

Proceeding
***THE 2ND INTERNATIONAL CONFERENCE AND
INNOVATION EXHIBITION ON GLOBAL EDUCATION (ICEGE)***

January 17th-18th 2020

***Universitas Muhammadiyah Prof. DR. HAMKA
Jakarta Timur, DKI Jakarta, Indonesia***



Remark from The Chairman of International Seminar Committee

Assalamualaikum Warahmatullahi Wabarakatuh

Distinguished Ladies and Gentleman,

As the host of the International Seminar, we are very grateful and would like to thank to the keynote speaker, all invited speakers and presenter who have prepared the papers and participating in the seminar. We strongly believe that their significant contribution will be useful to explore, share, and discuss innovation in education to face global challenges.

The theme of this seminar is "Innovative Education for Global Challenges". This theme on ICEGE 2nd aims to discuss, share and discuss education to discuss global challenges. The scope of this conference was many, among others Curriculum & Instruction, Leadership & Management, Educational Psychology, Educational Technology, Languages and Philosophy, Environmental Studies, Moral and Religions, Creative Art and Play Therapy, Guidance and Counselling, Special Needs and Disability, Early Childhood Education, TVET and Other Relevant Sub-themes, and Sociology of Education

In this seminar, we have keynote speaker, Prof. Mike Hardy, Coventry University, United Kingdom.

Besides that, we have seven invited speakers from different countries;

1. Prof. Mike Hardy, Coventry University, United Kingdom
2. Prof. Dr. Gunawan Suryoputro, M.Hum., Universitas Muhammadiyah Prof. DR. HAMKA
3. Assoc. Prof. Dr. Fauziah Abdul Rahim, Universiti Utara Malaysia
4. Dr. Hidayatulloh, M.Si., Universitas Muhammadiyah Sidoarjo
5. Assoc. Prof. Ferry Jie, Ph.D., Edith Cowan University, Australia

We wish all the participants could fulfil their expectation as well as enjoying the interaction among all scientists in this seminar.

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Finally, thanks to you all, for the success and most enjoyable stay in Jakarta.

Wassalamualaikum Warahmatullahi Wabarakatuh

Herri Mulyono, Ph.D
Chairman of International Seminar Committee

Preface

The Proceeding of the International seminar “Innovation Education For Global Education”. The seminar was held on 17th-18th 2020 at Universitas Muhammadiyah Prof. DR. HAMKA, Indonesia, organised by Universitas Muhammadiyah Prof. DR. HAMKA, and collaboration with Universitas Muhammadiyah Purwokerto, Universitas Muhammadiyah Prof. DR. HAMKA, and Universiti Utara Malaysia. As much as 35 papers were contained in this Proceeding.

The papers have divided some categories, they are Education, TVET, Curriculum & Instruction, Leadership & Management, Educational Psychology, Educational Technology, Languages and Philosophy, Environmental Studies, Moral and Religions, Creative Art and Play Therapy, Guidance and Counselling, Special Needs and Disability, Early Childhood Education, TVET and Other Relevant Sub-themes, and Sociology of Education. The committee would like to say thank you very much to all of the reviewers, editorial staff, and all of the members of the committee. They have given their support for the success of this international seminar and the preparation of the Proceeding. Finally, we would like to say thank you very much for all the authors for their significant contribution to the seminar. We strongly believe that their considerable contribution will be useful to all of the societies to enhance the development of tropical animal production in the future.

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Counseling and Education on Young Executive Gays in Indonesia

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ABSTRACT

The development of modern technology in the era of digital 5.0 is very helpful and facilitates the exchange of information with a number of facilities provided to interact and access information from around the world. One of them is the information that is currently crowded and widely discussed in our homeland about the activities of gays that flow and penetrate quickly into the broader society without heavy filters. This is added by the use of social media, community media, and social networking applications specifically gay that can be downloaded via smartphones, such as: Grindr, Jack'd, Hornet, Planet Romeo, Moovz, U2nite, BoyAhoy, Badoo, Struff, Tagged, and Growlr, really inspires community members in discussions and sharing experiences. Even some people understand it as part of a modern lifestyle, especially among young gay executives. The purpose of this study was to find out how counseling and education among gay young Indonesian executives. Data collection through in-depth interviews, observation, FGD, and literature studies. Data analysis techniques using the interactive model of Miles & Huberman. The results showed that counseling and education by applying the SEFT method were very effective in returning gays to their fitrah, evidently 2 (two) young gay executives expressed their desire to marry a woman or the opposite sex.

Keywords: Counseling, Education, Gays

INTRODUCTION

Gay phenomenon as a form of LGBT (Lesbian, Gay, Bisexual and Transexual / Transgender) in the cultural context in Indonesia which upholds eastern customs and upholds dignity and values based on the value of belief in God Almighty, cannot be fully accepted in Indonesia. For the majority of Indonesian people, gay behavior is deviant or abnormal behavior that can damage society's order in religious values. Ironically at this time among teenagers have started to consider it a normal and natural phenomenon. Some opinions expressed by a group of adolescents stated that the behavior of Lesbian, Gay, Bisexual and Transexual / Transgender is a lifestyle of today or millennial century style trends.

The development of modern technology in the era of digita 5.0 is very helpful and facilitates the exchange of information with a number of facilities provided to interact and access information from around the world. One of them is the information that is currently crowded and widely discussed in our homeland about the activities of gays that flow and penetrate quickly into the broader society without heavy filters. This is added by the use of social media, community media, and social networking applications specifically gay that can be downloaded via smartphones, such as: Grindr, Jack'd, Hornet, Planet Romeo, Moovz, U2nite, BoyAhoy, Badoo, Struff, Tagged, and Growlr, really inspires community members in discussions and sharing experiences. Even some people understand it as part of a modern lifestyle, especially among young gay executives.

Gay in the Islamic view is in accordance with the guidance of Allah and the Messenger of Allah in the Qur'an and Sunna, explicitly condemning the perpetrators of gay deviation. In the history of Imam Bukhari (1997), "The Prophet SAW cursed a man who resembles a woman and a woman who resembles a man, He said remove them from your house, then the Prophet issued fulan and umar also issued a fulan". Then in the history of Imam at-Tirmidhi (1998) "Hasan ibn 'Ali al-Khalla recounted, Abd al-Razza recounted, Ma'mar preached from Yahya bin Abi Kathir and Ayyub from' Ikrimah from Ibn 'Abbas said the Messenger of Allaah cursed a man who resembles a woman and a woman who resembles a man ". This hadith applies not only to transvestites, but women who resemble men. The Prophet also cursed men who wore women's clothing, and women who wore men's clothing.

Gay behavior is often left as long as the individual does not declare his sexuality in the public sphere and fulfill social and religious obligations such as marriage (Murray, 1997 in Jaspal & Cinnirella, 2010).

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As a result, the biggest problem for gays in Indonesia is family rejection (Krisanty, 2007: 11). According to Dede Oetomo (1996), the Indonesian government is obsessed with happy families: Gay mother, father and two children, especially gay marriage, have no place in Indonesian society. This is reiterated by Leslie Dwyer (2000 in Boellstorff, 2005) who in his research on the Family Planning program found that Indonesian men were required to get married and function as husbands and providers.

Deviations in gender roles in boys are also influenced by the mass media (Condry, 1989; Huston & Alvarez, 1990; in Santrock, 2003). According to Huston & Alvarez (1990, in Santrock, 2003) early adolescence is a period that is very sensitive to the messages conveyed by television one of them about gender roles. TV which is currently an integral part of society, unwittingly influences the appearance and behavior of the community (Bellak, in Gauntlet, 2008). The appearance of television artists, celebrities or anyone who is admired and become an idol figure, causes an imitation or observational learning process by paying attention to what people say or do (Soetjningsih, 2010). On the one hand, when referring to Bandura's social learning theory, television can be a learning medium for individuals in forming their identities. This is in line with the view of Master, Johnston & Feldmen (1990) that other causes of gender identity disorder are learning factors.

The encouraging thing is that not a few gays who get guidance to return to nature or become heterosexual men. One of the counseling programs applied is SEFT, which can return gay people who like the opposite sex or women. The purpose of this study was to find out how counseling and education among gay young Indonesian executives.

Literature Review

Spiritual Emotional Freedom Technique (SEFT) is a new method of therapy in counseling and education for gays who want to return to nature. According to Dr. Larry Dossey in his book *The Healing Words* that prayer and spirituality, have been proven in scientific research, it turns out that when prayer and spirituality are combined have the same strength as the treatment and surgery performed by expert doctors. SEFT is a combination of the power of prayer and spirituality in healing both physical and psychological illness, which is then called the multiplying effect (Faiz, 2017)

SEFT is a variant of technique that utilizes the body's energy system to improve or change one's emotional state of mind and behavior. Chemical imbalance in the body plays a role in triggering various emotional disorders such as depression, stress, anxiety, and even suicidal thoughts. Interventions in the body's energy system can change the chemical conditions of the brain which can further change a person's emotional state. Einstein's theory says that every atomic particle in every object contains energy $[E = M.C^2]$. Just as the hand contains electromagnetic energy, where every nerve cell and organ in a person's body has electrical energy. This electrical energy includes organs in the entire human body. Acupuncturists used to call it Chi and Yoga experts used to call it Prana. Chi energy is very important role for the health of the human body. It can flow along 12 energy paths called energy meridians. If the flow of this energy does not function properly or is chaotic, it can cause emotional disturbances and physical illness that will more easily attack the human immune system (Faiz, 2017).

According to William A. Tiller in the body of each human being there are 7 levels of the reality of the energy system, the first is the physical level also called coarse particulate substance. The second level is the pre-physical body, also called the fine information wave. The third layer is the emotional domain, the fourth is the mind domain, the fifth is lower spirit self, and the sixth (the deepest) is high spirit self. And one level between levels 2 and 3 is called the astral level. Interestingly, these seven levels are controlled by the mind. The human mind is responsible for connecting one level to another, and coordinating the levels of that substance. SEFT is a variant of techniques that utilize the body's energy system to improve or change one's emotional state of mind and behavior. Chemical imbalance in the body plays a role in triggering various emotional disorders such as depression, stress, anxiety, and even suicidal thoughts. Interventions in the body's energy system can change the chemical conditions of the brain which can further change a person's emotional state. Einstein's theory says that every atomic particle in every object contains energy $[E = M.C^2]$. Just as the hand contains electromagnetic energy, where every nerve cell and organ in a person's body has electrical energy. This electrical energy includes organs in the entire human body. Acupuncturists used to call it Chi and Yoga experts used to call it Prana. Chi energy is very important role for the health of the human body. It can flow along 12 energy paths called energy meridians. If this energy flow does not function properly or is chaotic, it can cause emotional disturbances and physical illness which will more easily attack the human immune system (Faiz, 2017).

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So it can be concluded that SEFT is a counseling method that prioritizes or utilizes the strengths that already exist in the human body such as spiritual energy and psychological power which, when combined will cause multiplied power, which can cure any problems faced by humans by empowering themselves with energy and that power. In this study, in addition to spiritual energy and psychological strength, coupled with persuasive communication carried out in the beginning to persuade young gay executives to be educated and given counseling to the mentoring stage so that the person concerned is sure to wholeheartedly leave his gay lifestyle turning to life as a person men who like the opposite sex or women.

RESEARCH METHOD

The method used in this research is narrative inquiry with qualitative and interpretive approaches. Lindolf (1995: 27) calls the interpretive paradigm to refer to qualitative research that uses the ethnographic tradition of communication, phenomenology, ethnomethodology, symbolic interaction, and cultural studies. According to Bogdan and Taylor (Moleong, 2004), qualitative research is a research procedure that produces descriptive data in the form of written or oral words from people and observable behavior. The reason in this study uses a qualitative approach because the problems to be discussed are not related to numbers but describe clearly and in detail and obtain in-depth data from the focus of the study. Qualitative research always tries to cover a problem, situation or event as it is. The results of the study are directed and emphasized in an attempt to provide an objective and detailed picture of the actual situation.

Data collection, first, in-depth interview. According to Engkus Kuswarno, in-depth interviews are interviews that do not have alternative responses predetermined or better known as unstructured interviews. This type of interview encourages research subjects to define themselves and their environment, to use their own terms about the object of research (Kuswarno, 2008: 54). The researcher must maintain the confidentiality and identity of the informant, the researcher conceals the real names of the informants even though when the researchers ask during the preliminary research, the informants who will be interviewed researchers are willing to include their identity by signing a statement, except for one informant who asked to be kept a secret. Second, observation. Observation is fundamentally naturalistic in essence; it occurs in the natural context of occurrence, among the actors who would naturally participate in the interaction, and follows the natural system of everyday life "(Denzin & Lincoln, 2009). In this observation the researcher plunges directly into the field in the actual situation. Some reasons for the need for observation are: 1) Add experience first than. 2) It is possible to see and record behavior and events in the actual situation. 3) Allows researchers to record events (Lincoln and Guba, 2009). Third, Focus Group Discussion (FGD). According to Burhan Bungin, Focus Group Discussion (FGD) is a data collection technique that is generally carried out in qualitative research to obtain data from a group based on the results of discussions focused on a particular problem. This technique is used to avoid the wrong interpretation of a researcher due to the encouragement of the subjectivity of the researcher (Bungin, 2003). There are no right or wrong answers from participants, because they are free to answer, comment, or argue (positive or negative) as long as they are in accordance with the problem of the discussion (Kriyantono, 2010). Fourth, Literature Studies. Information collected in the research was also obtained through written sources as secondary data, including from books and literature relevant to research, various printed materials such as community magazines, brochures, photos of activities, and other documents. According to Scatman and Strauss, historical documents are important material in qualitative research. As part of the field method, researchers can refine historical documents and other secondary sources (Mulyana, 2009). The document study tries to find a description of life experiences or events that occur along with the interpretation of research subjects through documents such as diaries, newspapers, clippings (Kuswarno, 2008).

Data analysis techniques in this study were prepared by adopting a qualitative data analysis technique developed by Miles and Huberman, namely interactive models of analysis. The first is data reduction, which is the process of selecting, focusing, simplifying and abstracting data from various data sources, for example from field notes, documents, archives and so on. Then the process of emphasizing, shortening, removing unnecessary, determining the focus and organizing data so that conclusions can be made. Data reduction is done when researchers determine the conceptual framework, research questions, cases, and research instruments used. Second, the presentation of data is focused on structured summaries and synopsis. Presentation of data, such as assembling data and present it properly so that it is more easily understood. Presentations can be in the form of matrices, drawings / schemes, networks, tables and so on. Finally, draw conclusions verification involves the interpretation

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of the process of researchers, determining the meaning of the data presented. Final conclusions are made after the data collection ends. Verification is obtained through a process of negotiation / consensus between subjects, discussing with colleagues, checking data between members.

RESULTS AND DISCUSSION

The young gay executives who were assisted through counseling and education were not all able to apply the therapy perfectly. Young gay executives who have joined the largest LGBT community in Indonesia and have largely come out or opened themselves up, are still comfortable with the circumstances and lifestyles they now choose. But there are 2 (two) gay informants who are determined to be willing to return to the nature of being a real man who likes the opposite sex to do further assistance with researchers. One of the reasons was triggered by his guilt towards their parents, especially their mothers who had given birth and cared for them with physical and mental waging. Another reason is that he wants to bequeath a number of assets he has obtained so far and he wants to leave them only to his biological children, so he feels sure to leave his current lifestyle which he thinks is sinful.

Counseling and education for young executives gay must be fully supported by the family as the main support system, as well as community members. A warm, harmonious and conducive family is the main key to the success of the counseling and education program through the Spiritual Emotional Freedom Technique (SEFT) therapy.

First, The Set-Up. Aim to ensure that our body's energy flow is properly directed. This step is done to neutralize spontaneous negative thoughts or negative unconscious beliefs, called Psychological Reversal, for example: "I want to be able to love and someday marry a woman I love". You do this by praying in a solemn manner, sincere and resigned: "O God ... even though I cannot get away from gay behavior, I am sincere, I surrender to You completely. Help me to return to being a real man who likes and loves women ". So this set-up functions as a neutralizing negative thoughts lodged in the human head, and carries the negative energy that is in a person's body. A surefire way to get rid of these negative energies by praying fervently '.

Second, The Tune-In. Informants do the tune-in by thinking about something or certain specific events that can cause negative thoughts, emotions, and behaviors that you want to eliminate. When a negative reaction (anger, sadness, fear) occurs our mind and mouth say, O Allah ... I am sincere ... I am resigned. Simultaneously with the tun-in we take step 3 (Tapping). In this process (tune-in accompanied by tapping) we neutralize negative emotions and thoughts. In this stage, the informant tries to feel or imagine everything that causes negative feelings, emotions, and behaviors with sincere sincerity and surrender and must come from the bottom of our hearts saying "I am sincere, and I surrender, O Allah".

Third, the Thapping. Tapping is tapping lightly with two fingertips at certain points on the informant's body while continuing to tune-in. These points are the key points of The Major Energy Meridian, which if we tap several times will have an effect on neutralizing one's emotional and behavioral disorders. Because the body's energy flow runs normally and is balanced again at this tapping time.

The core version is the version most often used, because in addition to being shorter, this version is quite effective in most cases. The core version is to do the first step (the set-up), the second step (the tune-in) with a prayer: "I am sincere, I surrender", and as a third step (the tapping), starting from the first point (the rrown) up to point 9 (Bellows Nipple), ends with a long breath.

There are three things that must be considered for an effective SEFT. These three things must be done during the therapy process, from Set-Up, Tune-In, to Tapping. Many of the main causes of treatment failure are ignoring one or all of these. These three things are as follows: First, Khusyu. During therapy, especially during Set-Up, the counselee must concentrate, or solemn. Focus and concentration when doing Set-Up (praying) to "The Most Healer", pray with humility. One of the reasons why prayer is not answered is because we are not solemn, our hearts and minds are not present when praying, aka praying only in the mouth, not fully reaching the heart. Second, Ikhlas. Ikhlas means pleasure or accept everything including the pain that we experience (both physical and emotional) with all my heart. Ikhlas means not complaining, not complaining about the calamity that is being received. This class also makes any pain that is experienced become a means of purifying or cleansing ourselves from sins and all the mistakes we have ever made. Third, surrender. Surrender is not the same as sincerity. Ikhlas is accepting gracefully everything that is experienced at this time, while surrender is giving up what will happen later only to Allah SWT.

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So, the key to the success of SEFT lies in each person, if someone does not have a strong intention to recover or free from the problem that is being faced, then it is impossible for that person to recover, therefore if you want to heal someone must have the intention to want to be right completely cured. Then after convincing themselves and intending to truly recover, then accompanied by being solemn, let go of everything or problems that are being faced at this time, then the last must submit all healing only to Allah SWT., Because everything that happens to himself human being at the will of Allah SWT.

CONCLUSIONS

Counseling and education for young executives gay must be fully supported by the family as the main support system, as well as community members. A warm, harmonious and conducive family is the main key to the success of the counseling and education program through the Spiritual Emotional Freedom Technique (SEFT) therapy. There are 2 (two) young executive gays who are determined to be willing to return to the nature of being a man who likes the opposite sex. The first reason is that he wants to make his mother happy. Whereas the second reason is that he wants to have biological children so that he can inherit the abundant wealth he has obtained.

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The Effectiveness of Model 4A (Phenomenon Analysis, Information Analysis, Data Analysis, Finding Analysis) of Analytical Thinking Skills in Secondary School

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ABSTRACT

The research aim to describe the effectiveness of model 4A (phenomenon Analysis, information Analysis, data Analysis, findings Analysis) of the analytical skills in secondary school students. Research is conducted with the school population with different accreditation, i.e. accredited A, B, and C. Research samples are class VII students in each school. Research design using quasi experiments. Effectiveness was measured through increased skills of minimal moderate category analytical thinking and a student's positive response to the implementation of the model 4A. Based on data analysis results, it was obtained that there was an increase in analytical thinking skills covering indicators of differentiating, organizing, and attributing with the average N-gain moderates category of each school A, B, and C respectively 0.57; 0.51; and 0.55 and the result a paired t-test, independent t-test, and 2-way variant analysis test showed that there was a change in model 4A impact on analytical thinking skills as well as the student response from schools A, B, and C in ranged between 84-100%; 76-100%; and 75-100% the meaning is very positive. Thus it can be said that the 4A model is effective to improving the analytical thinking skills of secondary school students.

Keywords: Model 4A, analytical thinking skills, Secondary School

INTRODUCTION

Analysis is used to identify intense and actual relationships as long as the statements, questions, concepts, descriptions or forms of representation are to express beliefs, justification, experiences, reactions, information, and opinions (Facione & Facione, 2013). According to Montaku, thinking analysis means sequential thought into related parts based on reason, principle, function or contextual conditions including the ability to organize groups in relation to different topics, to place topics in an important order (Montaku, 2012). Critical thinking, reasoning analysis, and problem solving skills are required in completing the task well (Hersh, 2000). Thus, it can be said that thinking analysis is important especially in resolving daily problems. Consideration of the problems given is an important aspect of critical thinking, reasoning analysis, and problem solving, as well as generating scoring on the task given (Harker, 2013). Natural science is closely related to how to find out about nature systematically, so the natural science is not only mastering the knowledge Group of facts, concepts, or principles only but also is how to find something (McLelland, 2003). According to Irwanto, analytical thinking skills are the basic ability needed to be developed (Irwanto, Rohaeti, Widjajanti, & Suyanta, 2017).

In fact natural science includes three main elements: (1) the scientific attitude is curiosity about everything that appears, natural phenomena, living creatures, as well as causal relationship that raises new problems that can be resolved through the correct procedures, where the natural science is open-ended; (2) the scientific process is the procedure/steps to solve the problem through the scientific method, including the formulation of hypotheses, variable identification, experimental or experimental design, evaluation, measurement, and withdrawal of conclusions; (3) scientific products are facts, principles, theories, and laws (Achmadi, Rasid, Sudibyo, 2007). So, natural science can be interpreted as a discipline that learns the symptoms of nature, its interactions and the factors that influence it. The knowledge is obtained based on a scientific stance to conduct scientific investigations systematically, so that the acquired product can be verified and accountable.

According to Sinan, one of natural science educational objectives is to teach effective thinking that is defined by science process skills. Natural science education includes a hypothesized emphasis, environmental manipulation, and reasoning-based data. Natural science's educational objectives shift

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from time to time, after the development of the curriculum and instructional purposes of natural science (Sinan, 2012). Analysis is a sequential and systematic thinking skill in solving the problems that are in accordance with the purpose of natural science education that teaches effective thinking. According to Hasyim, the analytical thinking skills are intertwined with the science process skills in science subjects (Hasyim, 2018).

Students' analytical skills in Indonesia are said to be low. Based on The Global index of cognitive skills and educational achievement of The Learning Curve Pearson of The Year 2014, Indonesia is ranked 40 from 40 countries, where students are at a low level of thought and understanding, It is still not able to think high level of the lowest (thinking analysis) (Edupost, 2012). According to Bloom's taxonomy, analytical skills are a sequence of cognitive skills to 4 (four) after knowledge, understanding, and application (Bloom, 1956). According to Sartika, the analytical skills of junior high school students are still low, because students are accustomed to working on knowledge, understanding, and application yet at the analysis stage (Sartika & Budi, 2015).

One alternative solution that teachers do is to implement a learning model that is able to improve the analytical thinking skills of junior high school students. Model 4A (phenomenon Analysis, information Analysis, data Analysis, findings Analysis) developed by Sartika, is able to improve students' analytical thinking skills (Sartika & Budi, 2019). According to Arends, the learning model is the learning objectives, the stages in learning activities, the learning environment, and the management of the class (Arends, 1997). The purpose of Model 4A to improve analytical thinking skills; stages in a Model 4A learning activity include: 1) phenomenon analysis; 2) information analysis; 3) data analysis; and 4) findings analysis; The learning environment for Model 4A can be done in the classroom, outside the classroom, as well as in the laboratory according to the concept of material to be delivered; and management of the Model 4A class is managed by natural science teachers who are equipped to implement Model 4A.

RESEARCH METHOD

Research uses quantitative research methods for quasi experiments. Data retrieval is conducted in class VII Secondary School, with samples in 3 different accredited schools, which are A, B, and C. Data collection techniques using tests and polls. The instruments used in the study include: 1) test thinking Analysis skills and 2) student response polls. The teaching materials used are the natural science object and its observations. Data analysis techniques for improvement of analytical thinking skills are calculating increased scores, paired-t tests, independent t-tests, and 2-ways analysis of variances, sedation to describe student responses using a student response questionnaire. Natural science learning by applying the 4A model is said to be effective if there is an increase in the results of analytical thinking skills and positive response of students to learning.

RESULTS AND DISCUSSION

Based on the test results of the analysis thinking skills, with analysis indicators (differentiating, organizing, and attributing) can be presented in table 1:

Table 1: N-gain from the Analytical Thinking Skills Indicators

No	Analytical Thinking Skills Indicators	Rates		N-gain	Kategori
		U ₁	U ₂		
SMP A					
1	Differentiating	15.36	26.40	0.62	moderate
2	Organizing	15.76	25.20	0.64	moderate
3	Attributing	16.60	25.16	0.46	moderate
	Total Value	47.76	76.76	0.57	moderate
SMP B					
1	Differentiating	12.55	26.87	0.54	moderate
2	Organizing	12.25	24.82	0.67	moderate
3	Attributing	12.00	20.96	0.32	moderate
	Total Value	36.90	72.65	0.51	moderate
SMP C					
1	Differentiating	20.50	32.40	0.72	high
2	Organizing	20.29	27.35	0.56	moderate
3	Attributing	18.29	22.75	0.37	moderate

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Total Value 60.00 82.50 0.55 moderate

With regard to table 3.1 obtained that the three secondary school tend to obtain results that are not much different for N-gain calculation so that all three have the same category that is moderate. The mastery of each of the lowest indicators is the ability to attribute.

Based on table 1, there is an increase in the value of students' analytical skills in both SMP A, SMP B, and SMP C. With regard to the initial test value and the final Test there is an increase in the value for each analysis thinking indicator that distinguishes, organizes, and attributes. The value N-gain of the three schools is almost identical to medium category. However, there is the lowest indicator of the indicators that the other is attributed. According to Anderson and Krathwol, the attribute is to apply views, bias, value/intent, find implied meanings (Hasyim, 2015). Another term is attributed to labeling. Labeling the incident is not an easy thing because it requires analysis steps so that the given label can be accounted for. High analytical thinking skills are distinguishing and organizing, according to the research of Hasyim (2015) and Sudiby, (2016). Analyzing means breaking the material into constituent parts and determining the relationship between the parts and the relationship between those parts with the whole structure or purpose (Hasyim, 2015).

Table 2: Paired t-test Results

School	Mean	Dev. Std.	Err. Std.	95% Confident Interval of The Difference		t	df	Sig. (2-tailed)	p	Conclusion
				Low	Upp					
SMP A	- 25.840	6.737	1.34 7	- 28.62 1	-23.059	- 19. 177	24	0.000	<0.0 5	H ₀ rejected (there was an influence)
SMP B	- 20.900	8.188	1.83 1	- 24.73 2	-17.068	- 11. 415	19	0.000	<0.0 5	H ₀ rejected (there was an influence)
SMP C	- 17.739	4.779	0.99 6	- 19.80 6	-15.673	- 17. 802	22	0.000	<0.0 5	H ₀ rejected (there was an influence)

Based on the paired test-t results in pairs at three schools were obtained that the value of significance was less than 0.05, meaning H₀ was rejected so that there was a model 4A influence on the analytical thinking skills of Secondary School students.

Table 3: Independent t-Test Results

Scho ol	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff	Err. Std.	95% Confident Interval of The Difference		p	Conclusio n
SMP A	32.45 9	0.06 0	- 10.94 2	4 8	0.000	- 22.52 0	2.05 8	- 26.65 8	- 18.38 2	>0.0 5	H ₀ accepted (there is no diffenece)
SMP B	0.395	0.53 3	- 9.514	3 8	0.000	- 20.90 0	2.19 7	- 25.34 7	- 16.45 3	>0.0 5	H ₀ accepted (there is no diffenece)
SMP C	0.520	0.47 5	- 17.55 8	4 4	0.000	- 17.73 9	1.01 0	- 19.77 5	- 15.70 3	>0.0 5	H ₀ accepted (there is no diffenece)

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Based on table 3 independent t-test results obtained significance value more than 0.05 meaning H_0 received so there is no difference in analytical thinking skills in three schools, although the three schools have accreditation different.

Table 4: 2-Ways Analysis of Variance Results

School	Source	Type Sum of Squ.	df	Mean Squ.	F	Sig.	p	Conclusion
SMP A	Class	0.094	1	0.094	5.115	0.280	>0.05	H_0 accepted (there is no diffenece)
	Level	0.167	1	0.167	9.067	0.100	>0.05	H_0 accepted (there is no diffenece)
	Class*Level	0	0	.	.	.	.	.
SMP B	Class	0.001	1	0.001	0.045	0.090	>0.05	H_0 accepted (there is no diffenece)
	Level	0	1	0	0.007	0.070	>0.05	H_0 accepted (there is no diffenece)
	Class*Level	0.044	1	0.044	1.984	.	.	.
SMP C	Class	0.008	1	0.080	12.154	0.070	>0.05	H_0 accepted (there is no diffenece)
	Level	0	0	.	.	0.060	>0.05	H_0 accepted (there is no diffenece)
	Class*Level	0	0	.	.	.	.	.

Based on the 2-ways analysis of variance test result in table 4, it is obtained that the significance value between class and the level is more than 0.05, meaning that H_0 is accepted so that there is no difference in the results of students' analytical thinking skills different.

Based on table 3.2, the paired test-t results showed that there was a model 4A influence on students' analytical thinking skills. The independent t-test results in Table 3.3 also showed no difference in student analytical thinking skills with Model 4A. In Table 3.4 2-ways analysis of variance test also showed that there were no differences in analytical thinking skills in three schools. The improvement indicates that the model 4A has the syntax: 1) phenomenon analysis, 2) information analysis, 3) data analysis, and 4) findings analysis is able to be accepted and applied to secondary school students in natural science learning. This is in line with Joyce and Weil's statements, learning models are used to help students acquire skills, ideas, information, grades, ways of thinking, and self-expressing, as well as teaching how to acquire them (Joyce, Weil, & Calhoun, 2004). Skill in question is the skill of analysis thinking increased through the application of model 4A, no denying the problem presented is in the nearby development zone. Students are able to work on this to understand the problem if they are in the closest development zone (Slavin, 2006) with the ability of critical thinking, problems are able to be solved. Critical thinking capabilities include analysis, evaluation, and reasoning (Hartini & Sukardjo, 2015).

Table 5: Student Response Poll Results

Response Aspect	SMP A		SMP B		SMP C	
	Positive Response (%)	Negative Response (%)	Positive Response (%)	Negative Response (%)	Positive Response (%)	Negative Response (%)
Learning material Model 4A	95	5	83	7	84	6
State of the art Understanding teaching material	93	7	78	22	86	14
Learning activities	84	6	80	20	75	25
Enjoy with learning activities	86	4	77	23	75	25
	95	5	76	24	83	17

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Teaching are guiding well	90	10	88	12	92	8
Improve analytical thinking skills	95	5	96	4	100	0
Easy to apply	100	0	96	4	100	0
Making confidence	90	10	100	0	100	0

Based on the results of the students' response poll in Table 5 It was obtained that students respond positively to each component of the device and learning activities by implementing the 4A model.

The results of the response poll in table 5 showed a positive response students, where in SMP A between 84-100%, SMP B 76-100%, and SMP C 75-100%. According to Poerwadarminta, the response means a reaction or response in the form of acceptance, rejection, or indifference to what is conveyed by the communicator in his message [21]. Thus, it can be said that the student's response is positive towards learning model 4A in improving the analytical thinking skills of SMP students on the natural science subjects indicated by the response percentage above 70%. Student response is said to be very positive if 76-100% (Arikunto, 2013). According to Harvey, the response is a form of readiness in determining a good attitude in positive and negative forms of objects and situations (Harvey, 2006).

With regard to the improvement of analytical thinking skills in medium category, the influence of the 4A model on analytical thinking skills, there is no difference in analytical thinking skills in three schools, as well as positive response students to model 4A shows that natural science learning with the model 4A is said to be effective. According to Sinambela, learning is said to be effective when the students are actively involved in organizing and finding information (knowledge) and the relevance of the information provided (Sinambela, 2017). According to Hamalik, it states that effective learning is a learning that provides self-learning opportunities or performs widest activities to students to study (Hamalik, 2001). So, with a model 4A students are able to perform widest activities through phenomenon analysis, information analysis, data analysis, and findings analysis.

CONCLUSIONS

Based on results and discussion it can be concluded that the 4A model is effective in improving the analytical thinking skills of secondary school students as evidenced by:

1. There is an increase in analytical thinking skills covering indicators of differentiating, organizing, and attributing with the average N-gain category of each school A, B, and C respectively 0.57; 0.51; and 0.55 and the results of a paired t-test, independent t-test, and 2-ways analysis of variance test showed that there was a change in model 4A effect on the analytical thinking skills of secondary school students.
2. Students' responses from schools A, B and C respectively range from 84-100%; 76-100%; and 75-100% the meaning is very positive.

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Adaptation Process on Blind Students and Teachers in Special Education School

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ABSTRACT

In Indonesia there are approximately 3.5 million people with blindness in both eyes. With this number, Indonesia ranks third in the list of countries with the highest blindness rates in the world. Half of the blindness sufferers, suffer from blindness due to cataracts. In adolescents blindness disorders usually occur due to myopia. This paper examines the adaptation process of students and teachers with visual impairments in Special Education School (the National SLB-A). The researcher uses the constructivist paradigm and the process adaptation theory. Data collection is done by observation, in-depth interviews, and literature study. Data analysis was performed with qualitative data analysis. The research findings show that in the process of adapting informants through several stages, such as stress caused by inner conflict due to facing a new situation (being blind), imbalance (disequilibrium) that arises in the form of uncertainty, confusion, and anxiety emotionality. They also face some obstacles in adapting, because the attitude of parents who are too protective (overprotected) and teachers who also always want to help. To overcome this adaptation, teachers, family, and peers play a very large role.

Keywords: blindness, adaptation process, special education school

INTRODUCTION

Globally the number of people of all ages visually impaired is estimated to be 285 million, of whom 39 million are blind. More than a quarter of the World's population --some 2,2, billion people – suffer from vision impairment out of which, one billion cases could have been prevented or have been left unaddressed, according to the first World Vision Report released by the World Health Organization (WHO) on October 2019.

WHO defined visual impairment (tunanetra in Bahasa) as any loss or abnormality in an anatomical structure or a physiological or psychological function. In line with this definition Soemantri (in Sundari & Aulia, 2019) explained, the visually impaired are individuals with a sense of vision who do not function as receivers of information channels in their daily activities. Factors that caused blindness come from internal and external. Internal factors are factors that are closely related to hereditary problems and the growth of a child in the womb. While external factors are factors caused by external conditions, for example caused by cataracts, glaucoma, or diseases that can cause visual impairment, understanding blindness is not only for those who are blind, but also includes those who are able to see but are very limited and cannot be utilized for the benefit of daily life.

Today, in Indonesia 3.5 million people experience blindness in both eyes. With blindness reaching 1.5% higher than other countries in Southeast Asia, Indonesia ranks third as the country with the highest blindness rate in the world. The most common causes of blindness in Indonesia, including: cataracts (0.78%), glaucoma (0.20%), refractive disorders (0.14%), and retinal disorders (0.13%), and corneal abnormalities (0.10 %).

Half of blindness sufferers in Indonesia experience blindness due to cataracts. Some others are caused by myopia. Myopia or nearsightedness is a condition when light entering the eye is focused in front of the retina, thus making distant objects blurred (James, in Sofiani and Puspita Santik, 2015). (Ilyas, 2012), myopia can be divided into three categories; mild, moderate, and severe. Myopia is progressive in childhood and tends to be stable when they reach the age of 20 years or late teens. WHO research results show that myopia in adolescents is more common in girls than boys in the ratio of 1: 4. Facing this bad condition, WHO initiated the Vision 2020: Right to Sight program on February 18, 1991. The program, which is supported by the government, NGOs and professional associations of eye health agencies, aims to reduce the number of eye diseases that can cause blindness. The Right to Sight has

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a mission to improve the data that cause blindness and solutions to eliminate problems; identify and guarantee resources needed throughout the world to improve prevention and treatment programs; facilitate the planning, development and implementation of the three core 2020 vision strategies by national programs.

In addition to preventing and treating blindness, the government provides Special Education School for children who are blind. One of them is the Extraordinary School for the Blind (SLB A) Jakarta. It was inaugurated by President Soeharto on December 9, 1981. In this school, there are several levels of education, ranging from special kindergarten, special elementary school, special junior high school, and special senior high school. Some blind students have normal intellectual abilities, but some are accompanied by intellectual, motor, and autistic disabilities. Students with visual impairments with this other obstacle are categorized as multi-disabled students with visual impairments.

Some of these students have experienced total blindness since they were kids, but there are also those who were born still able to see but experienced a few obstacles (low vision). Children with low vision usually slowly decrease their vision function until they experience total blindness. Students with this condition face a very difficult situation, because they inevitably have to accept conditions that are different from beforehand.

In the process of adaptation, communication actors have interactional synchrony, it is a kind of coordinated forward and backward pattern of steps that is influenced by three things namely requirements, expectations, and desires (Littlejohn, et al. 2006). This paper examines the adaptation process of students who experience from mild eye disorders into totally blind. This study aims to understand how students adapt to their new conditions through the mechanism of requirements, expectation, and desires; and the obstacles they faced during adaptation process, and the efforts they made in adapting.

RESEARCH METHOD

This research uses a qualitative approach with descriptive methods. Qualitative research aims to explain the phenomenon profusely through deep data collection (Kriyantono, 2008). The study was conducted in Special Education School of Jakarta (the SLB A). The school was chosen because it has trustee level of governmental school. The informants consisted of three people who were chosen deliberately (purposive sampling) based on the experienced case. In addition, there were three additional informants, consisting of two teachers who had undergone an adaptation process and a class teacher who accompanied the informants.

The research data were obtained from observations, in-depth interviews, and documentation. Observation of research subjects in daily activities in the classroom, computer laboratories, and massage classroom. The in-depth interview included the process of adapting to their new conditions. The researchers proposed and developed questions to the informants according to the informants' answers. The data analysis in this research used triangulation to measure and cross check the result of data obtained in interview and observation.

RESULTS AND DISCUSSION

Every creature in his life always experience change. At each stage of this change people will experience adaptation. Adaptation is the ability of living things to adapt to their environment (Hendriyani, 2018). Adaptation can be in the form of adjustments to body behavior and function (Leitch, 2017). Children who are born can still see, but gradually their vision decreases until they are totally blind must adapt. As experienced by the following informants.

Informant W (girl, 14 years old) admitted that her vision had declined at the age of six. "The doctor said, my eyes had been disturbed since I was a baby, but my parents did not know. One day when I woke up suddenly my eyes could not see. I experienced this condition for a month. After recovering my right eye is blurred, while my left eye is no longer functioning," (Interview on 17 September 2019).

The doctor advised W to go to Jakarta for treatment. She was treated regularly, but the results did not appear. We went to Singapore for treatment, but the doctor there raised his hand. Upon returning from Singapore, W moved to Jakarta to try herbal therapy. She was boarding at her mother's friend's house.

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Furthermore, W who studied at a private elementary school in the Kemang area of South Jakarta revealed,

"Every day I have to take six herbal capsules. Besides that I was treated to a massage on my hands and feet. The result, not bad. My eyes are rather bright. I had participated in inclusive education. The teachers treat me as the same as other normal students. The difference is that during the exam there were volunteers who read the questions. That's all," said W who did not like being pitied.

W tried to learn as best she could, besides to take guitar and drum music courses. But slowly her eyesight declined. She can no longer read the writing on the board, so it is advisable to move to special education school SLB A. This was where she started to feel a different condition than before. At her first times at school, a teacher asked her to learn to read Braille.

"In my heart I protested. I can still read! Why do I have to read Braille?" She recalled. W's offense also appears when she goes down the stairs then a teacher took her. She was never treated like that before. "In my previous school, teachers thought that I was the same as other students. Why in here (my new school), I must be helped," W continued.

According to Ngatidjo, a senior teacher at special education school SLB A, "Children who have been able to see and then they gradually can no longer see, they need to adjust themselves. They are in poor decision making, have a high level of anxiety and lack of courages. Therefore, they really need the support of the environment, especially from the family. In addition, they also need the help of psychologists to strengthen their mental and motivation.

Van Hasselt (1983) said that research and clinical case reports reveal a relatively consistent pattern of problems in social adaptation in visually handicapped children, adolescents, and adults. Moreover, there are some indications that later impairment in socialization maybe associated with inadequately formed "attachment" between blind and infant and mother.

HR (male, 32 years old), a student council teacher at W school who had blindness since he was a teenager stated, "I had been quitted for school for a long time, almost five years (2003-2008) because I could not accept the fact that I was blind. Moreover, many friends insulted me and teachers did not accept me," HR, who has been accepted as a SLB-A teacher since May 2019, recalled.

At that time HR could no longer see the letters on the board. The glasses could not help. "The doctor said I had glaucoma and needed a surgery at Cipto Mangunkusumo Hospital, Jakarta," HR said. He was hoping that he might be recovered from the illness.

He underwent surgery for second time but his world remained dark. Nevertheless, he still wanted to go to school. Unfortunately, his surroundings refused. His friends often joked and bullied him. The teachers also lacked understanding of the new conditions of HR. His daily assessment in school was never marked because his handwriting was very bad. HR was unable to deal with this condition. He stopped going to school. Everyday he was enjoying his time in his bedroom and listening to radio broadcasts. Sometimes, he did jogging or cleaning his clothes. HR seemed to avoid external people. "At that time, finally I started not to care to my friends who used to play me," said HR.

Things began to change when the H family moved to the city of Palembang, capital city of South Sumatera. One day HR's mother met with a Principal of a Vocational School and the Chair of a rehabilitation center for the visually impaired. He encouraged HR to return to school and live in an orphanage. Although this was opposed by his father, but finally HR began to study again at SLB-A Palembang and was placed in a vocational massage.

"At that time I was 21 years old. I have kind and supportive friends there. They encouraged me to move to special education school in Bandung, because many alumni of this school could continue their studies to universities. Lucky me, my parents gave their permission for me to move to Bandung."

While studying at the orphanage, he took special education at high school level. After obtaining his high school diploma he enrolled at UNINUS (Universitas Nisantara) Bandung, which is disabled-friendly. "The lecturers were very supportive to disabled students, even though the facilities and infrastructures were not yet supportive," HR said, who joined Diffable Student Forum during his study. HR graduated and got cum laude in 2015. After that he had applied for master study in Australia but because of some reasons, he postponed the application.

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While W and HR had difficulties in adapting the new condition, another student, I (boy, 14 years old) had different case to the blindness condition, he could only see like shadow since he was a kid. "I used to study in public elementary school. However, my vision declined gradually, then my father moved me to special school, here in SLB A," I told so. He said that he liked to read Al Qur'an (holy book of moslem) and wanted to be a preacher (ustadz, a person who deliver religious teaching). He felt more comfortable in the school because his teachers spoke softly and loved their students very much.

According to Schneider (1984), the adaptation process is a dynamic process and passed through three elements: 1) motivation and self-adjustment process; 2) attitude towards reality and the process of adjustment; and 3) the basic pattern of the adjustment process. Based on these three elements and information from informants, motivation is a key factor in the adaptation process. The motivation possessed by the informants came from both external and internal environment. Motivation is driven by external factors that they got from the environment outside their self, especially those closest to them, particularly from the family (parents and relatives), and teachers. The family and teachers become the main motivators who encourage informants to be able to adjust to the new conditions they experienced. These external factors are then internalized into the informants'self, so that it strengthens their motivation to adjust to new conditions as blind people. Elements of attitude towards reality and the process of adjustment can be seen from the continued living of social relations in the lives of informants, for example such as W who continues to take music courses actively, learn to recite, massage, understand some programs in the computer. Meanwhile, in terms of the basic pattern of adjustment, the informants make adjustments by forming new patterns in their social life, such as adjusting to learning braille, exercising mobility with or without the aid of a tool (stick), and continuing to carry out some activities that they have been carried out since before becoming blind, for example using public transportation, appearing in several events to play music, and establish relationships with fellow blind people.

According to Rowland (Vaughan, et al, 2018), in general, blind people are in an environment that requires closeness ("beholded-ness"), a perspective that said that they are people who need help in reading, access to transportation, and shopping access for example. Furthermore, it can be said that every human sometimes needs the help from others in dealing with complex problems. However, for persons with visual impairment, the issue of assistance is sensitive because of the variety of assistance they need, but on the other hand they feel they have no other choice but to receive the assistance. In general, blind people are dependent on others and give up on fate. However, dependencies that occur among people with visual impairment are no longer an issue that arises in their social interactions because of a mutual relationship (symbiotic relationship), even with normal people.

CONCLUSIONS

Like individuals in general, blindness sufferers are individuals who need social relations in their lives. The process of individual adaptation from normal conditions to being visually impaired is certainly not an easy thing. Encouragement and motivation internally and externally, the closest people and selfawareness become the power for people with visual impairment to undergo social relations.

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Relationship between Strategic Thinking Skills and Motivation to Lead among School Teachers in Malaysia

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ABSTRACT

Efforts to capitalize on educational excellence demand the commitment of teachers as leaders in schools to develop continuous improvement strategies. Teachers are even encouraged to develop strategic thinking skills as a prerequisite for improving school leadership capabilities. In general this study aimed to identify the level of strategic thinking skills and the level of leadership motivation among school teachers. In addition, the relationship between strategic thinking and leadership motivation among school teachers was also explored. The cross-sectional survey method was applied in the quantitative data collection process involving 456 respondents selected using a stratified random sampling method. The instrument used consisted of three sections: respondent demographic information, Strategic Thinking skills questionnaire, and Leadership Motivation questionnaire. The results showed that strategic thinking skills were at a high level while school teacher leadership motivation was at a moderate level. Pearson correlation test results showed that strategic thinking skills had a statistically significant positive relationship with school teacher leadership motivation. As such, it is hoped that the school administrators will be able to provide appropriate focus on the aspects of strategic thinking skills and leadership motivation towards enhancing school leadership capabilities.

Keywords: Motivation to lead, School teachers, Teacher leadership.

INTRODUCTION

The implementation of the Malaysian Education Development Plan (2013-2025) sets the goals and aspirations for upholding the quality education system in Malaysia. It is hoped that an effective united effort will be made through the cooperation of all parties, especially the commitment of educators in schools (Mohd Najib Abdul Razak, 2012). In this regard, to improve the quality of the education system in general and the excellence of the school in particular, the national education system has focused on leadership at every level (Ministry of Education Malaysia, 2013). Usually at school level, leadership is often given to school principals. However, there is another dimension of school leadership that can help to improve school excellence, namely teacher leadership (Norashikin Abu Bakar, Ramli Basri & Foo Say Fooi, 2015).

In this decade the principal is no longer considered the 'only leader' who makes the decision for continuous improvement for students' academic achievement (Greenwood, 2011). Besides principal leadership, teacher leadership has also been a topic of discussion in efforts to improve teaching professionalism and school reform (Billingsley, 2007). In addition, based on the previous study, scholars have found that strategic teacher leadership can impact student academic achievement in schools (Hairudin, 2012). In fact, Kowalski (2010) also emphasized that effective leadership strategies must exist at all levels in the school. In this regard, school teachers are required to develop strong leadership skills and to be able to master strategic skills to formulate effective school improvement strategies. (Davies, 2004; Davies & Davies, 2004; Eacott, 2008; Fullan, 2007).

Looking from a macro perspective, the fifth shift in the implementation agenda of PPPM (2013-2025) sets out a desire to bring together a group of leadership talent capable of embracing the values of wisdom, strategic thinking and leadership mindset (Kementerian Pendidikan Malaysia, 2012). In fact, efforts to incorporate school leadership skills are a key step in improving the quality of the education system and developing teacher professionalism (Hairuddin, 2012). However, Kho, Hamidah Yusof and Syed Ismail Syed Mohamad (2016) stated that there is still a misunderstanding about the importance of developing leadership skills in the school improvement agenda. Even Katzenmeyer and Moller (2009) found that there are groups of teachers who do not recognize themselves as school leaders. This has

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raised concerns over the successful implementation of PPPM (2013 - 2025) (Akma et al., 2013). In this regard, the school needs to be proactive in establishing a learning community in order to provide a platform for teachers to work and to find new ways to improve the development of teacher professionalism and teacher self-motivation.

RESEARCH METHOD

Specifically, the objectives of this study were to:

- a. Identify the level of strategic thinking skills and leadership motivation among school teachers.
- b. Identify the significant relationship of strategic thinking skills and leadership motivation among school teachers.

The Ministry of Education Malaysia (2012) is seriously focusing on the direction of national education through the implementation of the Malaysian Education Development Plan (PPPM 2013 - 2025). PPPM (2013 - 2025) is designed in detail to ensure that educational progress is constantly improved by incorporating strategic thinking elements in developing leadership talent. According to Haycock, Cheadle and Bluestone (2012), if every member of the organization has a good level of strategic thinking, they will be able to benefit through actions that lead to the achievement of organizational goals and objectives. In fact, Ghorbani and Kiani (2012) also found that individuals who are able to think strategically, are always ready for change and are able to act towards realizing organizational goals.

The strategic thinking skills in this research refer to the skills of individuals who practice thinking activities to benefit the organization. The goal is to find detailed competitive strategies towards achieving organizational goals. These thinking activities are also able to contribute to the broader concept and focus on the future direction of the organization in order to continue operations in line with current situation. (Haycock et al., 2012).

Chan and Drasgow (2001) stated that the construction of various non-cognitive capabilities such as personality and values are related to leader behavior. Leadership motivation in individuals affects the individual's participation in leadership activities and the role of leadership. Therefore, Chan and Drasgow (2001) stated that motivation for leadership is a precursor of leadership behavior that also acts as a mediator in the relationship of other characteristics and leadership behaviors such as personality, cognitive ability and values.

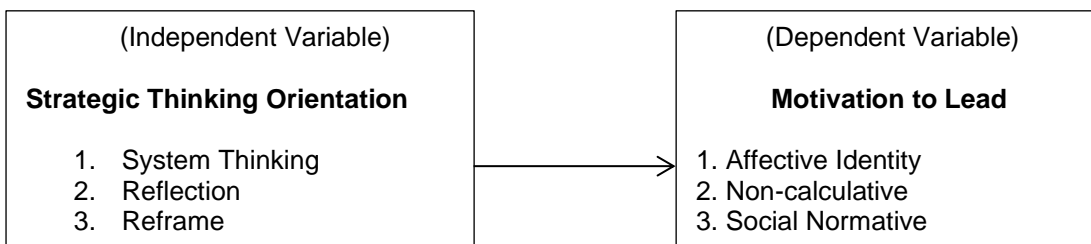


Figure 1. Research Conceptual Framework: The influence of Strategic thinking on motivation to lead.

In addition, strategic thinking skills are an important component of identifying effective levels of leadership and leadership within an organization (Pisapia, 2009; Pisapia et al., 2011; Yukl, 2013). In fact, Davies (2004), Davies and Davies (2004), and Eacott (2006) have also suggested strategic thinking and ability to take action as elements that enable them to effectively develop their intrinsic motivation, ability and leadership ability. Based on the research conceptual framework shown in Figure 1 above, strategic thinking skills have a direct influence on the motivation to lead. Therefore, the main focus of this research was conducted based on the research framework discussed earlier.

In general, this study was conducted using a cross-sectional survey approach whereby the process of collecting quantitative data was through respondents' questionnaires.. The population of this study was teachers who teach at the primary (SK) and secondary (SMK) schools in the northern part of the peninsula. A total of 456 respondents were selected from 40 schools using the stratified random sampling method based on the recommendations of Cohen, Manion and Marrison (2011) and Chua (2006).

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The instruments used in the study were the Strategic Thinking Questionnaire (Pisapia et al., 2011), and the Motivation to Lead questionnaire (Chan & Drasgow, 2001). The strategic thinking skills questionnaire was divided into three categories namely reframing, reflection and thinking systems, whereas the motivational questionnaire was divided into three main dimensions namely affective, social normative and non-calculative. The descriptive analysis of the study used (SPSS) version 25 while Pearson correlation test was used to test the relationship between the two variables.

RESULTS AND DISCUSSION

Strategic Thinking Skills.

Overall, the school teachers' strategic thinking skills level was relatively high ($M = 4.57$, $SD = 0.55$). However, the level of strategic thinking skills in the SMK category schools ($M = 4.58$, $SD = 0.57$) was higher than the level of strategic thinking skills in the SK category schools ($M = 4.56$, $SD = 0.53$). An analysis of the strategic thinking skills dimensions found that the dimensions of the thinking system ($M = 4.81$, $SD = 0.72$) were found to be higher than the means of the reflection dimensions ($M = 4.63$, $SD = 0.74$) and the dimensions of re-framing ($M = 4.13$, $SD = 0.79$).

Motivation to Lead

In summary, the results of the descriptive analysis showed that primary-school teachers overall showed a moderate level of motivation to lead ($M = 4.22$, $SD = 0.58$). When examined in more detail in the descriptive analysis of motivation to lead dimensions, both categories of schools showed a relatively higher mean for social normative dimensions than the other dimensions. However the social normative dimension of the SK category ($M = 4.51$, $SD = 0.79$) was higher than the social normative dimension of the SMK category ($M = 4.48$, $SD = 0.84$).

Relationship

Pearson correlation test results showed that strategic thinking skills had a statistically significant positive relationship ($r = .32$, $p < .01$) with motivation to lead among school teachers. This significantly positive relationship indicated that teachers with high levels of strategic thinking skills exhibited high levels of motivation to lead, while low levels of strategic thinking skills exhibited low levels of motivation to lead.

CONCLUSIONS

The findings of this study were in line with Jelenc and Pisapia (2015), and Pang and Pisapia (2012) who stated that the key aspects identified in driving leadership effectiveness were the factors of strategic approach. Pisapia (2009) and Pisapia et al. (2011) strongly advocated the development of direct strategic thinking skills in the early stages of establishing a leadership profile towards the organization's highest management team. Thus, the findings of this analysis would enable the management to accept without prejudice that the transformation of leadership in organizational management and readiness into leadership skills development depends directly on the style and approach of strategic management thinking of organizational management. Therefore, it is hoped that the school administrators would be able to give proper focus on the aspects of strategic thinking skills and leadership motivation among school teachers. School management should practice the strategic approach to develop strategic skills among school members. It is hoped that this study would serve as a source of reference and information for those who would continue their struggle as researchers in the field of education management and training in the future.

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Formation of Self-Resilience Based On Richardson's Self-Resilience Model

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ABSTRACT

Self-resilience naturally explains the ability of an individual to deal with stresses or trauma in life and successfully adjust themselves positively to the environment and challenges they face. Individuals who have self-resilience are able to cope with pressure so that they become better individuals than before. Resilience distinguishes between individuals who are able to survive even though they are forced to navigate the twists and challenges in life with individuals who are unable to survive but instead experience life that is ravaged by signs. The phenomenon of self-resilience is one aspect of positive psychology which is a scientific approach that examines the strengths and positive values of humans. Recent studies regarding self-reliance focus much attention on the various ways of adjusting and changing as well as the interactions that apply between children and their families and their surrounding factors. The five terraces of resilience (Resilience Core) discussed are purposeful life, perseverance, redha (equanimity), self-reliance and existential aloneness.

Keywords: Richardson's Self Resilience Theory Model, Self-resilience, Positive Psychology, Positive Adjustment

INTRODUCTION

The formation of self-resilience is a systematic process that applies between a person and his surroundings (Ungar, 2005). According to Cabness (2003), self-resilience refers to the situation of someone who is still competent and able to survive or function perfectly despite threats and pressures in life.

The ability to persevere and function perfectly needs to involve the actions and thoughts of the individual entrusted to perpetuate the balance (equilibrium) even though they are living in a shattered life. Individuals who turn into individuals who have self-resilience are said to have a positive action to deal with the threats they face (Cabness, 2003).

Self-resilience also illustrates the strength, power and resistance of lasak (Greeff & Van Der Merwe, 2004). Self-resilience henceforth carries the intention of positive adjustment even though it is afflicted by suffering in life (Sameroff, 2006).

According to Azlina (2010) students who are known to have self-resilience are students who have successfully adapted to risky living conditions. Richardson (2002) defines self-resilience as experiencing better life development despite the disruption and threats in their lives.

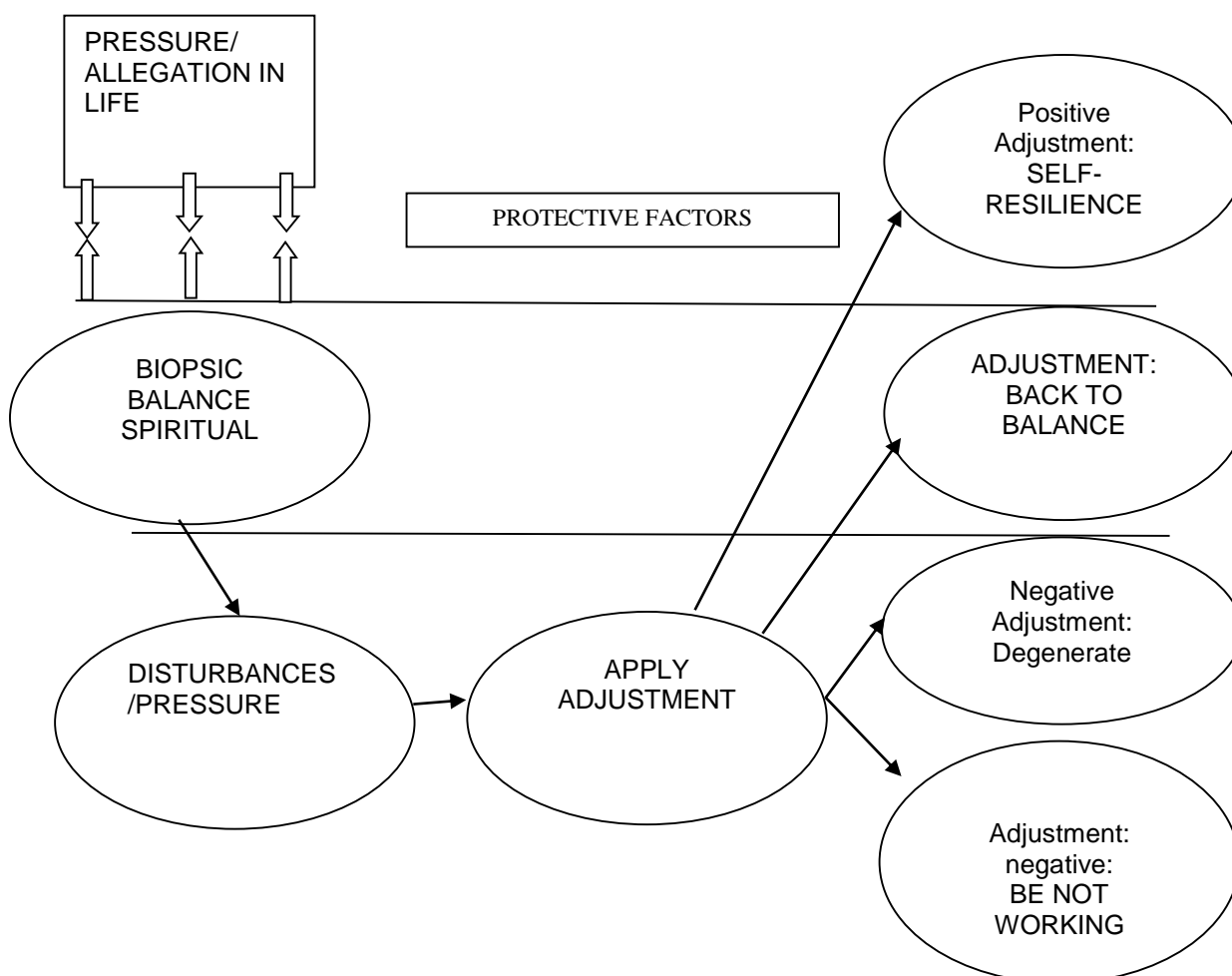
Self-resilience is an effort to rise from the beginning caused by events or trauma (Chen & George, 2005) or become better despite facing difficulties in life (Patterson, 2002). Alvord and Grados (2005) further define self-resilience as a person's skills, characteristics and ability to make positive adjustments to the hardships, challenges and bitterness of life experienced.

Patterson (2002) argues that a person is said to have self-resilience when he is in two main situations namely the first situation is distress, trauma or challenges in life when the second situation is also able to 'wake up' from trauma and get better. Without distress or trauma a person is not said to have self-resilience despite showing positive adjustments.

LITERATURE REVIEW

Richardson's Self-Resilience Model (2002)

Based on Richardson's Self Resilience Model (2002), a person will start in the biopsychospiritual balance (body, mind and spirit), so that they are plagued by problems or threats in life. In a troubled or threatened situation the individual will react in one of four ways to get better (have self-resilience), return to a state of balance, change to become worse or become dysfunctional. However according to Richardson's Self Resilience Model, the actions shown by the endangered individual depend a lot on the protective factors inherent in the individual's environment. Adjustments exhibited as well as positive or negative adjustments reflect the results of the influence of the protective factors received. Positive adjustments apply when individuals exhibit self-resilience or return to their original state, when negative adjustments occur when individuals show deterioration in the quality of life or continue to become dysfunctional.



Picture 1. Richardson's Self Resilience model (2002)

CONCEPT AND THEORY OF SELF-RESILIENCE

Positive psychology is an upward view of the strength of the individual along with the problems or challenges faced by the individual (Snyder & Lopez, 2007). Studies in the context of positive psychology are recognized as 'salutory factors' studies that focus on strength factors, different from studies that focus on risk factors. 'Solutory factors' are the main core in positive psychology (Snyder & Lopez 2007; Margalit 2004; Seligman & Csikszentmihaly, 2000). In conclusion, positive psychology is the field of psychology studies that examines positive life experiences, positive individual traits and positive institutions (for example, the school environment). Positive psychology is seen as being able to improve

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and enhance the quality of life because positive humans will be more willing to face any problems that will come (Synder & Lopez, 2007).

Self-resilience is interpreted as a complex and multidimensional construct that may be used in various disciplines (Haase, 2004). There are investigators who define self-resilience as personality traits (Stewart, 1997; Wagnild & Young, 1993), or as outcomes obtained as a result of stresses and threats in one's life (Masten, 2001; Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003). Self-resilience is also seen as a dynamic and continuous process (Luthar, Cicchetti, & Becker, 2000; Schoon, 2006). According to Martin and Marsh (2008), in the context of positive psychology self-resilience in the academic field is defined as the ability of students to deal with hardships and challenges in learning such as peer pressure, assignments and satisfying marking.

Information and knowledge related to self-resilience can be used to link the concept of protective factors from the environment and the inner strength of an individual to overcome the negative impression of challenges and trauma experienced in one's life (Rutter, 1985; Werner & Smith, 2001, Luthar, 2003). The principle construct for self-resilience is power (Richardson, 2002), which means that the study or case discussed focuses more on the factors that cause the triumph of an individual rather than discussing to eliminate the factors that cause failure. According to Richardson (2002), self-resilience is not a true characteristic but it is an individual act of retaliation towards a stimulus. This statement carries the intention, the characteristic of self resilience that is manifested in an individual person is an individual's response to a stimulus such as a disturbance or threat that applies in his life.

In line with Richardson's statement (2002) above, Schoon (2006) has also put forward several concepts of the principle of self-resilience namely:

- i. Having a satisfying life despite the stresses in life.
- ii. Can still survive despite dealing with challenges.
- iii. Able to recover from coughing trauma.

Cabness (2003), refers to individuals who have self-resilience in the academic field as a non-existent person who has high cognitive abilities such as having high problem solving skills. When, in terms of recovery too, individuals who have self-resilience are individuals who have the effort to recover from trauma and can eliminate all the pain they face.

Beauvais and Oetting (1999) report that self-resilience is not the original character that is found in individuals, but the more dominant factors affecting self-resilience are protective factors. Wong (2003) also asserts that a broader perspective seen above self-resilience is the process of positive adjustment, that is, the process of changing the tone and overcoming the problems faced instead becomes stronger than before.

According to Wagnild and Young (2008), there are five main characteristics as a basis for the concept of self-resilience namely:

- i. Having a purposeful life is the most important characteristic and is based on four other characteristics. The purpose of life is a driving factor in one's life, especially difficult and unexpected conditions.
- ii. Perseverance is a feeling of determination to overcome all difficulties, obstacles and sadness (Wagnild & Young, 2008). Individuals who are banned in handling all forms of life obstacles are those who have self-resilience. Self-resilience is the ability to rise first if it falls and only the shortcomings that can make individuals to rise first.
- iii. Redha (equanimity) intends to have a balanced and harmonious life. Individuals who have self-resilience are always optimistic, always looking for opportunities even in a troubling situation.
- iv. Believe in self (self-reliance) that is the trust of an individual person over the effort and shortcomings contained in oneself. Individuals who are self-reliant will learn from all the experiences that they face, especially their skill in solving problems.
- v. Being alone (existential aloneness) is meant is someone who has high self-resilience capable of 'living in his own world'. However, being alone does not mean to undermine the interests of having a close relationship with others.

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RESEARCH METHOD

The qualitative inquiry method was used through boasting of up to five fourth-grade students from a selected school in Kedah. The question of boasting was arranged in order to explore more deeply the formation of student self-resilience from the background of the divorced mother.

RESULTS AND DISCUSSION

Table 1. Result study

<i>purposeful life</i>	Respondent A was still able to perpetuate interest in the lesson even though he was in a separated family. This illustrates that he has a high academic resilience. The results of the gibberish prove the support received especially from family, friends and teachers is the most important element to help respondents to always have a clear purpose in life.
<i>perseverance</i>	The results of a conversation with Respondent A showed that he was able to follow the design that was made and at the same time had a high learning discipline and always tried to be earnest to achieve everything that was designed.
<i>equanimity</i>	If the question is related to the action taken if it is confronted with a disagreement between family experts, respondent A gives an answer that proves he is a person who has self-resilience because he is still able to focus attention in lessons without high concern and will not continue to think about problems beyond his ability to solved by myself.
<i>self-reliance</i>	The results of a conversation with Respondent B proved that the respondent was able to travel through a difficult time due to the divorce of the mother and father and continue his school life as usual. He has succeeded in using memorable learning strategies that continue to show brilliant eternal torture decisions despite facing the conflict of your father.
<i>existential aloneness</i>	Examining the results of a conversation with respondents D found that the respondent was a person who was very independent and was able to make his own decisions on various cases, especially in the field of learning. When questioned regarding the selection of subjects as there is Science or Literature, he declared that the election was made on his own without being influenced by others. Likewise, if faced with a problem he would solve it himself.

CONCLUSIONS

Talks related to resilience need to link between the two main constructs, namely experience or exposure to difficult circumstances when the second construct is a positive adjustment process such as the ability to handle pressure (Richardson, 2002). According to Zeynep and Firdevs (2011), among the main factors that underlie the concept of resilience is the realization of the ability of individuals to be individual personality traits to overcome the difficulties they experience. Therefore, this study may be specialized again by examining the personality factor of individuals who have high resilience so that existing knowledge can be used to foster resilience of other individuals. This case was also explained by Imam Al-Ghazali (1995) which emphasizes the element of human resilience originating from within themselves.

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Investigating Multilingualism on Syntactical Function: A Comparative Analysis

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ABSTRACT

Language is a tool to deliver messages to be uttered from the speakers to the listeners and the ability of using language is very important because the number of media to deliver the argument and thoughts is increasing. In this research, the writer analyzes the ability of using more than two languages as we call multilingualism phenomenon. This research adopted a descriptive qualitative method. The researcher found two videos from the multilingual person. The writer analyzed Indonesian, English, and Korean. The result stated that the multilingual person gets the language in different ways. English is her first language because she lives and grows up in Australia. For Indonesian and Korean, it can be concluded that she is able to speak Indonesian because of her interest in culture and for Korean she likes the culture from Korean drama she watched since she was 14. In Indonesian syntactical function and English syntactical function, verb comes after subject. While the similarity is the placement of adverbial can be in the front, in the middle, or in the last sentence. Meanwhile Korean syntactical function has its own rule where verb is placed at the end of the sentence and not after a subject.

Keywords: Investigasi multilingualisme, Sintaktis, Analisis komparatis

INTRODUCTION

In this modern era language is very important in order to make people keep up to date because if people are able to understand many things, it will make them able to master it, especially student. Unfortunately, awareness of being able to master Multilanguage is still rare. Most of students are only able to speak their mother tongue and their regional language, especially in Indonesia. Meanwhile, in this era the ability of using languages is very important because of digital in delivering argument and thoughts is increasing. It means the knowledge of language is also important because people can easily share they have on their mind and in order to be able to understand that, mastering more than one language is important. When we can speak more languages it will make us easier to understand everything wherever we are. In this case, language is a system of conventional spoken, manual, or written symbols by means of which human beings, as members of a social group and participants in its culture to express themselves. The functions of language include communication, the expression of identity, play, imaginative expression, and emotional release (Robins & Crystal, 2019). They also took a definition from Sweet (1890) that said language is the expression of ideas by means of speech-sounds combined into words. Words are combined into sentences; this combination answers the ideas into thoughts. It has been known that the ability of mastering language has its own importance in order to be able to adjust with this sophisticated era because we as a user has to get smarter than the technology we made. Besides that, language is also important because it has a relation with culture. Culture is always around us. When people are able to speak more than one language, every time they go to a different country with different language and culture then they will be easier to adjust with the culture around. There are many cultures in the world that we can explore to enrich our knowledge. To get easier learning the cultures, language is an important tool for that. As we know that there are several names of the ability of using language such as bilingualism, multilingualism, and polyglot. The cognitive advantages of multilingualism are widely documented. It improved metalinguistic skills, creative thinking, additional language and literacy development, intercultural sensitivity, and attendant socioeconomic benefits in the context of a fast globalizing world (French, 2016).

In this research, the writer analyzes the ability of using more than two languages or we call it as a multilingualism phenomenon on a vlogger's video. This research focused on three languages spoken by the multilingual person in syntactical function and how the multilingual person gets the languages. This research is aimed to know how the multilingual person gets the languages and to analyze the similarity among the languages in syntactical function.

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Language is a system which relates what is being talked about (content) and the means used to talk about it (expression). Linguistic content is inseparable from linguistic expression. In subject matter learning we (teachers) overlook the role of language as a medium of learning and in language learning we (teachers) overlook the fact that content is being communicated (Lopriore, 2018).

There may be no other word in the world that has as many connotations as this noun does with its few letters. For an anatomist, it will recall the set of muscle fibers divided into root, body, blade, and tip. A gourmet will think of tasty morsels in stewed, pickled, and smoked forms on the menu. Another definition of language is quoted from Robins & Crystal (2019), they said that language is a system of conventional spoken, manual, or written symbols by means of which human beings, as members of a social group and participants in its culture, express themselves. The functions of language include communication, the expression of identity, play, imaginative expression, and emotional release. They also took a definition from Henry Sweet that said language is the expression of ideas by means of speech-sounds combined into words. Words are combined into sentences, this combination answering to that of ideas into thoughts. From the explanation above it can be concluded that language is a system whether it is written or spoken by means of which human beings, as members of a social group and participants in its culture, express themselves. So that language is influenced by the culture and environment around.

Language has a relation with culture because language is a part of culture. Culture actually is a term that is difficult to define. Culture is a fuzzy set of basic assumptions and values, orientations to life, beliefs, policies, procedures and behavioral conventions that are shared by a group of people, and that influence (but do not determine) each member's behavior and his/her interpretations of the meaning of other peoples' behavior (Spencer-oatey, 2012). Culture is a derivative of individual experience, something learned or created by individuals themselves or passed on to them socially by contemporaries or ancestors. Culture is always both socially and psychologically distributed in a group, and so the delineation of a cultures' features will always be fuzzy (Spencer-oatey, 2012).

Nowadays, mastering more than one language is important for education and carrier. For example in education sector, the source for learning activity is much more than usually seen. If students and teacher can speak many languages, they can improve the language easier by reading a book or listening a source from the other countries which have different languages. In a world in which people are increasingly mobile and ethnically self-aware, living with not just a single but multiple identities, questions concerning bilingualism and multilingualism take on increasing importance from both scholarly and pragmatic points of view. Over the last two decades in which linguistic/ethnic communities that had previously been politically submerged, persecuted, and geographically isolated, have asserted themselves and provided scholars with new opportunities to study the phenomena of individual and societal bilingualism and multilingualism that had previously been practically closed to them [5]. There is a wide diversity of language learning beliefs including about the possibility of becoming a native-like speaker, the relative difficulties of languages, the importance of explicit grammar study, ets. One of the most pervasive beliefs concerns alleged age-related limitations Keeley, 2016).

In linguistics, syntax refers to the rules that govern the ways in which words combine to form phrases, clauses, and sentences. It's the concept that enables people to know things like adjectives generally come before the nouns they describe (green chair), how to start a question with a question word (What is that?), that subjects often come before verbs in non-question sentences (She jogged.), prepositional phrases start with prepositions (to the store), helping verbs come before main verbs (can go, will do), and so on (Nordquist, 2019).

Syntax is the grammar, structure, or order of the elements in a language statement. (Semantics is the meaning of these elements.) Syntax applies to computer languages as well as to natural languages. Usually, we think of syntax as "word order." However, syntax is also achieved in some languages such as Latin by inflectional case endings. In computer languages, syntax can be extremely rigid as in the case of most assembler languages or less rigid in languages that make use of "keyword" parameters that can be stated in any order (Hellsping, 2005).

As can be concluded that from the explanation, syntax refers to the rules that govern the ways in which words combine to form phrases, clauses, and sentences. It is also can be defines as the grammar, structure, or order of the elements in a language statement such as Object, subject predicative, object predicative, and adverbial (Hasselgård, 2015). Subject (S) is the "doer" of the action as has been quoted from Hasselgård (2015). Subject in the sentence is a word or group of words detonating something that is uttered. The subject may be a noun or any word or a group of words substituting for a noun (Helmie,

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2015). Verb (V) is a word that denotes an action or state of being. It is included a main verb with or without auxiliaries (Helmie, 2015).

Syntactical function is a part of grammar that focuses on relationship of one constituent to another within a syntactic construction. Syntactical function consists of five parts such as subjects, predicates, objects, complements, and adverbials. Direct object (dO) is the sufferer/ result of the action. The direct object of a verb is the thing being acted upon. While according to Nordquist (2019), the direct object of a transitive verb is the person or thing that is affected by the action of the verb. Indirect object (iO) is the beneficiary of the action. An indirect object is an object which is used with a transitive verb to indicate who benefits from an action or gets something as a result. For example, in 'She gave him her address', 'him' is the indirect object [8]. Adverbial (A) is a statement of time, place, or manner. According to Nordquist [11] an adverbial is an individual word (that is, an adverb), a phrase (an adverbial phrase), or a clause (an adverbial clause) that can modify a verb, an adjective, or a complete sentence (Nordquist, 2018). Syntactical function can be concluded as grammar that focuses on syntactic construction.

In language there is what we call language acquisition, it is very similar to the process children use in acquiring first and second languages. It requires meaningful interaction in the target language (natural communication) in which speakers is concerned not with the form of their utterances but with the messages they are conveying and understanding. Error correction and explicit teaching of rules are not relevant to language acquisition in Krashen (2002), but caretakers and native speakers can modify their utterances addressed to acquirers to help them understand, and these modifications are thought to help the acquisition process (Farwell, Snow, Catherine, & Ferguson, 1979). The fundamental claim of Monitor Theory is that conscious learning is available to the performer only as a Monitor. In general, utterances are initiated by the acquired system. Our fluency in production is based on what we have picked up through active communication. Our formal knowledge of the second language, our conscious learning, may be used to alter the output of the acquired system, sometimes before and sometimes after the utterance is produced. We make these changes to improve accuracy, and the use of the Monitor often has this effect. Figure 1 illustrates the interaction of acquisition and learning in adult second language production (Krashen, 2002). Each language has its own set of rules for speaking and writing the language properly, and individuals trying to learn a new language often blur the lines between which set of rules to use. Second language learners also face a certain degree of fear or anxiety about tackling a new language, which can, in turn, affect how easily or how well they acquire a second language. Ann E. Oliveri, a teacher with 30 years of experience teaching English as a second language (ESL), describes second language acquisition as a learning continuum because the person learning a new language (Abreu, 2012).

RESEARCH METHOD

There are two kinds of research problems in this research. The first one is how does the multilingual person get the languages? And the second one what is the similarity among the languages in syntactical function? This research adopts a descriptive qualitative method to analyze and classify the data. Qualitative method is used to gain an understanding of underlying reasons, opinions, and motivations. As known that qualitative research is a type of social science research that collects and works with non-numerical data and that seeks to interpret meaning from these data that help us understand social life through the study of targeted populations or places (Crossman, 2018). The researcher found two video of a girl who can speak more than three languages. The researcher chose those videos because they were suitable as what the researcher needed for this research. The multilingual person is a Eurasian girl lives in Australia. This research analyzed how the multilingual person, gets those languages and what is the similarity between those languages in syntactical function.

To complete this study, the writer sought data from two vlog videos presented by a girl who is able to speak more than two languages. The first video is about how she got the languages while the second video is showing her ability in speaking the languages. On the first video, the multilingual person explained how she gets the languages. The video takes 10 minutes 5 seconds, the researcher transcribed only on the parts when the multilingual person explains about how she gets English, Indonesian, Korean. For the second video, the respondent speaks seven languages. The first video has 4 minutes 21 seconds duration but same as what has done to the previous video, the writer only transcribed at some parts that are needed. The writer analyzed the three of language which are: Indonesian, English, and Korean. The researcher analyzed the video by transcribing them.

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After all the data collected, then the next step is analyzing the data. Analyzing data or data analysis is a process of arranging systematically the data which have been obtained. This research analyzed how the multilingual person, gets those languages and what is the similarity between those languages in syntactical function.

RESULTS AND DISCUSSION

How the Multilingual Person Get the Languages

Referring to the data, it can be seen that the multilingual person gets the languages by different ways. For the first language, English, she said that she is fluent in English because she grew up in Australia so her mother tongue is English. She also mentioned that her family speaks English that also influence her ability in speaking. For the second language, Indonesian, as has been mentioned in the finding that she get the language from her school when she was 7 years old. She keeps continue learning Indonesian until at the age of 12. Even she has learnt it with her teacher, she keeps learning the language by travelling and exploring Indonesia. She went to Indonesia for several times and she loves its culture. It can be concluded that she gets the language by learning with purpose. She also enjoys learning Indonesian because she is curious and interested in the culture which makes her motivated to learn more and more about Indonesian. It can be concluded that she is able to speak Indonesian also support by her interest to its culture.

For the third language, Korean, she started to learn Korean by the age on 14. At first, she only liked the drama series from Korea but day by day it makes her often to hear the dialogues in Korean. She became get used to it and wanted to learn how Korean speaks. She learned Korean only with herself, internet, drama series, and some books. Mostly she learned from the drama series. It can be concluded that she learned it by her own. Until four years later, she could watch Korean dramas and understood the conversation on the dramas. It can be concluded from the data that her interest to Korean appeared because of the drama series which motivated her to understand the conversation in the series. Notwithstanding she did not have a teacher for Korean but she got success to learn it by herself at home without pressure and while enjoying her favorite thing, Korean drama. From the discussion above, it can be seen that the multilingual person wanted to learn new languages because she also like the culture that made her excited to learn more the language until she is able to speak it fluently. So in teaching language, the teacher can input the culture from the language they are teaching itself so the student can be excited and easier to get the language because of the comfort and the excitement of its language. It is relevant to the theory proposed by Olusiji (2016) where learning a culture of a target language is important in achieving success in learning the new language.

Similarity among the Languages in Syntactical Function

From three data, in English syntactical function subject is always followed by verb. After that, some verbs are followed by object and some of them are not because from the data object does not always appear in the sentence. It is concluded in the third data which shows no object at all. While for Indonesian syntactical function, it has similarity with English syntactical structure. The similarity is that subject is always followed by verb, after verb, sometimes it is continued by object and sometimes not. It can be seen in the first, second, and third data which shows no object at all. Based on the data from Korean syntactical function, the researcher did not find big similarity between Korean and Indonesian or English syntactical structure. Korean has its own rule where verb, the action words in a sentence that describe what the subject is doing, is placed at the end of the sentence and not beside a subject. On the other hand, in Indonesian syntactical function and English syntactical function, verb always comes after subject.

The writer only found a little similarity among Indonesian syntactical structure, English syntactical structure, and Korean syntactical structure where the placement of adverbial can be in the front, in the middle, or in the last middle, or the last sentence.

CONCLUSIONS

This paper found some conclusions. It is found that the multilingual person gets the language in varied ways. For English, The multilingual person is able to speak English because English is her native language, she acquired it because she lives and grows up in Australia. For the next is the multilingual person is able to speak Indonesian because she learned it at school since the age of 7 until 14. And for

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Korean, the multilingual person is able to speak Korean because she liked Korean dramas that made her interested in learning Korean. She learned Korean by herself at home through the Internet and dramas. There is similarity can be found in syntactical function between Korean with Indonesian or English where adverbial can be place in the front, the subject is always followed by verb. Meanwhile, the position of subject in Korean is not similar to English and Indonesia because in Korean, verb comes in the end of a sentence and not beside the subject.

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The Effectiveness of Training "Success with (BEST) Effective Learning Focused and Relax" to Improve Self-Regulated Learning in Vocational High School Students

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ABSTRACT

Vocational High School (SMK) is one of education that combines academic and vocational education. Vocational subject hours in vocational curriculum has a load of 24 hours a week containing practical activities. In vocational education setting, students are required to work and learn independently and be able to modify the environment to make it more adaptive to accommodate the learning needs of students that are expected to create learning goals and knows how to achieve the learning objectives. Answer this problem, the researchers propose a training named "Success with BEST (Learning Focused and Relax) that use the basic theory and training stages as in reality therapy. This study is a quasi-experimental study with experimental design one group pre-post design. The participants are 11 tenth-grade students in SMKN 8 Surabaya. The data are collected by self-regulated learning scale for high school students. The data were analyzed using non-parametric statistical Wilcoxon signed rank test. The results of the data analysis of the subject scores on all three measuring tool shows Z value of -2,937 with $p = 0,003$ ($p < 0,05$) so that it can be concluded that the training Success with Effective Learning Focused and Relax (BEST) can improve self-regulated learning in students X. Effect size class training showed a score of 0,461, which means training Success with Effective Learning Focused and Relax (BEST) provides a strong enough influence on self-regulated learning participants. The researchers suggested that using this training to students in all grade levels.

Keywords: vocational students, self-regulated learning, effective learning, reality therapy

INTRODUCTION

Based on the Minister of Education and Culture Regulation No. 70 of 2013 (Permendiknas, 2013) concerning the implementation of secondary school curriculum, it is stated that the curriculum structure in vocational high school (SMK/MAK) is designed to be the same as senior high school (SMA/MA), which is basically a secondary school with two compulsory subject groups. The subject of group A (religious education, citizenship education, Indonesian language, mathematics, Indonesian history, English) and the subject of group B (arts and culture, physical education and sports, craftsmanship and entrepreneurship). Then the difference between vocational high school (SMK/MAK) and senior high school (SMA/MA) is in the group of specialization subjects. In senior high school specialization subjects are academic specialization while in vocational high school specialization subjects are academic specialization and vocational specialization.

Related to the government regulation number 70 of 2013, in vocational high school is not only get the compulsory subjects but also should take academic specialization and vocational subjects. Academic specialization has the understanding of general subjects that must be taken because they form the basis of the theory of each chosen expertise program. Vocational basically leads to expertise competencies that will be owned by graduates from vocational high schools. SMKN 8 Surabaya itself is engaged in tourism expertise and also has the same curriculum as stipulated in government regulations. If a comparison is made, the number of hours of senior high school student learning is 42 hours per 10 weeks while vocational student is 48 hours per week, vocational schools have more 6 hours of study per week.

The facts like this will certainly greatly influence the process of student learning activities in schools so that vocational students should be required to have the ability to regulate the learning process in order to meet the competency standards set by the government so that they can achieve academic success. According to Gruwel-Brand, Jossberger, Boshuizen, & van de Wiel (2010) school environment with a

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setting like vocational high school, students are required to work and study independently and be able to modify their environment to be more adaptive in accommodating students' learning needs so that they are expected to be able to make their learning goals and know how to achieve these learning goals.

Related to the learning demands in vocational high school that are so large, it turns out that conditions in the field have not shown progress toward meeting these learning demands. This is proven through the results of a survey conducted by the researchers on 78 students of X class beauty majors at SMKN 8 Surabaya which showed that 91% of students majoring in beauty did not have planning in learning and did not use any learning strategies when they were educated in school. 91% of students do not have a regular schedule for studying outside school hours. 33,3% of students stated that their biggest obstacle in learning was feeling lazy, 45% of students stated that mood or feeling conditions were the biggest obstacles in learning (Laili, 2015).

This data is also strengthened by the results of the distribution of scores from the scale of self-regulated learning given to beauty X class students as preliminary study data, from 78 students who become the respondents, 21 students or 27% have low self-regulated learning (SRL) scores (Laili, 7 April 2015). These things indicate that vocational students especially beauty majors experience problems in learning and it is still difficult to lead themselves in learning activities outside school hours. The survey results are also supported by the results of a focused group discussion (FGD) conducted by the researchers of 5 students in beauty X class and 3 students in food service X class. The results of the discussion showed that 4 of them entered vocational school because they followed the instructions of their parents so they did not seriously study at school. Most students do not understand what learning planning is and how to do learning planning, they also do not have a regular study schedule outside of school hours, only two or three students who take private lessons outside of class hours. Furthermore, these students are easily influenced by mood when studying or doing assignments (if they are not in the good mood then they do not study), and when they have difficulty in doing their assignments they are afraid to ask the teacher and prefer to copy the results of their friends' work (Focus Group Discussion, 2015).

Based on the facts that occur in the field, the researchers propose an intervention that is theoretically able to overcome the problems. Interventions in the form of training with the title Success with Effective Learning Focused and Relax (BEST), which each stage is based on the stages in reality therapy. Reality therapy itself has 4 stages, namely: wants, direction, evaluation, and planning which according to Banks (2011) and Kianipour & Hoseini (2012) are able to effectively improve the self-regulated learning of high school students.

Teurling and Van der Sanden, 1999; Vrieze, Van Kuijk, and Van Kessel, (2001 in Gruwel-Brand, Jossberger, Boshuizen, & van de Wiel, 2010) stated that students in educational environments that prioritize practice will certainly challenge the students to gain knowledge, skills in learning, and attitudes related to his work. Such challenges make students have to develop their attitude to work independently and be able to learn many things independently such as self-regulated learning theory. A study identified self-directed learning and self-regulated learning as a key skill in learning and achieving high-quality performance (Knowles, 1975; Van de Wiel, Szegedi, and Weggeman, 2004; Zimmerman, 2006 in Gruwel-Brand, Jossberger, Boshuizen, & van de Wiel, 2010).

Related to the research on self-regulated learning, many researchers raised a variety of intervention methods in improving self-regulated learning. One of them is Priyambodo (2013) whose research results state that self-regulated learning in first-year students at the Faculty of Psychology, Airlangga University can be improved through interventions that use group counseling methods. Other research conducted by Ermida (2015) and the results stated that the intervention model using the training method of self-regulated learning strategies conducted in a group can improve the ability of self-regulated learning of first year students. In line with this, the results of research from Banks (2011).

Ormrod (2000) states that to improve self-regulated learning a student needs to be trained to improve his learning activities by setting up some of his own learning goals and then monitoring progress in achieving these goals. Students need to be given a number of activities in the form of group activities that focus on changing behavior and self-regulation. This group activity will be directed in the form of training which is based on the stages in reality therapy proposed by Glasser and Wubbolding (in Corey, 2009). The work of training is to train participants to be able to explore the aspects of want, direction, evaluation, and planning. This aspect is the stages in reality therapy. Want is the first stage of the reality therapy process in which participants are able to find their desires. Direction is the ability of participants to find out what they have done in achieving their desires. The evaluation stage is when participants are

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able to assess whether the things they have done are approaching or moving away from their desires. The last stage is planning, where participants are invited to make short, medium and long-term plans to achieve their desires. Exploring these aspects aim to make participants aware of their desires and goals in learning and to remind them that every action taken will have responsibilities that must also be shouldered by an individual (Glasser, 2003 in Corey, 2009).

Based on the facts and data presented above, an intervention is needed to overcome the problem of self-regulated learning that occurs in students of SMKN 8 Surabaya. SMKN 8 Surabaya were the target of the study, X class that had just received a vocational high school education for almost one year, which meant they were still in their teens. Characteristics of adolescents according to Santrock (2003) is someone who is still in the search for identity and is still in the process of regulating and controlling his emotions which fester and often underestimate the little things. These characteristics turned out to affect many aspects of their lives including learning. Therefore, the form of intervention that is considered most appropriate for students' conditions is training that uses a reality therapy approach. Then in order to be able to leave a deep impression on the participants who are still teenagers, the researchers decided to give the name of the training a short and easy to remember by the participants namely the Success with Effective Learning Focused and Relax (BEST) which is believed to be able to improve the participants' self-regulated learning.

RESEARCH METHOD

The research design conducted by the researchers is one group pre-post design. This experimental research design did not have a control group and did not go through a randomization process (Seniati, Yulianto & Setiadi, 2005). The researchers' reason use this design is that the researchers will select research subjects based on subject scores on a scale of self-regulated learning for school students. Subjects who get low scores on this scale will be the subject of research, thus not all students in X class will be the subject of the research.

2.1. The operational definition of independent variable (X) is SUCCESS WITH BEST training (Effective Learning Focused and Relax) where the training stage used is reality therapy approach proposed by Wubbolding (2007 in Corey, 2009), the stages include want, direction, evaluation, and planning.

2.2. The operational definition of the dependent variable (variable Y) in this research is an independent effort from a person (in this research is X class student majoring in beauty at SMKN 8 Surabaya) in managing their learning system independently. In this case he is able to plan, process, and evaluate independently the results of his learning, and to support the learning process, he also regulates the learning environment both in terms of physical (for example, places to learn, conditions of learning) and in terms of social (for example, study partners) (Zimmerman, 1988).

The subjects of this research were students of X class in SMKN 8 Surabaya. The research subjects will be selected based on a scale of self-regulated learning scale for school students, the students who have low scores on that scale.

RESULTS AND DISCUSSION

Table 1: Data Distribution of Self-Regulated Learning

Category	High	Medium	Low
Total	24	33	21

Training participants are students who have a low category score based on group norms that have been compiled then obtained 11 students who meet the training criteria, which have a score below 129. The data for prospective trainees with a scale score can be seen in the table below:

Table 2: Students' Score of Low Category in SRL Scale who become the Participants

No	Name	Score of SRL Scale
1	FO	124
2	RL	124
3	RS	105
4	AD	102
5	RR	121
6	NF	124

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7	ER	121
8	NV	119
9	TB	120
10	SN	122
11	SO	123

Research hypothesis testing is done by testing the overall pretest and posttest scores of participants on the self-regulated learning measurement tool. The pretest and posttest scores of the measuring instrument are as follows:

Table 3: Students' scores on measuring instruments of SRL

No	Name	Pretest	Posttest	Difference
1	FO	124	128	+4
2	RL	124	145	+21
3	RS	105	114	+9
4	AD	102	118	+16
5	RR	121	131	+10
6	NF	124	137	+13
7	ER	121	135	+14
8	NV	119	150	+31
9	TB	120	141	+21
10	SN	122	153	+31
11	SO	123	130	+7

Before determining parametric or non-parametric statistical analysis, the researcher must do the assumption test first, namely the normality test and the variance homogeneity test. Thus it can be concluded that there is an increase in the attitude of X class students towards self-regulated learning after receiving the training "Success with Effective Learning Focused and Relax (BEST)". Furthermore, the results of this statistical test can also be the answer to the problem formulation so that the research hypothesis is accepted that Success with Effective Learning Focused and Relax (BEST) can improve the self-regulated learning of vocational high school students in SMKN 8 Surabaya.

The data on the evaluation of behavioral aspects was obtained from the inter-rater interview process to the trainees and was conducted in 2 interviews, namely before and after the training Participants Score on Behavior Aspects Evaluation

Table 4: Students' scores on evaluating aspects of behavior

No	Name	Pretest		Average Pretest	Posttest		Average Posttest
		Int. 1	Int. 2		Int. 1	Int. 2	
1	FO	23	23	23	32	36	34
2	RL	34	34	34	36	35	35,5
3	RS	20	20	20	21	22	21,5
4	AD	22	24	23	28	28	28
5	RR	27	26	26,5	26	30	28
6	NF	35	29	32	36	32	34
7	ER	17	16	16,5	17	19	18
8	NV	33	34	33,5	37	38	37,5
9	TB	27	31	29	38	38	38
10	SN	31	35	33	36	36	36
11	SO	18	16	17	24	27	25,5

In behavior aspects of the data, the assumption test is performed first to determine the data analyzed using parametric or non-parametric statistics, namely the normality test and the variance homogeneity test. Thus it can be concluded that there is an increase in the self-regulated learning behavior of X class students after receiving the training "Success with Learning Focused and Relax (BEST)".

The results of statistical analysis on the SRL scale show that there is an increase in self-regulated learning for participants after attending the training, so this ability proves that this research hypothesis is accepted, namely the Success with Learning Focused and Relax (BEST) can improve self-regulated learning of vocational high school students in SMKN 8 Surabaya. The theoretical explanation needs to

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support the data above, the explanation is between Success training with Effective Learning Focused and Relax (BEST) which uses a reality therapy approach with self-regulated learning which have planning stages that according to Wubbolding (2007 in Corey, 2009) in these stages taught to arrange learning plans that are simple, easy to do, and suitable with the abilities of each participant. Besides being taught to plan, participants were also asked to specify when the plan would be implemented. The plan must be able to be done within a short time of preparing the plan. While the planning stage in the dimension of self-regulated learning is the dimension of improving personal functions in which there are indicators of goal setting and planning (Zimmerman & Martinez, 1990).

CONCLUSIONS

The results showed that the training "Success with Effective Learning Focused and Relax (BEST)" can improve self-regulated learning of X class students of SMKN 8 Surabaya. Some suggestions that can be given in this study are:

For the next researcher:

- a. Use more appropriate and comprehensive measuring tools that can measure aspects of understanding, perception, and self-regulated learning behavior of participants.
- b. Module development is more operational, it is carried out over a longer period of time (3 to 5 training days) to make it easier for participants to learn the material and all the necessary data can be extracted.
- c. Expanding the number of research subjects so that research results can be generalized to a wider population.
- d. The use of a control group in the design of the experiment so that the researcher can find out in detail about the effects of training on the group that received training (the experimental group) with the group that did not receive training (the control group).
- e. Evaluate the result level especially for subjects chosen by the participants as prerequisite subjects that support participants to achieve their desires so that the effectiveness of the training can be seen more clearly on students' academic achievement.

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English Pre-Service Teachers' Perception of the Use of Just-in-Time Teaching Method in ELT and Instructional Media Learning Context

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ABSTRACT

This small-scale research investigated the English pre-service teachers' perception of the use of Just-in-Time Teaching method (2 times trial) as the potential way to stimulate English Pre-Service Teachers' learning Engagement; in this context their activeness and motivation when learning the materials about English Language Teaching (ELT) theory and Instructional Media. Just-in-Time Teaching (JiT) method is a method that was pioneered for the first time by Novak, Gavrin, Patterson, and Christian (1990) using feedback loop system between the use of web based technology (online) outside the classroom and teaching in the inside classroom. This research took 35 respondents of English pre-service teachers using the close-ended questionnaire (quantitative) and added with open-ended questionnaire (qualitative). The question of this research is: Does Just-in-Time Teaching or JiTT Method stimulate English Pre-Service Teachers' ELT and Instructional Media learning engagement, particularly their activeness and motivation? The result showed there were positive experiences from English pre-service teachers in the 2 times trial of the use JiTT method. They felt more active, and got a lot motivation after they learned some materials of English Language Teaching theory and Instructional Media using this method. The English Pre-Service Teachers' perception towards JiTT method may open the opportunity to apply this method continuously that can support them with better concept of theory and practice of ELT and instructional media context for teaching their students in future.

Keywords: Teacher perception, Just in time, ELT

INTRODUCTION

Pre-service teachers or also called by students' teachers or teacher candidates are known as undergraduate students who are undertaking course in pedagogy, content specialty, or technology but they have not yet entered the teaching activities (See Cohan & Honigsfeld, 2011; Kafyulilo, 2012). At this stage, pre-service teachers are still in progress to learn everything they need to support their future teacher profession. In the context of English Language Teaching (ELT), being a good English teacher can be very hard and complicated. The English teacher's candidate must know the standard for teaching English for their students. They need to master not just on the English content or subject matter knowledge, but also they need to comprehend the English teaching skills (See Richards, 2007). What it means by English content or subject matter knowledge is how the English teacher's candidate masters the concepts and disciplines of English (skills, discourse, linguistics, pedagogy relevant materials, and etc). Meanwhile, English teaching skills are more on understanding the ELT theory, method, strategy, Instructional media, and etc that will support their teaching performance. Thus, English pre-service teachers must aware for having and achieving those English teaching standards.

In the case of Indonesia English pre-service teachers, they may have no trouble with the English content or subject matter knowledge, but in the area of English teaching skills (ELT theory, method, strategy, instructional media, and etc), they may get problems of it. Indonesia English pre-service teachers are going to teach English as foreign language for their students, either at primary or secondary school, so they need to prepare, to acquire, to use the best teaching technique, method, strategy, and media for teaching their future pupils. However, to make English pre-service teachers understand and master the English Language Teaching (ELT) theory, method, strategy, instructional media, and etc is surely not easy. They often feel bored or not interested much due to the lots of theory and concept they need to learn. Moreover, commonly, they are passive, and they really depend on the teachers or lecturer (See Meyer, 2014). It is difficult to create "a learning engagement; activeness and motivation" for Indonesia English pre-service teachers. This issue is crucial, and it needs to be highlighted.

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Therefore, this study explores the English pre-Service teachers' perception of the use of Just-in-Time Teaching method to create their learning engagement (activeness and motivation). The researchers state question; Does Just-in-Time Teaching or JiTT Method stimulate English Pre-Service Teachers' ELT and Instructional Media learning engagement, particularly their activeness and motivation? This research can reveal whether or not JiTT method is positive to boost English Pre-Service Teachers' learning Engagement known from their perception.

Literature Review

What it means by a learning engagement; activeness and motivation is a synergic interaction between those variables which create the engaging learning, in this case when learners are seen involving a lot into the learning activities, they use active thoughts towards materials given by the teacher or lecturer as one as gaining learners' motivation or known as changing the interest of students (internal and external), expectations, and values to be achieved by learners (See Matshusita, 2017). Students' learning engagement is a term that closely related to activeness and motivation. (Fredericks, Blumenfeld, & Paris, 2004) tend to call the involvement of students with the concept of "school engagement" which has three specifications, known as behavioral engagement, emotional engagement, and cognitive engagement. The activeness can be seen from the learner's behavioral engagement (participate or be actively involved in the learning given, such as following rules, concentration, attention, effort to engage in discussions, or want to ask questions) and learner's cognitive engagement (solving problems, understanding complex knowledge, or mastering the skills taught). Meanwhile, motivation can be seen in learner's emotional engagement (the psychological side where students react positively and negatively to learning, such as being interested, bored, anxious, happy, like, or sad). Christenson, Reschly, and Wylie (2012) asserted that motivation is the outward manifestation; a display of active involvement of students when participating in a lesson. The main point of pushing Indonesia English pre-service teachers' learning engagement; their activeness and motivation is to make them to be interested or taking part related to materials. Shernoff (2013) explained that students can be said to be actively involved if students are given the opportunity and time to complete a task, they concentrate on the quality of their work, they are committed, participatory, and influence the values they want to achieve. Of course, the main goal of creating, in this case Indonesia English pre-service teachers' learning engagement; their activeness and motivation is to support them to achieve the standards and goal of learning that they need and expected to have; in this context mastering the English Language Teaching (ELT) theory, method, strategy, instructional media, and etc. Hence, there must be a proper way to solve this learning engagement issue.

One of method that may help Indonesia English pre-service teachers to boost their ELT theory, method, strategy, instructional media, and etc learning engagement; activeness and motivation is the implementation of Just-in-Time Teaching (JiTT) method. Today is the rise of technology era of information communication and technology (ICT) or even tend to move to what it is called by the disruption era or often noticed by Industry revolution 4.0. Indonesia English pre-service teachers can be taught to use Just-in-Time Teaching method as parts of their ELT theory, method, strategy, and instructional media learning. Just-in-Time Teaching (JiTT) method is a method that was pioneered for the first time by Novak, Gavrin, Patterson, and Christian in 1990 to teach physics using feedback loop system between the use of web based technology (online) outside the classroom and teaching in the inside classroom (face to face) (Marrs & Novak, 2004). The idea is simple by asking students to do tasks (utilizing website) that must be learned, done, and collected several hours before class starts (just in time), to then be assessed and examined by the teacher (Cookman, Mandel, & Lyons, 2006).

Gravin (2007) pointed out that by applying the web-based technology, students could be very well-prepared to learn the material that are going to be delivered by teachers in class, and it can make them actively involved in learning (by reading the materials first, identifying themes, and answering questions) before entering the classroom. Simkins and Maier (2010) added that the concept of JiTT method can make the students do warm-up learning (outside the classroom) towards material and course that will be given as well as make them to practice by themselves first (formative assessment given inside the web), while in the classroom, the focus of the teacher or lecturer is easier to just do the analysis of student learning outcomes on the web learning (reinforcement). Therefore, the JiTT method can provide great benefits to the achievement of learning objectives because the provision of learning material is done not only in the classroom, but student learning is also carried out in classroom activities by accessing material and answering online exercises determined by the teacher or lecturer.

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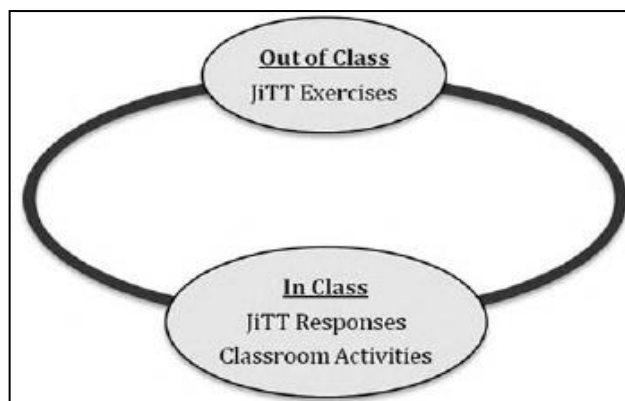


Figure 1. by Marrs and Novak (2004)

Many literatures have pointed out the advantages of implementing the Just-in-Time Teaching method such as Odums (2014) who conducted an experimental comparison of research methods between Just-in-time teaching and conventional methods. His research focused on critical assessment in the field of business science in Nigeria. Wanner (2015) examined students' engagement using the Just-in-time teaching method collaborated with the use of PowerPoint software in the field of educational technology in Australia. In the area of education specifically related to teaching English, research using the Just-in-Time Teaching method had been done by Abreu and Stephanie (2014) with a focus on research on foreign language studies of higher education. Then, Chantoem and Rattanavich (2016) who studied the Just-in-Time Teaching method for Thai vocational students to improve reading and writing skills. While in Indonesia, research with the use of Just-in-Time Teaching method have not been done much, such as from Wati, Maridi and Ramli (2017) who explored JiTT method in Biology education area. Especially in English language research, ELT, or instructional media, it is still rare.

RESEARCH METHOD

This study was conducted in Private University of Muhammadiyah Prof. Dr. Hamka, Jakarta, and the researchers used small scale participants which selected and took 1 classes of ELT theory and Instructional media courses (4th semester on 2017/2018 Academic Year) with total 35 respondents. The researchers used close-ended questioners' instrument by Likert's ordinal scale from 1= Strongly disagree (SD), 2= Disagree (D), 3= Neither agree nor disagree (Neutral /N), 4= Agree (A), and 5= Strongly agree (SA), and added by open-ended questioners; instrument. The result of close-ended questioner lead to quantitative measurement needed to recap the participants' respond, meanwhile open-ended questioner lead to qualitative description. These instruments were adapted, developed, and modified based on Cookman, Mandel, and Lyons (2006) questionnaires that suit to find the English Pre-Service Teachers' perception of the use of Just-in-Time Teaching method in ELT and Instructional Media learning at class.

For the procedures, researchers first asked the English pre-service teachers to study about ELT theory and Instructional media using Just-in-Time Teaching method (experiencing learning using JiTT method only for 2 meetings). The materials, the practice, and the formative assessment were given in website, thus English pre-service teachers can study it by themselves first (at night before meeting held). Next in the class, the lecturer did check, analyzed, discussed towards ELT theory and Instructional media materials they have learned. After all activities had been done, the English pre-service teachers were given open-ended and close-ended questioners' instrument to figure out their perception towards JiTT method and students' learning engagement of activeness and motivation.

RESULTS AND DISCUSSION

In this section, the data of questioners were showed first as results of this study, and then the discussion were elaborated afterwards.

English pre-service teachers' perception of JiTT method and its impact to their learning engagement; activeness.

Table 1: The Close Questioner of JiTT Method and Students' Activeness

Questions	\bar{X}	SA	A	N	D	SD
Students' learning engagement; activeness after experiencing JiTT method (Outside - Inside Class Activities)						
1. I always read ELT Theory and Instructional media material presented on the website before the lecture begins.	4.4	14 (40%)	21 (60%)	0 (0%)	0 (0%)	0 (0%)
2. I can understand every material on the website quickly and easily.	4.3	9 (26%)	26 (74%)	0 (0%)	0 (0%)	0 (0%)
3. I become more prepare for material that will be studied with the help of the website.	4.5	16 (46%)	19 (54%)	0 (0%)	0 (0%)	0 (0%)
4. If there is material that is poorly understood, I immediately ask in the website comments column.	4.5	19 (54%)	16 (46%)	0 (0%)	0 (0%)	0 (0%)
5. I follow and do the formative assessment on the website.	4.8	27 (77%)	8 (23)	0 (0%)	0 (0%)	0 (0%)
6. When I was in class, I focused on listening and paying attention to the lecturers' explanations regarding the material being studied.	4.5	19 (54%)	16 (46%)	0 (0%)	0 (0%)	0 (0%)
7. I feel active and responsive by asking the lecturer regarding material that I still not understand.	3.5	7 (20%)	21 (60%)	6 (17%)	1 (3%)	0 (0%)
8. I also try to actively discuss with friends related to the material being studied.	4.4	15 (43%)	20 (57%)	0 (0%)	0 (0%)	0 (0%)
9. While discussion session, I am able to provide an argument or explanation regarding the material being studied.	4.1	7 (20%)	26 (74%)	2 (6%)	0 (0%)	0 (0%)
10. I feel more concentrated and fully involved in the discussion about the material in class.	4.4	13 (37%)	22 (63%)	0 (0%)	0 (0%)	0 (0%)
Total		146 41%	195 56%	8 2%	1 1%	0 0%

Based on 10 items shown from the table 4.1 above, it can be seen that there were total 341 responds or 97% students who confirmed strongly agree (146 responds or 42%) and agree (195 responds or 56%) about becoming more active and involved when learning ELT theory and instructional media through JiTT method. Meanwhile, it was only found small number of students who responded neutral (8 responds or 2%) and disagree (1 respond or 1%) from the questioner given. Below is the visualization of English pre-service students' average score from item number 1 up to 10 that showed their responses after experiencing JiTT method (2 times trial):

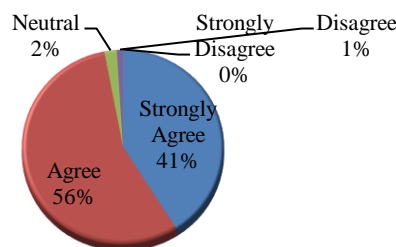


Figure 2. The Average Score of JiTT Method and Students' Activeness

English pre-service teachers' perception of JiTT method and its impact to their learning engagement; motivation.

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Table 2: The Close Questioner of JiTT Method and Students' Motivation

Questions	\bar{X}	SA	A	N	D	SD
Students' learning engagement: motivation after experiencing JiTT method Outside - Inside Class Activities						
1. JiTT method motivates me to read ELT theory and Instructional media material before the meeting.	4.7	23 (66%)	12 (34%)	0 (0%)	0 (0%)	0 (0%)
2. JiTT methods helps me to be able to study independently.	4.7	26 (74%)	9 (26%)	0 (0%)	0 (0%)	0 (0%)
3. With the obligation to do the formative assessment on website, I become more ready in learning.	4.9	33 (94%)	2 (6%)	0 (0%)	0 (0%)	0 (0%)
4. The JiTT method adds my motivation and enthusiasm, such as asking material that is quite difficult to understand in website comment column.	4.4	15 (43%)	20 (57%)	0 (0%)	0 (0%)	0 (0%)
5. I like and enjoy the JiTT learning method applied in class.	4.8	28 (80%)	7 (20%)	0 (0%)	0 (0%)	0 (0%)
6. The JiTT method adds motivation and enthusiasm while question-answer session with lecturer in class.	3.9	7 (20%)	27 (77%)	1 (3%)	0 (0%)	0 (0%)
7. The JiTT method adds motivation and enthusiasm for me to discuss with friends when studying in class.	4.3	17 (48%)	16 (46%)	2 (6%)	0 (0%)	0 (0%)
8. The JiTT method isn't bore me when applied in class.	4.3	30 (86%)	5 (14%)	0 (0%)	0 (0%)	0 (0%)
9. I became more serious about studying ELT theory and Instructional media material in class.	3.3	9 (26%)	26 (74%)	0 (0%)	0 (0%)	0 (0%)
10. I fully concentrate while following the learning process in class.	3.7	5 (14%)	20 (57%)	9 (26%)	1 (3%)	0 (0%)
Total		193 55%	144 41%	12 3%	1 1%	0 0%

Based on 10 items shown from the table 4.2 above, it can be seen that there were total 338 responds or 96% students who confirmed strongly agree (193 responds or 55%) and agree (144 responds or 41%) about becoming more motivated in learning ELT theory and instructional media using JiTT method. Again, it was also found small number of students who responded neutral (12 responds or 3%) and disagree (1 respond or 1%) from the questioner given. Below is the visualization of English pre-service students' average score from item number 11 up to 20 that showed their responses after experiencing JiTT method (2 times trial):

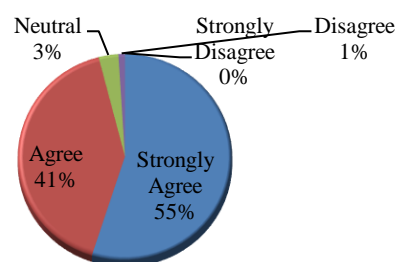


Figure 3. The Average Score of JiTT Method and Students' Motivation

From 2 result points above (a) and (b), it can be known that English pre-service teachers truly felt active and motivated in learning ELT theory and instructional media using JiTT method (2 times trial). To strengthen and validate the results from previous close-ended questioner, researchers gave deeper question (open-ended) to the respondents (two samples) as follows:

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Table 3: The Open Questioner of JiTT Method and Students' Learning Engagements

Question	Answer
<p>1. Give your feedback regarding to the use of the Just-in-Time Teaching (JiTT) method in class! Do you feel more active and motivated to learn ELT theory and instructional media? Elaborate the reason!</p>	<p>- Respondent 1: <i>I feel so happy. I can learn more active at home because the method encourages me to study at home through the website first. Exciting, new experience.</i></p> <p>- Respondent 2: <i>This method is good. I am motivated to learn, I have a better preparation. At home, I read the materials on website first, then working on the questions, and discussed the next day in class.</i></p>

Based on the 2 respondents shown from table 4.3 above, it can be known that English pre-service teachers stated positively when they were asked about their experiences using JiTT method in learning ELT theory and instructional media. Respondent 1 clearly stated their happiness and excited feeling, and Respondent 2 evidently confirmed about the motivation rising in learning ELT theory and instructional media through JiTT method.

Discussion

Due to the findings of the study presented previously, it can be proved that the 35 respondents of English pre-service teachers indeed confirmed that the use of JiTT method in learning ELT theory and instructional media stimulates their learning engagement: activeness and motivation known from 97% and 96% students who responded strongly agree and agree in the close-ended questioner (no.1-20). The researchers believed that this positive experiences are based on the concept of Just-in-Time Teaching Method which combines the outside and inside activities, especially the use of website (online learning) that ease students to learn individually without any border. Cole (2001:66) strongly stated that web based technology has a significant and dominant role in the field of pedagogy or education in this century.

Besides, JiTT method gives opportunity for the students to prepare themselves of ELT and instructional media materials that they will study in classroom. Simkins dan Maier (2010:7-8) highlighted 5 benefits for studying using JiTT method: 1) Preparing for a discussion of a complex, possibly controversial topic (Discussion Preparation), 2) Getting beyond memorization (Applying Concepts), 3) Reconstructing ideas and concepts (Personalizing Knowledge), 4) Developing a need to know (Building Curiosity), and 5) Reflecting on their learning (Developing Metacognition). This 5 benefits are truly experienced by respondents of this research from their questioner's responds.

Lastly, JiTT method provides continuous English pre-service teachers' learning engagement: highly active and motivated. As it is proved and supported from Cookman, Mandel, and Lyons, (2006:15) who concluded students cannot postpone the reading and learning until the night before a high-stakes exam. It makes them to stimulate themselves to read, to answer formative questions which lead to encourage the cognitive skills as one as creating motivation and engagement. To sum up, it can be claimed that all experts and studies mentioned above had supported about JiTT method that can stimulate English pre-service teachers' learning engagement: in this case, their activeness and motivation.

CONCLUSIONS

The findings of this study support the idea that JiTT method can create benefits to English pre-service teachers' learning engagement: mainly, their activeness and motivation. By experiencing only 2 meetings of using JiTT method and conducted in small-scale area, the respondents can give positive perception toward the use of JiTT method and its relation to stimulate ELT theory and instructional media learning engagement; activeness and motivation.

As this study is very limited to a certain institution, it is highly recommended for other researchers who might interest in exploring JiTT method preferably in area of English as Foreign Language (EFL) Research at any levels. Also, the further study might discover the impact of JiTT method not only to confirm with learning engagement: activeness or motivation issue (by using questioner), but also it can be treated and compared fully by using quasi-experimental design, thus its advantages can be known

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more detail. Last, the results of this research hopefully can be a good reference to enrich the results and evidence for other researches in the other field of study.

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Learning Obstacle Related to the Ability of High School Student Representation to the Trigonometry Concept

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ABSTRACT

This research is phenomenological qualitative research that aims to identify learning obstacles in the representation ability of high school students on the Trigonometri concept. This study also revealed how the meanings and experiences of students' meanings regarding the ability of representation in the trigonometry concept. This study involved 36 Class XI students in one of the State High Schools in the Sukabumi Regency and two mathematics teachers as participants. The data in this study were obtained from the analysis of the results of representation ability tests, documentation analysis (curriculum and sourcebooks), student and teacher questionnaires. The results obtained that there are three identified learning obstacle characteristics consisting of Ontogenic psychological obstacle identified in connection with the interests and motivation of students towards learning on trigonometric concepts; conceptual ontogenic obstacle relating to conceptual designs that are too difficult and too fast for students; Didactical obstacle deals with designs that do not represent the interconnectedness of concepts so that they are not aligned with the students' continuous thinking needs (mathematical representation ability); The epistemological obstacle relates to students' knowledge in solving representational ability problems with trigonometric concepts. These characteristics are found in each indicator of the ability of mathematical representation.

Keywords: Learning obstacle, Representation, Trigonometri

INTRODUCTION

In learning mathematics and living everyday life students always deal with multiple problems. Likewise, when students are confronted with a mathematical problem situation in learning in class, they will try to understand the problem and solve it in ways they know. Bruner et al. revealed that the success of the problem-solving process depends on representation skills which include construction and using mathematical representations in words, graphics, tables and equations solving and manipulating symbols. One part of the efforts that students can make is to create a model or representation of the problem. The models or representations made can vary depending on the ability of each individual in interpreting the problem at hand. Any mathematical concepts must be represented in a number of ways that are presented based on students' thinking.

The representations or interpretations presented based on students' thoughts produced are not imitations and are also a mental action. A situation or series of didactic situations to create a learning process that leads to one or several goals, namely the formation of mental objects, one of which is to create a solution to a problem (Bruner & Kenney, 2014). When faced with a situation or series of situations, a person (in this case students) will certainly respond by doing mental actions related to the situation, namely interpreting, guessing, inferring, concluding, explaining, compiling, generalizing, using, describing, clarifying, find and solve problems.

In the process of learning and learning in the classroom, students must be accustomed to solving problems independently to find something useful in themselves and deal with ideas because the essence of constructivist theory is an idea where students individually must find and transform information in a complex if they make it themselves. If students have been able to find information and are able to convey complex information to other situations, then learning and learning must be packaged into a process of "constructing," not "receiving" knowledge. Because the reality that exists in learning that is formed in a person/individual about something about learning or ideas and mathematical abilities are built based on the internal processes possessed by individuals through their perceptions about the experiences and situations faced. The series of mental actions continue until the solution is termed

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Ways of Thinking (WoT). The uniqueness of WoT construction as each person represents the diversity in how to produce a mental object called Ways of Understanding (WoU).

Learning mathematics in the classroom should provide sufficient opportunities for students to be able to practice and develop mathematical representation abilities as an important part of solving problems. The problems presented are adjusted to the content and depth of the material at each level by taking into account the initial knowledge or prerequisites and thinking habits of students. In high school mathematics learning all the problems and material presented have linked the material and questions with real problems including the Trigonometry concept. Problems that still occur in students deal with not being able to present the problems given by the teacher in different contexts, meaning that students are only able to understand them but have not been able to apply the knowledge they have to the maximum in other contexts such as in daily life and cannot choose alternative answers or solutions that are considered most effective to be used in accordance with their abilities, besides that they lack mastery of prerequisite material. Because the process of conceptualizing and creating conditions of learning flow and the meaning of a mathematical object not only occurs in the context of learning but also through books or written material. Errors occur in aspects of prerequisites where students are not able to transform in mathematical models (Neria & Amit, 2004). Teachers often only emphasize aspects of the mathematical process compared to its application in everyday life.

The ability to interpret mathematical problems whose context is the real world of students and story problems is still not as good as when they interpret mathematical problems in the context of algebra or direct counts, in this case, students should interpret mathematical problems by students while thinking how to understand the problem, and then translating understanding it in the form of mathematical symbols, as well as telling/rewriting the contents of the problem in their own words. Ainsworth revealed that several research results showed that the majority of students failed to understand the importance of the relationship between different types of representations. Baer and Forbes revealed that most students only apply the formulas they have learned to solve problems, but do not always understand the real concepts or principles behind the formulas.

Students must build their own knowledge in order to be able to utilize thinking activities, especially in terms of mathematical representation. The teacher can help the process byways of learning, designing information to be more meaningful and more relevant to the needs of students. You do this by providing opportunities for students to find or implement their own ideas, and by inviting them to be aware and consciously using several methods or strategies in terms of representation in learning mathematics. Thinking or conceptual demands are too high can cause children to lose their learning orientation/frustration, conversely, conceptual challenges that are too low can be the cause of underachiever in learning.

Conceptualizing and creating these conditions to facilitate the process of learning mathematical knowledge not only occurs in the context of learning but also through books or written material, the meaning of a mathematical object can occur from the process. Therefore, students naturally experience learning difficulties (learning obstacles). There are three types, namely ontogenically learning obstacle, (mental readiness of learning), didactical learning obstacle (due to teacher teaching) and epistemological learning obstacle (students' knowledge which has a limited application context).

Based on the background that has been explained previously, the purpose of this study is to find out what obstacle learning is happening to students in solving representation problems in the mathematics learning process in high school.

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RESEARCH METHOD

This research reveals phenomena that occur under natural conditions in mathematics learning and then develops a solution based on the perspective of related theories. This research describes the

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experiences of students and identifies factors that are obstacles to the ability of representation in learning mathematics in high school, therefore this study uses qualitative methods in phenomenology.

The test questions were tested on 36th-grade high school students as many as 36 students who had learned the concept of trigonometry. Completion of the Open Questionnaire was conducted on 10 students purposively with consideration adjusted to the results of the representation ability test representing each student's ability, and 2 mathematics teachers as participants.

RESULTS AND DISCUSSION

Based on the results of the student's representational ability test, epistemological obstacles that arise or are detected based on students' responses to the tests given. Of the six questions given to the concept of trigonometry, it turns out that in each problem based on indicators of the ability of students to represent difficulties. Here are the details of each question:

3.1 Visual Representation Ability

Problem number 2 is a matter of concepts relating to solving trigonometric comparisons on right triangles involving images to clarify problems in cartesian coordinates. In this problem there are still students who are wrong because in representing questions in the form of images are still wrong inputting the values of x and y to illustrate the picture, resulting in errors in determining the location of angles θ , because students are usually given questions that directly use right triangles already in the previous image on. This indicates that the concept of the definition of a triangle is still not good. So that the epistemological obstacles that arise are related to the existing concept image of the definition of a triangle and the connection of the concept at the previous level.

Problem 2: Given POQ triangle, if point $P (-12, 5)$ and measure $\angle POQ = \theta^\circ$ then determine the comparison value of $\sin \theta^\circ$, $\cos \theta^\circ$, dan $\tan \theta^\circ$.

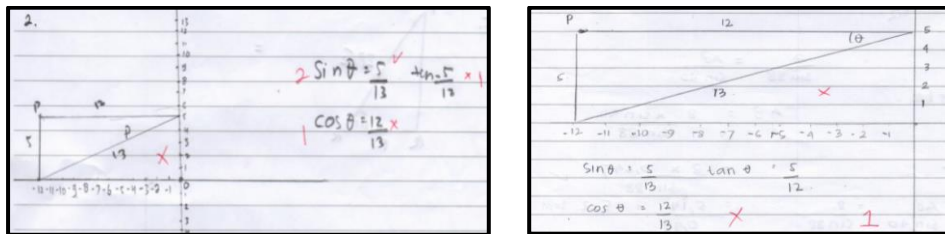


Figure 1. Example of student answers to question problem 2

Problem number 3 is a problem that includes visual representation with the aim of students being able to solve trigonometric comparisons on right triangles in the form of real contexts. In this problem, there are still students who are wrong because in representing questions in the form of images are still wrong in putting the angle on the picture.

Problem 3: Draw a triangle ABC , where $\angle C$ is a right angle, $AB = 4$ cm and measure $\sin \angle A = \cos \angle A$. Determine the measure $\angle A$ and the measure $\angle B$.

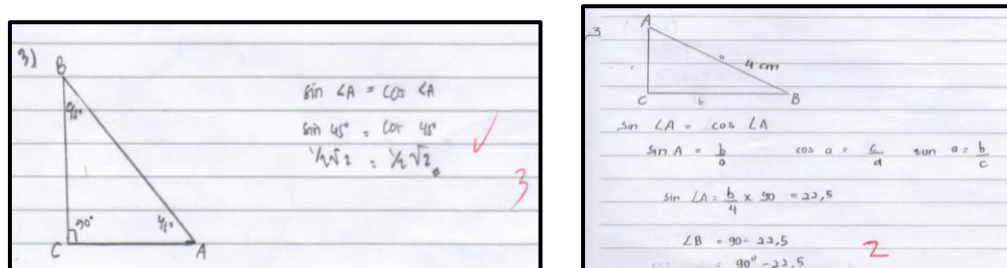


Figure 2. Examples of student answers to question problem 3

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Problem number 5 aims to make students able to use the cosine rule. This question requires creative thinking because this problem can be done as simply as possible without using all the information available. This problem only requires accuracy in translating information about the angular comparisons in trigonometry so that when represented visually it becomes easy without complicated calculations. So the epistemological barriers that arise are related to understanding a given trigonometric comparison and how to choose information available. This is because, students do not get more variation problems so that students' representations of the concept of trigonometric comparisons are still lacking. Therefore, we need more variation problems as said in Brunner's theory of the contrast-variation theorem.

Problem 5: The PQR triangle with a measure $\angle PRQ = 45^\circ$. If the distance $QR = p$ and $PR = 2p\sqrt{2}$, then the length of PQ is ...

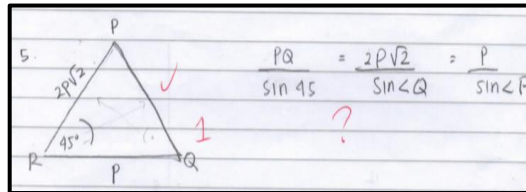


Figure 3. Examples of student answers to question problem 5

3.2 Ability to make mathematical models and mathematical expressions

Problem number 4 determines students to solve trigonometric comparisons on right triangles in a real-world context. In this problem students are required to be able to take the core of this story. In this problem there are still many students who are wrong because they use the direct method without illustrating the problem to form images. It also turned out to be the student's mistake because it was not usual to read long questions. Students are usually given a problem that is directly to the heart of the problem. This results in students being lazy to read a problem that must be sought first the purpose of this problem. According to Ausubel's theory, that learning means one of them through the stages of applying. So, students must be given questions that are application. So that the epistemological obstacles that arise are related to the ability of students to understand the purpose of a problem and represent it into a simpler notation or symbolic and mathematical model.

Problem 4: A tower stands perpendicular to the horizontal land. A child who stands 160 cm tall stands at a distance of 50 m from the foot of the tower. If the top of the tower elevation angle is 60° , whether the tower's height exceeds 100 m?

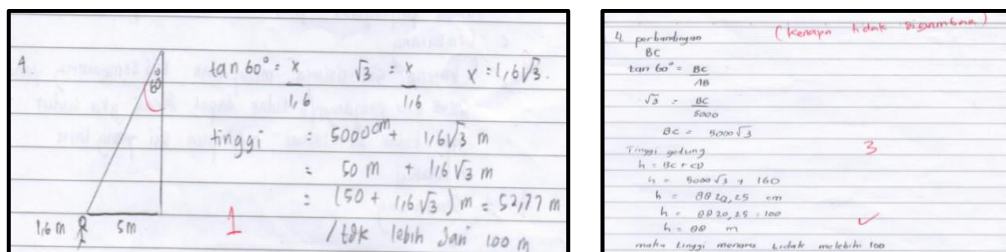


Figure 4. Examples of student answers to question problem 4

3.3 The ability to make words or text

Problem number 1 is a matter of basic concepts or prerequisites of trigonometry, namely the definition and types of triangles. In this problem there are only 10 students who answer correctly. 26 students (most of them) answered incorrectly and there were no students who did not answer, meaning students could not write down interpretations of a representation.

Problem 1: Determine the types of triangles if you know the length of the three sides, give a reason:

- a. 5 cm, 5 cm, dan 8 cm
- b. 6 cm, 8 cm, dan 10 cm
- c. 2 cm, 5 cm, dan 9 cm

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d. 5 cm, 7 cm, dan 11 cm

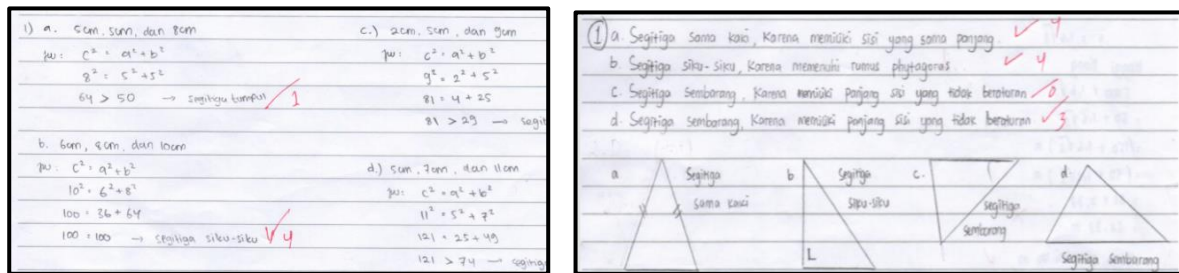


Figure 5. Examples of student answers to question problem 1

In the group of students who answer incorrectly there are several types of answers. The first group, students immediately answered that questions no 1 a, b, c and d considered all to be triangles with the immediate reason to assume the four were triangles by calculating the sides of a triangle, in addition there were students who deduced the type of committee by giving a picture based on the length of each side of the triangle. From this it can be seen that students do not understand the definition of a triangle in understanding. In the student concept image, that if three sides are known, then the three sides will form a triangle. David Tall states that individual development is built on three basic set-before namely recognition, repetition and language. In this case, the students did not repeat many basic questions on the triangle material.

This indicates that the concept of the definition of a triangle is still not good. So that the epistemological obstacles that arise are related to the existing concept image of the definition of a triangle and the connection of the concept at the previous level. This shows that the representation to make words or text of students about previous material which is still not good causes students to experience errors. According to Dubinsky's theory of the term action, someone who experiences problems will try to relate them to prior knowledge and someone who has a deeper understanding will take better action.

In problem number 6 using the sine rules in solving problems in the form of real context, measuring how students can read the intent of the picture and whether students can represent the context to form words. In this problem students already understand the purpose of this picture but cannot write it in the form of completion so that students find it difficult to determine what trigonometrical formula is used to solve the problem, this problem is difficult because many students answer incorrectly and do not answer.

So that the epistemological obstacles that arise are related to the representation in the form of words and how to choose the information available. This is because, students do not get more variation problems so the concept of sine rules in the real context is still lacking. Therefore, we need more variation problems as said in Brunner's theory [13] regarding the contrast-variation theorem.

Problem 6: In training to drive a fast boat in the waters, the training track is designed as given in Fig. The driver must start from point A, and move southwest to form an angle of 52° to point B, then move southeast to form an angle of 40° to point C, proceed back to point A. Distance from point A to C is 8 km. Calculate the length of the fast boat driver's trajectory?

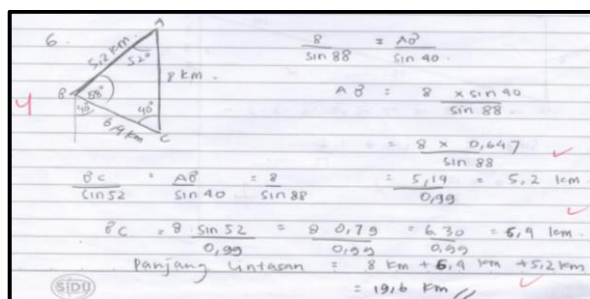
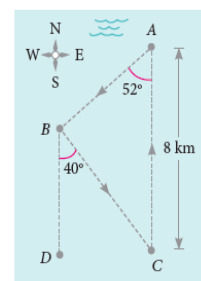


Figure 6. Examples of student answers to question problem 6

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Based on the results of student questionnaires, they always answer with the statement "forgetfulness". There is a mistake in teaching that is the lack of reinforcement of prerequisite material such as definitions and types of triangles, how to make triangles in cartesian coordinates.

Experiencing meaning based on the results of the teacher questionnaire, students are not ready at the time of learning. Researchers suspect these difficulties are caused by the ontogenic obstacle, which is learning difficulties caused by lack of readiness to study or lack of psychological aspects. This was reinforced when the researchers conducted interviews with some students who could not explain the definition of a triangle and they looked confused when asked how to solve the problem when the context was in real form. The Meaning Experience in terms of the source book, in the textbook itself, there are still many similar and monotonous questions in quite a large amount. It should be made questions that are not routine and more applicable and varied so that it can improve students' ability to represent mathematically so that they can solve questions that can later explore students' abilities more deeply. In the context of trigonometry as in high school textbooks used that related questions represent images, usually the pictures and length of the sides are known immediately while students just need to find the results. Books tend to provide information directly and not in excess.

CONCLUSIONS

Based on the results of the analysis conducted, identification learning obstacles are obtained: Ontogenic psychological obstacles identified are related to students' interests and motivations for learning on trigonometric concepts, conceptual ontogenic obstacles are related to conceptual designs that are too difficult and too fast for students; Didactical obstacle deals with designs that do not represent the interconnectedness of concepts so that they are not aligned with the students' continuous thinking needs (mathematical representation ability); The epistemological obstacle relates to students' knowledge in solving the problem of representational ability related to the trigonometric concept, as follows: (1) epistemological barriers related to the existing concept image regarding the definition and type of triangles as preconditions for trigonometry material, (2) epistemological barriers related to the context of variations in information available in the problem, (3) epistemological barriers related to students' ability to represent visually, represent in the form of mathematical modeling and represent in the form of words.

Based on the results of this study, the authors argue that there needs to be an improvement in the preparation of teaching materials (didactic design) related to the concept of trigonometry used as a guide in the process of learning mathematics in high school following the learning barriers that occur. Therefore, the suggestions proposed by the authors are as follows: (1) in the preparation of the material, more presenting various examples of trigonometry to provide a complete understanding of the students, (2) provide questions that vary in terms of providing information on question. This is done so students are able to choose the information provided to determine the extent to which students are able to represent the given problem, (3) provide questions that practice the child's ability to represent concepts in visual form, mathematical symbols and notations, and words (4) reduce the provision of similar questions, add more questions that are more applicable and relate the concept of trigonometry. Suggestions for further research related to the improvement of the learning flow and learning design to provide more space for students to be able to interpret the ability of representation in the concept of trigonometry.

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The development of calculus teaching materials using geogebra

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ABSTRACT

Calculus is one of the fields of mathematics that is the basis of mathematical thinking. Problems related to differential calculus experienced by students are visual ability in drawing graphics. Focus material on graphs of equations and functions. Therefore, researchers make innovations in learning by making teaching materials using GeoGebra. The research method used is research and development. The research subjects were 40 students in the Mathematics Education Study Program at Universitas Suryakencana. The results of the validation of media experts using the Kendall test, sig. = 0,020 > 0.05 (Ho accepted) means that the calculus teaching material using GeoGebra is feasible to use. The results of the validation of the material using the Kendall test, sig. = 0,025 (Ho accepted) means that the material content is appropriate. The results of tests on 40 mathematics education study program students, an average percentage of 78% of students answered strongly agree and 15% answered agreed, meaning that calculus teaching material using GeoGebra is effectively used.

Keywords: Development, Calculus, Geogebra

INTRODUCTION

Calculus is one of the fields of mathematics that is the basis of mathematical thinking. Problems related to differential calculus experienced by students are visual ability in drawing graphics. Focus material on graphs of equations and functions. Functions and equations are important and fundamental mathematical concepts in differential calculus.

Mathematical concepts that are introduced to students or students more directly use formal definitions without regard to the concept of image / visual. Some students are still weak in their ability to illustrate images. Visual abilities rely more on memory/memorization abilities so that they are low in algebraic and graphical representations and their effects on analytic abilities. This is a serious problem in solving problems. Weaknesses in solving problems due to obstacles drawing graphics in calculus. There are some similar difficulties in differential calculus, namely drawing graphs of incorrect functions/difficulties.

In the 4.0 industrial revolution era, the development of the technological world is growing rapidly[8]. Some applications in the world of education have been widely used by lecturers [9]. Also, the ability of lecturers in teaching is required to master technology, so that in the end it will adjust to the conditions of the times. The challenge in the future is how an educator can master technological literacy in the industrial revolution 4.0 era. Current technological developments are needed according to the times. Educators must utilize technology in their learning, so they can adjust to their needs.

Many technology-based tools are widely used in mathematics learning. One of the computer software that can be utilized in learning mathematics is GeoGebra software. This software should be introduced to Mathematics educators so that students can explore the world of Mathematics in a wider and make the students able to think critically and creatively. According to Hohenwarter, the GeoGebra program is very beneficial for teachers and students. Unlike the use of commercial software that usually can only be used at school, GeoGebra can be installed on a personal computer and used anytime and anywhere by students and teachers. For teachers, GeoGebra offers an effective opportunity to create an interactive online learning environment that allows students to explore various mathematical concepts.

The need for the development of teaching materials related to differential calculus courses adjusted to the ability of students to be a way for lecturers to overcome problems that occur. Learning calculus with Geogebra could make students give more attention on the material. Therefore, it needs to be made and developed teaching materials using GeoGebra.

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Based on the description above, the researchers aimed to find out the calculus teaching material using GeoGebra, knowing the results of expert validation in terms of multimedia and material, and knowing the effectiveness of using calculus teaching material using GeoGebra.

RESEARCH METHOD

The method used in this research is Research and Development (R&D) with a development model that is ADDIE (Analysis, Design, Development, Implementation, and Evaluation). The resulting product is a calculus teaching material in the form of a GeoGebra file. The subjects in this study were lecturers of calculus and multimedia experts at Universitas Suryakencana. In addition, the target users were 40 students in the Mathematics Education Study Program at Universitas Suryakencana in the academic year 2019-2020.

The instruments used in this study were multimedia expert validation sheets, calculus material validation sheets, and student response questionnaires. The multimedia expert validation sheet contains aspects of the assessment of ease and technical quality. Multimedia validation was carried out by 5 multimedia experts from 2 multimedia teaching lecturers, 2 multimedia expert lecturers from informatics engineering lecturers, and 1 technology application lecturer in mathematics learning.

The calculus material validation sheet contains aspects of learning assessment and lecture material. Material validation was conducted by 5 material experts from 2 lecturers in differential calculus, 2 lecturers in integral calculus, and 1 lecturer in basic mathematics. Student questionnaire includes convenience, motivation, attractiveness, and benefits.

The data analysis techniques of multimedia expert validation sheets and calculus material validation sheets used the alignment/compatibility test with the Kendall Test. Data analysis techniques in the student response questionnaire used the percentage of student answers.

RESULTS AND DISCUSSION

The calculus teaching material using GeoGebra

The development of calculus teaching materials using Geogebra is carried out with several stages by the development model, namely ADDIE (Analysis, Design, Development, Implementation, and Evaluation). The resulting product is a calculus teaching material in the form of a GeoGebra file.

In the analysis phase, before using teaching materials, a needs analysis must first be done by observing or reviewing the relevant literature. Next, in the second stage, the design stage includes learning design and multimedia design. The learning design phase includes identity, learning objectives, subject matter, learning strategies, evaluation design, and source of material. While the product design stage includes the elements of image and navigation.

In the third stage, the development stage, at this stage the production of teaching materials in the form of GeoGebra with planned designs. The fourth stage is implementation, at this stage the product has been designed, designed, and ready for use and then tested on the target product users. The final stage is the evaluation stage, at this stage, an evaluation is carried out using validation by multimedia experts and material experts. Besides, trials were conducted on students as targets for product users.

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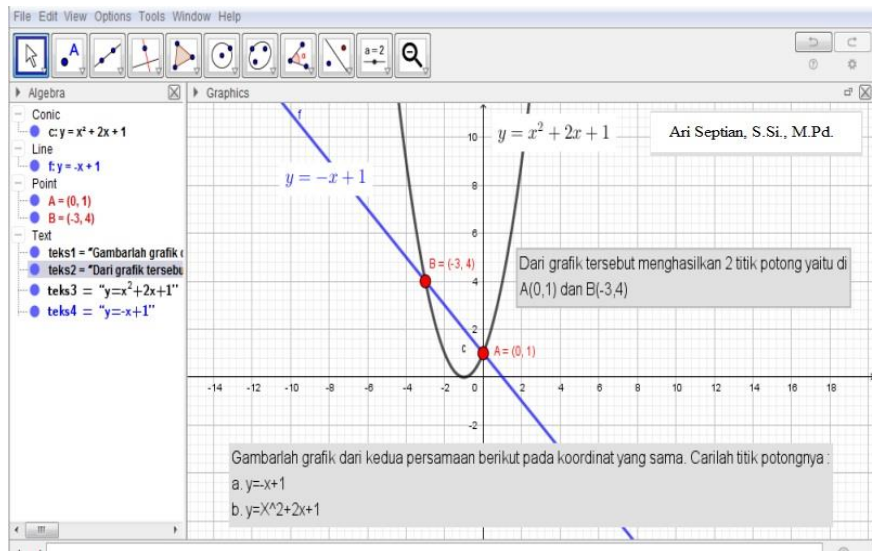


Figure 1. Display calculus teaching material using GeoGebra on the material functions and equations

Expert validation in terms of multimedia and material

Multimedia validation was carried out by 5 multimedia experts from 2 multimedia teaching lecturers, 2 multimedia expert lecturers from informatics engineering lecturers, and 1 technology application lecturer in mathematics learning.

The aspects assessed by multimedia experts are instructional quality and technical quality. There are 26 assessment indicators with 6 instructional quality indicators and 20 technical quality indicators. Tests carried out using the Kendall test. Kendall test is done to find out whether there is harmony among the weighers in making an assessment. The hypothesis for this case is, H_0 : There is alignment among weighers in evaluating, H_1 : There is no harmony among weighers in valuing. Decision making: If Sig. > 0,05, H_0 is accepted and if Sig. < 0,05, H_0 is rejected. Following are the results of data processing with SPSS 24.

Table 1. Kendal Test Results for Assessment of Multimedia Experts

Validator	Kendall W	Sig.	Df	Conclusion
5	0,332	0,020	25	Ho accepted

From Table 1 it can be seen that Sig. = 0,020. This means that H_0 is accepted, thus it can be concluded that there is harmony among the weighers in providing an assessment. the majority of multimedia experts rate it in the good category (4), so it can be concluded that calculus teaching material using GeoGebra is appropriate to use.

Material validation was conducted by 5 material experts from 2 lecturers in differential calculus, 2 lecturers in integral calculus, and 1 lecturer in basic mathematics. The aspects assessed by material experts are instructional quality and quality of content and objectives. There are 21 assessment indicators with a composition of 9 instructional quality indicators and 12 indicators of content quality and objectives.

Tests carried out using the Kendall test. Kendall test is done to find out whether there is harmony among the weighers in making an assessment. The hypothesis for this case is, H_0 : There is alignment among weighers in evaluating, H_1 : There is no harmony among weighers in valuing. Decision making: If Sig. > 0,05, H_0 is accepted and if Sig. < 0,05, H_0 is rejected. Following are the results of data processing with SPSS 24.

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Table 2. Kendall Test Results for Assessment of Material Experts

Validator	Kendall W	Sig.	df	Conclusion
5	0,342	0,025	20	Ho accepted

From Table 2 it can be seen that Sig. = 0,025. This means that Ho is accepted, thus it can be concluded that there is harmony among the weighers in providing an assessment. The majority of material experts judge in the good category (4), so it can be concluded that the content of the material is appropriate.

The effectiveness of using calculus teaching materials using GeoGebra

The effectiveness of the use of calculus teaching material using GeoGebra was measured by using an assessment of 40 students in the form of a questionnaire with 21 statements divided into 4 aspects namely ease, motivation, attractiveness, and usefulness. The following results from filling out the effectiveness questionnaire using calculus teaching material using GeoGebra.

Table 3. Student responses to the use of GeoGebra in learning

Aspects	Indicator	Student Response			
		Strongly Agree	Agree	Disagree	Strongly Disagree
Ease	Ease of Use	83%	13%	1%	4%
	Ease of navigation	80%	16%	3%	1%
	Ease of understanding material	74%	16%	3%	8%
Motivation	Interest Motivation	82%	15%	1%	3%
	Attention	78%	15%	3%	4%
Interest	Display quality	79%	15%	3%	3%
	Attractive	74%	16%	3%	8%
Usefulness	Give a positive impact on students	73%	20%	5%	3%
	Providing learning assistance	70%	20%	3%	8%
	Overall Indicator Average	78%	15%	2%	4%

The results of tests on 40 mathematics education study program students, an average percentage of 78% of students answered strongly agree and 15% answered agreed, meaning that calculus teaching material using GeoGebra is effectively used. .

CONCLUSIONS

Based on the results and discussion, researchers can conclude that calculus teaching material using GeoGebra is feasible to use, the content of the material is appropriate, and calculus teaching material using GeoGebra is effectively used.

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Emotional Intelligence and Interpersonal Communication: Their Relationship on Primary School Teachers' Adversity Quotient

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ABSTRACT

This cross-sectional study aimed to examine the relationship between emotional intelligence and interpersonal communication with the adversity quotient. The study was conducted by employing a quantitative survey method with a correlational technique. The proportional random sampling was used with a sample of 101 teachers from seven private elementary school teachers in Jakarta. Three broadly hypothesized of three variables were tested to find out their correlations. The results showed that emotional intelligence has a positive relationship with teacher's adversity quotient; interpersonal communication has a positive relationship with teacher's adversity quotient, and emotional intelligence and interpersonal communication have a significant relationship with teacher's adversity quotient. The findings indicate that emotional intelligence, interpersonal communication, and adversity quotient positively correlate with each other, which leads to teachers' professional development and advantages to teachers' success.

Keywords: emotional intelligence; interpersonal communication; adversity quotient; primary school teachers, professional development.

INTRODUCTION

Paul G. Stoltz first developed the concept of adversity, which forms the character of a person, clarifies goals, and sets the course of the individual to succeed (Stoltz, 1997). (Stolz & Weihenmayer, 2010) stressed the way to success is to learn how to turn hardship into real gain, both in business and in life. It is also noted that adversity is a daily thing, and people choose the way to respond to every adversity in their lives. To order to prevent them, they are pointless, unjust, painful, and beyond our power. For a reason, though, they come into our lives. People can choose to learn essential lessons from every challenge they face in their lives (Brunkhorst, 2005).

Agreeing with Brunkhorst (Bakare, 2015) describes the adversity quotient as a capacity to make people live in adverse situations, which is to transform people into life-changing advantages. In the study of Santos, she has evaluated the role of Adversity Quotient ® in improving one's quality of life among Philippine special education teachers (SPED). After a modular self-learning program developed by her, it was found that the teachers AQ ® improved with moderately high AQ ® ratings (Santos, 2012). Thus, it implies that possessing adversity quotient is required to achieve success and performance.

However, not only does adversity quotient determine individual success, but emotional intelligence also contributes 80 percent to one's life success (Goleman, 2006). In Goleman's experiment, it is proven that the ability to control emotion has a significant role in success. In the words of Bautista et al., emotional intelligence is described as the ability to understand (i.e., learn) and to use the power of emotions effectively as a source of personal energy and interpersonal synergy (Bautista, Joana Marie P Custodio, Dhivvie L Lagundino & Manaig, 2015). (Mayer, Salovey, & Caruso, 2004) defined emotional intelligence as perceiving, knowing, controlling, and harnessing one's and others ' emotions and adaptively using acceptable emotions. Therefore, one of the latest developments and advancements in understanding the relationship between thought and emotion is emotional intelligence (Wong & Law, 2002).

Prior studies have shown that high emotional intelligence has provided people with additional advantages, whether in education or professional development (Chew, Zain, & Hassan, 2013; Joshi, Srivastava, & Raychaudhuri, 2012). Studies of 650 people found that the relation of cognitive intelligence and academic achievement could be altered by emotional intelligence, according to (Petrides, Chamoro-

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Premuzic, Frederickson, & Furnham, 2005). Self-respect is seen as a major contributor to emotional and social change, especially for adolescents, which is linked to their social networks, activities, and things they hear.

In addition to elaborating on the crucial things of adversity quotient and emotional intelligence to one's success, effective communication is highly imperative, particularly for teachers to improve the quality of relationships with their pupils. (Moradi, Faghiharam, & Ghasempour, 2018) asserts its significance of interpersonal communication as the basis for human identity and happiness, which form the foundation for the relation with others. Since the teachers work with a group of young ages at schools, which are less mature, the ability to engage and communicate with them is necessary. Thus, maintaining successful interpersonal relationships with group members demands that interpersonal skills be adequately used (Notari, Baumgartner, & Herzog, 2013). Conflict resolution, consensus decision-making, leadership skills, dialog and discussion skills, team-building skills, and empathic skills are often conceptualized in interpersonal skills (Parker & Hackett, 2012; Wooley, Chabris, Pentland, Hashmi, & Malone, 2010). The research revealed that having interpersonal communication skills brings a successful and positive interpersonal relationship with group members.

Working in the education profession is emotionally demanding, mainly working with the students of primary schools. Emotional reactions are evoked when confronted with adversities at work, such as managing the classroom, correcting homework, administration, and soon. Thus, helping professional engaged in this kind of work need to utilize and manage their emotions. All these activities require emotional intelligence and endurance to be practiced. They need to understand and manage their emotions like how they cope with adversities in order to be effective in their work. Such characteristics are considered essential for professionals working in the occupation of education. As a change agent, a teacher who has an adversity quotient will have the ability to manage his weaknesses to become a definite challenge in teaching students, and it will eventually improve the quality of school graduates (Ronni, 2006).

Teachers who have high workloads and work demands will negatively impact their work performance. Besides, teachers who feel depressed can bring negative attitudes towards students and are not professional in carrying out their duties. Therefore teachers must have adversity quotient, develop emotional intelligence (EQ) as a provision to improve quality in learning, and build interpersonal communication between fellow teachers and their students. Several researchers have reported adversity quotient and its correlation or impacts with other variables such as performance, academic problems, academic stress, and success. However, very few published studies have examined the correlation of interpersonal communication and emotional intelligence with adversity quotient on teachers. Under these circumstances, the study of adversity quotient, emotional intelligence, and interpersonal communication is necessary to conduct. Thus, the purpose of the study is to investigate the correlation between those three variables, particularly for elementary school teachers as they engage with very young age learners who need extra patience to work with them.

RESEARCH METHOD

Research design

The descriptive study was conducted in the form of a quantitative research approach by using correlational techniques with the use of a survey questionnaire. In the design of correlation statistics, the relationship between two or more variables was described and calculated (Creswell, 2014). The survey method was employed to examine the relationship of emotional intelligence (DV), and interpersonal communication (DV) with adversity quotient (IV). The research was carried out over five months from April to August at a cross-sectional time, including observation, the preparation of general instruments and consent letters to school principals, pilot test instruments, the distribution of questionnaires, data collection, and data analysis. The questionnaires were distributed to primary school teachers to determine their point of view on emotional intelligence, interpersonal communication, and adversity quotient.

Population and sample

A sample of 101 teachers from a total population of 135 come from seven private elementary schools in the district of Tambora, West Jakarta. Thirty teachers took part in the pilot test. The selection of

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teachers for the sample used the technique of proportional random sampling. The distribution of sample size and a pilot test is presented in table 1.

Table 1: The distribution of sample size and pilot test

School	Population	Sample size	Pilot test
A	30	23	7
B	28	21	6
C	16	12	4
D	15	11	3
E	15	11	3
F	15	11	3
G	16	12	4
Total	135	101	30

The procedures

The study employed a cross-sectional design. Before data collection, the researchers obtained permission from seven principals of private primary schools and explained the objective of the study. The researchers then distributed the questionnaire to all teachers after working hours. All participants completed the questionnaires for around 15 minutes and returned it directly to the researchers. A total of 86 questions were distributed with the four constructs of adversity quotient, the four constructs of emotional intelligence, and the five constructs of interpersonal communication. The constructs of adversity quotient include control, origin, and ownership, reach, and endurance based on (Stoltz, 1997). The constructs of emotional intelligence include self-awareness, motivation, empathy, and social skill (Golemen cited in (Wilding, 2007). The constructs of interpersonal communication include openness, empathy, supportiveness, feeling positive, and equality. The teachers responded to the items along with five-point Likert scale namely: “Always = 5, often = 4, sometimes = 3, seldom = 2, and never = 1.

Data analysis

The data analysis was performed using SPSS versión 22.00. According to the result of *the Lillefors* test, data were normally distributed. Analysis of variance (ANOVA) and t-test were used. The t-test calculates the significance test of the correlation coefficient. Pearson Correlation coefficients were utilized to calculate the relations between emotional intelligence (DV), interpersonal communication (DV), and adversity quotient (IV). Regression analysis was conducted to identify the association of three variables on primary school teachers, which $P \leq 0.05$ was considered statistically significant.

RESULTS AND DISCUSSION

Findings

Reliability and Validity

Reliability analysis was conducted to ensure the internal validity and consistency of the items used for each variable. According to (George & Mallery, 2003), the value of Cronbach’s alpha < 0.5 are unacceptable. Table 2 shows the reliability of the measurement scales, in which Cronbach’s alpha reliability scores of three variables are considered good. Thus, the results proved that the questionnaire is a reliable measurement instrument. The instrument was also proven to be valid in measuring the constructs of the variables.

Table 2: Cronbach’s alpha for study variable

Variable	Cronbach’s alpha
Adversity quotient	0.886
Emotional intelligence	0.904
Interpersonal communication	0.885

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Relationship between emotional intelligence and adversity quotient among primary school teachers.

The results of the first hypothesis test using the linear regression analysis of the variables of emotional intelligence and the teacher's adversity quotient are as follows:

Table 3: Coefficients Variable X₁ – Y

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	22.592	7.430		3.041	0.003
1 emotional intelligence	0.654	0.065	0.711	10.047	0.000

Note. Dependent Variable: adversity quotient

The regression equation that occurs between Y over X₁ is $\hat{Y} = a + bX_1$. Based on table 3, the regression coefficient $b = 0.654$ and constant $a = 22.592$ are obtained. Thus, the form of the relationship between the emotional intelligence and the teacher's adversity quotient shown by the linear regression analysis equation is $\hat{Y} = 22.592 + 0.654X_1$

The significance of the regression coefficient Y over X₁ uses the F test. The results of the F test calculation were performed using SPSS 22 software, and the following results were obtained:

Table 4: ANOVA Variable X₁ – Y

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	3101.200	1	3101.200	100.936	0.000 ^b
Residual	3041.711	99	30.724		
Total	6142.911	100			

Note. a. Dependent Variable: adversity quotient
 b. Predictors: (constant), emotional intelligence

From Table 4, it is seen that the value of $Sig = 0.000 < 0.05$ and the value of $F = 100.936 > F_{table} = 3.94$, then H_0 is rejected which means that the regression coefficient is significant. In other words, there is a significant relationship between the teacher's emotional intelligence (X₁) and the adversity quotient (Y).

The Pearson Correlation then calculates the relationship between a teacher's emotional intelligence and adversity quotient. The magnitude of the correlation coefficient between these variables is shown in the following table:

Table 5: Correlations X₁ – Y

		adversity quotient	emotional intelligence
Pearson Correlation	adversity quotient	1,000	0,711
	emotional intelligence	0,711	1,000
Sig, (1-tailed)	adversity quotient	.	0,000
	emotional intelligence	0,000	.
N	adversity quotient	101	101
	emotional intelligence	101	101

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Based on table 5, the value of the correlation coefficient between emotional intelligence and adversity quotient is 0.711. This shows a strong relationship between those two variables. The direction of a positive relationship indicates that the higher the value of the teacher's emotional intelligence, the higher the teacher's adversity quotient variable will be, and vice versa. Significance of the correlation coefficient was calculated using the t-test, and the results are obtained in the following table:

Table 6: The Significance test of Correlation Coefficients $X_1 - Y$

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	22,592	7,430		3,041	0,003
1 emotional intelligence	0,654	0,065	0,711	10,047	0,000

Testing the significance of the correlation coefficient is done by taking into account the values / numbers listed in column t or column *Sig* for the row of the teacher's emotional intelligence (X_1). According to the existing provisions, the criteria for the significance of the correlation coefficient are "if $t_{value} > t_{table}$, then H_0 is rejected" or "if $Sig < 0.05$, then H_0 is rejected", which means that there is a significant correlation of independent variable X_1 to the dependent variable Y. *Sig* value and t_{value} are the numbers listed in the *Sig* and t_{value} columns for the rows of the teacher's emotional intelligence (X_1). The value of t_{table} is the value of the distribution table t for the real level of 5% with a degree of confidence ($df = n - 2$) = 99 where n is the number of respondents. From Table 6, it can be seen that the value of $Sig = 0,000$ and $t_{value} = 10,047$, while $t_{table} = 1.66$. Because of the *Sig* value < 0.05 and $t_{value} > t_{table}$, H_0 is rejected, which means that there is a significant relationship between the teacher's emotional intelligence and adversity quotient.

The correlation matrix between the dependent and independent dimensions is used to examine which relationships are the strongest for the dimensions of the independent variable on the dependent variable. The variable of emotional intelligence consists of four dimensions, namely self-awareness (X_{1_1}), motivation (X_{1_2}), empathy (X_{1_3}) and social skills (X_{1_4}), while the variable of adversity quotient consists of control (Y_1), origin and ownership or Y_2 , reach or Y_3 , and endurance or Y_4 . The results of the correlation analysis between dimensions on the variable of emotional intelligence (X_1) and the teacher's adversity quotient variable (Y) are as follows:

Table 7: Correlation among dimensions of Variable X_1 and Variable Y

		Y1	Y2	Y3	Y4
X1.1	Pearson Correlation	0,493**	0,482**	0,254*	0,253*
	Sig. (2-tailed)	0,000	0,000	0,010	0,011
	N	101	101	101	101
X1.2	Pearson Correlation	0,172	0,264**	0,131	0,348**
	Sig. (2-tailed)	0,085	0,008	0,191	0,000
	N	101	101	101	101
X1.3	Pearson Correlation	0,396**	0,399**	0,339**	0,323**
	Sig. (2-tailed)	0,000	0,000	0,001	0,001
	N	101	101	101	101
X1.4	Pearson Correlation	0,325**	0,391**	0,117	0,085
	Sig. (2-tailed)	0,001	0,000	0,243	0,400
	N	101	101	101	101

Table 7 shows that for the variable of emotional intelligence, the most powerful dimension of the relationship is the dimension of self-awareness (X_{1_1}) to the dimension of control (Y_1) on the teacher's adversity quotient since it has a coefficient value = 0.493

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Relationship between Interpersonal Communication and Teacher’s adversity quotient.

The results of the second hypothesis test using a linear regression analysis of interpersonal communication and adversity quotient are as follows:

Table 8: Coefficient Variable X₂ – Y

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	13.030	6.238		2.089	0.039
1 interpersonal communication	0.775	0.057	0.805	13.504	0.000

Note. Dependent Variable: adversity quotient

The regression equation that occurs between Y over X₂ is $\hat{Y} = a + bX_2$. Based on table 8, it obtained a regression coefficient $b = 0.775$ and a constant = 13.030. Thus, the form of the relationship between teacher’s interpersonal communication and adversity quotient is shown by the linear regression analysis equation is $\hat{Y} = 13.030 + 0.775 X_2$. Pearson Correlation calculated the relationship between the teacher's interpersonal communication and the teacher's adversity quotient. The magnitude of the correlation coefficient between these variables is shown in the following table:

Table 9: Correlations X₂ – Y

		Adversity quotients	Interpersonal communication
Pearson correlation	Adversity quotient	1.000	0.805
	Interpersonal communication	0.805	1.000
Sig, (1-tailed) N	Adversity quotient	-	0.000
	Interpersonal communication	0.000	-
	Adversity quotient	101	101
	Interpersonal communication	101	101

Based on table 9, the value of the correlation coefficient between the teacher's interpersonal communication and adversity quotient is 0.805. This shows the strong relationship between the teacher's interpersonal communication and the teacher's adversity quotient. The direction of a positive relationship indicates that the higher the value of the teacher interpersonal communication variable, the higher the teacher’s adversity quotient variable will be, and vice versa. Significance test of the correlation coefficient was calculated using the t-test, and the results are obtained:

Table 10: The Significance test of Correlation Coefficients X₂ – Y

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	13.030	6.238		2.089	0.039
1 interpersonal communication	0.775	0.057	0.805	13.504	0.000

Note. Dependent Variable: adversity quotient

From Table 10, it is seen that the value of $Sig = 0,000$ and $t_{value} = 13.504$, while the $t_{table} = 1.66$. Because of the Sig value < 0.05 and $t_{value} > t_{table}$, H_0 is rejected, which means that there is a significant relationship

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between the independent variable of teacher's interpersonal communication (X_2) and the dependent variable of teacher's adversity quotient (Y).

The variable of interpersonal communication consists of five dimensions, namely openness or $X_{2.1}$, empathy or $X_{2.2}$, supportiveness or $X_{2.3}$, positiveness or $X_{2.4}$, and equality $X_{2.5}$. The variable of teacher's adversity quotient consists of control or Y_1 , recognition and origin and ownership, Y_2 , reach or Y_3 , and endurance (Y_4). The results of the correlation analysis between dimensions on the interpersonal communication variable (X_2) and teacher's adversity quotient (Y) are as follows:

Table 11: Correlation among dimension of Variable X_2 and Variable Y

		Y1	Y2	Y3	Y4
Pearson Correlation		0,450**	0,462**	0,212*	0,226*
X2.1	Sig. (2-tailed)	0,000	0,000	0,033	0,023
	N	101	101	101	101
Pearson Correlation		0,493**	0,368**	0,357**	0,307**
X2.2	Sig. (2-tailed)	0,000	0,000	0,000	0,002
	N	101	101	101	101
Pearson Correlation		0,459**	0,524**	0,312**	0,326**
X2.3	Sig. (2-tailed)	0,000	0,000	0,001	0,001
	N	101	101	101	101
Pearson Correlation		0,435**	0,413**	0,348**	0,232*
X2.4	Sig. (2-tailed)	0,000	0,000	0,000	0,019
	N	101	101	101	101
Pearson Correlation		0,354**	0,388**	0,248*	0,412**
X2.5	Sig. (2-tailed)	0,000	0,000	0,012	0,000
	N	101	101	101	101

Table 11 shows that for interpersonal communication, the dimension, which has the most substantial relationship, is supportiveness or $X_{2.3}$ towards the dimensions of origin and ownership or Y_2 on teacher's adversity quotient that is 0.524.

The Relationship between emotional intelligence, and interpersonal communication with adversity quotient

The results of the multiple regression analysis of the teacher's emotional intelligence and teacher's interpersonal communication and the teacher's adversity quotient are as follow:

Table 12: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	- 0,591	6,221		-,095	0,924
Emotional intelligence	0,315	0,063	0,342	5,006	0,000
Interpersonal communication	0,570	0,066	0,592	8,670	0,000

Note. Dependent Variable: adversity quotient

The regression equation that occurs between Y over X_1 and X_2 is $\hat{Y} = a + b_1X_1 + b_2X_2$. Based on table 10, the regression coefficient $b_1 = 0.315$ and the regression coefficient $b_2 = 0.570$ with a constant $a = -$

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0.591. Thus, the form of the relationship between the emotional intelligence and the teacher's adversity quotient shown by the linear regression analysis equation is $\hat{Y} = -0,591 + 0,315X_1 + 0,570X_2$.

From Table 13, it is seen that the value of $Sig = 0.000 < 0.05$ and $F_{value} = 125.866 > F_{table} = 3.09$, then H_0 is rejected which means that the multiple regression coefficient is significant. In other words, there is a significant relationship between the teacher's emotional intelligence (X_1) and the teacher's interpersonal communication (X_2) and the teacher's adversity quotient (Y).

The significance of the regression coefficient Y over X_1 and X_2 using the F test. The results of the F test calculation performed using SPSS 22 software obtained the following results:

Table 13: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	4421,578	2	2210,789	125,866	0,000 ^b
Residual	1721,333	98	17,565		
Total	6142,911	100			

Note. a. Dependent Variable: adversity quotient
 b. Predictors: (constant), interpersonal communication, emotional intelligence

Pearson Correlation calculated the relationship between the teacher's emotional intelligence and teacher's interpersonal communication and the teacher's adversity quotient. The magnitude of the correlation coefficient between these variables is shown in the following table:

Table 14: Correlations $X_1 - Y$ and $X_2 - Y$

		Adversity quotient	Emotional intelligence	Interpersonal communication
Adversity quotient		1,000	0,711	0,805
Pearson Correlation	Emotional intelligence	0,711	1,000	0,622
	Interpersonal communication	0,805	0,622	1,000
	Adversity quotient	.	0,000	0,000
Sig. (1-tailed)	Emotional intelligence	0,000	.	0,000
	Interpersonal communication	0,000	0,000	.
	Adversity quotient	101	101	101
N	Emotional intelligence	101	101	101
	Interpersonal communication	101	101	101
	Adversity quotient	101	101	101

Based on table 14, the value of the relationship between emotional intelligence and adversity quotient is calculated with the Pearson Correlation, and the correlation coefficient between these variables is 0.711. While the magnitude of the relationship between the teacher's interpersonal communication and adversity quotient was calculated with Pearson Correlation, and the correlation coefficient between these variables was 0.805. This shows the close relationship between emotional intelligence and interpersonal communication and adversity quotient. The direction of a positive relationship indicates that the higher the value of the teacher's emotional intelligence variable and the teacher's interpersonal communication variable, the higher the adversity quotient will be, and vice versa. The level of significance of the one-sided correlation coefficient of output measured from the probability shows the number 0,000. Because the probability is far below 0.05, the correlation between emotional intelligence

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and adversity quotient is genuine, and the correlation between interpersonal communication and adversity quotient is genuine.

From Table 15, it is seen that for the variable emotional intelligence (X_1), the value of **Sig** = 0,000 and $t_{value} = 5,006$, while $t_{table} = 1.66$. Because the value of **Sig** < 0.05 and $t_{value} > t_{table}$, H_0 is rejected, which means that there is a significant relationship between emotional intelligence (X_1) and adversity quotient (Y). For interpersonal communication (X_2) the value of **Sig** = 0.000 and $t_{value} = 8.670$, while $t_{table} = 1.66$. Because of the **Sig** value < 0.05 and $t_{value} > t_{table}$, H_0 is rejected, which means that there is a significant relationship between teacher's interpersonal communication (X_2) and adversity quotient (Y). The t-test calculates the significance test of the partial correlation coefficient, and the results are obtained:

Table 15: Coefficients $X_1 - Y$ and $X_2 - Y$

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant) emotional	- 0,591	6,221		-,095	0,924
1 intelligence	0,315	0,063	0,342	5,006	0,000
interpersonal communication	0,570	0,066	0,592	8,670	0,000

Note. Dependent Variable: adversity quotient

Discussion

The purpose of this study was to examine the relationship between emotional intelligence and interpersonal communication with adversity quotient among primary school teachers. Findings of the research on the primary hypothesis indicated a positive correlation between emotional intelligence and adversity quotient with regression equation $\hat{Y} = 22,592 + 0,654X_1$, which is linear and significant, and the amount of calculated F value is 100,936 with significant level 0.000. The study finds that emotional intelligence and the adversity quotient contribute to different factors, consistent with findings from previous research by (D'souza, 2006). AQ ® is also found to correlate with the performance of schools and the school environment. (Coetzer, 2013) also conducted a study on the relationship between emotional intelligence (EI) and job satisfaction for university lecturers. There was a useful link between EI and lecturers' job satisfaction. The results show that a quotient of adversity plays a major part in deciding whether or not an individual can handle and work efficiently under pressure and poor conditions. In other words, emotional intelligence is also vital for the recognition of emotion and a strong understanding of emotions.

Emotional intelligence is a crucial and effective factor in real-life outcomes such as the success of a school, education, jobs, and interpersonal relations, and general health issues according to (Ciarrochi, Forgas, & Mayer, 2005). Emotional intelligence can also be said to be a feature or capability to control and regulate individuals in their emotions and to enhance and maintain their sense of happiness, with a high level of emotional intelligence (Zeidner & Olnick-Shemesh, 2010). The Cando & Villacastin's report, however, found that both EQ and AQ ® have no ties with the ratings for instructor performance, given an excellent overall measurement of teacher performance. It shows that the desire to address one's life problems and to consider both personal feelings and those of others does not affect the result of one's teaching (Cando & Villacastin, 2014).

The findings of the second hypothesis showed a positive correlation between interpersonal communication and teachers' adversity quotient with regression equation $\hat{Y} = 13,030 + 0,775 X_2$, which is linear and significant and the amount of calculated F value is 182.364 with significant level 0.000. The findings of the current study confirmed the results of the previous study. According to Stoltz, some individuals have a high intelligence Quotient and impressive social skills and communication but fail to succeed because these individuals do not have high adversity. It implies that interpersonal communication is associated with adversity quotient.

Our third findings indicated that emotional intelligence and interpersonal communication are simultaneously significantly and positively associated with adversity quotient with the regression equation $\hat{Y} = -0,591 + 0,315 X_1 + 0,570 X_2$ significant and the amount of calculated F value is 125.866

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with the significant level 0.000. Since the significance is less than 0.05, it shows that the relationship between teachers' emotional intelligence and teachers' interpersonal communication simultaneously with teachers' adversity quotient is significant. Such results are similar to studies by (Nouri et al., 2014), which documented a significant relationship between emotional intelligence and skill in communication. An example of emotional intelligence in action is the ability to communicate efficiently to benefit positive interaction (Petrovici & Dobrescu, 2014). A significant relationship is evident between interpersonal relations with a few of the emotional intelligence variables (Nasir & Munaf, 2011).

The teaching and learning process involves contact with great importance because teaching involves a very high degree of communication. People can only learn their skills, knowledge, and attitudes through communication in social life (Bhala, 2011; Çağlar & Kılıç, 2011; Zlatić, Bjekić, & Marinković, Snežana Bojović, 2014). Communication competence must be taken into account when discussing teacher competence. (Ogienko & Rolyak, 2009) have identified three areas of teacher knowledge in line with the "the European teachers" model, namely, key competences, basic competences, and special competences. The communication skills of teachers are part of both key and basic teachers' competence. In Indonesia, teachers must have four competencies, including pedagogic competence, personality competence, social competence, and professional competence. Interpersonal intelligence is included in social and personality competence, which is directly related to the communication between teachers and students; teachers and students' parents, teachers and principals, and among fellow teachers. In Zgaga's view, cited in (Zlatić et al., 2014), the teachers with developed communication competencies in all segments of the teaching process are more effective. They are capable of modeling and controlling teaching behavior in order to control contact, and social situations, identifying and changing the objectives of communication and teaching conversation, etcetera. (Çetinkaya & Alparslan, 2011) revealed that the sub-dimensions of emotional intelligence and the sub-dimensions of communication are in a positive relationship. In the study carried out by (Özer, Gün, & Öğüt Düzen, 2018), it was concluded that emotional intelligence affects communication abilities in respect of nursing students. The studies have resulted in substantial and medium-level differences between sub-sizes of emotional intelligence and communication skills. In their research, (Marzuki, Najib Ahmad Mustafa & Saad, 2015) reported that there is a positive association between emotional intelligence and communication skills. Likewise, sub-dimensions of emotional intelligence perception explain 44.5 percent of the total variance on communication skills. Their research has found that emotional understanding and communication have a positive link. The research also determined that communication skills would benefit students with high emotional intelligence. Emotional intelligence allows communicating better, according to (Jadhav & Gupta, 2014). Sinha and Sinha's work confirms that the secret to effective communication is emotional intelligence. They also emphasized that the two are unorganized interwoven. Every form of effective communication requires emotional intelligence (Sinha & Sinha, 2007).

The key factors that connect emotional intelligence with skills in communication, e.g., empathy, adaptability, positive thinking, strong interpersonal abilities, group behavior, problem-solving, decision-making, etcetera, are examined, and the analyzes demonstrate that numerous communication capacities are based upon emotional intelligence (Lakshmi, 2016). Yousefi studied a group of Iranian students on the relationship between emotional experience and communication skills. Emotional intelligence was also found to be positively associated with communication skills, and gender differences in emotional intelligence and communication skills were not necessary (Yousefi, 2006).

(Austin, Saklofske, Rohr, & Andrews, 2007) believe the interpersonal and intrapersonal capacities of emotional intelligence are beneficial in people of great emotion. The capacity for people to deal successfully with environmental pressures and demands is a crucial factor in determining the quality of life and mental health. Emotional intelligence includes the ability to resolve emotional problems, the ability to accept reality, flexibility, and the ability to regulate and change the affective reactions of stress and crisis, based on the findings, (Miri, Kermani, Khoshbakht, & Moodi, 2013).

Nevertheless, there are low levels of a positive correlation between the communication skills of teacher candidates and their levels of emotional intelligence. In terms of academic performance, the student results found a positive and important correlation between adversity and the academic performance of the student (n=441) (r=530), (P<0.01, (Mwivanda, 2018). No significant variation in the emotional intelligence level was observed between teacher candidates and the communication skills regarding gender and departmental variables (Ozkaral & Ustu, 2019).

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In addition, research has been carried out to determine the significant link between emotional quotient, adversity quotient®, and student-parent academic performance. The study showed that the emotional quotient, adversity quotient, and academic achievement of students-parents are not closely related (Yazon & Ang-Manaig, 2019). The AQ relation with EQ ($r = 0.519$, $p = .000$, $N = 1845$) was moderately positive (Matore & Khairani, 2016). Apart from whether or not it is associated with discrepancies in earlier research findings, it can also allow a person to better communicate by mastering the emotional intelligence and adversity quotient. Last but not least, our findings proved that emotional intelligence and interpersonal communication are significantly correlated with adversity quotient.

CONCLUSIONS

Based on the results of the study, it was found out that emotional intelligence and interpersonal communication are significantly and positively correlated with adversity quotients of primary school teachers. It indicates that both emotional intelligence and interpersonal communication are good predictors of adversity quotient. Since emotional intelligence, adversity quotient, and interpersonal communication play a major role in individual success and performance, building up emotional intelligence, adversity quotient and interpersonal communication is imperative to fortify the ability of people in the education field to handle the stress and obstacles in workplace and develop effective and efficient relationship with pupils, fellow teachers, principal, and students' parents.

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Efforts to Increase Learning Outcomes Using Kinesthetic Auditory Visualization Model

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ABSTRACT

This study aims to: (1) improve science learning activities using the Kinesthetic Auditory Visualization Model, (2) improve the results of science learning using the Kinesthetic Auditory Visualization Model. The method used by researchers is to use a classroom action research (CAR) design that attempts to solve or answer the problems faced in the current situation. The subjects in this study were all fourth grade students of SDS Muhammadiyah Plus Kapuas Regency which consisted of 12 students, 7 men and 5 women. For data collection techniques used are observation and tests. While in this study using qualitative and quantitative data analysis. The results of this study indicate that there was an increase in the activities and learning outcomes of science in fourth grade students of SDS Muhammadiyah Plus Kapuas Hilir Subdistrict, Kapuas Regency in the academic year 2016 / 2017. This can be seen from: 1). The activity of students is better in science learning in the subject matter of animal classification using the VAK learning model in fourth grade students at SDS Muhammadiyah Plus Kapuas Regency 2016/2016, this can be seen from the increase in activity from cycle I which only gets average scores - classically average 2.5 with poor criteria and in the second cycle increased in good category with a classic average of 3.5. 2). There is an increase in science learning outcomes of the fourth grade students of SDS Muhammadiyah Plus Kapuas Regency in the academic year 2016/2017 with the acquisition of the pre-test getting an average score of 25.4 with completeness in classical 0%, while the average score of students in cycle I research is 58.3 with completeness in classical 42% and in the second cycle the classical average value increased to 81, with 100% classical completeness.

Keywords: Learning outcome, model, kinesthetic auditory visualization, KAV

INTRODUCTION

Science is still a difficult subject for most students in Indonesia, including elementary school students. Science is an important subject, difficult to be accepted and understood by students. If a student is confronted with certain material while he is not ready to understand it, then he will not fail in learning but learn to frighten, hate and avoid the lesson. Not all students can easily accept the lessons delivered by the teacher. There are some participants who have understood the subject matter and some who have not been able to understand it.

The difference in understanding of students then there is a distance between those who understand and those who do not understand. This happens because teachers more often do conventional learning that makes monotonous so that students are happier with the way the teacher teaches various subject matter. The teacher lacks variation in learning in teaching. There are students who easily accept lessons and there are students who find it difficult to accept lessons with only lectures conducted by the teacher.

So that the learning process can accommodate knowledge with all students well, it can be applied Visualization Auditory Kinesthetic Model (VAK). Kinesthetic Visualization Auditory Model (VAK) has enough creativity to provide an explanation and make students feel curious about the lesson. This is also reinforced by the results of interviews with fourth grade teachers saying that the delivery of subject matter more often uses the method of lecture and rarely uses teaching aids or learning models so that students are better.

Education provides a very large contribution to the progress of a nation. Through education, the Indonesian people can free themselves from ignorance, backwardness and can develop human resources so that they can increase their confidence to compete with other countries. Education that is developed is education that can develop the potential of the community, is able to foster a will and can

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arouse motivation to explore potentials and develop them optimally to develop in their entirety and comprehensively.

The implementation of education, especially formal education takes place in the school environment. Education in schools is one of the tri education centers. This should be really noted by the teacher. So the teacher must really carry out their duties as well as possible. In carrying out their duties, the teacher should plan learning well. Education is the most important thing in life. Many things are obtained from education. Good about skills, personality, attitude values, knowledge and so forth. In the field of education that plays an important role in particular the learning process by teachers.

Sardiman (2006) explained that learning is always a change in behavior or appearance, with a series of activities for example by reading observing, listening, imitating and so forth. Sugihartono, et al (2007) learning is a process of gaining knowledge and experience in the form of changes in behavior and the ability to react relatively permanently or permanently because of the interaction of individuals with their environment.

Hilgard (Nasution, 2000) says learning is the process of giving birth to or changing an activity through training (whether in a laboratory or natural environment) that is distinguished from changes by factors that do not include exercise such as changes due to intoxication or drinking marijuana not including learning outcomes.

According to Purwanto (2010) learning outcomes are the results achieved from the teaching and learning process in accordance with educational objectives. Learning outcomes are measured to determine the achievement of educational goals so learning outcomes must be in accordance with educational objectives.

With the end of a learning process, students get a learning outcome. Learning outcomes are the result of an interaction of learning and teaching actions. Based on the description of learning according to the experts, it can be concluded that learning is a process of activities in the form of reading, observing, listening and imitating the results of which can change behavior or behavior so that the same change does not occur again and again in every new situation. The change in question must lead to a change that is better than the state before learning.

According to Gagne (2012) explained that the learning objectives provide a view of learning from back to face. The main reason for this view is that we remember what is the end of learning. Learning objectives according to Sardiman (2006) are reviewed in general, then there are three types of learning objectives namely (a) to gain knowledge, (b) inculcation of concepts and skills, (c) the formation of attitudes.

To get knowledge depends on the ability to think because the ability to think will enrich knowledge. While inculcating a concept or formulating a concept, it also requires a skill. The skills themselves can be educated with a lot of ability training.

In developing mental attitudes, behavior and personalities of students, a teacher must be wiser and more careful in his approach. A person's attitude will be influenced by the attitudes of others he often meets or idolizes.

The three learning objectives above in teaching are three things that are planning and programmatically separate, but in reality in students will be a unified whole and round. All three of them in teaching and learning activities, each planned according to the items of learning material.

Learning is forming a fixed state of the student. After knowing the meaning of learning, it will be revealed what is the learning outcome. Sudjana (2005) states that student learning outcomes are essentially changes in behavior and as feedback in an effort to improve the teaching and learning process.

Measurement, evaluation and evaluation are hierarchical. Evaluation is preceded by assessment, while assessment is preceded by measurement. Based on some of the opinions of the experts above, it was concluded that learning outcomes are abilities possessed by students after receiving their learning experience.

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These abilities include cognitive, affective, and psychomotor aspects. Learning outcomes can be seen through evaluation activities aimed at obtaining proof data that will show the level of students' ability to achieve learning objectives. In this study the researchers emphasized cognitive learning outcomes. The instrument used to measure student learning outcomes on cognitive aspects is a test.

IPA can be defined according to its function. In this case Bernal has mentioned two very important functions of science that are to increase production and to change the attitude of human and natural outlook. The science functions to change the attitude of humans towards the universe and can be described as follows: In the past people believed that a rainbow was an angel with IPA that people understood that the rainbow was a habit of light spots of water in the air.

When translated freely the meaning is roughly as follows: Science is a collection of theories that have been tested for truth that explain the regularity patterns of natural phenomena that are closely watched. From some of the above meanings of science, it can be concluded that science is a science concept that studies the natural environment and its contents.

There are three main types of learning modalities, but it often happens that a child has a combination of several learning modalities. The first learning modality is the Visual learning modality, for example reading a book, seeing a teacher's demonstration, seeing the greatest examples in nature or natural phenomena by observation, or seeing learning presented through TV or video tapes.

The second learning modality, namely Audio learning modality, a child will learn more easily by listening. Here the application of lecture, question and answer and discussion methods are more effective. Students can learn through listening to educational radio, learning tapes, video tapes, the third learning modality is kinesthetic learning modalities, students learn through physical movements. For example, by walking, moving your feet or hands, doing experiments that require physical activity and so on. (Sumani, 2011).

Although most people have access to the three VAK modalities, almost everyone tends to one of the learning modalities which acts as a filter for learning, processing, and communication. People not only tend to one modality, they also utilize certain combinations of modalities that give them certain natural talents and flaws. (Porter, 2010).

VAK learning model is a learning model that optimizes the three learning modalities to make students feel comfortable. This learning model is a child of the Quantum learning model that is principled to make the learning situation more comfortable and promises success for students in the future.

In VAK learning, learning is focused on providing direct and fun learning experiences. Direct learning experience by learning by remembering (Visual), learning by listening (Auditory) and learning by movement and emotions (Kinesthetic).

Your way of learning is the result of a combination of how you absorb, then organize and process information. Verbal cues (visual, auditory and kinesthetic) can help you find your learning modality in the wrong direction, so you need to know the characteristics of each of these verbal cues. Are you or someone included in the visual, auditory and kinesthetic groups. Different activities require different ways of thinking. So the advantage is to know, first, which is your dominant way and second what you can do to develop another way of thinking in yourself. (Riyanto, 2010).

The characteristics of students who are more dominant have a visual learning style such as glancing eyes upward when speaking and speaking quickly. Children who have a visual learning style must look at the body behavior and facial expression of the teacher to understand the subject matter. Students tend to sit in front so they can see clearly. Students think using images in the brain and learn faster by using visual displays such as diagrams, picture books, and videos. In the classroom, visual children prefer to take notes to the details to get information. (Colin and Nicholl, 2002).

Visual acuity, although more prominent in some people, is very strong in everyone. The reason is that in the brain there are more devices for processing visual information than all other senses. (Meier, 2002: 97). The characteristics of students who are more dominant have auditory learning styles such as a glance of the eye towards the left / right, horizontal when speaking and mediocre. For this reason,

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teachers should pay attention to their students to their hearing devices. Children who have an auditory learning style can learn quickly by using verbal discussion and listening to what the teacher says. Auditory children digest meaning conveyed through tone, sound, pitch (high and low), speed of speech, and other auditory matters. Written information sometimes has minimal meaning for auditory children. Children like this can usually memorize faster by reading texts aloud and listening to tapes. (Colin and Nicholl, 2002).

Our auditory thoughts are stronger than we realize. Our ears continually capture and store auditory information, even without us knowing. And when we make our own sounds by speaking, some important areas in our brain become active.

In designing lessons that appeal to strong auditory channels in learners, look for ways to get them to talk about what they are learning. Have them translate their experiences with sound. Have them read aloud dramatically if they want. Invite them to talk as they solve problems, make models, gather information, make work plans, master skills, make reviews of learning experiences, or create personal meanings for themselves. (Meier, 2002).

Learning through physical activity and direct involvement. A student prefers to handle, move, touch and feel / experience his own body movements (hands-on, physical activity). For kinesthetic students, learning must experience and do. The characteristics of students who are more dominant have a kinesthetic learning style such as a glance of the eye down when speaking and speaking more slowly. Such children find it difficult to sit quietly for hours because their desire for activity and exploration is very strong. This learning style student learns through motion and touch. (Colin and Nicholl 2002: 130).

According to Porter (2010), encourage students to apply all of these methods in learning. You might also want to tell parents about the child's learning type and teach them strategies that support the learning style.

RESEARCH METHOD

The study was conducted at SDS Muhammadiyah Plus Kapuas Hilir Kuala Kapuas with the research subjects being Grade IV students. The reason for conducting research at SDS Muhammadiyah Plus is because at SD there are learning problems that need to be investigated, namely the low learning outcomes of Natural Sciences (IPA) in this school.

This research uses Classroom Action Research (CAR). Classroom Action Research is a systematic study conducted in improving practice. Practice in education by taking practical action and reflection of these actions. According to Kemmis and Mc Taggart (2012), classroom action research done through a dynamic and complementary process consisting of four essential "momentum", namely "Preparation of plans, actions, observations, reflections".

The presence of researchers is very necessary in every activity at the research site because the researchers act as planners, implementing actions, observers, reflectors and as reporters of research results. As the subject of the action giver, the researcher acts as the teacher or teacher of the model in charge of making the lesson plan (lesson plan) while simultaneously delivering teaching material during the learning process. In addition, researchers also collect and analyze data and report on the results of research.

Researchers collaborate with class teachers of Natural Sciences (IPA) to act as observers who are in charge of collecting data on the learning process, before observing observers are trained in order to understand the learning of Natural Sciences using the scientific approach that is applied along with the material taught.

Planning is developing a plan of action that is critical to improving what has happened. The class action research plan should be structured and in terms of definition it must be prospective for action, the plan must look forward.

The CAR plan should be flexible enough to be adapted to unexpected effects and unseen obstacles. Planning is based on the problem and hypothesis of the action being tested empirically so that the

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expected change can identify aspects of the PBM results, as well as uncovering the supporting and inhibiting factors of action implementation.

This action is the application of the plan that has been made can be in the form of an application of learning models that aim to improve and perfect the model being implemented. These actions can be carried out by those directly involved in implementing a learning model whose results will also be used to improve the implementation of the task.

Observation serves to document the effect of related actions. These observations are oriented towards the future, providing the basis for present reflection, even more so when the current round is running. Careful observation is needed because actions will always be limited by the state of reality, and all these obstacles have never been seen clearly in the past. Observations need to be planned and jufa based on openness of views and thoughts and are responsive.

Reflection is remembering and pondering an action exactly as recorded in the observation. Reflection seeks to understand the processes, problems, problems, and real obstacles in strategic action. Reflection considers the various possible perspectives in a situation and understands the problem and the circumstances in which it arises. Reflection (contemplation) is an activity of analysis, interpretation and explanation (explanation) of all information obtained from observations of the implementation of actions.

RESULTS AND DISCUSSION

Planning the first cycle of learning is carried out by selecting a learning model that is suitable for learning to classify animals so that students can learn well. Next is compiling the Learning Implementation Plan (RPP), preparing assessment instruments and also preparing collaborators. The researcher also prepares student activity activity sheets and teacher activity activity sheets which will be filled by observers. The learning cycle I was carried out in one meeting. Researchers as well as implementing learning are assisted by a teacher as a collaborator who will help observe and record events or findings during the learning process. In this observation activity the researcher and observer provide an assessment of the results of observations by referring to the format that has been prepared by the researcher. In this observation activity the researcher will explain the results of the observation through an observer format table to the activities of the teacher and students during the learning process lasts until the final activity.

Table 1: Calculation of learning outcomes.

No.	Learners Code	KKM	Max Score	Value
1	DS	65	100	60
2	FDP	65	100	60
3	FR	65	100	70
4	MT	65	100	40
5	NA	65	100	70
6	RI	65	100	60
7	SS	65	100	60
8	UK	65	100	70
9	HA	65	100	10
10	NAS	65	100	70
11	AG	65	100	60
12	MRK	65	100	70
	Total		700	
	Average		58,3	
	Max Value		70	
	Min Value		10	
	Complete		5	
	Not Complete		7	
	% Complete		42 %	

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Based on the results of the calculation of learning outcomes, it can be seen the completeness of student learning outcomes in post-test cycle I was 42%. Based on table 12 it can be seen that the results of the Natural Sciences evaluation of 12 students in the first cycle showed that the average value of the class reached 58.3. The highest value is 70 while the lowest value is 10. Mastery learning reaches as many as 5 students or 42%, while incomplete learning is 7 students or 58%.

The evaluation of natural sciences in the preliminary data increased after the first cycle. The increase was seen from the average class which was originally 25.4 to 58.3. While mastery learning has increased from 0% to 42%. However, the improvement in the IPA evaluation results of students in the first cycle has not reached the success indicator that has been set, namely 85% of students who experience completeness so that it still needs improvement.

Table 2: calculation of average

No.	Name	KKM	Max Score	Value
1	DS	65	100	70
2	FDP	65	100	80
3	FR	65	100	70
4	MT	65	100	80
5	NA	65	100	90
6	RI	65	100	80
7	SS	65	100	90
8	UK	65	100	80
9	HA	65	100	70
10	NAS	65	100	90
11	AG	65	100	90
12	MRK	65	100	80
Total			970	
Average			81	
Max Value			90	
Min Value			70	
Complete			12	
Not Complete			0	
% Complete			100 %	

Formula:

$$M = (\sum x) / n$$

$$= 970/2 = 81$$

Based on the results of the calculation of the average (mean), it can be seen the average value of students in the post-test cycle II is 81.

Calculate the percentage of students mastery learning classically, where the indicator of mastery learning that is used is 85% with the formula:

$$TB = (\sum s \geq 65) / N \times 100\%$$

$$= 12/12 \times 100\%$$

$$= 1 \times 100\%$$

$$= 100\%$$

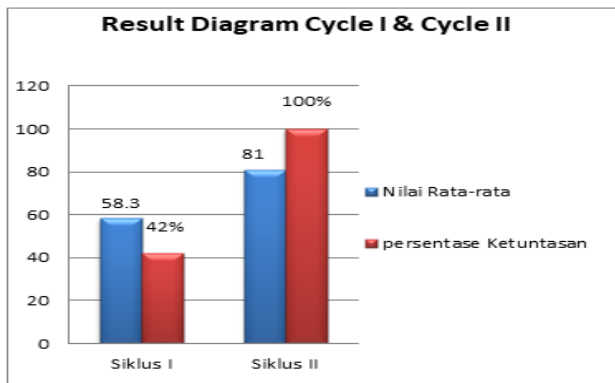
Based on the results of the calculation of learning outcomes, it can be seen the completeness of student learning outcomes in post-test cycle I is 100%. It can be seen that the results of the IPA evaluation of 12 students in the second cycle showed that the average value of the class reached 81 The highest value was 90 while the lowest value was 70. Completion of learning reached as many as 12 students or by 100%.

the first cycle has increased after the second cycle. The increase was seen from the average class, which was originally from 58.3 to 81. While the mastery learning increased from 42% to 100%. So, efforts to improve student learning outcomes that have been set is 85% of students who have mastery. so, this research is said to be successful and will be stopped in cycle II. Thus the implementation of the action in this study no longer needs to be revised to carry out the next cycle or in other words this research can be stopped in the second cycle.

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Diagram 1: Result Diagram Cycle I and Cycle II



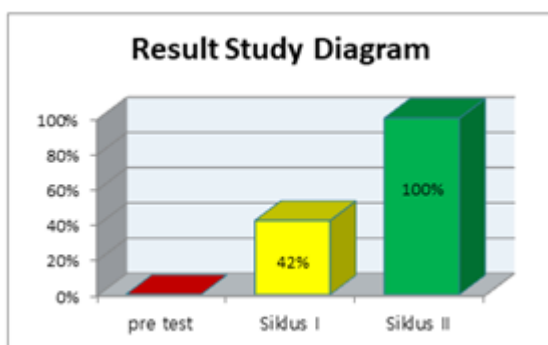
Qualitative data acquisition to support the hypothesis of learning activities, based on observations in cycle II obtained an average of observer ratings of 3.5 with the category of "good". It can be concluded that the activities of students look active when participating in science learning with material classifying animals using the VAK model.

Quantitative data acquisition supports the hypothesis of student learning outcomes improvement using the VAK model. the fourth grade students at SDS Muhammadiyah Plus. The acquisition of learning activities has increased from the first cycle with an unfavorable category with an average of 2.9 with an increase with an average acquisition of 3, 5 with a good category.

Acquisition of student learning outcomes with an average of students in the first cycle that is 58.3 and in the second cycle has increased with an average value of student learning outcomes of 81. The classical percentage acquisition in the first cycle is 42% and in the second cycle experienced increase to 100%.

Based on the description above, the hypothesis formulation that has been made can be tested for accuracy by comparing research results in the form of both qualitative and quantitative data.

Diagram 2: Result Study Diagram



Based on the diagram above, the results of the initial data, the first cycle, and the second cycle showed an increase in learning outcomes in science lessons material classifying animals using the VAK model for grade IV students at SDS Muhammadiyah Plus. It can be seen that in the preliminary data students only get an average value of 25.4, this value is still less than the completeness criterion of 65. The student's completeness learning outcomes are only just getting a value of 0%. This value is very far from the complete completeness criteria where the specified value is 85%. Then in the first cycle the average value of students increased to 58.3, this value still has not reached the minimum completeness criteria determined by schools which is 65 with a classical completeness of 42%, still not reaching 85%. So researchers must optimize the learning process again in cycle II and in cycle II obtain an average value of 81, this value has increased from the previous action and the classical completeness reaches 100%. Based on these results there has been an increase in learning outcomes of science material classifying animals using the VAK model from the initial data to cycle I by 42% and from cycle I to cycle

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II by 58%, so it can be seen that the use of the VAK model in science lessons can improve science learning outcomes in the fourth grade students of SDS Muhammadiyah.

CONCLUSIONS

Based on the results of research and discussion, it can be concluded that there is an increase in science learning activities and learning outcomes for grade IV students of SDS Muhammadiyah Plus Kapuas Hilir District Kapuas District in the 2016/2017 academic year after participating in science learning using the Visualization Auditory Kinesthetic (VAK) model, the researchers conclude:

1. Student activities both in learning science on the subject matter of animal classifications using the VAK learning model in grade IV students at SDS Muhammadiyah Plus Kapuas District 2016/17 Academic Year, this can be seen from the difference from the initial conditions where the activities of students are not good, in cycle 1 there was an improvement in activity but not maximized which was maximized in cycle 2 it was seen from the increase in observations from cycle I which only got an average value of 2.5 classically with unfavorable criteria and in cycle II it increased in the good category to an average - the classical average is 3.5.
 2. There is an increase in science learning outcomes of students of grade IV SDS Muhammadiyah Plus Kapuas Regency in the 2016/2017 academic year with the acquisition of pre-test scores an average of 25.4 with a classical completeness of 0%, while the average score of students in the study the first cycle was 58.3 with a classical completeness of 42% and in the second cycle the average value classically increased to 81, with a classical completeness of 100%.
1. Based on the conclusions of the results of the study, to improve learning activities and learning outcomes of Science using the Visualization Auditory Kinesthetic Model (VAK), researchers provide the following suggestions:
1. The principal should consider the Kinesthetic Visualization Auditory (VAK) model as input or supervision for school teachers.
 2. Teachers are advised to apply the Visualization Auditory Kinesthetic (VAK) model as an alternative model of natural science learning, especially in classifying animals. That is because the Visualization Auditory Kinesthetic (VAK) model has been proven to be able to improve students' learning activities and science outcomes.
 3. It is hoped that activists in the education world will be able to use the Visualization Auditory Kinesthetic (VAK) model as one of the further research materials so that it can be further improved and utilized as a learning model used in other subjects.
2. The researchers would like to extend their gratitude to Dean Faculty of Teacher Training and Education Muhammadiyah University of Palangkaraya for their support, and to those who have supported the researcher to continue working in the field of educational research, hopefully the results of this research can be useful for the community, especially the innovators and experts education.

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Student Literation Capabilities in Utilizing Arabic Language Translation Machine as Study Skills

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ABSTRACT

This research focuses on the description of the ability of Arabic Language Education students to use the Google Translate translation engine as a means of fulfilling "Study Skills" in learning Arabic. Data sources in this study were students of the Arabic Language Study Program who participated in the Arabic Computer Application course, in the UHAMKA Arabic Language Study program. The focus of this research was the ability to combine machine translation with linguistic skills possessed by Arabic language education students. This research was conducted in the Arabic Language Study Program Faculty of Islamic Religion, Universitas Muhammadiyah Prof. DR. HAMKA (UHAMKA). The research method used was Classroom action research. The results of this study indicated that using "Google Translate" in learning translation in class can improve the quality of the translation of the UHAMKA Arabic language study program students. This was proven by three things that were mastered by Arabic Language Education students, namely; linguistic ability, ability to apply technology, and the ability to use Google Translate.

Keywords: Literacy, Machine Translation, Students, Arabic Education

INTRODUCTION

The current technological advances can't be dammed anymore. Massively, technology has become an important thing inseparable from various aspects of human life. The work done by humans is slowly being replaced by machines. One aspect of work that is facilitated and slowly replaced by machines is translation work.

Literacy at this time is not only a form of reading, writing, mathematics, and science skills, but literacy at this time is the literacy of the 21st century where humans should have the ability to utilize media, tools, and everything that can be used to facilitate all jobs. This is consistent with the results of the High-Level Conference in Berlin in 2002 (Juditha, 2011). Not only the ability to use media, but literacy is also how humans can find out and process information for problem-solving (Boeriswati, 2012), this correlates with students' ability to translate.

A student doing translation tends to use a translation machine; "Google Translate" and utilize its linguistic competence. Translation done with or without a machine will cause errors in certain forms, this study discusses how the errors in the translation were formed.

The translation is a manifestation of the existence of language as a means of communication that makes people understand each other and can express all information, thoughts and develop knowledge (Giovanni, 2018). Problems that arise in the translation can have a significant impact when the meaning is not fully translated properly.

The ability to translate is one of the language competencies needed by academics. Students will need these abilities in the process of completing their education, especially for students who learn foreign languages, because translation is one of the study skills.

The relationship between students' ability to translate directly and the existence of machine translation into a problematic, where the linguistic ability of students will be tested with the results of machine translation to produce a good translation. In this case, technological literacy as mentioned above is needed for students to be able to utilize existing translation machines in collaboration with their linguistic abilities.

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So far, research on literacy in learning has been carried out by several people including; Mehmet Cem Odacioglu & Saban Kokturk's research entitled "The effects of technology on translation students in academic translation teaching". This study aims to describe how technological developments in translation affect learning academic translation (Odacioglu & Kokturk, 2015). Endry Boeriswati's research entitled "The Implementing Model of Empowering Eight for Information Literacy" revealed that, in the first cycle, students' problem-solving skills could be improved through the "Empowering Eight" information literacy model. It can be concluded that students' attitudes towards innovation and confidence affect information literacy, and information literacy models through "Empowering Eight" contribute to students' problem-solving skills.

The study of Ilza Mayuni et al. entitled Teachers' perspectives and practices in applying technology to enhance learning in the classroom (Safitry, et al., 2015) teachers with more than 10 years of teaching experience but have never received formal training in the use of ICT. Overall, teachers have a positive perspective on the application of ICT in their classrooms, even though they lack technical support from schools and lack ICT skills.

Salima Harrat and Karima Meftouh Kamelsmaili's research entitled "Machine Translation for Arabic Dialects (survey)", which aims to describe various kinds of Arabic dialects in written language applied by machine translation. This research uses survey method. The results showed that the development of technology in translation is very helpful for life. Dialect differences are not yet fully coordinated in machine translation. That happens because the number of Arabic dialects is very complex (Harrat, Meftouh, & Smaili, 2019).

Based on the above study, the researcher will complete several things that have not been linked and discussed in the above research, in this study the researcher studies and describes the ability of Arabic education students to utilize technology in translation, especially machine translation with "Google Translate".

The focus of this research is a description of students' ability to combine Indonesian and Arabic linguistic competencies. This ability is one form of information technology literacy in the world of education, especially in the field of Arabic language education.

In every study, there is certainly a question that must have an answer. How is the ability of UHAMKA Arabic Language Education study program students in utilizing translation technology?

This research is carried out with the assumption that with a large number of languages in this world, various purposes of using language are hampered because of the differences in language. One of the communication links across languages and a bridge to these differences is a translator. Various research objectives in translation and technology literacy are finding solutions to how problems in learning translation can be solved. Formatting the title, authors and affiliations.

In this section we discuss how to format the title, authors and affiliations. Please follow these instructions as carefully as possible so all articles within a conference have the same style to the title page. This paragraph follows a section title so it should not be indented.

Student interest in literacy can be seen from the extent to which the student is active in matters relating to computers and the internet, and both of these are things that are preferred by students at this time. Technology literacy contributes greatly to the development of student learning skills, so information technology literacy becomes a necessity for students (Hume, Allan, & Lonigan, 2016)

Hutchins sees that the discussion of translation technology is divided into three parts; first known as (CAT); Computer-Aided Translation. Second; MAHT (Machine aided human translation), and third; (HAMT); Human aided Machine Translation. Both have similarities in the use and use of computers in translation (Hatim & Munday, 2004).

The translation process using computer-aided (Computer Assisted Translation) is almost the same as the manual translation process. The translator must read, understand the source language text, find the equivalent, and then write it into the target language text. The translation process is fully carried out by translators namely humans. Conversely, the translation using the help of a machine (Machine Translation-MT), the translation process is all done by a machine (computer) (Somers, 2003).

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One example of MT which is perhaps the most popular at the moment is Google Translate. When translating with Google Translate, users do not need to be involved in the translation process. Users simply enter the source language text that will be translated, run the Google Translate engine, and will immediately get the results of the translation in the target language. The user is only tasked to help run the translation process that is automatically carried out by Google Translate (Ghasemi & Hashemian, 2016).

The translation process that occurs in the machine does not follow the manual translation process in general. Since this process is fully carried out by the machine, the language elements are transformed into elements that can be computed by the machine. The translation process does not involve many linguistic considerations, Google Translate only scans a large collection of text, which contains text in the source language and the equivalent target-language text, for later analysis based on statistical formulas. From the results of the analysis created data that can be used as a basis for translating (Omari, 2015).

Regarding the quality of machine translation, Google Translate itself recognizes on their site that even the most sophisticated machine translation is not currently able to approach the language quality of a native speaker or does not yet have the skills of a professional translator. Strictly speaking, Google Translate also stated that they might take a long time before they could offer translation with quality human translations.

The size of human involvement in the machine translation process is inversely proportional to the size of machine involvement in computer-aided translation. In machine translation, humans are the ones who help, while in computer-aided translation, machines help human work. In the process of machine translation, translators are usually only involved in the editing process. When the translation has been done by machine translation, the translator is asked to edit the final result of the translation. Editing like this usually will not greatly improve the quality of machine translation. Thus, the quality of the final translation will be largely determined by the quality of machine translation. In contrast to human translation, the quality will be determined by the quality of the translator, not by the translation aids used.

The machine translation device itself cannot be said to be merely a translation aid because the working portion of the machine translation device in machine translation is greater than the translator who only does editing. Therefore, the results of machine translation cannot be called human translation, but rather machine translation.

The translation is the transfer of messages and meanings (messages) from the source language (SL) to the target language (TL) using grammatical forms, equivalents and meanings. Translation activities are part of language skills that involve the competence and skills of translators in using the source language and target language (Zhang, 2018). The translation is very broad in scope, as revealed by Emery that in translation there are terms of macro dimensions and micro dimensions (Hatim, 2001: 173). Macro dimensions include the dimension of situations where macro language elements such as culture, illocutionary power, implied meanings, and interpretation must be studied. Micro dimension includes linguistic structure which includes grammatical and lexical.

Arabic is one of the languages whose texts have been translated into Indonesian, especially in terms of the books of knowledge. Translation activities have been carried out since the glory of the Abbasid Dynasty, especially during the reign of Al-Ma'mmun. Begins by Muslim scientists such as Alkhawarizmi, Ibn Sina, Ibn Rusyd translating Greek scientific concepts, then continued by western scientists during the heyday of Islam to learn many sciences then they were translated into languages in their respective countries (Abukhudairi, 2008:6).

The process of translating Arabic texts into Indonesian and vice versa continues to grow rapidly until now. In translating a text, both by sworn translators, lecturers, students and other academic practitioners sometimes find some difficulties and problems in translating. These difficulties can be in the form of equivalent words, the correct choice of words, the formation of words, style of language in poetry and equivalent in the meaning of a translation. Arabic becomes one of the languages that are quite difficult to translate into/from Indonesian because the language characteristics are far different from Indonesian, both in grammatical aspects (morphology and syntax) as well as in the choice of word equivalents so errors in translation often occur (Kayyal & Russell, 2013). Should not be indented; subsequent paragraphs should be indented by 5 mm.

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RESEARCH METHOD

The method used in this research was Classroom Action Research on students of the Arabic Language Study Program Universitas Muhammadiyah Prof. Dr Hamka. Descriptions were made to the results of the translation skills test using a machine and collaboration with students' linguistic abilities.

The data source in this study was the result of translation in translation from Indonesian into Arabic of the students of the Arabic Language Study Program, Universitas Muhammadiyah Prof. Dr Hamka. The data in this study were the result of collaborative translation between manual translation and machine translation.

Data collection was done by Cross-Sectional with an observation of translation results. Data analysis was performed by identifying the entire text and errors made, giving a score of the results of the translation and determining its value. After data collection, data analysis, the researcher concluded the ability of students to use the translation machine.

The research began by testing the ability of students to translate texts from Indonesian into Arabic in the Arabic language study program, Universitas Muhammadiyah Prof. Dr Hamka. After testing, researchers provide direction with the literacy of translation technology to make it easier for students to translate texts. Style and spacing.

RESULTS AND DISCUSSION

Footnotes the following Table describes the ability of students of Arabic Language Education, Faculty of Islamic Religion, Universitas Muhammadiyah Prof. Dr Hamka in translating Indonesian texts into Arabic.

Table 1: Frequency Distribution of Translation Ability Scores from Indonesia into Arabic

No.	Class interval	Absolute frequency	Relative frequency (%)	Cumulative frequency (%)
1	40 – 43	2	9,52	9,52
2	44 – 47	4	19,05	28,57
3	48 – 51	7	33,33	61,90
4	52 – 55	6	28,57	90,48
5	56 – 59	2	9,52	100
Total		21	100	

A total of 7 (33.33%) respondents were in the average group, 8 (38.10%) respondents were above the average, and 6 (28.57%) respondents were below the average group. Based on the above calculations, it can be concluded that:

- a) The average translation result of Arabic Language Study Program students is 50.10, far above the average theoretical score of 35. This shows that the ability to translate students with manuals and machine-aided from Indonesian to Arabic is Good Enough.
- b) The standard deviation of 4.64 indicates that the magnitude of the deviation between the highest score and the lowest score is not too far away. In other words, the ability between students with the highest and lowest scores is not too different. This also indicates that the ability of students with low scores can still be improved to near or equal to the abilities of students with high scores.
- c) The data also shows that students with scores above the average are more than students with scores below the average. This indicates that students with good translation skills are more than students with sufficient translation skills.

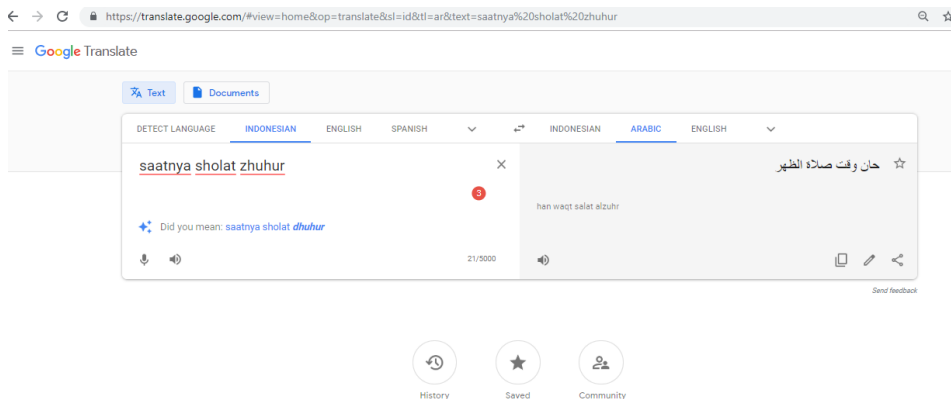
Based on the results of the above research, technological literacy in translation can be applied in class with the following steps:

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1. Make sure that the students master all functions of the Google Translate machine translation.

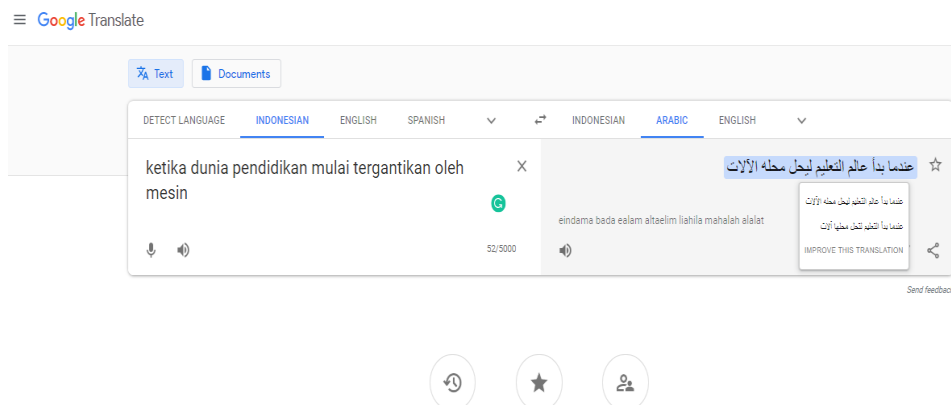
Figure 1: Google Translate Display



In Figure 1 above, as a teacher and facilitator, lecturers must understand all the functions of Google Translate so that they can be taught to students how to use it to the fullest.

2. Students master the structure and selection of words in the source language (Indonesian) and Arabic and can modify and choose the words listed on the Google Translate page.

Figure 2: Choice of words in Google Translate



3. Students are trained to use the feedback feature; where improper translation can be corrected directly and provide input to Google's database.
 - avoid excessively large white space borders *around* your graphics;
 - try to design illustrations that make good use of the available space—avoid unnecessarily large amounts of white space *within* the graphic.

The application of translation technology literacy in the classroom is something that must be done by the teacher/lecturer in language learning.

Following the Literacy Coaching technique, that true literacy in learning translation using technology must be designed in such a way as to become a pattern that has a standard structure (Jay & Strong, 2008). The following are the criteria that must be met by the teacher/lecturer; 1) Lecturers and Teachers must be competent in translation, 2) Lecturers and Teachers Having in-depth knowledge or learning process of translation, 3) Having in-depth knowledge of machine translation, 4) Having excellent presentation skills; has knowledge and experience in presentations at local, state, and national conferences, and 5) Has experience or preparation that allows it to observe and make models in the classroom and provide feedback to teachers. This final criterion includes the skills needed to be sensitive to the needs of the teacher and to generate confidence in the relationship with the teacher (Jay & Strong, 2008).

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Analysis and Discussion

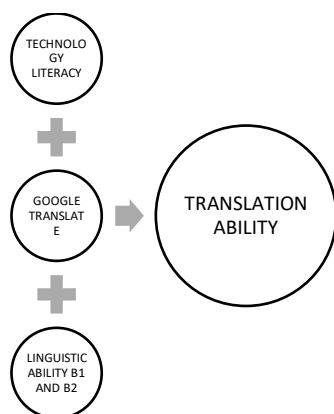
Following the Literacy Coaching technique, that the application of literacy in learning to translate using technology must be designed in such a way as to become a pattern that has a standard structure (Jay & Strong, 2008).

As an analysis, three abilities needed by Arabic language education students that can support translating skills include:

1. Linguistic Abilities of Arabic Language Education Students
2. Ability to apply technology
3. The ability to use Google Translate

Linguistic abilities of Arabic language education students at the Universitas Prof. Dr Hamka can be seen from the results of the translation. Their ability is seen in the reconstruction of Arabic sentences that have been translated from Indonesian. The reconstruction technique requires linguistic skills which are also complemented by an understanding of the cultures of both languages (Arabic and Indonesian).

Figure 3: Linguistic Abilities



The ability to apply technology is a skill in operating software and hardware using web-based computer media (Juditha, 2011). One part of the application of technology in translation is the use of the Google Translate translation engine (Ghasemi & Hashemian, 2016). The ability of students to use technology can be said to be related to other things including facilities and infrastructure. That includes the specifications of the computer used, the available bandwidth speed, and network consistency.

Linguistic skills in students should be applied in the implementation of source language writing in the Google Translate column. Every individual has linguistic skills that are brought from birth (Ingram, 1989), which was mentioned by Ingram as the acquisition of language. In this case, linguistic intelligence is said to be a mental process that exists in every human being (Fairclough, 1989). The mental process can develop with a learning process that produces a linguistic skill.

Referring to Somers (2003), that machine translation has definite properties and has mathematical laws, while students' linguistic skills can minimize the standard machine translation. The research findings show that students can use machine translation to the maximum but not the maximum in using their linguistic skills, both in the source language and in the target language.

CONCLUSIONS

Translation can now be facilitated with the translation machine, but not everyone is "literated" with the translation machine. Arabic language students are academics who are required to have translation technology literacy because translation is one of the skills in learning Arabic.

The results showed that the ability of students to translate text using the translation machine combined with linguistic competence is said to be sufficient. This is evidenced by the ability of students to collaborate on the translation machine with their linguistic abilities.

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In the classroom, the application of translation uses machines as a literacy of translation technology that affects the competence of translation as one of the abilities that must be possessed by Arabic Language students. Three abilities needed by Arabic education students that can support translating skills include; the linguistic ability of Arabic language education students, ability to apply technology, and ability to use Google Translate.

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A Semiotic Study from Religious Values in the Novel Entitled: Under Ka'bah Protection, Made by HAMKA

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ABSTRACT

This study aims to understand the religious value in the novel entitled: Under Ka'bah Protection made by Hamka reviewed through semiotic study. This research uses qualitative descriptive method. The result shows that the Novel entitled Under Ka'bah Protection made by Hamka contains religious values from *aqeedah* and *akhlaq*. The semiotic study on icons, indices, and symbols finds that there are 17 religious values in *aqeedah* namely 2 icons, 4 indices, and 11 symbols. While the religious values in *akhlaq* are 19 namely 7 icons, 7 indices, and 5 symbols.

Keywords: Religious Values, icons, indices, symbols

INTRODUCTION

Literary works are not naturally occurred. It is born form the result of creativity, reality and imagination of the author poured into a piece of work, with the existence of characters as the main object elaborated. The result of author's imagination is not a textbook, therefore it cannot be studied as we usually do to the textbooks, instead we need to treat it as a work of art.

Literature is a form and result of creative work of art, which object are human as the character and their lives to be told through certain language as the media to tell stories. In this regard, the literary work produced by the author is not a mere story told without any beneficial purpose to the reader, it is a series of experiences familiar to the author that he wants to convey through positive messages. The messages delivered might be religious, educational, social, cultural, or describe the background of the author himself. From here, the reader may understand life's value, a belief, and other people's or certain society's point of view towards life through the literary works.

Literary works have various functions, including reactive function, didactic functions, aesthetic function, morality function, and religiosity function. Reactive function tends to be responsive or may react immediately against something occur inside of someone, its function is to entertain through literature. The didactic function is a function aims to educate the reader with the literary works through the sense of righteousness and kindness therein. Aesthetic functions is the function that gives sense of beauty. While the morality function conceives high sense of moral values, it enables the readers to differ good and bad. And the religiosity function has that religious teachings to be made as example for the readers.

If we connect the five functions of literary works to the current state of life, we can use them to study the most occur problems and has already become a habit. For example, the gang fight among students triggered by various small problems between individuals and groups refuse to yield to each other. Then bullying (suppression) among friends, and many other problems. These examples are proofing that the educational environment in particular, and the society in general, have not absorbed religious values in optimum manner.

Therefore, the Author is trying to study the religious values in the novel entitled Under the Ka'bah Protection made by Hamka. We hope that the result of this study may give depiction on the religious values from the characters in the novel. These religious values are referring to *aqeedah* and *akhlaq*. The character in the novel illustrates strong religious character, personality, or characteristic with respect to their *aqeedah* and *akhlaq*. Particularly in the love story between Hamid and Zainab, who were separated due to their different social status. Zainab must get married to the man that has already been chosen by her mother, despite that in the end Zainab refuse to do it. However, Hamid had decided to

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go to Mecca to worship his God, when he knew that Zainab's mother had arranged a man for Zainab. In the end, Hamid had to die before the Ka'bah.

The characterization in this novel has a religious value to be set as example, in terms of controlling love by worshipping God. The religious value of *aqeedah* and *akhlaq* shall be studied with semiotic approach. Language sign in the novel entitled Under the Ka'bah Protection made by Hamka is interpreted into icons, indices, and symbols. As elaborated by Peirce that "*argued that interpreters have to supply part of the meanings of signs. He wrote that a sign, is something which stands somebody for something in some respect or capacity*". (Berger, 2014)

Signs in literary works can be seen from how the author tells the characterization of the behavior, personality, and image of the character, either explicitly through the dialogue of the characters or implicitly in the story. Thus, we can determine whether or not the signs contained therein can be interpreted as religious characterization. As for the signs in this semiotic study, it refers to Pierce's opinion in (Zaimar, 2014) that semiotics includes symbols, indices, and icons. Therefore, this study will examine on how the religious values of characterizations in the novel entitled Under the Ka'bah Protection made by Hamka shall be reviewed through semiotic studies.

Theoretical Review

Novels are fictional stories in the form of prose from a literary work. It contains life journey of a person or a group of people that has storylines and conflicts faced by the characters, especially the main characters. Since essentially novels are depicting everyday stories, despite that it might be fictional or essays, yet the conflicts and the events are usually found in people's daily life. Novel's story has lots of exemplary values and one of which is the religious value in each characterization. Each character in the novel entitled Under Ka'bah Protection made by Hamka has religious value and *akhlaq*. A characterization in novel entails description of behavior, personality, and image of the character either physically or psychologically.

Religious values analyzed in this novel are focusing on the *aqeedah* and *akhlaq*. *Aqeedah* is a belief upon the existence of Allah, the most glorified, the highest, in the daily life, in socializing with people, which is based on the *arkanul iman* (the pillars of faith), which are faith to Allah, the most glorified, the highest; faith to the angels; faith to the scriptures; faith to the prophets and messengers; faith to the judgment day; and faith to the destiny determined by Allah, the most glorified, the highest. Further, *akhlaq* is the demeanor/ manner or in other words is the behavior, courtesy, habits or customs. *Akhlaq* in this regard shall be addressed to Allah, the most glorified, the highest, to other human beings, and to the environment through the semiotic study.

Semiotic is the signs that has interpretation of meaning. In this regard, the interpretation of signs shall be associated with the verses in the Al-Quran which relates to the semiotics of icons, indices, and symbols. Peierce argues there are three types of semiotics often used, which are icons, indices and symbols. **Icon** is a sign resembles with the shape of the original object. It can also be interpreted as a relationship between a sign and a similar object. The purpose of an icon is to give a message about the original form of the object. Index is something that carries a function as a marker that indicates its sign. A symbol is something that indicates a sign prevalently used by the public through convention. As stated by Peierce as follow (Danesi, 2010).

RESEARCH METHOD

This study uses descriptive qualitative methods and analysis techniques for the characterization in the novel entitled Under Ka'bah Protection made by Hamka through semiotic study. In a study using qualitative method, it is explained by (Emzir, 2014) that qualitative research collects more data in the form of words or pictures instead of numbers. The written result of the study is consisting of the excerpt of data to illustrate and provide the proof of presentation. Such data includes the transcript of discourse, field notes, photography, videotapes, personal documents, memos and other official records. In their search of understanding, the qualitative researcher does not reduce the pages from the narration and other data into numeric symbols.

A descriptive analytical method was used in order to analyze the characterizations in the novel entitled Under Ka'bah Protection made by Hamka. This method is very suitable to analyse of words in such novel rather than using numbers. Further, the result of the analysis

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The resource of data for this research is the novel entitled *Under Ka'bah Protection* made by Hamka. This book is published by Balai Pustaka. It is 76 pages thick.

1. Excerpt of data concerning the characterizations in the novel entitled *Under Ka'bah Protection* made by Hamka shall be traced through the analysis of religious values.
2. The data analyzed through the religious values shall be focusing on the *aqeedah* and *akhlaq*.
3. The data obtained from the analysis of the religious values, shall be examined with the semiotics while focusing on the icons, indices, and symbols.
4. The result of the analysis interpreted shall relate with the verses of the Al-Quran.

This research shall be assisted with the analysis table from the clarification process of the data that has been obtained in accordance with a predetermined category by words, sentences, and paragraphs. This is in line with Ratna who argued that this analysis method is made to the paragraphs, sentences, and words (Ratna, 2012).

RESULTS AND DISCUSSION

The religious values in *aqeedah* and *akhlaq* within the novel entitled *Under Ka'bah Protection* made by Hamka that were examined by the icon, index and symbol are as follow.

Aqeedah

Aqeedah referred here is the covenant over a firm belief to Allah, the most glorified, the highest. Fully trust and perform whatever been ordered, particularly elaborated under the *Arkanul Iman* (the pillars of faith) which is divided into six parts, which are faith to Allah, the most glorified, the highest; faith to the angels; faith to the scriptures; faith to the prophets and messengers; faith to the judgment day; and faith to the destiny determined by Allah, the most glorified, the highest faith in God, faith in angels, faith in scriptures, faith in Prophets and Messenger, faith in Judgment Day and faith in the destiny of Allah. The result of findings of the analysis are as follow.

Icon

- *The arrival of that new friend has changed Hamid's conditions and characteristics, it is uncertain on what news he probably brought from His Village, that might disturb Hamid's peace of mind. He became more diligent in reading scriptures, particularly the sufism written by Imam Al-Ghazali. (p. 6)*

In that story, Hamid's character entails religious value of *aqeedah* in terms of having faith to the Allah's scriptures by "*becoming more diligent in reading scriptures (Al-Quran ') particularly in the sufism scriptures*". This scene can be studied as semiotic in terms of icon. As Allah, the most glorified, the highest, had saith in the Quran Surah Al-Israa verse 14.

أَفْرَأَ كَيْفَ كَفَىٰ بِنَفْسِكَ الْيَوْمَ عَلَيْكَ حَسِيبًا ۚ ١٤

Which means:

"[It will be said] Read your record. Sufficient is yourself against you this Day as accountant."

- *He has left me and my mother in a very poor condition. Our home was only a small old house, which shall be better known if it is called as a hut or a shack. Our poverty has made mother becoming desperate in viewing the life and the association within this world, since the rope as the place to depend on has broken and the ground as the place to stand has fallen. Only I, who is staying, the only children, where she hung her future hope, an age that still in the dark. (p. 10).*

From the above excerpt, the characterization story of Hamid and his mother has a religious value of *aqeedah* with the significance of accepting the destiny from Allah the most gracious, the highest, for their modest life. This can be proven through the semiotic icon from the phrase of "hut or shack". As Allah, the most glorified, the highest, had saith in the Quran Surah Luqman verse 19.

وَأَقْصِدْ فِي مَشْيِكَ وَأَعْضُضْ مِنْ صَوْتِكَ إِنَّ أَنْكَرَ الْأَصْوَاتِ لَصَوْتُ الْحَمِيرِ ۙ ١٩

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Which means:

“And be moderate in your pace and lower your voice; indeed, the most disagreeable of sounds is the voice of the donkeys.”

Index

- “Not necessarily, Mum. Sometimes if good luck can be the same, sometimes if it's less than that, it's just enough for us to eat every day ”(p. 15)

Hamid's character told by Hamka has a religious value of *aqeedah* against destiny and Allah's provision, which can still be amend with his effort to be thankful that they still in sufficiency. This is consistent with the semiotic index. As Allah, the most glorified, the highest, had saith in the Quran Surah At-Talaq verse 3.

وَيَرْزُقْهُ مِنْ حَيْثُ لَا يَحْتَسِبُ وَمَنْ يَتَوَكَّلْ عَلَى اللَّهِ فَهُوَ حَسْبُهُ^٣ إِنَّ اللَّهَ بَلِّغُ أَمْرِهِ^٤ قَدْ جَعَلَ اللَّهُ لِكُلِّ شَيْءٍ قَدْرًا^٥

Which means:

“And will provide for him from where he does not expect. And whoever relies upon Allah – then He is sufficient for him. Indeed, Allah will accomplish His purpose. Allah has already set for everything a [decreed] extent.”

The next morning, I do not bring the snack's basket over my head anymore, yet I have gone to school clenching the slate. It seems that Engku Haji Jaafar will hand-over two benefits for me: first is to help me, second is to befriend with his daughter. Thus, I repent, moreover after my mother gave me some advice. I see Zainab as my biological sister. I protect her against bully from other students. After school, I often came with my mother to that big house, just in case there are something that we can assist and help with, since we have been considered as the members of that big house. (p. 17)

In the above excerpt, Hamid's characterization in the story has a religious value of *aqeedah* against Allah's destiny and provision which can be amended through endeavor. There shall be ease with hardship, which can be seen from the phrase of "The next morning, I do not bring the snacks' basket over my head anymore, yet I have gone to school clenching the slate ". This is consistent with the semiotic index. As Allah, the most glorified, the highest, had saith in the Quran Surah Ash-Sharh verses 3-6.

الَّذِي أَنْقَضَ ظَهْرَكَ^٣ وَرَفَعْنَا لَكَ ذِكْرَكَ^٤ فَإِنَّ مَعَ الْعُسْرِ يُسْرًا^٥ إِنَّ مَعَ الْعُسْرِ يُسْرًا^٦

Which means:

“Which had weighed upon your back. 4. And raised high for you your repute. 5. For indeed, with hardship [will be] ease. 6. Indeed with hardship [will be] ease”.

After a while, unexpectedly, a huge calamity had unexpectedly fall upon us consecutively. First is the sudden death of that generous Engku Haji Ja 'far. He is someone who's cherished very much by the people of this country, his right-minded and his intelligence in socializing, there is no single common practice there is that was not interfered with by Engku Haji Ja 'far. (p. 26)

Hamid's characterization in the story has a religious value of *aqeedah* to accept Allah's destiny that the person doing goods to him all this time has been deceased and Hamid must accept this circumstances. This is can be said as semiotic index in the phrase of "death". The religious value in this part is related to The Saith of Allah, the most glorified, the highest in Quran Surah Ghafir verse 67.

هُوَ الَّذِي خَلَقَكُمْ مِنْ نُرَابٍ نَّمٍ مِنْ نُطْفَةٍ نَّمٍ مِنْ عِلْقَةٍ نَّمٍ بَخْرَجَكُمْ طِفْلًا نَّمٍ لِيَتَّبِعُوا^{٦٧} لِتَبْلُغُوا أَشُدَّكُمْ نَّمٍ لِيَكُونُوا شُيُوخًا وَمِنْكُمْ مَنْ يَتَوَفَّى مِنْ قَبْلٍ وَلِيَتَّبِعُوا أَجَلًا مُسْمًى
وَلَعَلَّكُمْ تَعْقِلُونَ

Which means:

“It is He who created you from dust, then from a sperm-drop, then from a clinging clot; then He brings you out as a child; then [He develops you] that you reach your [time of] maturity, then [further] that you become elders. And among you is he who is taken in death before [that], so that you reach a specified term; and perhaps you will use reason.”

Now Brother, your younger sister's body is aching. It is uncertain whether death will prevails in the morning, or tomorrow noon, no one certain on Allah's movement. I have high hopes for us to meet ...

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And if you are late in returning home, the excavation remains, remnants of talqin waters and the trace of the two tombstone, are seemed to be the only ones you will get. (p. 62)

The excerpt above explains Zainab's character, it is illustrated that Zainab is surrendering to her last days that would befall upon her, by believing in Allah's *qada* and *qadar*. In this sentence we can see semiotic index. This matter is related to Quran Surah Ali 'Imran verse 145.

وَمَا كَانَ لِنَفْسٍ أَنْ تَمُوتَ إِلَّا بِإِذْنِ اللَّهِ كِتَابًا مُؤَجَّلًا وَمَنْ يُرِدْ ثَوَابَ الدُّنْيَا نُؤْتِهِ مِنْهَا وَمَنْ يُرِدْ ثَوَابَ الْآخِرَةِ نُؤْتِهِ مِنْهَا وَسَتَجْزِي الشُّكْرِينَ ١٤٥

Which means:

"And it is not [possible] for one to die except by permission of Allah at a decree determined. And whoever desires the reward of this world – We will give him thereof; and whoever desires the reward of the Hereafter – We will give him thereof. And we will reward the grateful."

For the sake of when the book is finished, please send it to me even if it is only one copy, to help me serve the past memories, when we were still under the protection of Ka 'bah. Your best friend. (p. 2)

In this part, Hamka tells the characterization of "I" with the story that has a religious value of *aqeedah* with the means of worshipping Allah, the most glorified, the highest, through faith. Semiotic symbol can be seen in the word "under the Protection of Ka'bah" that such sentence has means in the characterization of "I" in the novel who has faith to Allah, the most glorified, the highest, by executing His order. As Allah, the most glorified, the highest, had saith in the Quran Surah Al-Baqarah verse 128.

رَبَّنَا وَاجْعَلْنَا مُسْلِمِينَ لَكَ وَمِنْ دُرَيْتِنَا أُمَّةً مُسْلِمَةً لَكَ وَأَرِنَا مَنَاسِكَنَا وَتُبْ عَلَيْنَا إِنَّكَ أَنْتَ التَّوَّابُ الرَّحِيمُ ١٢٨

Which means:

"Our Lord, make us Muslims [in submission] to You and from our descendants a Muslim nation [in submission] to You. And show us our rites and accept our repentance. Indeed, You are the Accepting of repentance, the Merciful."

That was the time when I went on hajj. From Belawan Harbor, I have sailed to Jeddah, hitchhike aboard in the Karimata ship. For fourteen days I was adrift in a big sea. On the fifteenth day, I arrived at Jeddah Harbor, at that Red Sea Coast. Two days later, I was arrived at Mecca, the holygrail for the Muslims around the world. (p. 3)

Further, in the part of the story above, Hamka still tells about the characterization of "I" with the story that has a religious value of *aqeedah* with the means of worshipping Allah, the most glorified, the highest, through faith, in confidence despite that he must face hardship to deliver the hajj. Then, the meaning of "hajj" phrase in the above excerpt can be considered as related to semiotic symbol. As Allah, the most glorified, the highest, had saith in the Quran Surah Al-Hajj verse 27.

وَأَذِّنْ فِي النَّاسِ بِالْحَجِّ يَأْتُوكَ رِجَالًا وَعَلَىٰ كُلِّ ضَامِرٍ يَأْتِينَ مِنْ كُلِّ فَجٍّ عَمِيقٍ ٢٧

Which means:

"And proclaim to the people the Hajj [pilgrimage]; they will come to you on foot and on every lean camel; they will come from every deep and distant (wide) mountain highway (to perform Hajj)."

How relieved my heart was when I saw the Ka'bah. I could not have possibly explain it, because ever since childhood, as how the custom for every Muslim is, the Ka'bah and those seven towers of the Masjidil Haram have becoming part of my memories. (p. 4).

The characterization of "I" with the story that has a religious value of *aqeedah* with the means of worshipping the fifth pillar of Islam, which is Hajj. This can proof the sign of semiotic symbol, from the phrase of "saw the Ka'bah". As Allah, the most glorified, the highest, had saith in the Quran Surah Al-Baqarah verse 197.

الْحَجُّ أَشْهُرٌ مَعْلُومَةٌ فَمَنْ فَرَضَ فِيهِنَّ الْحَجَّ فَلَا رَفَثَ وَلَا فُسُوقَ وَلَا جِدَالَ فِي الْحَجِّ وَمَا تَفَعَّلُوا مِنْ خَيْرٍ يَعْلَمُهُ اللَّهُ وَتَزَوَّدُوا فَإِنَّ خَيْرَ الزَّادِ التَّقْوَىٰ وَاتَّقُونِ يَا أُولِي الْأَلْبَابِ ١٩٧

Which means:

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"Hajj is [during] well-known months, so whoever has made Hajj obligatory upon himself therein [by entering the state of ihram], there is [to be for him] no sexual relation and no disobedience and no disputing during Hajj. And whatever good you do – Allah knows it. And take provisions, but indeed, the best provision is fear of Allah. And fear of Me, O you of understanding."

I stepped on the holygrail with good assumptions. I faced every people during their worship with full trust that they too feel the joy as how I feel. At first, I thought that in that holy nation, I shall not find any strange events or sad chronicles of human life. Because I assume that of course apart from myself, those people coming there are the happy and capable ones, who has more laughs than cries. But apparently, anywhere on earth, as long as it is occupied by humans, there shall be wealth and poverty, joy and sorrow, laughs and cries. (p. 4)

The characterization of "I" with the story that has a religious value of *aqeedah* with the means of worshipping the fifth pillar of Islam, which is Hajj. This can proof the sign of semiotic symbol, from the phrase of "the holy grail and the holy nation" and in the phrase of "saw the Ka'bah". As Allah, the most glorified, the highest, had saith in the Quran Surah Al-Baqarah verse 197.

الْحَجُّ أَشْهُرٌ مَّعْلُومَاتٌ فَمَنْ فَرَضَ فِيهِنَّ الْحَجَّ فَلَا رَفَثَ وَلَا فُسُوقَ وَلَا جِدَالَ فِي الْحَجِّ وَمَا تَفْعَلُوا مِنْ خَيْرٍ يَعْلَمُهُ اللَّهُ وَتَزُودُوا فَإِنَّ خَيْرَ الزَّادِ التَّقْوَىٰ وَاتَّقُوا بِالْأُولَىٰ ۙ أَلَّا تَكُونُوا
۱۹۷

Which means:

"Hajj is [during] well-known months, so whoever has made Hajj obligatory upon himself therein [by entering the state of ihram], there is [to be for him] no sexual relation and no disobedience and no disputing during Hajj. And whatever good you do – Allah knows it. And take provisions, but indeed, the best provision is fear of Allah. And fear of Me, O you of understanding."

As if I was not care anymore. While I was doing the tawaf around the Ka'bah, I saw that he was clinging onto the kaswah (curtain fabric covering the Ka'bah) he tilted his face to the sky, his tears dripped swiftly, soaking the turban that wrapped his chest, I also hear he prayed: O Allah! Strengthen your servant's heart!" (p. 7)

In the excerpt above, the characterization of "I" with the story that has a religious value of *aqeedah* with the means of worshipping the fifth pillar of Islam, which is Hajj. This can proof the sign of semiotic symbol, from the phrase of "tawaf around the Ka'bah. As Allah, the most glorified, the highest, had saith in the Quran Surah Al-Hajj verse 26.

وَإِذْ بَوَّأْنَا لِإِبْرَاهِيمَ مَكَانَ الْبَيْتِ أَنْ لَا تُشْرِكْ بِي شَيْئًا وَطَهِّرْ بَيْتِيَ لِلطَّائِفِينَ وَالْقَائِمِينَ وَالرُّكَّعِ السُّجُودِ ۚ
۲۶

Which means:

"And [mention, O Muhammad], when we designated for Abraham the site of the House, [saying], 'Do not associate anything with Me and purify My House for those who perform Tawaf and those who stand [in prayer] and those who bow and prostrate."

When I was four years old, my father had died, he had left me before I knew who he was and how his appearance is, I only found his picture on the wall, the picture when he was young, strong and sweet. (p. 10)

From the above excerpt, Hamka tells Hamid's characterization that has a religious value of *aqeedah*, by accepting Allah's destiny that his father had died ever since he was a child. This can be seen as semiotic symbol. As Allah, the most glorified, the highest, had saith in the Quran Surah Ghafir verse 67.

هُوَ الَّذِي خَلَقَكُمْ مِنْ نُرَابٍ ثُمَّ مِنْ لُطْفَةٍ ثُمَّ مِنْ عِلْقَةٍ ثُمَّ يُجْرِكُكُمْ طِفْلًا ثُمَّ لِتَبْلُغُوا أَشُدُّكُمْ ثُمَّ لِتَكُونُوا شُيُوخًا وَمِنْكُمْ مَنْ يَتَوَقَّىٰ مِنْ قَبْلِ أَنْ يَلْبَسُوا أَجْلًا مُسْمًى
وَأَلْعَلَّكُمْ تَعْطِلُونَ ۚ
۶۷

Which means:

"It is He who created you from dust, then from a sperm-drop, then from a clinging clot; then He brings you out as a child; then [He develops you] that you reach your [time of] maturity, the [further] that you become elders. And among you is he who is taken in death before [that], so that you reach a specified term; and perhaps you will use reason.

"I will stay close, Mum," I replied. That's the house we live in across the street. My father had died and I live with my mother. She was the one who made these snacks. In the morning, I sell fried banana

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and in the afternoon I usually sell shrimp rafts (shrimp sticks) or stewed chicken belly. (p. 15)

From the above excerpt, Hamid's characterization has a religious value of *aqeedah* with the means of accepting destiny from Allah, the most glorified, the highest, with a modest life. This can proof the sign of semiotic symbol, from the phrase of "My father had died and I live with my mother." As Allah, the most glorified, the highest, had saith in the Quran Surah Luqman verse 19.

وَأَقْصِدْ فِي مَشْيِكَ وَاعْظُضْ مِنْ صَوْتِكَ إِنَّ أَنْكَرَ الْأَصْوَاتِ لَصَوْتُ الْحَمِيرِ ١٩

Which means:

"And be moderate in your pace and lower your voice; indeed, the most disagreeable of sounds is the voice of the donkeys."

In the next story, Hamid's character gets the same disaster of losing someone he loved after H. Ja'far died, now, his mother also follows after the H. Jafar deceased. In this part, Hamid's characterization has a religious value of *aqeedah* with the means of accepting destiny from Allah, the most glorified, the highest, that his mother died due to illness. This can be proven as semiotic symbol in the phrase of "the long-awaited period came, the time to move from the narrow realm to the wide one" and the phrase of "The words of afterlife comes out from her mouth, along with the departure of her life to the holy realm where humans are freed from all disease." As the complete excerpt stands as follows:

Not many nights after he gave that advice, the long-awaited period came, the time to move from the narrow realm to the wide one. While I was absorbed with giving medicines, I had a spoon on my right hand and held a glass on my left hand, He looked at me calmly, the final address of separation. The words of afterlife comes out from her mouth, along with the departure of her life to the holy realm where humans are freed from all disease. (pp. 32-33)

In the next excerpt, Hamka still explained on Hamid's characterization has a religious value of *aqeedah* with the means of worshipping Allah, the most glorified, the highest, through hajj. As Allah, the most glorified, the highest, had saith in the Quran Surah Al-Baqarah verse 128.

رَبَّنَا وَاجْعَلْنَا مُسْلِمِينَ لَكَ وَمِنْ دُرِّيَّتِنَا أُمَّةً مُسْلِمَةً لَكَ وَأَرِنَا مَنَاسِكَنَا وَتُبْ عَلَيْنَا إِنَّكَ أَنْتَ الْكَرِيمُ ١٢٨

Which means

"Our Lord, make us Muslims [in submission] to You and from our descendants a Muslim nation [in submission] to You. And show us our rites and accept our repentance. Indeed, You are the Accepting of repentance, the Merciful."

From this explanation, it can be seen in the phrase of "I have been here, under the protection of the Ka'bah" as a semiotic symbol in that phrase, along with the next excerpt.

Now, as You have seen, I am already here, under the protection of the holy Ka'bah, separated from the association of other humans. (p. 45)

At that time, I answered while a little joking, "Inshaa Allah, after hajj, I will quickly go home. Hopefully we can go home together. "(p. 59)

This part is telling the story about Saleh's characterization with the means of worshipping Allah, the most glorified, the highest, by doing hajj. This can be seen from the phrase of "*Inshaa Allah, after hajj, I will quickly go home.*" From the phrase, we can also see semiotic in the symbol. In this regard, it is explained in the Quran Surah Al-Baqarah verse 128.

رَبَّنَا وَاجْعَلْنَا مُسْلِمِينَ لَكَ وَمِنْ دُرِّيَّتِنَا أُمَّةً مُسْلِمَةً لَكَ وَأَرِنَا مَنَاسِكَنَا وَتُبْ عَلَيْنَا إِنَّكَ أَنْتَ الْكَرِيمُ ١٢٨

Which means

"Our Lord, make us Muslims [in submission] to You and from our descendants a Muslim nation [in submission] to You. And show us our rites and accept our repentance. Indeed, You are the Accepting of repentance, the Merciful."

Further, at the end of this story, Hamid's characterization is told to keep his endeavor in worshipping Allah, the most glorified, the highest, despite in that he was the state of difficulty at the time of hajj. This can be seen from the phrase "stopping/*wuquf* at Arafat", "Arafat is very hot", and "Mahsyar field". This can be interpreted as a semiotic symbol and had saith by Allah, the most glorified, the highest, in the

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Quran Surah Al-Hajj verse 27.

وَأَذِّنْ فِي النَّاسِ بِالْحَجِّ يَأْتُوكَ رِجَالًا وَعَلَى كُلِّ ضَامِرٍ يَأْتِينَ مِنْ كُلِّ فَجٍّ عَمِيقٍ ٢٧

Which means

"And proclaim to the people the Hajj [pilgrimage]; they will come to you on foot and on every lean camel; they will come from every distant pass."

As in the following excerpt:

With regards to Hamid, at the first half after receiving the letter he did not seemed to be influenced with the contents. But after a day and two, it seemed that he was pensive, more than usual. When we asked on his situation, he said that his body was aching. But since stopping/wuquf at Arafat is one of the pillars in hajj, he must not refraining from going there. (p. 64)

The heat at Arafat was so real that when we stopped/wuquf there for a day, we shall be remembering that we will someday stopped/wuquf at Mahsyar field. (p. 65)

Akhlaq

Akhlaq referred to in this this regard is the attitude/behavior in the means of courtesy, habits or customs of a person to the *Khaliq*/creator, which is Allah, the most glorified, the highest, fellow human beings, the natural environment. The following are the findings of the analysis.

Icon

Nearby our house, there is a large building with a spacious courtyard. In that yard, planted delicious fruits such as sawo and rambutan. The house was vacant for a long time, since the owner, a Dutchman, had returned to Europe; the house was looked over by an old house keeper this whole time. There's a hearsay that the house is going to be sold, since the master shall not be returning to this country. During those times, we would often came to that house asking for rambutan and sauh to Mr. Paiman, the old house keeper's name. (p. 13)

Hamid's characterization in that story illustrates his *akhlaq* values with the means of respecting the plants, to refrain from plucking/stealing unripe fruits as we please. This can proof sign of semiotic icon and connects to what Allah, the most glorified, the highest, had saith in Quran Surah Al-Qasas, verse 57.

وَقَالُوا إِن نَتَّبِعِ الْهَيْدَىٰ مَعَكَ نَتَّخِطُ مِنْ أَرْضِنَا أَوْ لَمْ نُمْكِن لَهُمْ حَرَمًا ءَامِنًا يُجِبَىٰ إِلَيْهِ تَمْرٌ كُلِّ شَيْءٍ رَزَقْنَا مِنْ لَدُنَّا وَلَكِنَّ أَكْثَرَهُمْ لَا يَعْلَمُونَ ٥٧

Which means

"And they say: "If we were to follow the guidance with you, we would be swept from our land." Have we not established for them a safe sanctuary to which are brought the fruits of all things as provision from Us? But most of them do not know."

Next is about Zainab's characterization, whose *akhlaq* is kind to her fellows, one of which is to her attendant, Mr. Leman, and her good attitude when she eats betel. In this regard, the phrase of "betel" and "voice" are semiotic icons that connects to what Allah, the most glorified, the highest, had saith in Quran Surah Al-Hujruat verse 2 and Quran Surah Al-Baqarah verse 57.

يَا أَيُّهَا الَّذِينَ ءَامَنُوا لَا تَرْفَعُوا أَصْوَاتَكُمْ فَوْقَ صَوْتِ النَّبِيِّ وَلَا تَجْهَرُوا لَهُ بِالْقَوْلِ كَجَهْرِ بَعْضِكُمْ لِبَعْضٍ أَن تَحْبَطَ أَعْمَالُكُمْ وَأَنتُمْ لَا تَشْعُرُونَ ٢

Which means:

"O, you who have believed, do not raise your voices above the voice of the Prophet or be loud to him in speech like the loudness of some of you to others, lest your deeds become worthless while you perceive not."

وَظَلَّلْنَا عَلَيْكُمُ الْعَمَامَ وَأَنزَلْنَا عَلَيْكُمُ الْمَنَّاءَ وَالسَّلْوَىٰ كُلُوا مِنْ طَيِّبَاتِ مَا رَزَقْنَاكُمْ وَمَا ظَلَمُونَا وَلَكِن كَانُوا أَنفُسَهُمْ يَظْلِمُونَ ٥٧

Which means:

"And We shaded you with clouds and sent down to you, manna and quails, [saying], "Eat from the good things with which We have provided you." And they wronged Us not - but they were [only] wronging themselves."

Here is the full excerpt:

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That woman likes to eat betel, she has clear, friendly and caring face. Mr. Leman, as the maid who take care of the lawn, has never got a single loud voice from her. Her daughter was still young, just like mine. She complied obediently to whatever her mother ordered, turns out that it is because she is loved so much for she is an only child. (p. 14)

Then Hamka tells the story about the characterization of Mak Asiah and H. Ja'far on their *akhlaq* to fellow human beings on their concern to the poor and this can be studied as an semiotic icon and that connects to what Allah, the most glorified, the highest, had saith in Quran Surah At-Tawbah verse 60

﴿إِنَّمَا الصَّدَقَتُ لِلْفُقَرَاءِ وَالْمَسْكِينِ وَالْعَمِلِينَ عَلَيْهَا وَالْمَوْلَاةِ قُلُوبُهُمْ وَفِي الرِّقَابِ وَالْغُرْمِينَ وَفِي سَبِيلِ اللَّهِ وَأَبْنِ السَّبِيلِ فَرِيضَةً مِّنَ اللَّهِ وَاللَّهُ عَلِيمٌ حَكِيمٌ ٦٠﴾

Which means

“Zakah expenditures are only for the poor and for the needy and for those employed to collect [zakah] and for bringing hearts together [for Islam] and for freeing captives [or slaves] and for those in debt and for the cause of Allah and for the [stranded] traveler - an obligation [imposed] by Allah And Allah is Knowing and Wise.”

Here is the complete excerpt.

The fine proverb from Mak Asiah is an upbringing from her husband, a reporter who is very friendly to the poor. There's a hearsay, that the wealth he has got is from his own sweats and efforts, they are not inheritance from his parents. He was once poor as well, but thanks to his faith, the door to livelihood has opened for him. Even though he is now filthy rich, he has never forgotten his condition in the past. He is very aware of poor people, he is quick in giving help to people in need. (p. 16)

One morning, I came to my mother's face with a very happy feeling, I brought a good news that strongly encourages her, that tomorrow Zainab will be delivered to school and I will be taken along. They will send me to school and paid by Haji Engku Jaafar himself, along with his daughter. (p. 16)

The excerpt above illustrates H. Ja'far's generous characterization towards Hamid. Hamid can go to school from the fees paid by H. Ja'far. This shows H. Ja'far has a religious value of *akhlaq* to fellow human beings and this can be associated as a semiotic symbol from the phrase of " They will send me to school and paid by Haji Engku Jaafar himself, along with his daughter " and "since Engku Hajj Ja'far is still able capable to spend for me" here is the complete excerpt.

And I, if I have finished the school, I will go to Padang Panjang, since Engku Haji Ja'far is still capable to spend for me, what else my mother can possibly dream of. (p. 19)

Further, Hamka tells about Hamid's characterization on his good *akhlaq* to the nature created by Allah, the most glorified, the highest, by simply thanking on His creation as illustrated in the full excerpt as follow.

The beauty of nature that surrounds that cold city brings back my memories of the past. Merapi, with its gold-like crater, the evening heat which illuminates the mountain peak when the sun intends to return to the west and risk its position to light the moon, singlang which is always filled with fog and its sugarcane gardens rippled by the wind all has risen odd feelings that really disturb my mind's journey . (p. 21)

From the excerpt above, there is a semiotic icon in the phrase of "The beauty of nature that surrounds that cold city brings back my memories of the past" and in the phrase of "the beauty of fountain in Batang Anai or climbing the Bait Tuai or Batu Sungai Andok cave, when I see that beauty of the nature's creation, I remember, how happy Zainab would be if she can also see it." This can be connected to what Allah, the most glorified, the highest, had saith in Quran Surah Fatir verse 27

﴿لَمْ تَرَ أَنَّ اللَّهَ أَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجْنَا بِهِ ثَمَرَاتٍ مُّخْتَلِفًا أَلْوَانُهَا وَمِنَ الْجِبَالِ جُدَدٌ بَيْضٌ وَحُمْرٌ مُّخْتَلِفٌ أَلْوَانُهَا وَغَرَابِيبُ سُودٌ ٢٧﴾

Which means

“Do you not see that Allah sends down rain from the sky, and We produce thereby fruits of varying colors? And in the mountains are tracts, white and red of varying shades and [some] extremely black.”

Next is the story of Zainab's and Mak Asiah's on their good *akhlaq* to others, in this regard to Hamid's

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mother when she was sick, Zainab and Mak Asih provided her with food such as porridge, as excerpted below.

Mak Asiah left with Zainab. On the table, they put a bowl of cooled porridge, covered with a small plate, for mother, because she could not eat rice. When she was about to leave, she said, "Take a good care of her. If she wakes up later, give her this porridge even if it is just a small spoonful."(p. 27)

In the excerpt data [24] there are semiotic icons which connects to what Allah, the most glorified, the highest, had saith in Quran Surah An-Nahl verse 90

﴿إِنَّ اللَّهَ يَأْمُرُ بِالْعَدْلِ وَالْإِحْسَانِ وَإِيتَايِ ذِي الْقُرْبَىٰ وَيَنْهَىٰ عَنِ الْفَحْشَاءِ وَالْمُنْكَرِ وَالْبَغْيِ يَعِظُكُمْ لَعَلَّكُمْ تَذَكَّرُونَ ۙ﴾

Which means

"Indeed, Allah orders justice and good conduct and giving to relatives and forbids immorality and bad conduct and oppression. He admonishes you that perhaps you will be reminded."

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In the next excerpt.

I have heard, among the azan (bang) that faintly reached to the top of the seventh tower, among the roar of human's prayer who was travelling (tawaf) around the Ka'bah, among the takbir of the people who were running back and forth between Safa and Marwah hills, I have heard the cries and whimpers from a God's creature, very faint, as if was not there but it was, disappears and arises inside that great roar. (p.4)

In the part of story above, Hamka tells the characterization of "I" with the story that has a religious value of *akhlaq* with the means of worshipping Allah, the most glorified, the highest, or have *akhlaq* towards Allah, the most glorified, the highest, when doing Hajj. Then, the interpretation of the phrase "the roar of human's prayer " may proof as a form of semiotic index that can be connected to what Allah, the most glorified, the highest, had saith in Quran Surah Al-Baqarah verse 200.

﴿إِذَا قُضِيَتْ مَنَاسِكُكُمْ فَاذْكُرُوا اللَّهَ كَذِكْرِكُمْ آبَاءَكُمْ أَوْ أَشَدَّ ذِكْرًا فَمِنَ النَّاسِ مَن يَقُولُ رَبَّنَا آتِنَا فِي الدُّنْيَا وَمَا لَهُ فِي الْآخِرَةِ مِن خَلْقٍ ۚ﴾

Which means

"And when you have completed your rites, remember Allah like your [previous] remembrance of your fathers or with [much] greater remembrance. And among the people is he who says, "Our Lord, give us in this world," and he will have in the Hereafter no share."

In the next excerpt, Hamka explains the characterization of "I" that has the feeling to mutually help other people, in this regard is helping Hamid with his situation. This is evident by the excerpt of "borne what is heavy together, carry what is light together" and "I will help you just with the energy within me". These excerpt can be connected to what Allah, the most glorified, the highest, had saith in Quran Surah Al-Maidah verse 2

﴿يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَحْلُوا شَعِيرَ اللَّهِ وَلَا الشَّهْرَ الْحَرَامَ وَلَا الْهَدْيَ وَلَا الْقَلَائِدَ وَلَا أَمْبِينِ اللَّيْتِ الْحَرَامَ يَتَّبِعُونَ فَضْلًا مِّن رَّبِّهِمْ وَرِضْوَانًا وَإِذَا حَلَلْتُمْ فَاصْطَادُوا وَلَا يَجْرِمَنَّكُمْ شَنَا نُ قَوْمٍ أَن صَدُّوكُمْ عَنِ الْمَسْجِدِ الْحَرَامِ أَن تَعْتَدُوا وَتَعَاوَنُوا عَلَى الْبِرِّ وَالنَّفْقَىٰ وَلَا تَعَاوَنُوا عَلَى الْإِثْمِ وَالْعُدْوَانِ وَاتَّقُوا اللَّهَ إِنَّ اللَّهَ شَدِيدُ الْعِقَابِ ۙ﴾

Which means

"O, you who have believed, do not violate the rites of Allah or [the sanctity of] the sacred month or [neglect the marking of] the sacrificial animals and garlanding [them] or [violate the safety of] those coming to the Sacred House seeking bounty from their Lord and [His] approval. But when you come out of ihram, then [you may] hunt. And do not let the hatred of a people for having obstructed you from al-Masjid al-Haram lead you to transgress. And cooperate in righteousness and piety, but do not cooperate in sin and aggression. And fear Allah; indeed, Allah is severe in penalty."

The complete quotation is as follows.

As a friend, who must borne what is heavy together, carry what is light together, moreover we are far from our homeland, you are ought to tell me, what is it that troubling you now, to the extent that you have changed a lot than usual? " (p. 8)

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"I will help you just with the energy within me. Because even though we haven't been get along that much, I already know that you are a man of courtesy, I will not spoil your trust in me." (p. 8)

In the next excerpt, Hamka tells the characterization of Hamid's mother with a story that has moral religious value of *akhlaq* towards Allah, the most glorified, the highest, by praying to Him and teach her son (Hamid) to pray. This may proof a form of semiotic index that can be connected to what Allah, the most glorified, the highest, had saith in Quran Surah Luqman verse 13

وَإِذْ قَالَ لُقْمَانُ لِابْنِهِ وَهُوَ يَعِظُهُ يَا بُنَيَّ لَا تُشْرِكْ بِاللَّهِ إِنَّ الشِّرْكَ لَظُلْمٌ عَظِيمٌ ١٣

Which means

"And [mention, O Muhammad], when Luqman said to his son while he was instructing him, "O my son, do not associate [anything] with Allah. Indeed, association [with him] is great injustice."

Here is the complete excerpt.

Mother then showed me several prayers and readings, which was once performed by father as his dhikr when he was alive, spreading great praise to God, invoking the universe, pleading for His mercy. (p. 11)

Then in the next story Hamka tells about the characterization of Mak Asiah who felt sorry for Hamid by buying fried bananas Hamid brought. From this story, we can see that Mak Asiah has a religious value of *aqeedah* to her fellow human beings to love each other and this is evident from the phrase of "call him Nab, I feel sorry for him!" From that excerpt can be studied as an semiotic index and can be connected to what Allah, the most glorified, the highest, had saith in Quran Surah At-Tawbah verse 40

إِلَّا تَنْصُرُوهُ فَقَدْ نَصَرَهُ اللَّهُ إِذْ أَخْرَجَهُ الَّذِينَ كَفَرُوا ثَانِيًا إِذْ هُمَا فِي الْغَارِ إِذْ يَقُولُ لِصَاحِبِهِ لَا تَحْزَنْ إِنَّ اللَّهَ مَعَنَا فَأَنْزَلَ اللَّهُ سَكِينَتَهُ عَلَيْهِ وَأَيَّدَهُ بِجُنُودٍ لَمْ تَرَوْهَا وَجَعَلَ كَلِمَةَ الَّذِينَ كَفَرُوا السُّفْلَىٰ وَكَلِمَةَ اللَّهِ هِيَ الْعَلْيَا وَاللَّهُ عَزِيزٌ حَكِيمٌ ٤٠

Which means

"If you do not aid the Prophet - Allah has already aided him when those who disbelieved had driven him out [of Makkah] as one of two, when they were in the cave and he said to his companion, "Do not grieve; indeed Allah is with us." And Allah sent down his tranquillity upon him and supported him with angels you did not see and made the word of those who disbelieved the lowest, while the word of Allah - that is the highest. And Allah is Exalted in Might and Wise."

In this section the following complete quotation.

Eventually, the middle-aged woman was interested to call for what I. Likewise, her daughter. I once heard her said: "Call him Nab, I feel sorry for him!" (p. 14)

Next is the story about the characterization of Mak Asiah on her *akhlaq* to her fellow human beings, in this case to Hamid's mother, she considered as her own sister as in the excerpt "she sees as her own sister" as a semiotic index that connected to what Allah, the most glorified, the highest, had saith in Quran Surah Al-Baqarah verse 220

فِي الدُّنْيَا وَالْآخِرَةِ وَيَسْأَلُونَكَ عَنِ الْيَتَامَىٰ فَلْنِصِّحْ لَهُمْ خَيْرَ وَإِنْ تُخَالِطُوهُمْ فَاجْحُونُكُمْ وَاللَّهُ يَعْلَمُ الْمُفْسِدَ مِنَ الْمُصْلِحِ وَلَوْ شَاءَ اللَّهُ لَأَعْتَقْتُمْ مِنْ اللَّهِ عَزِيزٌ حَكِيمٌ ٢٢٠

Which means

"To this world and the Hereafter. And they ask you about orphans. Say, "Improvement for them is best. And if you mix your affairs with theirs - they are your brothers. And Allah knows the corrupter from the amender. And if Allah had willed, He could have put you in difficulty. Indeed, Allah is Exalted in Might and Wise."

Here is the complete excerpt.

Although my mother was bashful and over-conscious on her low status, Mak Asiah, such is the name of Engku Haji Ja 'far's wife, was never exalted herself, as was the custom among women, conglomerates' wives or of other high-ranks. My mother was even considered as her own sister. She heard all of

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mothers' feelings and bearings calmly with sorrowful face. Sometimes, she also cries when my mother tells sad matters. Thus when the story-time ends, a thick friendship was created between them, cherishing and loving each other. (p. 16)

Next is the story about H. Ja'far's characterization on his good *akhlaq* to his fellow human beings. He was both known for his generosity, and also good speeches in giving good advice to fellow human beings, especially towards Hamid. As the excerpt below

From his father I have got advice, Instead of his father I have got advice; "Study earnestly, Hamid, hopefully you will soon be keen-witted in religious matters and I hope I can assist you until you finish your studies ..." (p. 25)

The excerpt data [30] above has a semiotic index that can be connected to what Allah, the most glorified, the highest, had saith in Quran Surah An-Nahl verse 125

أَدْعُ إِلَى سَبِيلِ رَبِّكَ بِالْحُكْمِ وَالْمَوْعِظَةِ الْحَسَنَةِ وَجِدِلْهُمْ بِالَّتِي هِيَ أَحْسَنُ إِنَّ رَبَّكَ هُوَ أَعْلَمُ بِمَنْ ضَلَّ عَنْ سَبِيلِهِ وَهُوَ أَعْلَمُ بِالْمُهْتَدِينَ ١٢٥

Which means

"Invite to the way of your Lord with wisdom and good instruction, and argue with them in a way that is best. Indeed, your Lord is most knowing of who has strayed from His way, and He is most knowing of who is [rightly] guided."

The results of the analysis of the next excerpt is telling the story of Hamid's characterization on his *akhlaq* towards Allah, the most glorified, the highest, by pleading for His mercy upon his sins as the excerpt below.

Yaa Rabbi, O, my Lord, the Most Gracious and Merciful! For, under the protection of the Ka'bah, the holy and chosen House of Yours, I stretch out my hands for Your grace (p. 67)

The excerpt data [31] shows a semiotic index. This can be connected to what Allah, the most glorified, the highest, had saith in Quran Surah Al-Baqarah verse 285.

ءَامَنَ الرَّسُولُ بِمَا أُنزِلَ إِلَيْهِ مِنْ رَبِّهِ وَالْمُؤْمِنُونَ كُلٌّ ءَامَنَ بِاللَّهِ وَمَلَائِكَتِهِ وَكُتُبِهِ وَرُسُلِهِ لَا نُفَرِّقُ بَيْنَ أَحَدٍ مِّن رُّسُلِهِ وَقَالُوا سَمِعْنَا وَأَطَعْنَا غُفْرَانَكَ رَبَّنَا وَإِلَيْكَ الْمَصِيرُ ٢٨٥

Which means:

"The Messenger believes, and so do the believers, in the guidance sent down upon him from his Lord: each of them believes in Allah, and in His angels, and in His Books, and in His Messengers. They say: "We make no distinction between any of His Messengers. We hear and obey. Our Lord! Grant us Your forgiveness; to You we are destined to return."

Symbol

I have received your letter my Best Friend, which was sent a month ago. At first, my heart was very sad because ever since we parted in Jedda, I have never received your letter anymore. But after I have received that letter and read it, my sadness and grief were disappeared; it is obvious that you have not forgotten me. There is no assistance that I can give to you in that work, only hereby I send you letters that I have not got the time to give to you when we were still in Mecca. (p. 1)

The excerpt data [32] tells the story on the characterization of "I" who has a religious value of *akhlaq* with the means of maintaining bond of friendship with semiotic as symbol. This can be seen from the word "letter". As Allah, the most glorified, the highest, had saith in Quran Surah An-Nisa verse 1.

يَا أَيُّهَا النَّاسُ اتَّقُوا رَبَّكُمُ الَّذِي خَلَقَكُمْ مِنْ نَفْسٍ وَجَدَمٍ وَخَلَقَ مِنْهَا زَوْجَهَا وَبَثَّ مِنْهُمَا رِجَالًا كَثِيرًا وَنِسَاءً وَاتَّقُوا اللَّهَ الَّذِي تَسَاءَلُونَ بِهِ وَالْأَرْحَامَ إِنَّ اللَّهَ كَانَ عَلَيْكُمْ رَقِيبًا ١

Which means

"O mankind, fear your Lord, who created you from one soul and created from it its mate and dispersed

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from both of them many men and women. And fear Allah, through whom you ask one another, and the wombs. Indeed Allah is ever, over you, an Observer.”

As a custom of pilgrims from the land of Java, I went as a freeloader in a sheikh's house, whose job and livelihood were solely giving shelter for the pilgrims. Before the room chosen by the sheikh for me, there was a small room fits for two. There lived a young man who was just about 23 years old. He has slender body, his hair was black and greasy. He was quiet, he likes to be pensive alone in that room of his. Usually before we can hear the call for prayer at dawn, he had already woken up first, went to the mosque alone. According to our sheikh's description, the young man is from Sumatra, he came last year. So, he is someone who had settled in Mecca. (p. 5)

In the next story, Hamka tells the characterization of Hamid who has a religious value of *akhlaq*, which is willing to get closer to Allah, the most glorified, the highest, by going to the Mosque for morning prayer, As Allah, the most glorified, the highest, had saith in Quran Surah At-Tawbah verse 18.

إِنَّمَا يَعْمُرُ مَسْجِدَ اللَّهِ مَنْ ءَامَنَ بِاللَّهِ وَالْيَوْمِ الْآخِرِ وَأَقَامَ الصَّلَاةَ وَءَاتَى الزَّكَاةَ وَلَمْ يَحْشَ إِلَّا اللَّهَ فَعَسَىٰ أُولَٰئِكَ أَنْ يَكُونُوا مِنَ الْمُهْتَبِينَ ۝ ١٨

Which means

“The mosques of Allah are only to be maintained by those who believe in Allah and the Last Day and establish prayer and give zakah and do not fear except Allah, for it is expected that those will be of the [rightly] guided.”

Next Hamka tells the characterization of “I” with the story of having *akhlaq* to fellow human beings (to Hamid), as seen from the following phrase.

Seeing that habit of him and his pious nature, I have put a great respect to him and I want to be acquainted. Then, in just two days, I have succeeded in performing my intention. I have had a noble friend who is exemplary. His life is very modest. He never neglecting his worship to God, he does not like to waste his time for unavailing deeds, also very fond of observing religious books, particularly the holy books describing about holy people, highly qualified sufism experts. (p. 5)

In the phrase data [34] above from the excerpt of “I have put a great respect” can be considered as a semiotic index and in this case also connected to what Allah, the most glorified, the highest, had saith in Quran Surah Al-Ahzab verse 44.

تَجِيبُهُمْ يَوْمَ يَلْقَوْنَهُ سَلَامٌ وَأَعَدَّ لَهُمْ أَجْرًا كَرِيمًا ۝ ٤٤

Which means

“Their greeting the Day they meet Him will be, “Peace.” And He has prepared for them a noble reward.”

Next is the story of Hamid's characterization which is told by Hamka as having religious value of *akhlaq* to his fellow human beings with the means of maintaining the bond of friendship with semiotics as a symbol. This can be seen in the word of “letter” and the connection with what Allah, the most glorified, the highest, had saith in Quran Surah An-Nisa verse 1

يَا أَيُّهَا النَّاسُ اتَّقُوا رَبَّكُمُ الَّذِي خَلَقَكُمْ مِنْ نَفْسٍ وَجِدَةٍ وَخَلَقَ مِنْهَا زَوْجَهَا وَبَثَّ مِنْهُمَا رِجَالًا كَثِيرًا وَنِسَاءً وَاتَّقُوا اللَّهَ الَّذِي تَسَاءَلُونَ بِهِ وَالْأَرْحَامَ إِنَّ اللَّهَ كَانَ عَلَيْكُمْ رَقِيبًا ۝ ١

Which means

“O mankind, fear your Lord, who created you from one soul and created from it its mate and dispersed from both of them many men and women. And fear Allah, through whom you ask one another, and the wombs. Indeed Allah is ever, over you, an Observer.”

Here is the complete excerpt.

In my heart I remember that I wanted to write to him; to replace myself to explain all feelings in my heart. I will write that letter sincerely, without mixing with words that might be offensive to the heart,

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either for love matters or other matters, besides, other people will not know the content of the letter if it is written in Dutch. But, ah ..., I have no heart to do it, since that action was a behavior in vain. (pp. 23-24)

Indeed, if it is measured by mind, I will only be worthy of being Zainab's brother, her defender. But love has a wider field than that size of the mind. That is what is written in the heart, which is difficult to forget forever. There was a hung-up answer that I had not heard from Zainab's mouth and I had a strong allegation that she would have given it to me that day. That's what has always been becoming a disease to me, but it has becoming medication as well. (p. 42)

In the excerpt data [35] and [36] above, there's story about Hamid's characterization on his value of *akhlaq* in brotherhood and it has a semiotic symbol in the excerpt. This is connected to what Allah, the most glorified, the highest, had saith in Quran Surah Ali 'Imran verse 103.

وَأَعْتَصِمُوا بِحَبْلِ اللَّهِ جَمِيعًا وَلَا تَفَرَّقُوا وَاذْكُرُوا نِعْمَتَ اللَّهِ عَلَيْكُمْ إِذْ كُنْتُمْ أَعْدَاءً فَأَلَّفَ بَيْنَ قُلُوبِكُمْ فَأَصْبَحْتُمْ بِنِعْمَتِهِ إِخْوَانًا وَكُنْتُمْ عَلَىٰ شَفَا حُفْرَةٍ مِنَ النَّارِ فَأَنْقَذَكُمْ مِنْهَا كَذَلِكَ يُبَيِّنُ اللَّهُ لَكُمْ آيَاتِهِ لَعَلَّكُمْ تَهْتَدُونَ ١٠٣

Which means

“And hold firmly to the rope of Allah all together and do not become divided. And remember the favor of Allah upon you - when you were enemies and He brought your hearts together and you became, by His favor, brothers. And you were on the edge of a pit of the Fire, and He saved you from it. Thus does Allah make clear to you His verses that you may be guided.”

CONCLUSIONS

Based on the analysis of religious values in the novel entitled Under the Protection of Ka'bah made by Hamka, we can make the following conclusions.

1. The novel entitled Under the Protection of Ka'bah made by Hamka contains religious values
2. Hamid's characterization in the novel entitled Under the Protection of Ka'bah made by Hamka can bequeath religious values, since it reflects religious values in the form of *aqeedah* and *akhlaq*. It can be seen from the table of analysis that there are 17 excerpts which show that Hamid applied *the aqeedah* and 19 excerpts which show that Hamid applied the *akhlaq* in the novel
3. The religious values used in the entitled Under the Protection of Ka'bah made by Hamka are *aqeedah* and *akhlaq* which are reviewed based on semiotic studies in the form of icons, indices, and symbols. The more dominant religious value found in the novel is the *aqeedah* with the total of 19 excerpts while the *akhlaq* is only 17.
4. Research on the characterization of the entitled Under the Protection of Ka'bah made by Hamka is reviewing the semiotic study of the elements of icons, indices, and symbols from the aspects of *aqeedah* and *akhlaq*. In the aspect of *aqeedah* there are 2 icons, 4 indices, and 11 symbols while, the for the *akhlaq* aspect there are 7 icons, 7 indices, and 5 symbols.

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Industry-Based Course Syllabus for Fundamentals of Business Process Outsourcing

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ABSTRACT

The study generally developed and validated an industry-responsive course syllabus for the teaching of Fundamentals of Business Process Outsourcing, an enhancement course of some of the undergraduate programs of the Mariano Marcos State University. It was guided by the research and development approach with BPO personnel as key informants and seasoned BPO subject teachers as validators. A focus group discussion with the key informants was conducted to identify the required related industry skills that are perceived by BPO personnel from prospective industry employees. Results were then used as basis for the formulation of a syllabus following the OBE format. A validation checklist was used to determine the level of validity and usefulness of the designed syllabus along three areas: clarity and tone, course policies, and course characteristics. Results of the focus group discussion show that prospective industry employees are expected to have the following in order for them to function well in the industry: communication skills, language skills, intercultural communication skills, computer skills, and interpersonal skills. In general, the validators rated the developed OBE syllabus as highly valid and useful having an overall mean of 3.84; hence, is fit to be used by the university.

Keywords: Industry, Course Syllabus, Business Process Outsourcing

INTRODUCTION

In the province of Ilocos Norte, the IT – BPO industry has been booming since 2010 and has been offering the graduates of the Mariano Marcos State University (MMSU) and other universities key positions in the business. However, many of those applicants fail to make it in the job selection process due to their appalling English language proficiency level. This is important to note since most of them are high school and college graduates who are expected to have acquired a good level of proficiency given the training that they should have supposedly acquired in the classroom. Yet, reports on the English language proficiency level of Filipinos show otherwise (GMA News, 2019).

This reality is now a major concern of the IT - BPO industry. In order to sustain its needed pool of talents, the industry keeps on communicating said concern to educational institutions and inform applicants the needed industry skills required of them. Specifically, prospective employees are advised to learn how to communicate effectively their viewpoint at all organizational levels.

Aware on this necessity, MMSU designed and incorporated the offering of Business Process Outsourcing (BPO) subjects since 2013 in some of its program offerings such as the AB in English Language program. Said subjects aimed to orient students the entry skills that are needed in the industry. However, lack of instructional materials, specifically a syllabus to guide the BPO instructors in teaching the program greatly affected the quality of the teaching and learning process. Thus, the present study was focused on the development of a syllabus for the BPO subject offered to students of the ABEL program. Specifically, this research identified the needed industry skill needs of the prospective employees which was used as a springboard in formulating the course content of the BPO course. This is hoped to be used to facilitate the teaching of the course and to standardize the subject offerings of the subject.

RESEARCH METHOD

This study used the research and development (R & D) design process which consisted of three stages: planning (identification of the required related industry skills that are perceived by BPO personnel from prospective employees), development stage (the development of the course syllabus), and 3) the evaluation stage subjected the output in a validation procedure as to clarity and tone, course policies,

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and course characteristics. It involved two sets of respondents/key informants: BPO personnel and subject matter specialists. For the first set, it involved 10 selected trainers, supervisors and human resource personnel of the major IT-BPO companies in the province.

Only those who are more than two years in the industry were considered to ensure that they are aware on the systems of their companies; hence, could give insights as to much needed information in this study. For the second set, on the other hand, three validators who are teaching the BPO subjects were considered. Moreover, this study used two data – gathering tools: a focus group discussion interview guide and the level of validity and usefulness checklist by the Schreyer Institute for Teaching Excellence (2007) which evaluated the following components of the syllabus: 1) clarity and tone of the syllabus; 2) course policies; and 3) course characteristics. Before the questionnaires reached their final forms, they were first pretested to ensure their reliability and validity. Prior to the conduct of this study, the researcher asked permissions first from various offices. Upon approval, the researcher met the target respondents and explained to them the nature and extent of their participation in the study. Those who signified their intent to participate in the study were asked to sign the Informed Consent Document. When all the preliminary requirements and procedures were conducted, the following stages were done: needs analysis, content – specification, syllabus organization, and validation.

RESULTS AND DISCUSSION

Perceived IT-BPO Industry-Related Skills

1. *Communication skills.* In the discussion that was conducted with the key informants, the following communication skills were identified as necessary in the IT-BPO industry in this particular order: *speaking, listening, writing, and reading.*

Speaking. According to the respondents, speaking is very important in the business. When listeners struggle to understand their fellow communicators, the former eventually ignore the latter. One of the causes of these struggles is the indistinctness of the sounds that speakers utter. Therefore, enhancing clarity and distinctness of pronunciation should be considered for it does not only strengthen someone's communication skills, but improve his/her image and make others more responsive to messages as well (Voice and Speech, 2013). This was supported by KI3 during the focus group discussion.

Employees and trainees should be able to pro-actively and consistently speak in a conversation. Their pronunciation should be detailed	KI3
As agents we must sound fluent in using the English language. Our delivery should be clear, should not sound scripted, and should be conversational.	KI9

According to Lockwood (2012), spoken English language communication is a 'core commodity' for successful call handling and customer care in call centres. As mentioned by KI3, smooth and easy flow of the language is a vital factor in establishing a good conversation in the industry. BPO personnel are expected therefore to show a certain degree of command of the English language as said proficiency manifests a considerable level of credibility. Moreover, as mentioned by KI9, clarity on the sounds and tone of the voice are both important for the employees to not sound scripted in a conversation. However, these skills are observed to be lacking among prospective employees. This was reflected in the interview transcripts of KI7, KI1, and KI10 below:

Aside from many stutters and do experience verbal paralysis during the interview phase of the selection procedure, many fail to join the workforce because applicants have problems on sounds. For instance, there are issues on the production of the critical sounds of English. There are those who are confused in pronouncing 'p' and 'f', 'v' and 'b' and the sibilant sounds like 's', 'sh', 'zh.'	KI7
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According to the Information Technology & Business Process Association Philippines (2013), the IT-BPM industry is a multi-lingual industry and fluency in a second and even third language is always an advantage. The main reason job applicants do not get hired in this industry is their poor English communication skills both in writing and in speaking. This manifests that fluency in the English language is needed for aspiring call center agents.

Listening. It is a common misconception that speaking is the only needed communication skill in the industry. In fact, as mentioned by the key informants, listening is as important as the speaking ability. This is reflected in the transcript below:

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We need to be good listeners. You cannot say anything if you did not understand the message of your customer. It is not right for you to keep on asking your customer to repeat his/her message. Your manger will call your attention if you are wasting your time on air. K14

As mentioned by K14, good listening ability is a must in the industry. Hence, prospective employees are expected to practice good listening, specifically listening for information, for specific details, and for comprehension.

Writing. In the industry, one might be asked to write a report, strategic plan or strategy at work, grant application, and responses to managers' inquiries. This is captured in the transcript below.

Employees should be effective in writing in business setting, not physical letter because we are paper less company. More on emails, they must be educated with the different etiquettes and technicalities in email writing. Email composition is important; we call it business writing. K15

Email-based communication offers advantages, the few of which is that it lends formality between customers and business (Open Access BPO, 2013). Response to the customer email requires a higher standard compared to ordinary emails and must be properly written as it reflects the company's image. This shows that email writing is a skill that must be possessed by applicants in the BPO industry.

Reading. Although reading is not tested in the job selection process of the BPO industry, the key informants still emphasized that prospective employees should have a good reading ability. One of the key informants said that agents and managers still use such skill in the business:

We need agents who can easily comprehend with written announcements because we sometimes send them updates via email. This is important because these changes usually focused on the changes of our process ... required by our clients." K17

As presented in the transcript, K17 emphasized the need of having good reading skills in the industry. It was made to understand during the focus group discussion that majority of the announcements are given through emails as employees do not have the luxury of time to convene and discuss issues given their work schedules.

2. **Language skills.** Based on the FGD, good understanding on the following grammatical units/components are identified as necessary in the industry: *syntax, determiners and quantifiers, subject-verb agreement. Prepositions, tenses, idiomatic expressions and variety of English* were identified that also need enhancement from prospective employees.

Syntax. In the focus group discussion, it was found that applicants have issues as to syntax. This is reflected in the following transcripts:

During interviews, applicants sometimes commit errors in word order. This is necessary as said order affects the clarity of the message. If this is committed in the call, for example, customers might ask questions on the clearness of the message. K16

As reflected in K16, there are cases when errors on the following are observe: confusion on the use of but and however, improper usage of pronouns like he, she, and they and confusion on the use of has and have. In some cases, grammar lessons are offered to applicants prior to going onto the floor in order to ensure language accuracy at the sentence level (Lockwood, 2012).

Use of Determiners and quantifiers. It was also found in the focus group discussion that there are confusions among applicants regarding the use of determiners.

Applicants have a problem sometimes on the use of 'a' and 'an'. This is not a very serious problem in the industry. However, we still discuss this in our trainings. K16

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Based on the transcripts above, proficiency on the use of determiners is also needed in the industry. This is because determiners provide context and specifically to nouns, since they are words that come before a noun and serve to modify the noun.

Subject-verb agreement. This should not be a problem among applicants as majority of them are college graduates. However, it was revealed by the key informants that many applicants need to enhance their knowledge on subject-verb agreement.

The topic subject-verb agreement is supposed to be basic for the aspiring call center agents however, they still commit mistakes.” K12

As mentioned by K12, subject – verb agreement should be mastered by those who have intentions to work in the industry. This was further clarified by key informants when they mentioned that applicants have problems on the agreements of sentences that have intervening phrases, those that are joined by ‘or’, ‘nor’, ‘neither/nor’, ‘either/or’, and ‘not only/but also’, those with indefinite pronouns, units of measurements, collective nouns, and prepositional phrases.

3. *Inter-cultural communication skills.* This skill looks at how people from differing cultural backgrounds communicate, in similar and different ways among themselves, and how they endeavour to communicate across cultures.

Based on the interview with the key informants, there is a need to orient the applicants as to good intercultural communication.

As agent, you need to have a good background on cultural dialectics. This is important because your understanding on the cultural background of your caller would help you decide as to your approach in talking with them. K12

Based on the transcripts, employees of a business process outsourcing company should be effective cross-cultural communicators. Cross-cultural communication may be particularly challenging for agents with minimal exposure to various cultures (Lockwood, 2012), making cultural sensitivity training (Subramanian, 2005) all the more relevant for contact centre agents. By incorporating this type of training, agents can become more culturally sensitive and tactful in call handling and messages are delivered quickly without the risk of miscommunication.

4. *Computer skills.* Based on the interview with the key informants, the following computer skills were identified as necessary in the IT-BPO industry: knowledge on Microsoft Office and Basic Keyboard Shortcuts.

Enhancement of using excel and Microsoft word should be trained. It is an edge if you are knowledgeable of these. K15

They also do some reporting using Microsoft PowerPoint and Microsoft Word. They should be trained on these. K14

According to K15, it is an edge for the applicants if they are knowledgeable of Microsoft Excel and Microsoft Word. This means that, the use of such is a part of the selection process, specifically on non-voice positions. K14, on the other hand emphasized that said skills are vital once employed in the industry.

Employers across many BPO industries expect job seeker to have Microsoft Office skills, and it is probably the most preferred productivity software in business around the globe. According to Doyle (2019), one may not need to be an expert in Microsoft Office, but he/she will be considered for more roles if he/she is at least acquainted with the basics.

In the BPO industry, an agent needs to work on several things at the same time. For instance, one may receive a call while speaking and typing what he/she is receiving from the caller. Hence, multi-taking is observed in the workplace.

In order to facilitate the accomplishment of tasks, said agent should know at least keyboard shortcuts which will save him/her time in the process. This was noted by K18 in the transcript below.

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There are times that when you are in your cubicle, one hand is working on the microphone while the other hand either types or writes. So as an agent, you should know how to use effectively your resources, your keyboard for instance. So what I usually do is, I use shortcuts in my computer. And it helps. K18

According to Piton-Global (2019), if someone wishes to work in a BPO someday, one of the most common things he/she should prepare for is to practice handling multiple task at once. Hence, basic keyboard shortcuts are of great importance.

5. *Interpersonal skills.* Based on the interview with the key informants, the following topics on customer service were identified as important to be taught to prospective employees and trainees in the BPO industry: delivering excellent customer service, and customer satisfaction measures.

Delivering excellent customer service. Excellent customer service is basic of the industry. After all, there is no business without a customer. This is the reason why companies invest and conduct trainings on the delivery of excellent customer service. This is also a prime concept in the BPO industry as manifested in the transcript below.

Applicants should be industry ready in a way that they must have not just ideas of but should know how to deliver excellent Customer Service. K12

As mentioned by K12, excellent customer service is important in the industry. This is because, if clients are not satisfied, then they may not avail the services of the BPO company again. It is implied that agents are the frontrunners of the company. Hence, they should be equipped with skills that foster good relationships with the customer. It was further mentioned during the discussion with the key informants that *awareness on the customer service interactions, customer service principles and practices, and managing customer interactions* are viewed as skills necessary for establish good customer service.

According to McQuerry (2019), customer service is not just about being courteous to customers – it is a vital element of business operations that can impact how the company viewed by the public.

Customer satisfaction measures. Since customers are considered as the lifeblood of the company, it is deemed necessary to know as well their satisfaction measures. This gives the BPO employees ideas regarding their manner of handling their customers.

I believe that knowing key performance indicators will help you in the business. Of course, if you want to be retained, then you need to give your all. And giving your all means satisfying your customers. K18

As mentioned by K18, it is also important to learn satisfaction metrics of the customers. For instance, a client's public feedback on a social networking platform can make or break a brand. Hence, customers' life cycle management is of utmost priority for those working in BPOs.

Industry-Responsive Syllabus for the Fundamentals of BPO

The developed syllabus was drafted based on the data gathered from the perception of the BPO personnel as to the must-have skills of prospective employees. The development of the syllabus was guided by the OBE Syllabus.

Generally the syllabus that was established has three components: 1) preliminary parts; 2) course outline and time frame; and 3) learning plan.

1. *Preliminary parts.* This part of the syllabus includes 11 components. These are course name, course code, course credit, course description, contact hours/week, prerequisite, course outcomes, vision of the university, mission of the university, institutional outcome, and program outcomes.
2. *Course outline and time frame.* This part contains the six (6) different chapters that will be taken in the course and the number of hours that will be spent in each chapter. Aside from that, a one-hour orientation is included in the syllabus.
3. *Learning plan.* In the learning plan of the syllabus, seven (7) distinct parts were incorporated: intended learning outcomes (ILOs), course content / subject matter, textbook / references, teaching and learning activities (TLAs), assessment tasks (ATs), resource materials, and time table.

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Content Validity of the Industry-Based Syllabus for the Fundamentals of BPO

Based on the outcomes-based teaching and learning framework, a syllabus that was industry-based skill needed in the BPO industry were developed. After the development, experts subjected the syllabus to content validation in terms of clarity and tone, course policies, and course characteristics. Table 1 shows the overall validity of the syllabus as rated by three seasoned teachers / professors of the BPO subjects.

Table 1. Overall Validity of the Syllabus

Criteria	MEAN	DESCRIPTIVE INTERPRETATION
1. Clarity and tone	3.71	Highly Valid
2. Course policies	3.89	Highly Valid
3. Course characteristics	3.92	Highly Valid
Mean	3.84	Highly Valid

Legend:

- 3.51 – 4.00 Highly Valid
- 2.51 – 3.50 Valid
- 1.51 – 2.50 Moderately Valid
- 1.00 – 1.50 Needs Improvement

The data reveal that the overall level of validity of the proposed syllabus is *highly valid* with an overall mean of 3.84. This implies that the proposed syllabus is fit to be used in the IT – BPO subject of the new curriculum of the AB in English Language program.

CONCLUSIONS

Based on the findings of the study, the following conclusions are drawn: 1) among the communication skills, speaking and listening seem to be the most important in the BPO industry; 2) aside from communication and linguistic skills, relationship building and technical skills deemed to be important in the business.; 3) the fact that prospective employees were able to identify the needed skills from prospective employees, the former seems to lack the necessary skills that are expected of them; and 4) the syllabus is comprehensive enough for it caters to the development of all the skills necessary in the industry.

Based on the findings and conclusions, the researcher offers the following recommendations:1) BPO teachers are encouraged to use the developed syllabus in teaching the BPO subject to prepare prospective employees of the industry; 2) researchers should use the course content and the syllabus as bases in developing teaching resource materials for the BPO' and 3) though the BPO is offered to ABEL students only, said program is encouraged to be offered to other students who might need the program.

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Teach, Learn, Reflect: Narratives of SEA Teachers

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ABSTRACT

This study explores how South East Asian (SEA) pre-service teachers who were part of the SEA Teacher project engage in critical self-reflection to survive the demands of internship. Anchored on the theory of situated cognition which assumes that knowing is inseparable from doing and that knowledge is situated in activity bound to social, cultural and physical contexts, the researchers examined how their experiences hone them as professional teachers. Narrative inquiry guided the study which involved 6 pre-service teachers who were interviewed. Other sources of data include documents and interviews with teacher training instructors. Based on the narratives, the SEA teachers used self-reflection in every phase of their practice teaching experience. Themes that emerged include initiation, development and celebration. This study served as an avenue for interns to be heard and teacher education courses should integrate real classroom observation and immersion. Moreover, this study will serve as an eye opener for South East Asia Minister of Education Organization, the facilitator of the program and universities in South East Asia to focus on the real needs and pressing issues of the recipients of the project.

Keywords: SEA, Education, Narrative inquiry.

INTRODUCTION

Teaching Internship is the total immersion of the prospective teacher where he or she experiences the process of planning actual teaching and evaluating learning. This is now the avenue for the interns to bridge theory and practice. The Mariano Marcos State University College of Teacher Education has the mission of providing technical and professional training specifically on producing manpower for the country and the world's educational system in the pre-elementary, elementary and secondary levels. The college continually aspires to produce holistic and committed teachers.

One avenue to hone pre-service teachers is the SEA Teacher Project which is a month-long program that aims to provide opportunities for pre-service teachers from universities in Southeast Asia to have teaching experiences or practicum. This enables them to develop their teaching skills, gain more confidence, increase social skills, and expose them to diverse teaching and learning situations and opportunities.

In October 2014, SEAMEO Council has adopted its education agenda or the seven priority areas for SEAMEO to work together to improve quality education in the ASEAN countries. One of its priority areas in achieving quality education in the region is "Revitalizing Teacher Education". Now on its fifth year, the project has not been given ample monitoring and evaluation on its effectiveness. While there may have been some evaluations at the university levels as each recipient had to pass a form to this effect, not one has been analyzed and published elsewhere.

Also, studies and literatures about the lived experiences of pre-service teachers are scarce. These bodies of literature only explored the evaluation/assessment of the teacher education program and the pre-service education program of the teacher training institutions but not with the challenges, hassles and coping mechanisms, pressures, apprehensions and experiences of the pre-service teachers.

In the light of the identified gaps in the literature, this study was conducted to recount the experiences, challenges, viewpoints of students through the narratives of their stories lived as South East Asian Teachers' Project (SEA Teacher Project). More specifically, it attempted to answer the following questions:

1. What are the activities and most unforgettable experiences of SEA Teachers in their internship?
 - a. Inbound
 - b. outbound

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2. What did they learn in these experiences? How did they perform in the project?
3. What were the challenges they faced and how were they able to hurdle them?

This present study is anchored on the situated learning theory of Jean Lave and Etienne Wenger. In this theory in relation to pre-service education, the student teacher's learning is situated, that is, as it normally occurs is embedded within an activity, context and culture. Knowledge needs to be presented in authentic contexts. In this case, the pre-service teachers learn well because of the authentic context where they are in which is the classroom. As interaction and collaboration are essential components of the situated learning, the pre-service teachers become involved in a community of practice which embodies certain beliefs and behaviors to be acquired. As the novice teacher moves from the periphery of a learning community to its center, he or she becomes more active and engaged within the culture and eventually assumes the role of an expert.

RESEARCH METHOD

This part explains the design, methods and procedures in conducting this study. It also discusses the ethical considerations and reflexivity of the researchers.

Narrative inquiry is the process of gathering information for the purpose of research through storytelling. The researcher then writes a narrative of the experience. Connelly and Clandinin (1990) note that humans are storytelling organisms who, individually and collectively, lead storied lives. Thus, the study of narrative is the study of the ways humans experience the world." In other words, people's lives consist of stories. Field notes, interviews, journals, letters, autobiographies, and orally told stories are all methods of narrative inquiry.

In this study, the principles and tenets of narrative inquiry were employed as the narratives of the pre-service teachers of their stories about their Practice Teaching stints as indicated in the SEA Teacher Project. Narrative inquiry assumes that individuals and in this study, the Practice Teachers construct reality by sharing stories and critical incidents in their lives that led to the life's turning points. In this study, the individual narratives attempts to show a sequence of action (Riessman, 2008). Narrative analysts tend to know and why events happened the way they did. Narratives embedded from field notes, interviews, observations, journals and orally told stories were excellent pathways to crystallize the feelings, hopes, thoughts, concepts, aesthetic reactions and moral dispositions of the four pre-service teachers who participated in this study.

This study was conducted in the Mariano Marcos State University College of Teacher Education, Laoag City to those who were recipients of the SEA Teacher Project both inbound and outbound. The College offers Bachelor in Secondary Education and Bachelor in Elementary Education and one of the courses students take before they graduate is Education 200 or Practice Teaching. They have two phases for the Practice Teaching. One is the on-campus teaching where they conduct their pre-service teaching at the Laboratory High Schools of Batac and Laoag and the off-campus teaching where the Practice Teachers conduct their practice teaching in any school of their choice outside the university and now in its second year, for those who qualified to have their internship abroad, chose to go to any university which is a part of the SEAMEO SEA Teacher Project.

As to the first part of this study where documents were obtained from their portfolio, all of the inbound and outbound participants were covered. Documents that were passed to the Commission on Higher Education were also considered. In gathering the lived experiences of the clientele, there were four participants in this study from outbound and inbound. They were chosen via purposive sampling with the following selection criteria: (1) must be a BSE/BEED Practice Teacher, (2) must have on-campus and off-campus internship (3) diverse majors (specialization) (4) willing to share their experiences.

The study was conducted from January to May 2019. The research involved multiple sources of data. The data obtained and analyzed for this study were based on interview transcripts, observation notes, teaching portfolio and blogs of the participants, and reports submitted to the universities. The interviews allowed the participants to express meaning about their viewpoints and opinions on teaching internships (Marshall & Rossman, 2006).

Two in-depth interviews were conducted for each participant. A uniform interview guide was used for the four participants (2 inbound and 2 outbound) which were conducted through phones for the inbound. After building rapport and gaining trust and confidence, they provided documents and pictures related

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to the study. Likewise, they (inbound) allowed the researchers to observe them unobtrusively while they conducted some activities outside of the classrooms like conducting outdoor activities during the University Foundation, presentation practices, and talent development activities.

From the interviews, documents, and observations, a narrative for each participant was written to highlight their viewpoints, feelings and sentiments, moral dispositions, hopes, challenges, concepts, aesthetic reactions about Practice Teaching. Several alterations and revisions were vital in the study. Member checking was also employed at the end of the data collection process.

RESULTS AND DISCUSSION

Narrative analysis aims to identify the kinds of stories told about the researched phenomenon and the kinds of story representing the phenomenon in culture and society. Inductive analysis was also used.

Activities Done by the Sea Teacher Participants

The activities that were undertaken by the interns were classroom observation, teaching assistantship, teaching practice, preparation of instructional materials and appreciation of the country's culture through study visits

Inbound Students and their Schools:

The Mariano Marcos State University received 16 exchange students from eight universities in Indonesia. These universities are the following: 1) Universitas Muhammadiyah Prof. Dr. Hamka (UHAMKA); 2) Pakuan University (UNPAK); 3) Sebelas Maret University (UNS); 4) Ganesha University of Education (UNDIKSHA); 5) Lambung Mangkurat University (ULM); 6) University of Bengkulu (UNIB); 7) Universitas Jambi (UNJA); and 8) Indonesia University of Education (UPI).

Outbound Students and their Host Schools

Last August 2018, the university sent five (5) students in the Sea Teacher Project, Batch 6. In 2019, however, 20 students from the College of Teacher Education joined the project. Of the 20, seven (7) were from the Bachelor of Elementary Education while 13 were from the Bachelor of Secondary Education. Moreover, 19 of the 20 went to various Indonesian universities: 1) PGRI Madiun University; 2) Ganesha University of Education; 3) University of PGRI Semarang; 4) Pattimura University; 5) Indonesia University of Education; 6) University of Bengkulu; 7) State University of Makassar; and 8) University of Muhammadiyah Prof Dr Hamka. Meanwhile one (1) went to a university in Thailand, the Nakhon Si Thammarat Rajabhat University.

Inbound Students' Blog Addresses

One of the major requirements of the SEA Teacher Project is the participants' creation of a blog. It is required that the blogs have the following parts: 1) the general information and academic administration of the school; 2) pedagogical contents that includes teaching methods, learning materials and innovation, sources of learning and technology, and authentic assessment; 3) observation on teachers that includes the following parts (their planning for teaching, their preparing lessons and materials, their teaching in class, their measurement and evaluation, and the students' overall impression to the teacher performances); 4) the teaching plan (curriculum related to the major and teaching plan related to the major); 5) teaching practice (procedures of your teaching, time management and organizing activities, problem – solving, classroom management, and the students' overall impression in teaching); and 6) summary and recommendations on the purposes, procedures, outcomes, challenges and overall impression of practicum, and suggestions for future improvement.

These blogs were evaluated by the SEAMEO Secretariat and their quality determines whether the students will be issued a certificate of completion or not. It is worthy to point out that all the students' blogs passed the criteria set by SEAMEO.

Performance of MMSU in Implementing the Project

In order to monitor the services of the schools that are participating in the project, SEAMEO required all inbound students to evaluate the services of said schools. From the scale of 1 – 4, 1 being the lowest and 4 being the highest, the students were asked to rate the school in four components of performance: 1) meaningfulness of learning experiences; 2) sufficiency of support; 3) qualifications of mentors and other personnel support; and 4) cooperative relations.

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Table 1. Below shows the performance rating of MMSU as evaluated by the 16 inbound students from eight universities in Indonesia.

Components of Performance	Description of Component	Performance Indicators	Rating	Verbal Description
Meaningfulness of Learning Experiences	The Programme of Activities include relevant and meaningful activities, and were conducted as scheduled.	Practicum activities in the programme are meaningful and relevant to teacher development.	3.51	Excellent
		Cultural activities are enriching and promote understanding of diversity.		
		Activities in the programme are conducted as scheduled.		
Sufficiency of Support	SEA Teacher Participants were provided standard accommodations and transportation service from and to the nearest airport.	Accommodations provided are at least within student standards.	3.8	Excellent
		Shuttle service from and to airport was provided.		
		Other support provisions were available (e.g., medical assistance, immigration assistance, food preparation facilities)		
Qualification of Mentors and Other Personnel Support	Mentors and other personnel support were qualified and proportionate to number of SEA Teacher participants, and provided appropriate assistance, especially when needed.	Mentors and other personnel support were available to provide guidance and assistance to the participants.	3.8	Excellent
		Mentors and other personnel who were assigned are highly qualified.		
		Assistance provided was truly helpful to address issues and concerns, and timely.		
Cooperative Relations	Actions of Partner University established rapport and promoted ASEAN harmonization and cooperation	Partner University responded/acted to issues and concerns promptly.	3.37	Excellent
		Partner University was actively engaged with Sending University in online meetings, interview sessions and other related activities.		
		Partner University took an initiative to advance ASEAN harmonization and cooperation (e.g., proposed next possible actions/agreements)		
Total			3.62	Excellent

Legend:

1.00 – 1.74
 2.50 – 3.24

less satisfactory
 highly satisfactory

1.75 – 2.49
 3.25 – 4.00

satisfactory
 excellent

As shown in the Table, all the four components of performance set by SEAMEO were all rated excellent by the inbound students; hence, the *excellent* rating for the Mariano Marcos State University as a receiving university of the SEA Teacher Project.

However, one university commented that the teaching experience of the students was only “minimum”. This reason maybe attributed to the time when the students had their practicum. The foundation anniversary of the university is January; hence, a lot of university-wide activities were conducted.

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However, based on the said comment, MMSU, still, was able to meet the minimum teaching experience requirement set by SEAMEO.

Performance of MMSU Students in the Project

Aside from the evaluation of the school as a receiving university, the outbound students were also rated by their cooperating teachers based on the rubric prescribed by SEAMEO. Said evaluation rubric has the following criteria: teaching performance, strategies and skills for effective instruction, and personal characteristics.

Table 2. the overall rating of the students

	Criteria	X	Verbal Description
Teaching Performance			
1	Knowledge of subject matter	3.7	Excellent
2	Focus on objectives of the lesson	3.6	Excellent
3	Knowledge on how students learn	3.6	Excellent
4	Assessment of the lesson	3.5	Excellent
	Weighted Mean	3.62	Excellent
Strategies and Skills for Effective Instruction			
1	Instructional Strategies	3.6	Excellent
2	Communicative	3.8	Excellent
3	Classroom management	3.4	Excellent
4	Overcome discipline problems	3.6	Excellent
	Weighted Mean	3.61	Excellent
Personal Characteristics			
1	Demonstrates resourcefulness.	3.7	Excellent
2	Show initiative during exchange period	3.8	Excellent
3	Demonstrate thoughtfulness of judgements	3.6	Excellent
4	Work with enthusiasm and a positive outlook	3.8	excellent
5	Demonstrate patience	3.9	Excellent
6	Demonstrate good manners, discipline, and respect	3.8	Excellent
7	Develop good relations with students, peers, teachers, and administrators	3.8	
8	Show professionalism in all areas	3.6	Excellent
	Weighted Mean	3.75	Excellent
	Grand Mean	3.66	Excellent

Legend:

1.00 – 1.74	less satisfactory	1.75 – 2.49	satisfactory
2.50 – 3.24	highly satisfactory	3.25 – 4.00	excellent

As shown in the Table, all the three components of performance set by SEAMEO were all rated excellent by the cooperating teachers of the outbound students; hence, the *excellent* rating of the students of the Mariano Marcos State University.

Strategies and Skills for Effective Instruction

Overall, from the data gathered spell the university's readiness to host international students and the MMSU students' preparedness to join international activities such as internships abroad. Moreover, the students' reflections in their blogs prove that the SEA Teacher Project, Batch 7, was able to meet its objectives.

Furthermore, the lived experiences of the students who were interviewed supported the claim above.

Narrative 1: Of Challenges, Realizations and Lessons: The Story of Jenina (19 years old)

There were challenges that the first client experienced like budgeting time; hectic schedules, lesson planning (objectives, writing, passing on time) and running out of strategies to employ. Side by side with these challenges were realizations that she needed to prioritize her activities and the best avenue to apply theories learned was in the real classroom set up. She also realized that she needed to socialize and reflecting is needed all the time after doing a teaching job.

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Some of the lessons that she learned were prioritizing, strategizing, appreciating the beauty of being beset with a lot of challenges inside and outside the classroom.

Narrative 2: On Problems, Strategies, and Outcomes: The Story of Coco (20 years old)

The second intern encountered several problems – lesson planning (formulating objectives), so many overlapping activities, handling variety of students, rigorous work and requirements.

In facing these problems he employed strategies like being more serious in work, exhibiting more maturity in thoughts and actions and he learned to document everything, he looked for the best strategy to teach the subject matter and did more reflecting.

As such, he became more responsible, garnered more rewarding experiences, and for him learning became fun aside from having learned the value of respect, and eventually realized that teaching is fun.

Narrative 3 – Formula to Success: Hurdles + Techniques + Values: The Story of Allena (19 years old)

Intern number 3 hurdled a lot of challenges in her internship such as; lesson planning due to time constraints, classroom management (teen-agers are very aggressive), classroom size in the field, making assessments and checking them, voluminous work in the field.

To address these she employed a number of techniques –listening, teaching with confidence, being prepared all the time, being more patient, documenting everything in class, reading/researching a lot, speaking louder, relaxing when necessary

Values and important lessons that she learned were respect, prioritizing, patience, and being initiative at all times.

Narrative 4: World of Practice Teaching: Braving the Odds, Responding to the Challenge, Realizing the Outcomes: The Story of Jamie (20 years old)

Odds of internship were experienced by clientele 4 such as being hard up to keep with the pacing and schedules, lesson planning occupied much of his time, had voluminous IMs to be prepared and these expensive, and his schedules were so hectic most of the time so he had never had a decent leisure.

He responded to the challenge through learning how to budget time and money, more creative, learning how to use indigenous materials, prioritizing, no postponing of work, patient, record keeping and reflecting.

After all these, he realized the outcomes - teaching is a noble profession, value of patience, internship is not a baptism of fire but a time of realization whether teaching is for him or not.

Emerging Themes

Initiation- As revealed by Allena, Coco, Jamie and Jenina, Practice Teaching is a challenging part of life for pre-service teachers. As part of the educative process, they put into practice the theories learned in the classroom. They plan and prepare in considerable more detail than the teacher with more experience. (Cicek, 2013). These pre-service teachers were faced with many problems like: lesson planning, classroom management, dealing with people, assessments, time management, IM conceptualization and production.

Development. The four PTs revealed that their internship paved the way for them to learn and become a better teacher. They have metamorphosed as they learned to prioritize, value time, write good plans, strategize, manage their class, deal with people, prepare IMs, respect others, be patient and open-minded. This finding is consistent with the Theory of Situated Cognition which states that context is an inherent part of learning.

Celebration. Resolutions as to the perceived challenges are very evident in the four cases. Admittedly, all of them are happy of going through their own ordeals in teaching. The all claimed they were successful in their internship stints. This is a proof that internship is an avenue for them to hone their craft.

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CONCLUSIONS

Internship is an integral part of the teacher education curriculum. It is the culmination of their 4-year course and having it in another country is a gratifying experience. The study provided rich information about the storied lives of interns as revealed in the narratives

Pre-service teachers use self-reflection in every phase of their practice teaching experience as evident in their storied lives. They take these experiences as avenues for learning. Pre-service teachers don't take their problems as negative vibes instead, they took it as ways to learn and prepare them to become better teachers someday.

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Understanding Women's Views on Mining: The Case of the Winemakers of Adams

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ABSTRACT

Mining causes displacement and marginalization of affected communities, especially those comprised of indigenous peoples (IPs). However, it is very rare for the local people, the IPs specifically, to say no to such. The municipality of Adams, Ilocos Norte is one of those that curiously have been able to withstand the entry of mining corporations. Interestingly, those who were able to get the LGU to say no to it were the local women engaged in making local wines. This study is about understanding the views of the local women winemakers of Adams on mining. It contends that winemakers' view of their environment, their forest in particular as source of livelihood, as a home and a source of identity for them. These shaped their view on mining as threats to their resources intensified by media representations of mining highlighting the experiences of other host mining communities facing social and environmental adverse effects of such development projects. The LGU's program on eco-tourism, promoting Adams as an eco-tourist destination supported the winemakers' opposition on the entry of mining in the municipality.

Keywords: Understanding, Mining causes, Winemakers

INTRODUCTION

As humans work toward developing themselves and improving their quality of living, they harness the environment and the resources present in it. Every human undertaking is coupled with diverse and competing meanings. People look at the world in a relative manner and construct the world according to their own values. Thus, every human endeavour is coupled with competing meanings and differing values.

The way people use the world's resources reflect the values that they have toward the environment. In using these resources in the name of development, there are at least two competing views: one, the developer's perspective – usually that of an outsider and the other, the perspective of the indigenous community.

Some outsiders to a specific community may look at local resources as a good setting for progress undertakings and as an opportunity to implement projects for development. This is in contrast to the indigenous people who consider their land as sacred, since it is the home and cradle of memories of their ancestors, and the source of their identity and life. Such differences in the way groups view resources and the environment at times breed conflict.

According to Yangot (2009), the Philippines is one of the world's most highly mineralized countries, with untapped mineral wealth estimated at more than \$840 billion. It is one of the top five mineral exporters in the world, and has the potential to become the world's third biggest supplier of gold, fourth of iron, fifth of nickel and sixth of chromite. Of its nine million hectares of mineralized lands however, about half a million hectares have already been developed. Most of these lands are located within the indigenous people's ancestral domains (http://www.thai-ips.org/Documents/FPIC_philippines.pdf). This is because while the indigenous people make up less than a fifth of the Philippine population, most of the country's remaining biodiversity and other natural resources are located in their territories (Yangot, 2009: 2). These include mineral resources as such copper, nickel, chromite, limestone and marble.

The environment and its natural resources are considered by the indigenous people as fundamental to their survival. They depend on these resources for livelihood. Because of this, the indigenous people's loss of control of their lands and resources adversely affect their survival as a people. As such, they view the prospect of mining with hostility and suspicion.

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According to Ronderos (2013), while large-scale mining operations have negative consequences for everyone living in areas near mining sites, the indigenous people are particularly more vulnerable because of the large-scale destruction of forests and agricultural land, and the pollution of soil and rivers with toxic chemicals that these cause. In addition to these, indigenous people are also prone to various types of human rights violations such as displacement due to the appropriation of their lands; frequent mining accidents; health problems for mineworkers due to exposure of dust, heavy metals, hazardous gases, fumes; loud noises; and, the disintegration of their indigenous societies and culture. Because of these, the entry of mining companies in indigenous people communities generates opposing responses among the local people.

This study determines how the women winemakers' livelihood shapes their view of their environment, which consequently affects their views and perceptions of mining and their engagement with the LGUs and the other stakeholders in Adams. To do this, the study seeks answers to the following questions:

- What are the traditional wine making practices of the women in Adams? How are these threatened by mining?
- How do the women winemakers view mining? What are their perceptions about the prospecting of nickel in their locality? What factors shape their views on mining and mining operation, especially in Adams?
- How do the LGU policies and programs affect the views of the women winemakers about mining?

Related Work

Externally imposed development projects that involve resource extraction, such as mining, are one of the issues that IP communities face nowadays. Mining is considered and promoted by some as a development project. However, this view comes from an outsider's point of view and not from the people who and will be affected by it. This paper highlights the views of women winemakers on their environment as home of their IP identity and as source of their livelihood activities potentially threatened by mining operation. Most papers written on this subject came from the point of view of men who will benefit from it or whose livelihoods were threatened by it. Women's views on this subject were rarely taken into consideration. This research is conducted precisely to show how the women, especially those whose traditional practices and livelihood are threatened, view the prospect of mining.

The researcher hopes that this study, development project implementers can be made more mindful of the views of locals who will be affected by the project. By highlighting the women's views of mining, the researcher also hopes that the study can facilitate understanding and consideration of women's concerns in the design and implementation of development projects. Furthermore, the LGU as popularizers and as a medium in transforming claims to appeal in public will take its function as an institution to address the concerns of the IPs through policy formulation and strict implementation of IP related laws such as IPRA as well as mining laws. Stakeholders' (DENR, NCIP, NGOs, etc.) collaboration on the review and issuance of mining operation permits is necessary in order to ensure the respect and preservation of the rights and welfare of the IPs and of women, and at the same time steers the wheel of development at the local communities. Thus, this study will contribute to a more holistic understanding towards implementing development projects with resource extraction especially among IP communities.

This study focuses on the women winemakers of Adams, Ilocos Norte who are threatened by the potential impacts of possible mining projects in the municipality. Since no mining operation has taken place in Adams due to the fact that the locals have rejected mining exploration in their municipality, this study will focus on the local women's winemaking practices and how mining posed a threat to such. Consequently, the study also focuses on the responses of the winemakers, particularly on how they perceive the possible impacts of mining on their environment and sources of their livelihood. This paper highlights the views and voices of women who are open rarely emphasize in struggles of communities facing external development projects.

Social constructionist approach – anchored in the sociology of knowledge, interpretive sociology, and much of what now passes as postmodern epistemology (Burr, 1995) – addresses the historical, cultural, and political processes by which humans seek out, create, evaluate, and contest specific place meanings. Within the context of nature and wilderness, social construction refers to social, cultural, and political processes by which groups of people create shared meanings and understanding of a place and how these shared meanings, in turn, structure social actions in and with respect to those places.

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Ingold (2000, p.20) points out, for example, that the environment is socially and culturally constructed. He argues that the environment from which people derive resources is a relative term. He contends that the environment or the place where people live takes on meaning only in relation with the person's experience of such. Hence, the environment exists only with the people living in it. Ingold (2000) also avers that the environment or localities are never complete.

Meanwhile, Jenkins (2014) in her article entitled "Women, mining and development: A research agenda" argued that the experiences and perspectives of women in relation to the extractive industries have often been absent from analyses of the impacts of mining in the global South. She claimed that while it is true that natural disasters are inevitable, the worsening of their effects can be traced back to various man-made development programs. Environmental change, thus, is not exclusively brought about by the processes of nature but also by the activities of humans. The constant struggle in the class system directed man to centralize its economic development strategies. One of the strategies raised by Jenkins (2014) is natural resource extraction like mining. For both artisanal and small-scale and large-scale mining, the evident consequence is environmental degradation. Disadvantageous effects of mining include the pollution of water, air and land, and the use of land and water resources previously dedicated to agriculture.

Mining sites are usually in the rural areas. Hence, as mining companies occupy the area, rural communities lose access to communal and common land previously used for subsistence activities such as farming and hunting. Aside from its environmental effects, Jenkins identified the social impact of mining on women. Jenkins claimed that the work of women in the masculine-perceived occupation of mining remained obscure and hidden, forgotten and devalued.

Environmental change comes in two ways – natural and man-made- but leaning more to the latter like utilizing local resources for livelihood. Social structures are product of social constructs. It is formed from the perceptions of the people on the best course of action to take. Similarly to the residents of Adams who are threatened by mining operation and later denied a mining company entrance to their locality. This action was made to protect their land which they consider as a home and a livelihood resource.

Vandana Shiva's (1989) radical views on development and feminism are combined in her theory of ecofeminism. Ecofeminism's main contention is the inseparable relationship between the principles of ecology and the principles of feminism. Shiva theorizes that the injustice and adverse effects of environmental degradation brought about by the promises of economic development is the same injustice that puts women specifically in an exploited, marginal position. Injustice against women happens by discounting their contribution to the economy. An economic development that excludes women's work and wealth creation in the mind deepens the injustice by displacing women from their livelihoods and alienating them from the natural resources on which their livelihoods depend. The environment according to Shiva does not only feed the women who toil on its soils; it is also their home. As such, the environment encompasses all that is meaningful in a woman's life. Shiva specifically gives focus on the lived experiences of third world women because of her belief that it is these women who directly experience the impact of corporate globalization.

Shiva's theoretical stance on ecofeminism springs from her long involvement with the Chipko movement in India which is basically against industrial forestry, illegal logging and the risk caused by the destruction of forests on the women's source of livelihood.

On the other hand, Sandra Harding's (1993) gendered epistemology, also is called the feminist standpoint epistemology also becomes significant in this study through its two principal claims. Standpoint epistemology supposes that because knowledge is socially situated, marginalized groups become more inquisitive and assertive about their social positions because they are socially situated in oppressive contexts, which raises their awareness of why they are in the margins in the first place.

Harding specifically wants to find and highlight women's voices in oppressive structures such as in development. She specifically points out that the lived experiences of women are not as mundane as people think they are, but actually are politicized experiences as affected by power structures and material experiences.

John Hannigan's (2006) social construction of environmental issues and problems dovetails the social issue of the locals of Adams, specifically the winemakers being confronted by the impacts of the possible

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mining operation. The necessary factors for the successful construction of environmental problem are present and experienced by the local of Adams. Hannigan outlined necessary factors for the successful construction of an environmental problem. These factors are necessary for a prospective environmental problem to be fully and successfully contested. Hannigan's social constructionism will be used to explain the views of women winemakers about mining in the locality.

In his book *Environmental Sociology*, specifically on the chapter of social constructions of environmental issues and problems, Hannigan emphasizes the contrast between social and environmental problems. Although they are similar in a sense that they emerged as a "sequences of events" emerging from shared definitions, social and environmental problems are different. While moral aspect is embedded in both environmental and social problems, the former has greater physical ground. As such, more factual arguments are involved in them.

Related to this, Hannigan identified three key processes which are crucial in bringing the environmental topics into public awareness. These include assembling, presentation and contestation of environmental claims. The first process covers problem identification and discovery. These can be either derived from acquired scientific information or directly experienced by the locals. The second process involves legitimation of the problem through people's confirmation or acceptance of the problem. Lastly, the process of claims making must be scientifically precise, easy to manage by policy and address values of the policy-makers.

Applied to Adams, the local's responses to mining also involve these key processes. Firstly, if the mining operation is approved, the locals of Adams will be facing the impacts or threats of the possible operation of externally imposed development projects. These threats can impact on the locals differently, depending on how they view their environment. The locals of Adams construct their environment in relation to their needs. Their environment, especially their mountains provide them with resources used for their livelihood.

RESEARCH METHOD

The issue at hand talked about the interaction of external development activities with resource utilization and the local people, in this case, the winemakers in Adams, Ilocos Norte who were confronted with the threat of possible mining operation since mining companies operate where the resources are located. To date, along with other municipalities like Nueva Era, Carasi, Solsona, and Vintar – all identified towns where various IP groups live, Adams is the only municipality that has not given consent for BC's mining application primarily because of the negative response of the winemakers being the most affected group if the mining industry enters the locality.

The reluctance of the people of Adams, specifically the women winemakers, towards the possible entry of the mining industry in the community could be analyzed in four frames. These frames of analysis would be: 1) winemaking as a thriving economic frontier, 2) winemaking as a gendered industry, 3) winemaking as repository of indigenous knowledge, and 4) winemaking as ecologically and culturally embedded.

These four frames of analysis elaborate how winemaking is tied with livelihood as well as an important activity where gender and development could be affirmed. Both of these variables are threatened by the possible entry of mining in the area. Being a thriving economic frontier and a gendered industry, local efforts basically from the LGU is accounted as an important variable in response to this threat. Moreover, the reluctance of the winemakers toward the entry of mining in Adams springs from the projected adverse effects of this industry to their environment, their source of livelihood and their indigenous culture as intensified by media representation.

RESULTS AND DISCUSSION

The significance of winemaking in the Adams community did not start out as a purely economic endeavor. Winemaking in this community, like its other highland counterparts in the Cordillera and the Mountain Province, has been a part of the mundane community life since wine, mainly *tapuey* and *basi*, has always been a ritual element in special events such as marriage and burial, among others. Winemaking and wine consumption, however, have always been traditionally viewed as central elements in cultural life and not from the perspective of the economic. In Adams, winemaking became economically important because of the "one town, one product" advocacy of the province to boost its

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tourism industry. Thus, from the traditional production, use and consumption of wine in the area, winemaking became an economic activity since it has been designated as the localized Adams product which has become its identifier from other towns in the province and among tourists. As such, local ownership of wine production has been introduced, IP women have been tapped as makers and associations such as the AAA have been established. In terms of economic scale, the bugnay wine of Adams, most specifically, has become very visible in local hotels such as those in Pagupdud, Ilocos Norte and has been widely promoted in tourism expos at the provincial and the national level. These then, in retrospect, make the winemaking industry in Adams generally a thriving economic industry since its reach has exponentially widened and no longer just limited in the traditional, exclusive consumption of the locals.

As a thriving economic frontier, winemaking in Adams diversifies the sources of livelihood in the community, transcending agriculture and fishing. It has to be understood that the industry of winemaking was an offshoot of the booming eco-tourism in the province. Winemaking in this case then served as an identifier in response to the flocking of tourists in the area. While wines can be sold anywhere, winemaking in Adams provides an exotic and organic vibe because of its observable endowment of an abundant supply of natural resources and because the tourists themselves could get a peek of how they are processed. Using the concept of value-adding by Neil J. Smelser, winemaking as an economic industry in Adams is not only profitable because it is promoted as a local product but because the process of winemaking in itself gives tourists a sense of cultural immersion. Seeing how the products are made by the local people and seeing the mountains where they get their raw materials elicit a feeling of being an emic observer.

The reluctance then by the local people towards the possible entry of mining in Adams can be inferred as a subtle resistance to the probable demise of a communal economic effort through winemaking. Akin to this demise would also be the demise of the prestige of their wine products as their local identifier.

The advocacy of both the LGU and LEAD in campaigning for sustainable development through eco-tourism (which winemaking is a part of) could be seen as a local strategy to condition the community members that they do not need to risk their abundant natural resources just to be economically progressive. In effect, these efforts by the AAA, LGU and other institutions saliently puts mining and winemaking in a binary relationship with the latter as positive and the former negative, economically and ecologically speaking.

The process of winemaking in Adams is also a significant domain to study because it underscores a gendered industry with specific sets of expectations and performativity. The winemaking industry can be considered as gendered because it is particularly a livelihood activity designed for women.

While the motivation for this industry is predominantly economic, the specific tapping of women for this industry evokes the discussion of financial independence and feelings of empowerment. The label 'gendered' here then does not connote a negative stance, rather a more positive one.

Through winemaking, women in Adams enter a new realm of gender performance. Being identified as a winemaker elevates women's status as more than just mothers, wives or daughters. The act of gathering the raw materials, fermenting them in a laborious process, labelling them and then packaging the wine add a new layer to their everyday performance as women.

Consequently, financial independence stirs feelings of empowerment. Vandana Shiva's radical feminism, as epitomized by the contention of Susan Harding's standpoint epistemology, states that most often than not, the voices of women are muted in economic development. This position indicates that women are most of the time considered as not contributory characters in economic development since they are confined within traditional roles and they could not be separated from the domestic domain of living. This is not however, the case in Adams because amidst the development of their economy through eco-tourism in which winemaking plays a part, women are given the opportunity to take part in the actual developmental process. Empowerment comes then from the fact that women now hold an important role not only within the confines of their homes but also contribute to the progress of the whole community.

In this case, the reluctance of the community members toward the potential entry of mining may be viewed as deeply seated in the gender dynamics that winemaking gives to the community of Adams. With women as the winemakers, the adverse environmental effects of mining are directly aimed at a

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specific group deemed as still generally occupying a marginalized status in the Philippine context. As such, the resistance to mining then, as voiced by the AAA, is fundamentally gendered too; thus, the attachment of the locals to the forests does not only present an economic relationship nor an exclusively cultural relationship but also a gendered one.

It is also striking that women winemakers of Adams all have IP affiliation. With this, the reluctance of these winemakers towards mining does not only come from a gendered perspective but also from an indigenous indispensable attachment to a home. Thus, the negative perception of the winemakers toward mining and their attachment to the forests are ingrained in the spectrum of first, being a native to a home; second, being dependent on a natural resource, third, being valuable in the community's developmental process, and fourth, being independent and empowered. From these four visible standpoints, women winemakers are reluctant to mining because of their affective construction of the forests and mountains being their home and extension of their indigenous selves. This affective construction is manifested in winemaking.

Winemaking in Adams becomes significant then in contributing to a more positive reference in the discussion of gender and development. Furthermore, the solid position of the winemakers to resist the entry of mining in the area debunk the general idea that the woman's voice is absent in debates regarding conservation management and in the community's choice of developmental trajectory.

Adams provides a unique backdrop to winemaking predominantly since it is a melting pot of various ethno-linguistic groups, which historically speaking, has been made possible by resistance efforts during the Spanish colonization. The most notable ethno-linguistic groups/IP groups who settled in Adams are the Ilocanos, the Bago, the Isnegs/Yapayaos, the Igorots (composed of both Kankanaey and Ibaloi). Each of these ethno-linguistic groups regards winemaking and wine consumption as central figures of their cultural and communal life (Celino, 1990:32). The high level of variance in the composition of Adams' population in terms of ethnicity makes winemaking a repository of indigenous knowledge and a manifestation of the peaceful assimilation of ethnic identities in one community.

As a repository of indigenous knowledge, winemaking displays the winemakers' deep ecological attachment with their forest. The ability to turn a specific type of wild berry endemic in the Adams mountains presents the winemakers' knowledge on the use and taxonomy of their natural resources. The capacity of winemakers to mark the terrains where they could get raw materials from, and the conservation techniques used to protect these sources of raw materials through the ban of slash and burn, illegal logging and presently the resistance to the possible entry of mining in the community are reminiscent of the dialectical relationship between man and his environment. The antagonistic view of the winemakers, the LGU and other community members toward mining is not only motivated by the fear of losing a localized industry but also of the fear of losing the identity and dignity of what they consider as their land. The degradation of the forest through mining is then symbolically viewed by the winemakers and residents as a direct degradation of their indigenesness as a community and a direct blow on the indigenous knowledge made richer by the hodgepodge of beliefs, traditions and way of life through assimilation.

Moreover, their knowledge on the process of winemaking in itself is an intergenerational indigenous knowledge as emphasized in the narrative of winemakers noting that the art of winemaking has been a tradition handed to them by their forefathers. The sentimental construal of the winemakers of their environment as typified by the intergenerational knowledge of winemaking and their attachment to the forest because of identity are focal points to consider as to why winemakers oppose the entry of mining in Adams. The winemakers and the forests are bound not only through economic profitability but also through affective ties as recounted in memory and tangibly through winemaking. Mining then in this respect is perceived negatively by townspeople because its projected adverse effects will have a direct impact on important aspects of community living transcending from more than just profitability.

The possible massive ecological and cultural disturbance that mining is perceived to bring about in Adams is perhaps the overarching theme of the study. The previous contentions all boil down to the deliberation that while some of the locals have expressed economic hope in mining, there are more respondents, especially the winemakers who feel antagonistic about the mining industry because their environment will be at risk.

The ecological rootedness of winemaking can be disturbed by mining because it poses adverse environmental effects. Following the theory of social constructionism, the aversion of the winemakers

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and townspeople of Adams toward the entry of mining is inherent in their social construction that mining is a negative developmental process. Moreover, the role of media in conditioning sets of behavior and mindsets as John Hannigan emphasizes become highlighted as the winemakers and community members use what they have heard and seen from the media as bases for further construing mining as a threat that they should resist from.

With the combination of media information and observation from neighboring towns, the stand of the winemakers is strengthened especially that these information allows them to project further negative implications of mining on their craft. Their statements signify their renewed concern for their resources. This connection entails a responsibility to protect the environment because of the recognition that the degradation of it will consequently produce a degradation of culture, craft and a way of life.

Mining is also threatening the cultural significance of winemaking in Adams as highlighted by respondents from the AAA. This cultural significance is essentialized under the frames of identity, social cohesion, and practices.

The presence of mining poses a threat in the celebration of identity in the Adams community because winemaking is a cohesive force in the area. Adams being a community sheltering diverse ethno-linguistic groups/IP groups, identity is a very important variable. Winemaking creates dual identities for the winemakers of Adams since they identify themselves as both a member of a particular ethno-linguistic group and at the same time a community member of Adams. Without winemaking as one of the communal activities in which their dual identities could be assimilated in through the sharing of their lives and experiences while making their product, the sense of communal living may be diminished in effect. In the potential loss of their localized product which is their wines, their construal of their identity as a town may also be at stake.

CONCLUSIONS

In conclusion, the perception of the townspeople of Adams towards mining is more negative than positive because mining is in conflict with one of their major sources of livelihood, which is winemaking. This negative view of mining is not only purported by the information they receive from the media and through observation from neighboring towns that have consented to mining but also because of their projection that mining can give more adverse environmental effects than economic good. With these projections, underlying issues are put into the surface.

First of these issues would be the probable effect of mining to the winemaking industry as a thriving economic frontier of the town. The advent of eco-tourism as supported by the LGU, the province and other stakeholders tapped winemaking as an added attraction that they could bolster for Adams to capitalize on. Since winemaking is a collaborative initiative and because of its lucrative financial returns ever since it was established, the LGU, townspeople and other stakeholders are reluctant to the entry of mining because they feel that they do not need to submit to a dangerous form of development strategy when they can improve and make their development sustainable through eco-tourism.

Another issue is the perceived negative effect of mining in women empowerment since winemaking is generally a gendered industry. Winemaking is comprised entirely of IP women and through the industry. Women have achieved economic independence and a renewed status in the community. Being at the core of winemaking, IP women in Adams become a significant labor force in the socio-economic development of the town. The involvement of IP women in an important economic industry establishes the claim of radical feminists such as Vandana Shiva and Sandra Harding that development can only truly be represented when women are seen as important contributors in the labor force on a par with men.

The lives of the winemakers are also intertwined with the environment. This tie between the environment and the people presents why there are efforts to protect the forest and why there is a solid stance to resist the entry of mining in the community. Underlying this important connection is the involvement of the concept of identity and culture. The environment and the winemaking activity serve as cohesive forces in maintaining the stability of the culture and the cohesion of community members. Saliiently, the role of the environment in enmeshing diverse ethnic identities to form a solid community is crystallized in winemaking as the townspeople identify themselves as community members of Adams sharing the endowment of their environment and not as heterogeneous groups competing for same resources.

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Technology Innovation and Learning Media in Industrial Revolution Era 4.0 (Blended Learning) in Physical Education

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ABSTRACT

Innovation in educational field is carried out to solve educational problems and prepare all aspects of education to try to deal with the development of technological disruption. Educational innovations are carried out to solve educational problems and prepare all aspects of education to try to deal with the development of technological disruption. Educators and students in the digital age, can easily access information about physical literacy, as manifested in physical education. Blended learning as learning centered on the development of educational technology by combining face-to-face (face to face), offline and online as well as helping the process of accelerating education, one of which is by implementing flip classroom. The main purpose of physical education learning based on blended learning seeks to improve movement skills and physical activities for students. The research uses descriptive survey method, starting from identifying the needs, designing the system to be made and implementing a learning system based on blended learning. Data collected through questionnaires and structured interviews. The findings show an increase, first 90% of students become more focused, disciplined, innovative, creative, and interactive in physical education learning. Second, 85% of students are able to implement student center learning and 4C in physical education learning. Third, 87% of students learn to use ICT-based teaching materials (e-learning in the form of LMS) and digital learning resources (videos and e-books) in creating cognitive, psychomotor and character development.

Keywords: Technology Innovation, Industrial Revolution Era 4.0, Physical Education

INTRODUCTION

Physical education is part of education that prioritizes physical activity and the promotion of healthy living for physical, mental, social, emotional, and character growth and development. Physical education has been situated as the primary vehicle for children and adolescents to develop physical literacy. The intended purpose of physical education is to develop students' appropriate skills, help them understand strategies for moving within a specific environment, and to understand how this affects their health, rather than simply providing students with an opportunity to become physically fit within lessons. Physical literacy as a multidimensional disposition acquired by individuals encompassing "the motivation, confidence, physical competence, knowledge and understanding to maintain physical activity throughout the lifecourse (Sum, K. W. R, Wallhead, T., Ha, S. C. A. and Sit, H. P. C., 2018).

Sports publicity has increased more it has spread very much fast to all over the world. The field of physical education (PE) and sports can make a significant contribution to the role that technologies play in our lives (Al Qudah, Rashid, Iffah and Al Ani 2018). The utilization of Internet-based technologies in education has been growing at a rapid rate. We report on research which examined teachers' views of the implementation of a programme involving both face-to-face and online contact between pupils. Recent times have seen a rapid growth in demand for online access and provision of learning resources online. Higher education has been actively encouraged to find more effective and flexible delivery models to provide all students with access to quality learning experiences yet also meet institutional imperatives for efficiency and accountability (Alruwai, M. E., 2015).

E-learning and the role of technology in workplace learning have been high-profile topics in academic and practitioner HRD publications for some years (Margaryan, A., Collis, B., & Cooke, A., 2004). In practice, e-learning has frequently been implemented by retaining a focus on the delivery of existing content, albeit in flexible multimedia packaging. Discuss with it, blended learning is one of the most important pedagogical formats that can enhance student learning, optimize the use of active learning

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strategies, and potentially improve student learning outcomes (De George-Walker, L., and Keeffe, M., 2010). Blended learning (BL) is learning that is facilitated by the effective combination of different modes of delivery, models of teaching and styles of learning (Tsai, C.W., Shen, P. Di, & Tsai, M.C., 2011). Blended learning method with one of the learning components using interactive media, this as a solution to adjust learning styles at the moment. Blended learning aims to build a balance between online learning and face-to-face learning (Purvis, A.J., Aspden, L.J., Bannister, P.W. & Helm, P.A., 2011). The existence of offline and online learning in blended learning can help facilitate the delivery of aspects of knowledge to students and can help students in understanding the learning process of motion. Mirriahi, N., Alonzo, D., McIntyre, S., Kilgyte, G. and Fox, B (2015) Constructivistic learning theory allows students to build knowledge and learning skills in blended learning through their actual experiences in a professional manner. Therefore, blended learning can be considered an advantageous instructional model because it can be designed in a manner that can encourage students to become actively engaged in the instructional process. Blended learning is the seamless amalgamation of carefully selected online modules with face-to-face instruction (Austin, R., Rickard, A. & Reilly, Jacqueline, 2017). In this sense, physical education teachers have a critical role in developing student physical literacy such that future generations have the “motivation, confidence, physical competence, knowledge, and understanding to value and take responsibility for maintaining purposeful physical pursuits and activities throughout the life course.

RESEARCH METHOD

The method used in this research is research using descriptive survey methods, starting from identifying the needs, designing the system to be created and implementing a learning system based on blended learning. Research activities carried out by the following steps. First, conducting a needs analysis to identify the components needed to create a learning media system design. Second, design learning management system designs with schoology applications that have functions and specifications. Third, activate and verify schoology application accounts in the learning sequence. Fourth, conduct a performance test of the performance of a blended learning system. Fifth, the implementation of a learning system based on blended learning. The flow of research procedures carried out, as follows:

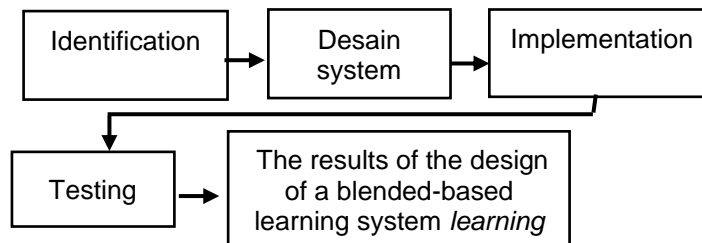


Figure 1. Research Flow

RESULTS AND DISCUSSION

Physical education teaching patterns can be divided into several stages: (a) introducing what will be learned and warming up; (b) skills development that contains introducing skills learned; (c) development of skills that contain learning skills; (d) the development of skills that contain correcting movements when things go wrong; (e) skills development that contains the application of skills; and (f) appeals and conclusions. Data collected through questionnaires and structured interviews. The findings indicate that the briefing model must consist based on: (1) core competencies and basic competencies; (2) Collaboration between lecturers and teachers with multi-aspects, namely pedagogical, personal, professional, and social aspects; (3) sharing learning resources by utilizing the advantages of learning resources on campus and partner schools. Based on the 3 things, the effectiveness of the use of physical education teaching material using Schoology was measured by using an assessment of 45 students in the form of a questionnaire with 21 statements divided into 3 aspects namely ease, attractiveness, and usefulness. The following results from filling out the effectiveness questionnaire using physical education teaching material using Schoology. The research results obtained in the form of an increase in physical education learning achievement; First, 90% of students become more focused, disciplined, innovative, creative, and interactive in physical education learning. Second, 85% of students implement student center learning and 4C in physical education learning. Third 87% of students learn to use ICT-based teaching materials (e-learning in the form of LMS) and digital learning resources (videos and e-books) in creating cognitive, psychomotor and character development. The

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implementation of blended learning, creating changes in the learning climate, supporting school equipment and collaborating educators with students are the keys to successful learning (Francis, R. & Shannon, S.J., 2013).

CONCLUSIONS

There are three conclusions of the results in the study. First, the needs needed to create a learning atmosphere and climate. Second, develop strategies, approaches, and learning models for student center learning and 4C. Third, creating a technological innovation and learning media 4.0 (blended learning), especially in physical education in schools that serves to help and facilitate the learning process from introduction, core to cover on each core competency / basic based on scientific methods. Based on the conclusions, there are two suggestions put forward. First, the learning media that has been designed can be developed with its functions and uses. Second, the use of the concept of blended learning in the learning process can be applied from elementary school level to university level. In essence, technology as a tool and interaction between teachers and students is a priority for learning.

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Creating good character on problematic students in Indonesia through TPSR model in physical education

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ABSTRACT

The presence of TPSR has become an innovation in the world of physical education in Indonesia giving major changes in the learning process. TPSR is a learning model through physical activity that teaches the value of life. The aim of this study was to examine the effectiveness of TPSR model at the high school level that was integrated in physical education learning, as an effort to create good character for the students. This is a quantitative study with a quasi-experimental method using comparison control groups. The participants of this study were students with poor character numbering sixty students with ages ranging from eight tonineteen years. The good character questionnaire is used as an instrument for measuring good character. The result of the study showed a significance difference in the good character of student in the experimental group (TPSR) before and after intervention of TPSR program and there was no difference in the good character of the students in the control group before and after the TTM intervention was given. The conclusion is the implementation of the TPSR model in PE learning as a pedagogical tool for creating good character through this research was successful or has proven its effectiveness.

Keywords: Problematic Students, PSR Model, Physical Education

INTRODUCTION

The phenomenon on the 21st century era shows that Indonesia has a moral decline on male and female students. The behavioral and social moral crises issues occur in the school of Indonesia or in the world which include bullying, drug addiction, skipping school, free sex, racial and cultural issues and conflicts between the students (Cothran, 2010;2014). The teacher has discussed about the issue of negative behavior that are often done by the students during the physical education (PE) classes, this negative behavior was disturb the teacher work, the most important is the inhibition of knowledge transfer to students (Walsh, Ozaeta, and Wright, 2014). This is a problem that should be solved immediately, this behavior deviation is caused by bad character in each student. Good character can be defined as the attitude or behavior that exists in students that shows good deeds (Pavão *et al*, 2018). Good character is one of the elements in the affective domain which has a very important function and role for students to be successful in their academic and society. Good character is a personal characteristic that exists in every student, which is needed to increase maturity of attitude.

This time, the curriculum in Indonesia focusing on implementing character education in every education area, including physical education. But, the reality there are still many physical education teacher only noticed to the development of the psychomotor domain, and ignore the development of affective domains, so that students have bad character and often did negative behavior that break the rules at school. The development of a good character is a very important goal that must be considered by every teacher, because good character is not formed automatically, but is developed through continuing process in physical education learning. All subjects, including physical education, are required to contribute to students' moral or character development. Therefore, through physical education and teacher skills are expected to contribute positively to the development of students' good character. The school environment is the first foundation for instilling and developing good character through physical education learning by integrating an appropriate learning model. The learning model is an approach in teaching practice based on a set of principles and strategies that are appropriate to support the achievement of student learning in all domains. Therefore teachers need to use appropriate instructional models to achieve the expected positive outcomes, the most positive results in students' character

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development is Teaching Personal and Social Responsibility (TPSR). Teaching personal social responsibility was originally developed in the United States by Don Hellison in (1970), Hellison was an academic and teacher who taught in Chicago, with the initial concept of using physical activity-based contexts as a facilitate to help students develop life skills-based values. When initially designed, TPSR was implemented in a physical education program within the school environment, then the TPSR learning model was introduced into a number of different contexts such as after-school programs, clubs and adventure-based programs for children. Therefore, TPSR is an effective learning model in helping students to develop personal and social responsibility attitudes or values of life in a variety of different contexts. The TPSR learning model has a definition as a learning model that uses physical activity as a tool to facilitate the development of attitudes of personal and social responsibility. One of the positive values of TPSR is that it can be integrated into various sports activities, such as: basketball, volleyball, soccer, futsal, handball, physical activity or club coaching programs, as a way in overcoming students who do not have a personal and social responsibility, moral or good character (Gordon, 2017).

The development of the current TPSR learning model is not only focusing on the development of personal and social responsibility aspects, but also the development of a comprehensive affective domain. That the TPSR learning model is one of several sports intervention programs and physical education for moral development in children. Escarti, Pascual, and Goig (2010) TPSR has several levels of responsibility that each student should learn, such as:

- Level 0. Irresponsibility: At this level is the most basic level of responsibility, in the PE learning process students show irresponsibility, such as often insulting and disturbing other students, disrupting the teacher when teaching.
- Level 1. Respect the rights and feelings of others: This level relates to respect. At this level the teacher teaches students how to respect other people in the process of learning physical education. In addition, at this level students are taught to accept differences of opinion. Also, it is intended to improve self-control in students, so that they can control emotions to resolve conflicts peacefully or without disputes.
- Level 2. Participation and effort: At this level, it relates to students' attitudes of participation and effort in completing all the tasks given by the teacher. At this level it is intended to improve students' self-motivation which has a function to participate in all physical activities. At this level, students must be willing to try something new without complaining and saying they can't. explains level II through the slogan "Try your best and don't give up".
- Level 3. Self-direction: At this level, it relates to the attitude of independence. In the PE learning process students are taught to study independently without help from the teacher. This level is intended to improve the goal setting ability and self-standard of students to successfully go through learning.
- Level 4. Caring and helping others: At this level, it relates to caring. In the learning process the teacher teaches students about caring, such as wanting to help teachers to take sports equipment, willing to work together and want to help friends who are injured.
- Level 5. Transfer to the outside of the gym: This TPSR level is the most difficult level, because students should be able to apply levels 1 to 4 outside the context of physical education, such as family or community environments.

The use of the TPSR learning model from Hellison was created until now, and it is always increase significantly and has been used by several countries such as Ireland, Spain (el, et.al), South Korea, Australia and New Zealand (Gordon, 2017; Rica, Alcalá, Río, Calvo, and Rica, 2018). Although the TPSR learning model provides many benefits to the development of the affective domain, there are still limitations to previous study, and it is claimed by some researchers regarding their success in implementing this model. The results study revealed that the TPSR program was difficult to implement and fully adapted so that students were only affected by cognitive response, this was because the teacher did not understand the contents of the TPSR theory so that the implementation of the program did not match the framework. Further issues regarding the limitation of TPSR are revealed previous study although this learning model has been around for more than two decades, this model has not been adopted by teachers and still remains as innovation in physical education (Parker). Regarding the limitation of TPSR in some previous studies, it is similar to the problems that exist in Indonesia, although TPSR is already well-known in several European countries and Asia, but this model has not been fully adopted by teachers in the physical education learning process. Therefore, further research is needed to overcome this problem, so that later it can be known accurately the effectiveness of TPSR.

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In several other countries such as: Spain, America, Canada and others, TPSR is effective in developing several aspects, such as: personal and social responsibility, discipline, emotional, and self-efficacy. But unfortunately, until now there have been no empirical studies with quantitative experimental methodologies that discuss TPSR with good character. Besides that, in Indonesia TPSR still has doubt about its effectiveness in developing aspects in the affective domain, because it is constrained by differences in culture, education, and student character between countries in Europe and Indonesia. Therefore, the hypothesis in this study is that TPSR has effectiveness in creating a good character for every student who has problems. So, the purpose of this study is to examine the effectiveness of the TPSR learning model at the high school level which is integrated into physical education learning, as an effort to create a good character.

RESEARCH METHOD

This is a quantitative study with a quasi-experimental method with pre-test and post-test design using comparison control groups.

The participants of this study were students with poor character (n = 60 boy) aged 18 to 19 years, from several well-known schools that had naughty or problematic students in the city of Cianjur (Indonesia). The participants in the experimental group (TPSR) were 30 students who had bad characters (ie smoking, brawls, fighting teachers, escaping from school) and for the control group (TTM) as many as 30 students from several high schools in the city of Cianjur (Indonesia). Two PE specialist teachers aged 25-40 years, from several high schools in Indonesia with teaching experience between 5 and 20 years, also agreed to participate in this study.

A good character instrument can use a questionnaire from Lickona. Good character indicators include: (i) moral knowing, (ii) moral feeling and (iii) moral action. This instrument has 30 question items. The assessment used is in the form of a Likert scale whose scores range from five (strongly agree), four (agree), three (disagree) two (disagree) one (strongly disagree). This instrument has been examined and has validity (0.930) and reliability (0.976).

This research was conducted for 12 meetings or 2 months, with frequency three times a week in PE classes at the school gymnasiums in Indonesia, located in urban areas in the city of Cianjur. The first author is responsible for implementing a TPSR-based program, two Indonesian teachers who participated in this study were responsible for teaching in the control group. In session 1, all subjects conducted a pre-test, which was to fill out a good character questionnaire, then in session 2 giving the intervention program between the experimental group (TPSR) and control (TTM) until session 11 and session 12 subjects filled out a good character questionnaire. This study is in accordance with the Declaration of Helsinki regarding the use of human subjects. TPSR strategies are presented in Table I.

Table 1. TPSR Strategy

Strategy	Description	The session lasted
Relational Time	The teacher tries to establish harmonious relationships with students, by: giving motivation, or praising students' strengths.	5 Minute
Awareness Talks	The teacher explains each level in responsibility, such as level I to IV and in this session students make behavioral contracts with the teacher regarding the target level of responsibility to be learned.	10 Minute
Physical Activity Plan	The teacher divides students into small groups consisting of 3-7 people to carry out physical activities with the aim of increasing levels I through IV.	60 Minute
Group Meetings	The teacher provides an opportunity for students to express their opinions about the TPSR learning process that was carried out at that time.	10 Minute
Reflection Time	The teacher evaluates the behavior of responsibilities that have been contracted by students.	5 Minute

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The TPSR strategy (Table 1) is implemented to provide guidance on the implementation of the program in the practice of TPSR learning, so that each level of responsibility can be learned by students optimally.

Table 2. TPSR intervention program

Session	Responsibility Level	Learning Activities	Tasks
1	Pre-Test		
2-4	Respect I	Handball	Each team will be competed 7 vs 7 and the losing team must be willing to be replaced by another team.
5-6	Participation and Effort II	Hockey	Students participate in learning push blows during hot weather.
7-9	Self-Direction III	Martial Arts (Silat)	Students learn silat punch techniques independently.
10-11	Caring and Helping others IV	Basketball	Students should be able to work with their teammates in game situations.
12	Post-Test		

Data analysis

Statistical analysis uses SPSS (version 22.0). Descriptive statistics are calculated mean and standard deviation were obtained for each group during pre-test and post-tests (Wright, Li, Ding, and Pickering, 2014). The Kolmogorov-Smirnov test ($n > 50$) was used to assess the normality of data distribution. It was observed that the sample was normally distributed. Parametric tests were used through ANOVA to make changes after being given an intervention program. The significant level of $p < \alpha 0.05$ was selected.

RESULTS AND DISCUSSION

The results of statistical descriptive studies (mean, standard deviation) are presented in Table 3 and the ANOVA results are presented in Table 4.

Table 3. Mean and standard deviation

Variables	Experimental (TPSR) (n=30)			Control (TTM) (n=30)			
	M	SD	Std. Error	M	SD	Std. Error	
Good Character	Pre-Test	34.73	2.741	.500	33.07	4.961	.906
	Post-Test	41.67	4.180	.763	34.30	1.664	.304

Table 4. ANOVA effects two model on good character

Variables	N	Mean Square	F-Value (2.000)	p	
Experimental (TPSR)	Pre-Test	30	721.067	57.722	.000
	Post-Test				
Control (TTM)	Pre-Test	30	22.817	1.666	.202
	Post-Test				

Table 4 shows the effect of the program of two learning models on student good character. The results showed a difference in the good character of students in the experimental group (TPSR) before and

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after the TPSR program intervention $F(2,000) = 57,722$, $p \leq 0.05$ and there was no difference in good character of the students in the control group before and after the TTM program intervention $F(2,000) = 1,666$, $p \geq 0.05$.

Examining the effectiveness of the TPSR learning model to create good student character is the aim of this study. The results of this study are in accordance with the hypothesis that we propose that the TPSR model can create good character in each student. Good character of students can develop because they are able to learn levels 1 through IV optimally. Respectful level I before giving the TPSR model intervention, students have poor respect, such as: often disturbing other students while studying, often insulting the teacher and not listening to his words, but after giving the intervention students experience a change of respect, such as: students learn seriously during the PE class, students no longer insult the teacher and want to listen to all instructions given by the teacher. Level II participation and effort before giving TPSR model intervention, students do not have self-motivation so that they do learning activities not seriously and often joke with their friends. Then there was a change in attitude of participation and effort after they got the intervention, such as students have a willingness to take part in all learning activities even though the weather was hot, willingness to learn difficult techniques in hockey games and trying to win the game organized by the teacher. Similar to Level III self-direction before the TPSR intervention, students cannot work on learning tasks independently, they always ask the teacher for help or cheat on friends who are smarter and after the intervention changes student behavior is very visible, such as being able to do difficult learning assignments without help from friends or teachers, they are able to set goal settings for their learning assignments. Whereas, level IV carries out changes that initially do not want to help injured students become caring, and are able to work together when defending and attacking well. Therefore, through this study, it can be seen clearly that in order to create a good character, a teacher should teach each level in the TPSR to students. 'Good character' is in terms of developing personal and social responsibility. So to build good character in students, it must increase all levels of personal and social responsibility. The results of this study are similar to other studies which reveal that the TPSR learning model was created in an effort to help students build their character through physical activity.

CONCLUSIONS

The implementation of the TPSR model in PE learning as a pedagogical tool for creating good character through this study was declared successful or has proven its effectiveness. The TPSR program has a significant positive effect in the future, therefore two PE teachers involved in this study must implement the TPSR program in schools in their respective regions. Future research must be carried out with different content, for example discussing TPSR and good character with samples of soccer athletes, martial arts, handball that have less good character (ie aggressive, unsportsmanlike, doping) or PE teachers who having a character who is not disciplined or angry, the use of a control group must also be considered, for example comparing TPSR with SEM, TGM or TGT, so that there is an idea of novelty in future research.

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The Role of Life Maps in Writing Student Essays

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ABSTRACT

This study aims to describe the students' ability in essays writing based on life maps. Students write their essays based on their interpretation of the life map. Students self-expressions, which are ideas, thoughts, feelings, imagination, and intuition are developed based on the life map that previously written. As a non-academic text, essays able to facilitate the writers' creativity in languages proficiency. Moreover, the Life Map is used as a tool to change the negative stigma, from a boring subject into a fun subject so that its role as a personality subject can be realized. The descriptive qualitative research method is used to achieve these objectives. The research subjects are 34 first-semester students of the Indonesian Language and Literature Education Program. Data in the form of language units in the essay are analyzed and interpreted for their role. While the reflective lectures journals are used as secondary data. The results showed that all students (100%) recognized the life map as a motivator for them to take Indonesian language courses. This finding is also strengthened by other evidence, which are the observation sheets that capture the students' responsive and creative attitude in creating life maps and transform them into an essay form. Student language creativity can be identified in the foreword words of the essays that usually consists of wisdom words of life values. These expressions mark the students' commitment to a meaningful life.

Keywords: Life maps, Student, Essay

INTRODUCTION

Today the role of maps is very important in various fields of life. There are world maps, concept maps from Tony Buzan, digital maps Hati, Suprayogi & Sasmito (2013) and other maps. This study examines one map, which is a life map (Ibrahim, 2004). Ideally, life must be organized and well planned. The arrangement of the life plan is commonly called the life map. Analogous to the map of life, even writing activities, ideally an activity structuring ideas, feelings, dreams, imagination, and so on. With this analogy, this study seeks to examine the role of life maps in student writing activities, especially essay writing. Essay writing is one type of self-expression activities. This activity is relevant to Indonesian lecture material in Higher Education (Nurwardani et.al., 2006). Efforts to foster self-expression and academic abilities are carried out in a variety of ways, ranging from studying teaching materials Wardani (2018), learning media Suryaman (2010), to Student Learning Centers Rejeki et.al. (2018).

Why does writing an essay need to be facilitated with a life map? Any writing skills still need to be fought for up to now, because writing skills are still considered difficult (Kinkead & Ugan, 1984; Nofiyanti, Sukmawati & Zenab, 2018). Previous studies, life maps can improve the ability to write complex procedure text high school students (Maryam & Adawiyah, 2019). With this success, this study assumes that life maps can be empowered in essay writing activities. What is the role of life maps in student essay writing activities? That question is a problem in this study. Considering that in addition to being considered difficult, in general, Indonesian language learning is still considered boring (Ansoriyah & Rahmat, 2018). Therefore, this lecture writing must be able to change the paradigm from boring to fun.

A person to become skilled must be given hands-on experience and lots of practice. This is in line with the opinion of Sellers Napitupulu (2010) who states that creative writing exercises can help students develop writing habits and skills that ultimately produce good writing for each type of writing (genre). Indonesian teaching materials for Higher Education compiled are dominated by writing, academic and non-academic skills. If viewed in terms of difficulties, of course, the academic text is more difficult. Considering this study was conducted at the beginning of the semester, the first and second meetings of the lecture, it focuses on easier skills, namely writing essays as one type of non-academic text.

An essay is a short article that is compiled based on the view of the author so that it is subjective (Maryam, 2007). Furthermore, Maryam explained that in the essay, the writer was given the freedom to

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look at various aspects of his interest so that the unique form and content of the essay is very possible. The winning essay will depend on the creativity of the writers' language. In this study too, students are given freedom. To be able to express themselves, students previously compiled a life map.

To prepare a superior generation of Indonesia, this study seeks to facilitate students to reveal a life map that is the agenda of student life activities. The objectives of this study clearly describe the following points. a) match between the life map and the essay, b) the benefits of the essay for the reader. Both of these objectives were pursued in this study. As the Indonesian subject is known as one of the personality courses, essay writing in this study is also one of the achievements of lectures regarding attitudes and values, knowledge, general skills, and special skills (Suwandi, et.al., 2016).

RESEARCH METHOD

This study used the descriptive qualitative method. The research subjects were students of the Indonesian Language and Literature Education Study Program Suryakencana University Semester I who contracted Indonesian subjects as many as 34 people. Relevant to the research objective, this research data is in the form of life maps and language units. The suitability between life maps and essays is determined based on a number of indicators, namely the ability to determine the number of targets, the elaboration of viewpoints, the development of essay content, experiences, ideas, feelings, imagination, and intuition.

After completion, students send it in the online version, which is published by WashApp Group employees. By publishing it in the application, students become motivated to finish it immediately. The essay described is obtained from the results of the Indonesian lecture. At the beginning of the lecture, after students learn about the Semester Lecture Plan, students are asked to draw up a life map. In the second meeting, students were asked to decipher life maps into essays. Each lecture is made a reflective journal which is also a logbook and observation sheet. The data processing is based on aspects that mark the suitability of the life map with the essay and the benefits for the reader.

RESULTS AND DISCUSSION

Conformity between the Map of Life with Essays

An important finding of this study was to obtain a student life map that facilitated essay writing. The assessment is based on the suitability of the life map with the essay. This is seen as very important in an essay (O'Shea, 2000). The following clearly presents one example of the compatibility between the essay and the life map.

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Figure 1. Life Map

(1) Hidup itu seperti sepeda. (2) Agar tetap seimbang, maka kau harus terus bergerak tidak hanya berbaring dan menuai mimpi-mimpi semu, tetapi harus bergerak maju, berusaha untuk mengejar cita dan harapan untuk masa depan kelak. (3) Mimpi masa depan yang bahagia adalah hal penting yang harus diwujudkan dalam hidup. (4) Untuk itu kita harus mempunyai keberanian untuk merancang mimpi-mimpi ke depannya. (5) Apakah semua orang berhak bermimpi? (6) Seperti saya yang mempunyai banyak mimpi yang akan saya mulai tahun ini ketika pertama masuk di bangku perkuliahan di Universitas Suryakencana. (7) Hari demi hari saya lewati dengan mulai ikut aktif di keorganisasian dan belajar dengan sungguh-sungguh agar kelak di tahun yang telah saya targetkan saya dapat lulus perkuliahan dengan IPK yang tinggi.

(8) Pada tahun 2024 saya bisa mempunyai teman hidup serta bisa menjadi seorang pengajar (guru) yang bermanfaat bagi murid-murid saya kelak, seperti apa yang telah saya cita-citakan sejak kecil. (9) Cepat diangkat menjadi PNS dan bisa mempunyai rumah juga kendaraan sendiri. (10) Belum cukup sampai disitu, mimpi saya masih banyak. (11) Saya ingin bisa membangun sebuah rumah baca, ingin mempunyai banyak usaha dan membuka lapangan pekerjaan agar tidak banyak orang-orang yang menganggur lagi nantinya. (12) Ingin bisa memberangkatkan haji orang tua, dan mimpi terakhir saya ingin bisa hidup bahagia bersama keluarga dan orang-orang yang saya kasahi.

(13) Itulah mimpi-mimpi saya pada sepuluh tahun yang akan data. (14) Semoga semua dapat terwujud, karena saya yakin bahwa sebuah proses tidak akan mengkhianati hasil. (15) Seperti sebuah pembahasan "Rendah gunung, tinggi harapan". (16) Aku seseorang yang memiliki cita-cita besar dan menaruh harapan tinggi kepada sesuatu yaitu mimpiku.

Figure 2. Essay

Figure1 and 2. Relevance between Life Map and Essay

In the picture above, you can see the change from a life map to an essay. Formally, life maps act as schemata in writing Swales (1990), organizational patterns and mental approaches Atwan R and Vesterman (1987), before they are developed into writing. Indeed a variety of ways to guide developing writing. Some use questions (McCrimmon, 1967). Previously, scientific papers have tested schemata in the form of data charts (Maryam, 2012). The benefits of the scheme can maintain the originality of the writing (Maryam, 2015). The essay opener in Figure 1 is a wise sentence that motivates the writer. Not only these essays, but other essays were also opened with wise words, including the following.

1. Mimpiku teramat tinggi, tapi restu orang tua yang mesti dijunjung tinggi. (The dream is very high, but the blessing of parents must be upheld.)
2. Simpanlah mimpimu setinggi bintang kejora, dan jangan simpan mimpimu dibawah bumi. (Keep your dreams as high as the Morning Star, and don't keep your dreams below the earth.)

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3. Dalam kerendahan hati ada ketinggian budi, dalam kemiskinan harta ada kekayaan jiwa dalam kesempitan hidup ada kekuasaan ilmu. (In humility there is the height of mind, in poverty there is a wealth of life in the narrowness of life there is the power of science.)

The compiled essay is a type of narrative (Kaul, 2002). The writers write about him, his life plan. The sequence contained in the life map guides the sequence of development in student essays. Guidance in writing is very necessary, remembering to write is not easy, but can be learned (Kinkead & Ugan, 1984). The conformity is marked by (a) the number of targets (points), (b) elaboration of viewpoints, (c) development, (d) experiences, (e) ideas, (f) feelings, (g) imagination, and (h) intuition. Based on the analysis results, the percentage of suitability between the life map and the essay is as follows.

From various aspects, the suitability of the map with the essay, namely aspects of the number of targets, ideas, feelings, elaboration, experience, intuition. Everything in the Good category. The Very Good category is only one aspect, namely the development of essays. In other words, the ability of students to adjust life maps with an average essay Good. Overall, it shows that the suitability of the life map with essays is categorized as Very Good (32%), Good (54%), and Enough (14%). Visually can be described in the following.

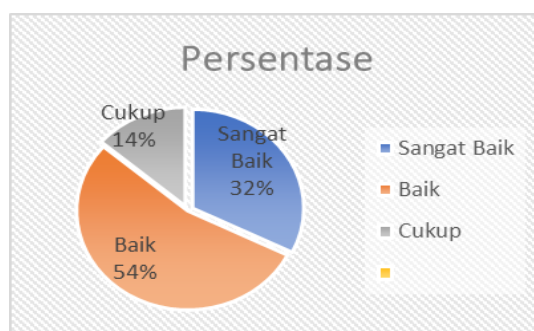


Figure 3. Percentage of Relevance

The percentage in Figure 3 above is supported by reflective journals and observation sheets that illustrate the enthusiasm of students when they take lectures to write essays with life maps. In class, the students seemed to be actively involved directly in lectures.

Benefits of Essays for Readers

Relevant to the scientific approach, the final part of the lecture process communicates to other parties. After being collected, the essays are distributed back to be read by other parties. So that there is no jump in learning or assessment Maryam (2007) the initial step of communicating the work to the closest, ie classmates, is peer review. The assessment assigned to the reader is not to provide numerical value, but rather to assess the benefits of the contents of the essay.

The meaningfulness of something will be determined by its usefulness. Likewise, in an essay, ideally, an essay is considered meaningful if the reader can benefit after reading it. Not only written texts, but oral texts can also be taken advantage of for improving language skills (Amalia, 2018). The benefits of the essay according to the readers include: motivating the reader to be brave, don't be afraid of failure, achieve dreams by continuing to learn to achieve the highest knowledge, teach the values of life, teach patience, to achieve those goals there is a process, struggle, God pleases, broadening insight, such as the difference in targets between students and students, using time as well as possible, do not be lazy, and place the prayer of parents, the family is important.

Recognition from the readers it boils down to the benefits of the essay that can strengthen the character. This means that in Indonesian lectures there has been an integration between text, content, and characters.

CONCLUSIONS

Based on the description above, it can be concluded that the life map plays a good role as a guide in developing points of thoughts, feelings, experiences, points of view, imagination, and intuition in essay writing. The benefits of essays for readers are many, namely motivating readers to dare to behave,

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achieve dreams, teach the values of life to broaden horizons, make the best possible time, and look at the prayers of parents and family.

Based on the above, it is implicitly lecturing to write an essay using life maps that have integrated attitudes, knowledge, general and special skills as mandated in Learning Outcomes (Suwandi, et.al., 2016). It is hoped that the essay study can continue on other aspects, both those concerning the author or the authorship.

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Implementation of Civil Desicions in State Court and Various Execution of Indonesian Citizens (The Implementation on Sosiological Point of View)

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ABSTRACT

There are still many things that cannot be implemented on decision of Pengadilan Negeri (State Court) because it is considered not only accordance with the values justice that lives in the community but also creates a sense of justice. The purpose of this study is to point out that sociological approach needs to be implement in PN, according to the theory that community acceptance where the law is enforced, is one of the an indicators there must be recognize by community based on the value of justice that grows and develops in life in society. Whereas according to the theory of Power, sociologically the legal method applies the coercion of the authorities, regardless whether it is accepted or not by the community, with the indicators of coercion by the authorities regardless of whether obedience is due to coercion or not, and does not matter whether or not there is legal awareness that arises in society, as well as whether or not in accordance with the value of a sense of justice in society, of the law that applies to citizens. The method used in this research is descriptive method by document, and interview analysis. The result of this study, showed that in society, based on observations, excesses arise as a result of the implementation of PN decisions that do not reflect sociological enforcement, including (1) Community disobedience to the law in force. (2) Loss of public respect for the judiciary. (3) People tend to find their own way in solving problems outside the legal channels. (4) Horizontal conflict occurs in the community.

Keywords: Civil Decisions, Sosiological, State Court

INTRODUCTION

The Republic of Indonesia is a state based on law based on Pancasila and the 1945 Constitution. Furthermore, Indonesia's statement as a "rule of law" was reaffirmed in the Elucidation of the 1945 Constitution which said that the Indonesian state was a state of law (*rechtstaat*) and not mere power (*machtstaat*). This implies the consequence that all actions taken by the state apparatus and Indonesian citizens must always be based on the law (*Tresna*). The rule of law, according to Rahardjo, (1986) and Manan (1999), has the meaning of power that is limited by law and at the same time states that law is supreme compared to existing instruments of power.

The above shows that the teachings of the state based on the law (*de rechtsstaat* and the rule of law) contain the essence that the law is supreme and the obligation for each state or government to comply with the law (subject to law). There is no power above the law (above to the law). Everything is under the law (under the rule of law). In this connection there cannot be arbitrary power or misuse of power. Therefore state teachings based on the law contain elements of supervision over power so that there is no arbitrariness (Manan, 1999).

As a rule of law, everything that is carried out in the life of the state and society must be within the corridor of the law. That is, in society absolutely necessary law to regulate the relationship between citizens and the relationship between the community and the state.

The law regulates what may and may not be done, or what procedures must be passed, where the sanctions imposed by society for individuals who cannot adjust are strict. The creation of the law is in line with the natural desire of humans to obtain or obtain justice in a shared life as a member of the community, so as to create order and order in a social order (*social order*).

The search and process of justice for the people who need it is left to certain authorized institutions. The court is one of the focuses in resolving disputes between various parties. The court functions as an institution that accepts, examines, and hears and resolves every case submitted to it. The case starts

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with an examination and ends with a decision. However, with the dropping of the church, the problem is not over. This decision must be implemented or carried out.

Decisions of District Court (PN) judges can be carried out or carried out if they have obtained permanent legal force. This means that both the plaintiff and the defendant have accepted the decision well and what needs to be carried out is the decisions of the judge which contain an order for a party to commit an act (Mertokusumo, S., 1993).

PN decisions that have permanent legal force, which are punitive, must be accepted by various parties. Because it has been given the opportunity to take legal action, both resistance, appeal and cassation from various parties, and it is also possible that the parties did not take legal action which means they have received it. Then the consequences, especially to the losing parties, must be carried out or realize the PN decision voluntarily. But if the losing party does not want to carry out voluntarily, then it can be done by force by execution. Thus, in general the execution will be a problem if the losing party is the defendant (Harahap, M.Y., 1991).

With the judge's ruling, the losing party (executed) feels disadvantaged, or even indeed harmed, so that the loser can make legal remedies that are entitled to claim their rights with extraordinary legal remedies in *verstek* cases. The extraordinary legal remedies are, in general, carried out with due regard to matters not shown to the verdict to be executed, but only to the field of implementation or the reasons carried over in that field.

The objectives of extraordinary remedies against execution are: (1) To delay; (2) Cancel the execution by stating the decision to be executed is not binding; and (3) Reducing the value of the amount to be executed. But in practice, legal remedies as an objective of the resistance are carried out by the losing party in a way that is outside the law. For example by mobilizing certain community or community institutions / organizations that are already known and can provide services to obstruct the execution that has been decided by the PN.

Apart from these extrajudicial resistance efforts, it is not uncommon to be caused by PN decisions that do not meet the sense of justice that lives in the community. In that context, executions carried out, for example by bailiffs, only fulfill the juridical element. While the sociological element is lacking or not fulfilled, because the community thinks that the PN decision is unfair and does not comply with norms or rules that apply unwritten in the middle of the community.

On the other hand, as mentioned above, besides only the elements of *jusridis* which are fulfilled, it turns out that based on the author's observations, often the execution of decisions that already have legal force cannot or postponed their implementation and if the execution decision is postponed it will result in losses and it also shows no the existence of legal certainty and legal protection for parties who legally won the case. In fact what happens is negative excesses such as legal regulations that cannot be implemented and enforced, people do not respect the law and people no longer trust the law.

Another negative excess is that even if the execution can be carried out, it is accompanied by various acts of violence from the defeated party. Even people who are provoked are not uncommon to confuse the atmosphere and not only bring about property losses, but also lose lives. Difficult to realize the decision of the implementation of PN in the field to be carried out execution, even though it has obtained permanent legal force, occurs in cases of civil, criminal, and state administration.

Cases that often occur in civil cases such as inheritance cases (examples of cases of land inheritance claims on Diponegoro street, Bandung, West Java or examples of cases involving elementary school inheritance lawsuits in Tasikmalaya, West Java); divorce cases (examples of divorce cases between Bambang Trihatmodjo and Halimah in Jakarta), and so on.

Cases that occur in crimes, for example the case of execution of confiscation of property which is decided by the PN and is the result of corruption in the case of Gayus Tambunan. While cases in state administrative matters, for example the case of housing, villas, and the like construction in the Cianjur Regency, West Java, are prohibited by Regional Regulation because they violate spatial planning and without Building Construction Permit (IMB), but the demolition execution cannot be carried out because the owner has access to power in the Center (Jakarta).

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The series of various PN decisions that could not be executed finally gave a strong impression that legislation is difficult to implement and the law is also difficult to enforce. This fact is contrary to the saying in the famous field of law, namely: "Let the sky fall, the law, must be upright".

Based on this fact, to see the effect of sociology, can be seen through the means of empirical research on community behavior. If the research shows that the public behaves with reference to the whole rule of law, then there is an empirical rule of law. Thus, legal norms reflect the reality that lives in society. With this sociological basis, laws and regulations are made and accepted by the community in a natural and even spontaneous way.

It is better if the sociological ineffectiveness or ineffectiveness can be reviewed through empirical means regarding the behavior of people who do not behave in accordance with the existing legal norms, then there is empirical enforcement of the rule of law. Thus, the norm or rule of law does not reflect the reality that lives in society.

RESEARCH METHOD

The court's verdict is a judge's statement made at a hearing that is open to the public in order to settle and end a civil case (Syahrani, 1988). The definition of "judge's decision", according to Hamzah (1986), is the result or conclusion of a case that has been carefully considered in the form of a decision, both written and oral.

Meanwhile, according to Mertokusumo (1993), a judge's decision is a statement which the judge, as a state official authorized for, is pronounced at the hearing and aims to end or settle a case or dispute between the parties. Furthermore, Sudikno Mertokusumo states that judges' decisions are not only what are called what are called verdicts, but also statements that are stated in written form and then pronounced by judges at court. A draft decision (written) has no power as a decision before it is pronounced in court by a judge (Mertokusumo, 2003).

From the various meanings regarding the "judge's decision" above, it can be concluded that the judge's decision is the final conclusion that has been carefully considered as outlined in written form, then uttered in a session open to the public by the Panel of Judges who are authorized to do so in resolving or ending a dispute between the parties concerned.

Decisions of District Court judges can be carried out if they have obtained permanent legal force. This means that both the plaintiff and the defendant have accepted the decision well and what needs to be carried out is the decisions of the judge that contain an order to a party to commit an act (Mertokusumo, 1993).

Decisions of court judges who have obtained permanent legal force, which are punitive, must be accepted by the parties. For example, in a court decision for a civil case, if the parties do not accept the court's decision, then the party is given the opportunity to take legal action, both resistance, appeal and cassation. However, if those parties do not take legal action, it means they have received it. Then the consequences for the losing party must be carried out or realize the decision voluntarily. But if the defeated party does not want to carry out voluntarily, then it can be done by force by execution (Harahap, 1991).

In principle, execution as a forced act of carrying out court decisions that have permanent legal force (Harahap, 1991). The choice of law with a forced action was made because in reality it was rarely found that court decisions were carried out or realized voluntarily by the defeated party, even though they had obtained permanent legal force.

In the case of court settlement, the procedure must be in accordance with the provisions of the civil procedural law. Civil Procedure Law is a regulation that regulates how to ensure compliance with material civil law by the judge. In other words, Civil Procedure Law is a legal regulation that determines how to guarantee the implementation of material civil law. More concrete about how to file claims for rights, examine and decide, and implement than the decision (Anonim, 2009).

Judges in deciding cases, as mentioned above, must be free and independent, as stated in the 1945 Constitution which states that judicial power is an independent power to administer justice to uphold law and justice. It was further stated that judicial power was exercised by a Supreme Court and the judiciary

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below it within the general court, religious court, military court, state administrative court, and by a Constitutional Court (Soekanto, 1993).

Law Number 48 of 2009 concerning Judicial Power also mentions the freedom of judges to decide cases. However, "the freedom of judges", according to Harahap (1991), should not be interpreted as unlimited freedom by emphasizing the arrogance of power attitude by using the freedom to justify any means. But this freedom is relative, with the following references:

First, applying the law that is sourced from the right and correct legislation in resolving case cases that are being examined, in accordance with the principles and statutes of the law must prevail.

Second, it does not depend on anything or anyone, and therefore is free from any or anyone's influence. Judges or judges, which are places for people to seek justice, must be independent and independent, in the sense of not being dependent or bound to anyone, so they do not have to side with anyone so that the decision is objective. Independence also requires that judges in examining and deciding cases must be free. Thus, the independence of judges can't be separated from the freedom of judges, but it is a unity.

Third, it is not only ideals and desires for every nation, but is a principle or principle in every justice system, because the principle is the embodiment of human ideals. Every justice system everywhere knows and adheres to the principles of independence and freedom of judges or the judiciary.

RESULTS AND DISCUSSION

Decisions of judges that have been handed down, as described above, must then be implemented so that judges' decisions based on the laws and regulations have the power to be enforced effectively. The strength of the enactment of legislation, according to Rahardjo (1986) and Mertokusumo (1993), there are three kinds, namely as follows:

First, the force applies philosophically (*filosofische geltung*) which states that law has the force to apply philosophically if the legal method is in accordance with the ideals of the law (*rechtsidee*) as the highest positive value. To fulfill the philosophical demands, the law must incorporate the ideal element. Second, the force applies juridical (*juristische geltung*) which states that the law has the force of juridical effect if the material and formal requirements for the formation of the law have been met. Third, the force applies sociologically, according to Soekanto (1993) and Mertokusumo (1993), is a reality in society. There are two kinds of forces that apply sociologically to society, namely: (1) Theory of Strength or *Machtstheorie* in which law has power to apply sociologically if enforced by the authorities, regardless of whether the community is accepted or not; and (2) Theory of Recognition or *Anerkennungstheorie* where the law has sociological force if accepted and recognized by the citizens.

Regarding Sociological Enforcement in the Implementation of Court Decisions. Sociological validity based on Power Theory holds that positive law that gets legitimacy in society through formal institutions in achieving the legal goals provided by the state, such as courts, prosecutors, the police, and so on, regardless of whether the jurisdiction is based on compulsion because of fear of power, or because of lack of legal awareness or other causes.

The meaning of "social validity" according to the Power Theory above does not consider the aspects of sociological validity, but rather emphasizes the aspect of power. In this case, the power of legislators, such as between the DPR (the House of Representatives) and the Government or between the DPRD (the House of Representatives) Regional) and Regional Government, so it is not impossible to ignore the sense of community justice and community legal awareness.

Regarding justice, according to Huijbers, (1990), it must be closely intertwined with the law. Laws are fair laws; if a law (law) is contrary to the principles of justice, then the law is no longer normative and cannot be said to be law anymore. The law only becomes law if it meets the principles of justice. In other words, justice is a constitutive element of all notions of law.

Meanwhile, regarding the legal awareness of the community can't be separated from the discussion about compliance or public observance of the law. Real behavior is manifested in legal compliance, but this does not automatically mean that the law has public support. Community support can be obtained if legal compliance is based on satisfaction, because satisfaction is the result of achieving desire and

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justice. In other words, the law will get community support if the law is in accordance with the values that grow and develop in society.

Legal awareness is often associated with legal effectiveness. In other words, legal awareness concerns the issue of whether certain legal provisions really function or not in society? The relationship between legal awareness and legal compliance can be described in a hypothesis, namely high legal awareness raises compliance with law; while low legal awareness results in non-compliance with the law.

Meanwhile, sociological validity according to the Theory of Recognition relates to the people's acceptance of the laws and regulations. If the laws and regulations are derived from the wishes of the community, it will have implications for the community's recognition of these laws and regulations, so that acceptance and recognition will lead to effectiveness in their implementation. Conversely, if the laws and regulations are not derived from the wishes of the community, it will have implications for the community's rejection of these laws and regulations. The community's rejection shows the ineffectiveness of the implementation of laws and regulations.

In the implementation of court decisions must reflect the demands of the community's need for legal norms in accordance with community legal awareness, so that it can be applied sociologically (sociologische gelding). That means reflecting the reality of life in society, which requires resolution, so that the implementation of court decisions obtain sociological validity. This also means that the implementation of court decisions has sociological validity, not just obtaining juridical and philosophical validity.

In the context of obtaining sociological validity in the implementation of court decisions, one way for judges to formulate and explore living values among the people (community) must try to "plunge" into the midst of society with the aim of getting to know, feel, and able to explore the feelings of law and a sense of justice that lives in the community. It is hoped that, by using this method, the judge can make decisions in accordance with the law and a sense of justice that lives in the community.

The distinctive characteristic of a judge's decision that fulfills a sense of community justice can be seen from the community's reaction to the judge's decision in question. Even though there are those who are not satisfied with the verdict that fulfills that sense of justice, but the verdict of such a judge will certainly never get turmoil in the field. Because deep down, those who are dissatisfied actually accept and understand the truth of the decision.

Sociological behavior in the implementation of court decisions also implies that the law must be returned to its morality, cultural roots, and religious roots, because only in this way will people feel that the law is compatible with the intrinsic values they profess. As long as the rule of law is not in accordance with the intrinsic values of the citizens, the legal obedience that arises is merely compliance which is compliance, which is obedience only because of fear of sanctions, and not compliance that is internalization, which is obedience because it truly considers the rule of law to be suitable with intrinsic beliefs. Concerning excesses arising from the implementation of district court decisions that do not reflect sociological applicability.

The judiciary, which should be the last fortress to obtain justice, is often unable to provide the desired justice, in accordance with the principles of free and impartial judiciary. This did not materialize because in carrying out their duties, the judge sided with one of the parties having a case, not the truth and justice. In fact, free and impartial justice must absolutely exist in every country that claims to be a state of law, such as the state of Indonesia. In carrying out their judicial duties, judges must not be influenced by anyone, either because of the interests of office (politics) or the interests of money (economy).

In addition, in determining judgments and making decisions, judges do not live up to the values of justice that live in the midst of society. Judges should not only act as the "mouth" of laws or regulations, but also "spokesmen" for justice that voice feelings of justice that live in the midst of society. As a result of judges not acting so, many of the judges' decisions get blasphemous community because it cannot fulfill the sense of justice of the community.

Every society always has a culture that is an individual characteristic of its members collectively, one of which is a legal culture, namely an understanding of the norms or values that live in everyday life, both written and unwritten, which apply in society and is a reflection of the collective will of its members which is a good and bad measure of a legal act and a mirror of the sense of justice of the community. Therefore,

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every judge who hears a case is always required to explore, follow, and understand the legal values and a sense of justice that lives in the community as determined by article 5 paragraph (1) of Law Number 48 Year 2009 concerning Judicial Power.

The next excess of the lack of sociological validity in relation to the implementation of judges' decisions is obedience or compliance with the law which is influenced by community legal awareness. If the legal awareness of the community is low, it results in non-compliance with the law. Conversely, if the community's legal awareness is high, then the community's record of the law will also be high.

High public compliance with the law will in turn make the law effective which is posited by state power. Therefore, compliance is not always based on the strength of positive legal sanctions that exist. People's willingness to voluntarily obey the law is also an important prerequisite in law enforcement. Without a willingness to voluntarily follow what is ordered or prohibited by law, there will be no sanction as hard as anything that can fully control the subject's behavior. There are always gaps and opportunities, however small, that someone will use to avoid (with all calculated risks) from legal control. Willingness to obey the law is also a deciding factor for sociological application of law.

The next excess of the implementation of court decisions that are sociologically ineffective is the loss of respect and trust in the judiciary, including the judges, which have lately been virtually non-existent. So that people no longer optimally submit legal issues to the court. Except, if there is a guarantee that the legal system can run properly, then it can be pursued by law. If there is no guarantee or guarantee that the legal system can be implemented, an alternative channel must be sought to resolve disputes experienced by the community; because the completion of the dispute will be detrimental to all parties, especially those who are legally won by the judge.

At least the losses suffered by the parties won by the court's decision include time and material. Another disadvantage that is more severe is the lack of consistency in the application of regulations by court officials. This can be witnessed by the people in plain view as a result of unprofessional law enforcement officials who disappoint the people. All of this further degrades the image of law enforcement which, according to Friedman, (1975), (1984), and (2011) is influenced by the legal structure; legal substance (legal substance), and legal culture (legal culture).

Lawrence Friedman further mentioned three factors that influence law enforcement. First, the legal substance factor, what is meant is the rules, norms, real patterns of human behavior that are in the system. Substance means the products produced by people who are in the legal system, which includes the decisions they issue and the new rules they draft. The substance also includes living law and not just the rules in the law.

Second, structural factors, in this case, are the parts that persist, the parts that give some form, and the limits to the whole. In Indonesia, for example, when talking about the structure of the Indonesian legal system, it includes the structure of law enforcement institutions, such as the police, prosecutors and courts. Also included are structural elements, the number and type of court, the jurisdiction of the type of case authorized to be examined, and how and why it happened. Clearly, the structure is like a still photo that stops motion.

Third, cultural factors, in this case human attitudes and legal systems, beliefs, values, thoughts and expectations. In other words, legal culture is a state of mind that determines how law is used, avoided, or misused. Without legal culture, powerless laws are like dead fish lying in a basket and not like fish that live in the sea (Friedman, 1975, 1984, and 2011).

In brief, other ways to describe the three elements of the legal system are as follows: (1) The structure is likened to a machine; (2) The substance is what is done and what is produced by the machine; and (3) Legal culture is anything or anyone who decides to turn on or turn off the machine, and decides how the machine is used.

Apart from the three influential elements in law enforcement, as outlined by Lawrence Friedman above, in the context of law enforcement, which must always be considered is justice, legal usefulness, and legal certainty (*rechtssicherheit*) (Friedman, 1975). Because, in a good law is if it contains the values of justice for all people and benefits, in addition to the community expects legal certainty. Because with the existence of legal certainty, the community will be more orderly (Rawls, 1999).

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Normative legal certainty is a rule that is made and promulgated with certainty because it regulates clearly and logically. Clearly in the sense of not causing doubt (multi-interpretation); and logical in the sense of becoming a norm system with other norms so that they do not clash or cause norm conflicts. Conflicts of norms arising from rule uncertainty can take the form of norm contestation, norm reduction, or norm distortion. Thus, legal certainty is not in a vacuum, but in a space surrounded by various factors that influence the weakening or strengthening of legal certainty in resolving disputes.

In addition, other excesses that have been raised by PN (District Court) decisions whose social conduct is not in line with the growing sense of justice in society are the absence of legal protection for various parties. Though the law has a function to provide protection for the interests of various parties without exception. Therefore, legal protection must be implemented so that the interests of various parties can be protected.

CONCLUSIONS

Based on the description above it can be concluded that the sociological effect in the implementation of the District Court's decision, according to the Theory of Recognition, is the rule of law that applies based on community acceptance where the law applies. Thus, the measure is sociologically the measure is community recognition based on a sense of justice that grows in the community. On the contrary, according to the Theory of Power, sociologically, the rule of law applies because of coercion by the authorities, whether accepted or not accepted by the community. Thus, the sociological validity of the measure is the coercion of the authorities which in its form prioritizes sanctions without considering the sense of justice of the community.

The excesses that arise as a result of the implementation of the District Court decisions that do not reflect sociological applicability, namely: (1) loss of public respect for the court institution; (2) community disobedience to law; and (3) people find their own way in solving problems outside the legal channels.

Based on the conclusions above, it can be suggested that sociological behavior in court decisions pronounced by judges should consider the sense of justice that lives in the community, so that such decisions will reduce the negative excesses that arise from court decisions that are solely based on text. Contained in the Act. As for reducing the negative excesses above, the court institution should restore the court's authority so that the decision applies sociologically, in addition to being legal and philosophical, by making decisions that are acceptable or recognized by the public, so that people obey the law and resolve problems stay in the legal channels.

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The Use of STIFin Test and Talents Mapping as an Effort to Find Potential Children in Sekolah Alam Al Izzah

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ABSTRACT

Sekolah Alam Al Izzah Krian Sidoarjo is a modern school that is nature-based by combining intellectuals and Islamic proportionally by implementing a full day school system. In teaching and learning activities, the school is implementing an integrated curriculum and packed through field study activities and natural joint Learning/Belajar Bersama Alam (BBA). The two activities are the result of a combination of learning integration, joyful learning, and cooperatif learning. The learning is also supported by a willingness of educated and competent faculty, varied teaching methods, interaction and fun. The school has always sought to develop the quality of learning, one of which is the implementation of the Stifin test and Talent Mapping test to explore the student's potential. The STIFin test is a test conducted by scanning the ten fingertips of students. The fingerprint carries information about the composition of the nerve structure and is then analyzed and connected with a certain hemispheres that dominant role as an operating system and as well as a machine of intelligence. Stifin divides the intelligence into five parts, namely: 1) Sensing is known for sensory intelligence, 2) Thinking is known for its logic wit, 3) Intuiting is known for his sixth Sense intelligence, 4) Feeling is known for its emotional intelligence, and 5) Insting is known for its seventh sense of intelligence. In addition, schools also use tallents mapping that are applied at the junior high school level. Talents mapping is a way to assess or assess and explore talents (productive characteristics) and our potential strengths with a complete, easy to understand and interesting display of results. By using the two tests to explore intelligence and talent, students are expected to find their talents, students are happier with themselves, and can improve students' abilities in academics or soft skills

Keywords: Stifin Test, Talents Mapping, Sekolah Alam (SA)

INTRODUCTION

Natural schools in Indonesia have started to spread and spread their wings throughout Indonesia. This is caused by several factors, one of which is the community's need for schools related to starting to increase. Society wants sons and daughters to help with nature, foster good social sensitivity with nature, and provide awareness to humans who need nature, and vice versa. Another factor is schools that use special curricula in the daily learning process. The education system used is of course still racing on Law Number 20 Year 2003 concerning the National Education System. For example, Article 3 of Law Number 20 Year 2003 reads: "National education develops capabilities and makes a dignified character and civilization of the nation in the context of intellectual life of the nation, seeks to develop its potential, educate people to become people of faith and to be devoted to God Almighty, moral noble, healthy, knowledgeable, capable, creative, independent, and become citizens who are supported and responsible."

Along with this article, Al Izzah School of Nature (SA) also seeks to develop students' abilities through their talents and interests. Furthermore, SA Al Izzah also directs students to become human beings who have faith and piety to Allah SWT. So many activities have been carried out by SA Al Izzah by involving nature, religious values and the talents or interests of students. Activities that involve akam include: planting onions, watering and caring for plants, giving love to farm animals or pets. Then, activities that implement religious values are saying greetings when coming to school and being welcomed by the teacher, performing sunnah prayers or compulsory by congregation, muroja'ah every morning before giving the subject matter, linking each subject matter to the power of Allah SWT, and memorizing holy verses Al-Qur'an. Furthermore, activities to develop students' interests and talents include: students participating in existing extracurricular activities. Extracurricular activities that can be followed consist of archery, painting, and jujitsu. Activities for students are very numerous and the SA supports it by providing a number of supporting facilities, such as a library, swimming pool, field, school canteen, dining

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room, outbound facilities, green house, gardening area, sand area, fish pond, mini zoo, play outdoor ground, indoor playground, and mosque.

The curriculum used by SA Izzah is to apply three methods, namely Learning with Nature (BBA), Mother Language (BB), and Outbound. SA Al Izzah has a school concept that combines the advantages of learning methods, integrated curriculum and contributive community in order to realize a noble Islamic civilization. The curriculum is a typical curriculum for natural schools and of course SA Al Izzah also applies the education department curriculum. From this school, students will get a curriculum full of moral learning and leadership, talent and life skills, art and creativity, as well as logic and knowledge. But of all that, there are several methods used as a tool to find the intelligence and talents of students in the hope that learning is given in accordance with the needs of students (Conscience, 2017). Wulansari (2016) dan (2018) stated that the BBA Model is a learning model that utilizes nature as a medium as well as learning material. Learners are invited to learn in nature and get learning from nature. In addition, BBA has other uses which can improve the quality of the learning process in elementary school education and specifically the objectives of the BBA are as follows: (a) provide real learning for children, b) provide a learning environment for children, c) provide adequate time and continuous, d) facilitate the learning process of children through interactions with adults and peers, e) facilitate individual learning for children, f) provide opportunities for children to develop aspects of the development of religious and moral values, physical, motor, cognitive, language, social emotional, and art, and g) help the Educational For Sustainable Development Program to develop sustainable education in the field of nature conservation.

Schools always strive to develop the quality of learning, one of which is the application of stifin tests and talent mapping tests to explore the potential of students. The stifin test is a test carried out by scanning students' ten fingertips. Fingerprints carry information about the composition of the nervous system and then analyzed and connected with certain brain hemispheres that dominantly act as the operating system and also become an intelligence machine. Stifin divides intelligence into five parts, namely: 1) Sensing is known as sensory intelligence, 2) Thinking is known as logical intelligence, 3) Intuiting is known as sixth sense intelligence, 4) Feeling is known as emotional intelligence, and 5) Instinct is known as sensory intelligence seventh.

In addition, schools also use aptitude mapping tests that are applied at the junior high school level. Talents mapping is a way to assess or assess and explore talents (productive characteristics) and our potential strengths with a complete, easy to understand and interesting display of results. By using the two tests to explore intelligence and talent, students are expected to find their talents, students are happier with themselves, and can improve students' abilities in academics or soft skills.

RESULTS AND DISCUSSION

STIFin Test

The STIFIn method is an application of the STIFIn concept which compiles theories from psychology, neuroscience, and human resource science. The great principle refers to the concept of a single intelligence from Carl Gustaav Jung (Poniman, 2012). How to find out this intelligence machine with Fingerprint STIFIn, a test conducted by scanning the ten fingertips. Fingerprints that carry information about the composition of the nervous system are then analyzed and linked to certain brain hemispheres that are dominantly acting as the operating system and at the same time becoming a person's intelligence machine. This test is also called the brain test because one of the most important components bestowed upon humans is the brain. Like a machine, the brain is a machine that is amazing and incomparable (Ramly, 2010). Scientists analyze and study the brain with their brainpower. So that comes the formula for the division of the human brain based on the dominance of intelligence. The best known intelligence is Intelligence Quotient (IQ), which almost a hundred years ago was introduced by William Stern which has not taken small attention (Pasiak, 2008).

STIFin divides intelligence into five parts, namely: 1) Sensing, known as sensory intelligence, 2) Thinking, known as logical intelligence, 3) Intuiting, known as sixth sense intelligence, 4) Feeling, known as emotional intelligence, and 5) Instinct. known as the seventh sense intelligence. The following is an explanation of each intelligence section (Poniman, 2017).

Table 1: Five Parts of Intelligence According to STIFin

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No	Intelligence	Information
1.	Sensing	Has the advantage of the five senses that are more sensitive. Stimulus he receives through the five senses tends to be easily captured and responded to. "Sensing" intelligence shows left limbic dominance. In the left limbic there is a thalamus which functions as the center of sense regulation
2.	Thinking	Has advantages in analytical and logical thinking. Individual ways of thinking "thinking" refers to cause and effect. Therefore, all information that comes into him must be rational, reasonable. The intelligence of "thinking" shows the dominance of the left neocortex. In that area there are frontal lobes that function in the ability to think and concentrate.
3.	Intuiting	Having an advantage in the sixth sense that arises based on thought processes, or other terms is intuition. Intuition can take the form of unlimited creativity. "Intuiting" intelligence has the ability to think long term so it is easy to find new breakthroughs. Intuiting intelligence shows dominance of the right neocortex. In the right neocortex lies the occipital lotus which functions as an interpretation of vision.
4.	Feeling	Has an edge on his emotions. Emotional intelligence makes it easy for individuals to understand others so that they are easily known and loved because of caring and empathy. Intelligence "feeling" shows the dominance of the right limbic. In that area there are the amygdala which functions as the center of human emotions.
5.	Insting	Has an advantage in the seventh sense that refers to his instincts. "Instinct" intelligence shows dominance in the reptile brain or in the cerebellum which functions as a center of balance and coordination of bodily movements. Therefore, this type of intelligence is easy to respond or spontaneous and versatile.

Every intelligence has advantages and disadvantages of each. For example, students with S intelligence have the advantage of storing memory or memorizing. T students have expertise in mathematics and analysis. Meanwhile, individual I has the talent to be creative and imaginative. Then individual F is easy to get along with and individual in has the advantage of being helpful. As Allah SWT said in Surah Al-Isra verse 70: "And verily we glorified the children of Adam, We transported them on land and in the sea, we gave them sustenance from the good ones and We over them with perfect advantages over most of the creatures that We have created."Every human being must have weaknesses or weaknesses, no matter how great he covers it from all beings. It's just that he is able to cover up with the advantages he has, such as his potential. This concept is applied by SA Al Izzah in awakening students' potential by covering up their shortcomings with their strengths. Students are able to pass the teaching and learning process with a feeling of calm and without pressure because each teacher will pay attention to the strengths of students in accepting lessons. Every student has the right to get the same treatment, humane treatment, and even love from parents or teachers at school. They are just a child who is still learning and developing in his life to prepare for the future.

SA AL Izzah has a policy related to the use of this STIFin test, that is, before students enter a new learning year, each student will conduct a STIFin test to obtain information related to their respective intelligence eyes and the results will be used by SA Al Izzah teachers to adjust learning system with the eyes of each student's intelligence. This is done so students can maximize their potential by adjusting their learning styles.

Talent Mapping

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Talent Mapping is a way of assessment to assess and explore talents (productive characteristics) and the potential of human strength with the appearance of results that are complete, easy to understand, and interesting. This method can identify the potential strengths of students which include measurements and statements of self strength. According to the owner of the Al Izzah SA Foundation, Talent Mapping is applied to SA Al Izzah Middle School students, because talent will begin to appear at the age of elementary school and can be maximized when students have started to become teenagers. Previously, elementary school students had been given a STIFin test to help maximize their potential.

Talent Mapping Assessment is a personality assessment created and developed by Rama Royani, founder of LEADPRO Consulting Indonesia. This assessment is very useful for schools that implement it in helping to prepare educational planning and develop potential learners. This assessment was developed referring to the results of a Gallup Organization study for more than 20 years that found 34 types of talents that help humans to produce superior performance in various professions or roles (Muhfirman, 2015). Here is a sequence table of human talent:

Table 2: Talent Sequence

Connectedness	Learner	Adaptability	Focus	Positivity
Developer	Belief	Analytical	Ideation	Context
Consistency	Intellection	Futuristic	Relator	Woo
Harmony	Responsibility	Individualization	Input	Emphaty
Arranger	Self-assurance	Maximizer	Significance	Command
Strategic	Restorative	Activator	Achiever	Competition
Communication	Includer	Deliberative	Discipline	

Every individual has 34 talents (thirty four) talent themes. The difference between one individual and another individual is the order of the themes of their talents. This talent theme sequence is the initial guide to finding yourself. We need to pay attention here are the first 7 (seven) talents (or dominant talents), because this is your potential strength. Talents that occupy the lowest order (the last seven or ten talents) are potential weaknesses or limitations.

To find this talent mapping, SA AL Izzah applied a number of ways, including Talent Mapping (TM) Assessment, Personal Strength Statement (PSS) Assessment, and Strength Typology (ST-30). For TM, the school explores a person's productive nature (talent), interrogates the strengths related to the role through dominant talent, and self-assessment which has 170 statements. Furthermore, for PSS, the school explores recognition of productive activities, delineates abilities / competencies and interests in activities, and self-assessment which has 114 activities, consisting of 99 clusters related to roles and 15 clusters related to fields. Finally, for ST-30, this method is the fastest way to find oneself, describing abilities / competencies and interests in roles, having 30 human typologies related to productive forces, and as a personal brand or self-awareness for students.

Students who have already conducted an assessment will get results in the form of talent mapping to make it easier to read the dominant talents of students and ineffective talent for them. Students are advised to use the dominant talent that is found as much as possible. If not, the talent possessed will interfere when used. As a result, students' talents do not achieve their goals. Call it analytical talent who always wants data evidence behind every fact. Instead of being able to solve an urgent problem to be solved, you will only irritate colleagues at work. If that happens, there is nothing you can do but forget your talent for a while. Besides ignoring ineffective talents, we can also manage our weaknesses in certain talents. The easiest way is of course looking for partners who can replace our role. Actually it is not difficult to find suitable people to fill roles where we have weaknesses in it. The most difficult thing is recognizing our own weaknesses. Once we accept our weaknesses, we will find someone who can help. Another way to overcome weaknesses is to try to be a little better in our weak talents. For example in the discipline talent, for those who are weak in that talent. You don't need to be the best, just be a little better in terms of discipline.

CONCLUSIONS

SA Al Izzah uses two strategies to discover the potential of the students, namely the STIFin test and Talent Mapping. The STIFin test has been applied by reading the fingerprints of prospective students and reading the results of the analysis which will then be analyzed by the teacher to match the learning

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process with the potential of students. Furthermore, Talents mapping is a way of assessing or assessing and exploring talent (productive characteristics) and the potential of our strengths with a complete, easy to understand and interesting display of results. However, for Talent Mapping, SA AL Izzah has not implemented it fully because it is still in the process of deepening so that it can be maximized in its application. By using the two tests to explore intelligence and talent, students are expected to find their talents, students are happier with themselves, and can improve students' abilities in academics or soft skills.

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Moving from Traditional Teaching to Blended Learning in the Teaching and Learning of Sports Test and Measurement Course to Improve Students' Learning Outcomes

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ABSTRACT

Blended learning is an innovation that gives a new colour to the teaching and learning process of physical education. It is one of the instructional models integrating traditional learning systems with online learning. The present research aims to test the effectiveness of blended learning as an alternative to traditional teaching to improve students' learning outcomes in the course of sports test and measurement. It employed an experimental method with the pre-test and post-test control design. The participants were students of the Physical Education Department at University of Suryakencana, Cianjur. A multiple-choice test was used to measure the students' learning outcomes in the course. The results show that there was a difference in the improved learning outcomes in the course of sports test and measurement between students taught with traditional learning and those with blended learning. It can be concluded that blended learning was more effective than traditional learning.

Keywords: Blended learning, Sport tes, Student's learning outcomes

INTRODUCTION

The phenomenon of industry 4.0 has a significant impact on education, including physical education. Education 4.0 is a response to the need for the fourth industrial revolution where humans and machines are aligned in an attempt of seeking for a solution to problems and find possible innovations in education (Series.C, 2019). This phenomenon translates as a challenge and simultaneously a demand for all lecturers in higher education to give quality education for their students. The teaching and learning of physical education, especially in the course of sports test and measurement currently adopts the traditional or face-to-face approach with unsatisfactory learning outcomes. Therefore, a learning model that is suited to the development of education 4.0 is needed, which is the blended learning (BL) (Waha, B & Davis, K, 2014)

Blended learning (BL) is defined as a learning model that integrates traditional or face-to-face learning model with online learning, where students and lecturers interact with and without technology (Waha, B & Davis, K, 2014). BL is alternatively defined as a model that integrates or combines various programs, such as classroom learning activities, but with student assignments that are accessible through the internet (Kastrup, et al, 2018). The teaching model combines new technology with the traditional, face-to-face method, which is desirable for many lecturers and students.

Some of the examples of technological aids used include podcasts, lecture capture, online chat, discussion boards, and google classroom. These tools are the features frequently used in instructional management (Lyons, T & Evans, M., 2013). BL has become increasingly popular, as shown by how the model is widely practiced by academics around the globe (Alebaikan, R & Troudi, S., 2017), in various fields such as education, military, medicine, nursing, business, and engineering.

The American Society for Training and Development stated that BL is one of the top ten trends in the knowledge industry today (Halverson, L. R., et al. 2012) and is regarded by some experts as the best education practice (Taylor, P. Et al). A survey by Sloan Consortium showed that 55% of the institutions

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(e.g., universities) in the United States applied BL (Allen, I. E.) The scheme of BL is presented in Figure 1

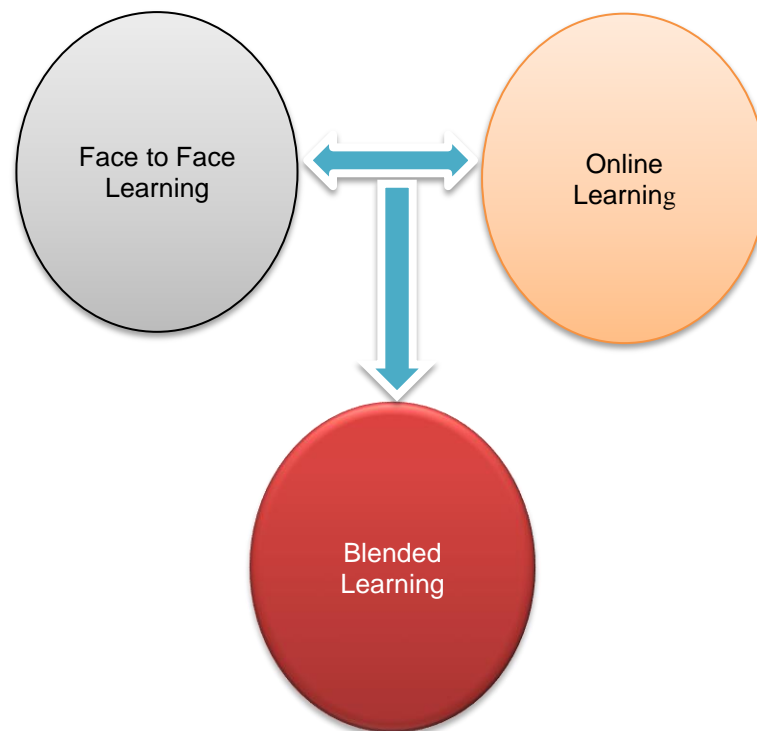


Figure 1. Blended Learning Scheme

BL is a highly flexible learning model (Pavla, et al, 2015), as it does not depend on time and space for learning and is accessible anytime, anywhere. The activities commonly included in BL include asking, answering, or interacting between students and lecturer and between students. BL is a mix of face-to-face and online interactions that enable collaborative and interactive learning, which is increasingly used as a strategic curriculum (Cooner, 2016). Through BL, students will be actively involved in the teaching and learning process, thereby helping them develop their skills of self-reflection, self-direction, and self-management (George & Keeffe, 2010). In addition, BL has the potential to lead students towards developing their learning autonomy and responsibility as well as metacognitive processes.

BL implementation can facilitate communicative learning environment, creating meaningful learning outcomes (Okaz, 2015). However, teachers' lack of a proper understanding of BL will inhibit the attainment of expected learning outcomes (Taylor, et al). Much research has been done on the effectiveness of BL at the level of individual courses, but there has been a dearth in research that can provide guidelines at the level of institutions (Graham, et al, 2013). Furthermore, no research was found on the implementation of BL in comparison to traditional teaching (TT) in the context of physical education instruction. Therefore, the present research aims to test the effectiveness of BL as an alternative to TT to improve students' learning outcomes in the course of sports test and measurement.

RESEARCH METHOD

The research adopted a quasi-experimental method with the pre-test and post-test control design. Two classes were involved in the research, namely the experimental class (E) and the control class (C). The research was carried out for one semester (16 sessions), from September to December 2019.

The research was granted a permission from University of Suryakencana and conformed to the Code of Ethics of World Medical Association (Helsinki Declaration). The research participants were third year students of the Department of Physical Education, Health, and Recreation (PJKR) of University of Suryakanca Cianjur (N=40, PJKR III-A= 20, PJKR III-B= 20) with the following demographic characteristics: age = 21.4±1.2 years, height = 167.9±4.6 cm, weight =56.7±9.3 kg.

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All participants were divided equally into the experimental class (20) who would receive BL intervention, and the control class (20) who would be taught with TT. In the first meeting, all students from both classes were given a pre-test in the form of a multiple-choice test. From the second to the 14th meeting, BL and TT interventions were given, and in the 16th meeting, the E and C classes were given a multiple-choice post-test. The learning program is described in detail in Table 1.

Table 1: Learning Program

Meeting	BL	TT
1	Pre-Test (Multiple Choice)	
2	Concepts of Test, Measurement, and Evaluation	Concepts of Test, Measurement, and Evaluation
3	Selecting Good Test Criteria	Selecting Good Test Criteria
4	Tests in the Cognitive, Affective, and Psychomotor Domains	Tests in the Cognitive, Affective, and Psychomotor Domains
5	Motor Ability	Motor Ability
6	Motor Educability	Motor Educability
7	Test and Measurement of Physical Strengths, Resilience, Speed, Power	Test and Measurement of Physical Strengths, Resilience, Speed, Power
8	Test and Measurement of Flexibility, Agility, Coordination, Balance, Reaction	Test and Measurement of Flexibility, Agility, Coordination, Balance, Reaction
9	Test and Measurement of Physical Fitness	Test and Measurement of Physical Fitness
10	Test and Measurement of the Sport Branches of Soccer, Volleyball, Basket Ball	Test and Measurement of the Sport Branches of Soccer, Volleyball, Basket Ball
11	Test and Measurement of the Sport Branches of Handball, Badminton	Test and Measurement of the Sport Branches of Handball, Badminton
12	Test and Measurement of the Sport Branches of Hockey, Table Tennis	Test and Measurement of the Sport Branches of Hockey, Table Tennis
13	Test and Measurement of the Sport Branch of Tennis	Test and Measurement of the Sport Branch of Tennis
14	PAN and PAP	PAN and PAP
15	How to Process Data of Test and Measurement Results	How to Process Data of Test and Measurement Results
16	Post-Test (Multiple Choice)	

The multiple-choice test consisted of 30 questions. This instrument had a score of validity and reliability of 0.80 and 0.90, respectively. The data were analysed using IBM (version 25) to look for descriptive physical characteristics of the participants (age, height and weight), followed by normality and homogeneity tests using the Shapiro-Wilk and Levene tests. The difference in the learning outcomes of the sports test and measurement course between the class with BL and TT interventions was tested with independent sample *t*-test, with a criterion of significance level of $p \leq 0.05$ [16].

RESULTS AND DISCUSSION

The description of participants' demographic characteristics (age, height, and weight) is presented in Table II, and the results of descriptive statistics are displayed in Table III. The results of normality test using Shapiro-Wilk confirmed that data were normally distributed, and Levene test revealed that the data were homogeneous. The results of the difference in the learning outcomes for the course of sports test and measurement between the classes taught with BL and TT are provided in Table IV.

Table 2: Participants' Characteristics

Characteristic	N	M	±	SD
Age (y)	40	21.4	±	1.2
Height (cm)	40	167.9	±	4.6
Weight (kg)	40	56.7	±	9.3

Table 3: Statistical Data

Group Statistics					
Activity	Class	N	M	±	SD
Pre-Test	BL	20	10.90	±	1.553
	TT	20	10.45	±	1.572
Post-Test	BL	20	25.10	±	3.144
	TT	20	20.50	±	1.395

Table 4: Independent Samples t-test

Dependent Variable	t-test for Equal Means					
	F	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Learning outcomes	9.715	5.981	38	.000	4.600	.769

Table IV shows that there was a difference in the learning outcomes for the course of sports test and measurement between the classes intervened with BL and TT ($F= 9.715, p\leq 0.05$). Based on the experimental class' pre-test score ($M=10.90\pm SD=1.553$) and post-test score ($M=25.10\pm SD=3.144$) compared to the control class' pre-test score ($M=10.45\pm SD=1.572$) and post-test score ($M=20.50\pm SD=1.395$), it can be seen that the class taught with BL had a more significant improvement in their learning outcomes than the TT-taught class (see Table III).

This research embarked on the aim of testing the effectiveness of BL as an alternative to TT to improve the learning outcomes of students in the course of sports test and measurement. The research indicated with accuracy that BL had more significant impact in optimising students' learning outcomes compared to TT (Series & Science, 2018). The intervention with BL encouraged students to be more enthusiastic in the teaching and learning of sports test and measurement course, thereby increasing their knowledge significantly (Coll, et al, 2017). Another study found that BL significantly increased students' involvement in the teaching and learning process (series, 2019), led to strong motivation (Islam. Et al, 2018), and even could make students more independent in completing all assignments given by the lecturer (Dalsgraad, et al, 2008). BL could open up students' mind, helping them to see a situation from multiple perspectives; help them manage their learning time more effectively and efficiently; and improve their teamwork, promote their self-reflection, and improve their reasoning skills (Monteiro, et al).

BL has become an alternative to the outdated traditional teaching that should be abandoned altogether. BL has more positive values than other learning models such as a flexible learning that can be done anywhere and anytime without the constant monitoring of the lecturer. BL has been shown to be more effective than TT (Bernard, et al, 2014). The results of this research are consistent with those of a meta-analysis done by the US Department of Education which demonstrated that BL led to stronger learning outcomes than TT (Means, et al, 2009). BL consistently gave a significant impact on all education sectors. Adopting BL is an effective strategy to face the changes brought about by industry 4.0 towards more quality physical education.

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CONCLUSIONS

The results of this research have contributed a new insight to the limited amount of research on BL in the context of physical education. BL is an important teaching method that should be used in education in general, particularly for physical education in the future. We suggest that all lecturers apply BL in all courses of physical education that are still taught with traditional teaching because this research has proven that BL had a positive impact on improved learning outcomes of students in the course of sports test and measurement, and the students admitted that BL was better than TT (Keogh, et al, 2017). The limitation of this research lies in the small number of research participants and the limited wifi network that did not reach all areas on campus. Future research should be done on how to improve the learning outcomes in other physical education courses.

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Defense Heritage Curriculum in Indonesian Schools

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ABSTRACT

This academic paper, that would be presented in *The 2nd International Conference and Innovative Exhibition on Global Education (ICEGE)*, 17-18 January 2020, University of Muhammadiyah Prof. Dr. Hamka Jakarta, offers a novelty about defense heritage curriculum in Indonesian schools, not just in text books, but also valuable activities. To explain the research output, this paper is using the theory of Defense Heritage, Modernism, and Education Evaluation by Prof. Abd. Rahman A. Ghani, with the qualitative method. The theory of defense heritage is used to explain the definition of defense heritage, while theory of modernism is used to explain that modern schools need modern curriculum to be more adapted with reality or threats that faced by Indonesian people. Education evaluation is used to know more about how this idea can be implemented in realistic way in some schools in Indonesia. This paper aims to raise more awareness about the importance of defense heritage in history curriculum and also to create more valuable activities for students to know more about the historical buildings, monuments, or museums around them, are important for Indonesian history.

Keywords: defense heritage, modernism, history curriculum, Indonesian history, school

INTRODUCTION

Indonesia is one of 161 countries, that participated and ratified UN General Assembly meeting proposed by UNESCO to define an international instrumental binding law to do protection of intangible heritage (Francoise, et al., 2008, p.88). On her research about defense heritage, Francoise stated that Indonesian government does not really apply about defense heritage concept.

For example in Padang and Surabaya, defense heritage is implemented as integral part of cultural heritage, so that the budget and activities related to preserve historical building is under cultural heritage concept. Although we know that defense heritage concept is quite different with cultural heritage concept, that is mentioned in Method section in this paper.

Besides, there is no coordination of heritage-related activities between local governments and central government. If local government does not have historical building, then they do not have budget to do some observation to search and if the local government have historical buildings, but they don't have budget, then what we can see is the abandoned pieces of art. There are lots of abandoned buildings or historical sites damaged, just because there is no budget for restoration.

It does not matter if there is still no defense heritage policy in Indonesia, or while Indonesian government, historians, NGO, or defense heritage analyst like Jeanne Francoise from Indonesia Defense University are in the process of creating the suitable defense heritage concept in Indonesia, here we can still discuss defense heritage curriculum in Indonesian schools.

This paper does not yet conduct field research in schools, but we can observe what we need to create defense heritage curriculum, as part of modernization our school curriculum, so that students don't feel bored to study about History, as well as Indonesian government provide more budget of creative activities for students to understand deeply their roots in history, as the nation of winning, not "*nation of babu*".

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RESEARCH METHOD

Defense Heritage

Article 1 of the United Nations Organization, Education and Cultural Convention (UNESCO) (1972) has three broad categories of cultural heritage; monuments, building groups and sites. The term cultural heritage includes movable heirlooms such as paintings, sculptures, coins and manuscripts, immovable inheritance such as monuments and archeological sites and underwater cultural heritage such as shipwrecks, underwater ruins and cities. This also includes intangible items such as oral traditions, performing arts and rituals (UNESCO, 1972) (O'Brien, et al, 2015, p.99).

Historic buildings or historic sites are defined as official locations where pieces of political, military, cultural, or social history have been preserved because of their cultural heritage values (Othman & Elsaay, 2018, p.1705-1707).

Modernism

Rosana (2011, p.46) said that modernism and social change is two aspects that linked each other. Modernisation is essentially covering a lot of fields, but which field would be prioritized by such community, it depends on how is the policy that ruled that community. Modernization is almost in the beginning faces the disorganization in the society, moreover those which concern values and norms inside the society, where that society is not ready for change, because the change is so fast with no pause. This can cause continuous disorganization, because society never has time to build reorganization.

In her newer research in 2015, Rosana (2015, p.67) also said that modernization can be released from human life, because modernization is one of social change that happens in the society. Society cannot avoid it because each society human is always facing changes and always want to change. Changes in that society life is a normal social phenomenon, because each human has unlimited desire or interest.

Education Evaluation

Prof. Abd. Rahman A.Ghani (2008, p.165) on his research said that learning is a system whose its substances are interacted each other. The success of the learning is can be determined, for example, by teacher skills in choosing and implementing the right method and learning strategy used by the students. Prof. Abd. Rahman A.Ghani also said that one successful method on learning is students' independent learning.

One measuring tool is used to evaluate learning quality, as well as to encourage student learning activity, is formative evaluation. It is integral part of learning, to identify learning needs and difficulties in learning. Measurement instruments used in evaluation education can be some tests, quiz, essay, or multiple choices. Non-test can be scale, observation, and interview (Ghani, 2008, p.166).

RESULTS AND DISCUSSION

If we connect to Max Weber research that there is a relation between Religion and Economic growth, as Indonesians we can agree that Religion is first point in our philosophy, Pancasila and it becomes the moral compass on what we want to do with our future education.

Our future of history curriculum will be modernized by the need of knowing the defense heritage concept, that recognized by UNESCO lately in 2000s. The existence of this defense heritage concept is in line with modern history learning. The modern world wants to know more about the global history, to find hidden treasure of a nation, or to find a way to protect historical buildings, because perhaps there will be nuclear war or World War III after US-Iran tension.

If other countries already changed their history curriculum, then Indonesia must start this trend, but the changes does not mean to be Westernized. The curriculum changes must lead to the more civilized society of Indonesian people.

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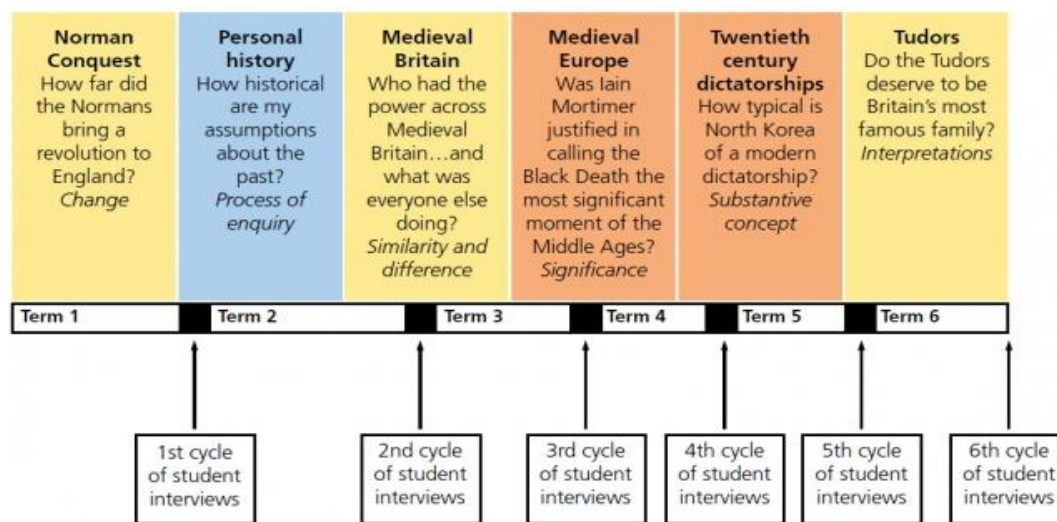
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Authors agree on Inkeles-Smith research (quoted on Rahayu, p.78) that the core aspect of modernization is human quality. It is why this paper will talk about the importance to add defense heritage curriculum in Indonesian schools, because to know history is to predict future.

If we can take a look on History curriculum in American schools, we can find that teachers put the students to think or criticize, not just accept the history, so students can learn the errors, bad and good people, or inevitable war, to predict the future. Students are the future leaders of the nation. To add critical questions like that, is also such effort of teachers to do education evaluation, that is explained by Prof. Abd. Rahman A. Ghani on Method section of this paper.

Indonesian history curriculum is still on process to be more modernized and more student-centered. In Indonesia, teachers just give subjects to be memorized by students; the dates, people, and events. If the students are creative, they can go to Google and find the whole history, but the problem is what will be in test are those given by the teachers and students don't ask critical question, such as "why A is hero, but B is not?".

Figure 1: Example of history curriculum in American school



(Note. Source: Watson, April 2019).

Figure 2: Example of history curriculum in American school

Grade 9	Grade 10	Grade 11	Grade 12
European History	Nonwestern Cultures	United States History	Dual Enrollment World History*
Honors European History*	Honors Nonwestern Cultures*	AP United States History*	Honors Renaissance History
Honors Renaissance History*		Honors Women's Studies I and II (1 sem each)	Honors Women's Studies I and II (1 sem each)
		Government (1 sem)	Government (1 sem)
		Economics (1 sem)	Economics (1 sem)

* Department approval required

Note. Source: Salem Academy

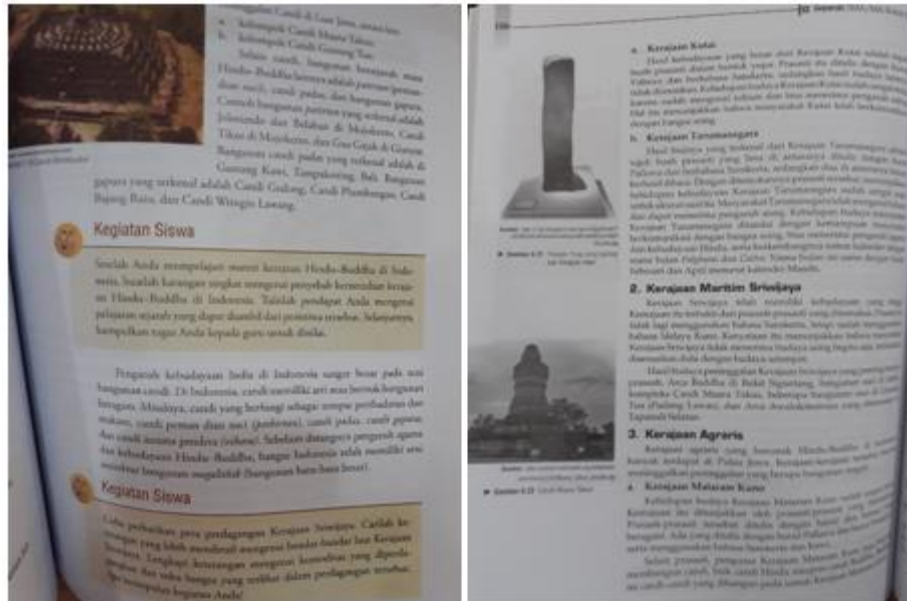
Moreover, by adding defense heritage curriculum, students can be more active in *Bela Negara* under Indonesian Ministry of Defense's state defense program, for example visiting fortresses, hiding caves,

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national and local museums, historical ports, and others. Currently, based on 2015 National Socio-Economic Survey data, only 6.43% of Indonesian people visit historical relics and cultural heritage. When viewed from the aspect of age, those who visited the museum under the age of 17 were only 8.57% while 5.07% were at the adult age (Source: Indonesian Ministry of Education and Culture, 2019).

Figure 3: Example of history on Indonesian high school book



Note. Source: Gramedia

The Novelty of this paper is to add defense heritage curriculum with several aspects:

1. Modernization curriculum is not Westernization curriculum.

Indonesia implementation of defense heritage curriculum is perhaps different with other countries, because each country has their own perspective of history. For example there is education evaluation for students to visit the nearest historical building, monuments, or museums in their city and after that they must write report in essay format. Then in class students can discuss why some buildings are important for a nation, but is seen as bad memory for other nation.

2. Teachers give students more space to have critical thinking in history class.

In New Year 2020, Jakarta and surrounding areas had experienced big floods. This experience can be used as education evaluation, for example in history class, teacher can ask "what do you do if there are defense heritage buildings, museums, or artefacts, were broken by natural disasters?". First of all students must know if there are nearest historical building, monuments, or museums in their city.

3. Comparative study on defense heritage curriculum.

Indonesia is the biggest country in ASEAN. In first step of creating defense heritage curriculum, Indonesian Ministry of Education can invite other ASEAN countries' Ministry of Education to listen their experiences about the changes of history curriculum in this modern time, so we can evaluate which is the best and suitable curriculum of defense heritage for Indonesian students. Then evaluation education still continues.

CONCLUSIONS

Defense heritage is new concept for ASEAN countries. The countries that are ready to build the defense heritage concept are coming from developed countries, such as America, Australia, Europe, and Singapore. Indonesian government only recognize cultural heritage activities.

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Indonesia can add defense heritage curriculum, so that students are aware of the nearest historical building, monuments, or museums in their city, respect the nation founding fathers and heroes, being proud of the nation, and to anticipate historical misunderstanding. This change curriculum can be helped by the evaluation education as part of modern education, to preserve national history and to prepare students as future qualified human being in the Golden Year 2045.

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Designing and Organising Successful Continuing Professional Development Training (CPDT) for Science Teachers in High Performing Schools: Implementing Instructional Technology (IT) Integration Effectively in Malaysia

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ABSTRACT

Successful Continuing Professional Development Training (CPDT) is one of the crucial aspects in ensuring the effectiveness and efficiency of Malaysian science in integrating Instructional Technology (IT) integration in science classrooms of Malaysian High Performing Schools (HPS). Undeniably, CPDT may take several years to accomplish educational changes such as curriculum innovations. Based on qualitative semi-structured interviews and observations conducted with five (5) science teachers and administrators who participated in this study, many issues pertaining CPDT emerged that help design training in the future. This paper reports the findings of research study involving science teachers. Not all the teachers involved in the study underscored the value of the CPDT, but it is vital to highlight some important points pertaining to CPDT attended. The teachers in this study felt that some of the work given during the training was often interrupted due to lack of IT competency in other participants. Undoubtedly, teachers with widely differing IT skills affect the performance of the group psychologically, as those who are not skilled may mistakenly be considered as weak teachers. There are some recommendations given to help improve the CPDT designed and developed by Ministry of Education: (1) Before sending teachers out for training, it is crucial to perform a basic needs' assessment of their general, specialised and technical skills; (2) CPDT should be attended by teachers with similar levels of IT skills; (3) Teachers should be divided into groups based on their levels of IT skills; and (4) CPDT should be conducted as an ongoing series of CPDT courses and (5) CPDT does not have to be a residential programme. It is important to realise that educational changes expected is a journey, not a product of implementing change in schools.

Keywords: Teachers, Instructional Technology, Science

INTRODUCTION

There have been lots of Information and Communication Technology (ICT) development in Malaysian schools, from the introduction of Malaysian Smart Schools (from 1999-2010) and the enculturation of smart teaching and learning through High Performance Schools (2010 onwards). Every country around the world always try to take advantages of ICT and Instructional Technology (IT) tools as they realise the importance of IT in increasing productivity of teachers and students (Sahagun & Bueno, 2019; Collin & van der Heijden, & Lewis (2012). Malaysia too, has become an advanced country through change and development. Various initiatives have been taken by the government to ensure that our country continues to develop innovatively, competitively and comparably with other countries in the world. High Performing Schools are defined as effective schools with ethos, character, identity and unique in all aspects of education and able to compete on the world stage (MOE, 2013).

The main objective of the MOE is to place all the HPS as a benchmark in terms of educational excellence and a model to all other schools in the country. Only 88 schools were selected from more than 10,000 schools in Malaysia (MOE, 2013). The Ministry of Education (MOE) ensures that leaders who are appointed from these schools are knowledgeable, skillful and competent; the International Society for Technology in Education (ISTE) and the Partnership for 21st Century Skills pushed for a renewed importance on technology in education in a recent national report (SETDA, 2007). It is stated that "we must leverage [technology] to provide engaging and powerful learning experiences, content, and resources and assessments that measure student achievement in more complete, authentic, and meaningful ways" (U.S DOE, 2010, p. 3). CPDT is crucial in ensuring success of IT integration in schools (Yuan Chen & Jing Peng, 2019).

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The Ministry of Education (MOE), particularly, the Educational Technology Division has spent lots of money and organized lots of training programmes and initiatives such as ICT and Instructional Skills (IT) skills training in order to prepare students as quality human capitals in the future. Teachers' Activity Centres of MOE (Pusat Kegiatan Guru) work closely with the respective State Education Department and District Education Offices to design and organize Continuing Professional Development Training (CPDT) in order to keep abreast of any new ICT development and educational changes expected by MOE. MOE (2013) has specifically explained what roles should IT play in promoting students engagement and interaction among teachers and students. Successful Continuing Professional Development Training (CPDT) is one of the crucial aspects in ensuring the effectiveness and efficiency of Malaysian science in integrating Instructional Technology (IT) integration in science classrooms of Malaysian High Performing Schools (HPS) (MOE, 2013). Abdul Halim's findings reveal the most frequently cited barriers to technology use were a lack of developmentally appropriate software, funding issues, time constraints, and inadequate technology skills (Abdul Halim, 2006).

All current CPDT programmes by MOE agencies are intended to bring new changes to the ways teachers ordinarily teach in their classrooms and maximise the integration of ICT in classrooms. As a catalysts for achieving Vision 2020, the technology-supported training would be one of the ways to help achieve the National Philosophy of Education (NPE) and foster the development of a work force prepared to meet the challenges of the twenty-first century skills. Training developers need to look into teachers' skills in enhancing three forms of literacy: technological literacy, information literacy and visual literacy (Roblyer & Doering, 2014). After undergoing training, teachers are expected to change their roles as controllers or givers of knowledge to facilitators and to make their classrooms to be more student-centred. Teachers need to adopt constructivist approaches to enhance students' cognitive skills. Cognitive skills can be developed if the teaching strategies are "active and pupil-centred" (Hudson, 1994, p. 97).

Approaches using constructivism should have six elements:

*Teachers develop the **situation** for students to explain, select a process for **grouping** of materials and students, build a **bridge** between what students already know and what they want to learn, anticipate **questions** to ask and answer without giving away an explanation, encourage students to **exhibit** a record of their thinking by sharing it with others and solicit students' **reflections** about their learning.* Gagnon dan Collay (2001, p. 2)

Once equipped with appropriate knowledge and skills through CPDTs, Malaysia teachers are expected to be able to integrate IT (tools) into their teaching of concepts of learning. Teachers should not only be able to provide effective instruction but also to ensure that their presentation of lessons is of sound quality. Teachers should encourage and engage learners with Higher-Order Thinking Skills (HOTS) and Problem-solving skills. We are aware that schools are not just about using ICT in teaching and learning. CPDT must be able to educate teachers to make informed decisions before using appropriate IT tools in their classrooms and to motivate students, present interesting lessons, assess fairly and help their students learn effectively.

Despite training teachers to use ICT and 21st century skills, teachers are still weak in integrating ICT into their teaching practices (Abdul Halim, 2006). Lots of factors have been considered hindrance for teachers to fully integrate ICT into teaching and learning. Despite the availability of ICT facility, some of the reasons why they continue teaching without integrating extensively are as follows:

1. Requirement of finishing the syllabus in time for public examinations;
2. Many topics to be completed before the public examinations;
3. Varying capabilities among students (a variety of students' individual differences);
4. Insufficient knowledge on students' individual differences;
5. More experiments, more teachers' talk;
6. Less interactions between teachers and students;

CPDT programmes should be a continuous programme, not a one-off programme that keeps teachers motivated to teach and provide effective instruction to students. Therefore, teachers after undergoing the training should also be monitored and assessed periodically. Any CPDT that is developed should be used to enhance teachers' personal, subject as well as learning and teaching competence in integrating IT tools. The integration of IT enables students to practice self-paced, self-accessed and self-directed learning that allows some flexibility of learning based on the capability of individual students. The availability of IT does not guarantee the effectiveness of teaching if teachers do not know

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how to use them effectively. Regardless of the availability of IT and the sophistication of technology equipment, the effectiveness of IT depends on teachers' skills in IT integration.

With the advancement and development of ICT, CPDT programmes should be geared to bring the effect the technology transfer form advanced nations and to build up local technology through Research and Development (R&D) within the Multimedia Super Corridor (MSC). ICT is not considered as a cure for all educational problems. In spite of ICT as an enabler, teachers always will be more important than technology. Teachers may not be capable of keeping up with ICT changes and development. As new ICT tools are introduced, *"older technologies are still relevant and more useful"* (Roblyer, 2014, p. 20).

Training of teachers must be carefully developed and designed to allow teachers to integrate instructional technology or ICT. According to Roblyer and Doering (2016), integrating instructional technology *"refers to the process of determining which digital tools and which methods for implementing them are the most appropriate responses to given educational needs and problems"* (p.16). To take advantages of ICT advancement and change, CPDs should be able to focus on skills teachers require to bring about *"three different levels of human capacity development: technology literacy, knowledge deepening and knowledge creation"* (Roblyer and Doering, 2014, p. 31). Moreover, CPDT programmes are designed and delivered *"to move away from memory-based to an education that stimulate thinking, creativity, and caring in all students, caters to individual abilities and learning styles and is based on more equitable access"* (MOE, 1997, p. 9). Besides ICT skills, teachers must also teach metacognition or focus more *"learning to learn"* skills, such as thinking creatively and reasoning effectively, than on memorising facts, definitions and rules (Roblyer & Doering, 2014, p.36).

The CPDT should be aimed at producing enable the life-long professional development of teachers who are honourable, knowledgeable, creative and resilient through a comprehensive curriculum that not only provides the content knowledge but also the skills that are essential for the facilitation of learning and of good moral behaviours at the school level.

The study is conducted to meet the following objectives:

1. to document teachers' uses of Instructional Technology (IT) tools in science classrooms and
2. to investigate how could CPDT programmes be improved in enhancing Instructional Technology (IT) skills;

The research questions are:

1. What types of Instructional Technology (IT) tools are being integrated into science classrooms?
2. How could their CPDT be improved to enhance science teachers' Instructional Technology (IT) skills?

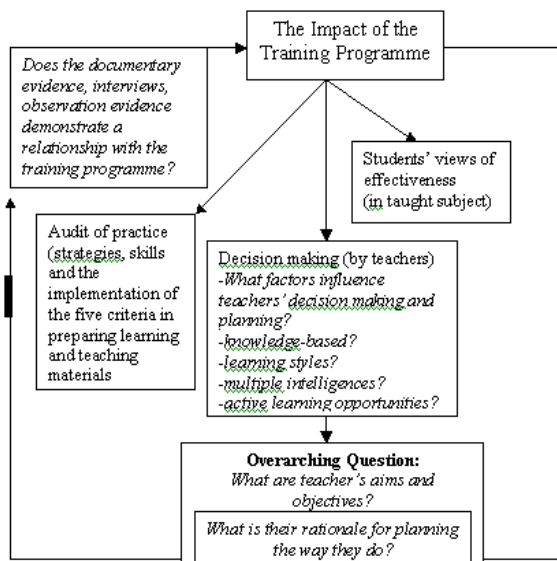


Diagram 1: Research Overview

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RESEARCH METHOD

In probing teachers' skills in ICT and 21st century teaching and learning skills, three methods were used to collect the data from eighty teachers involved. Questionnaires, semi-structured interviews as well as observations to help gather the data concerning the effectiveness of CPDT programmes attended. The questionnaires were given to 18 science teachers in 6 High Performance Schools (3 teachers per school) and semi-structured interviews were carried out to understand how they did they make their decisions in terms of using IT as a tool in classrooms.

The questionnaire was used to find out as much as information on the training they attended. It was used to gather information about teachers' experiences and their confidence in the integration of IT into their lessons. Teachers' uses of IT and their CPDT programmes attended, knowledge on IT skills and their attitudes in IT integration.

Carrying out this study involving teachers could be difficult, especially getting them to talk about educational policy and teaching practice. Together with observation and survey, I used interviews as a flexible way of getting "a rich source of data" (Silverman, 2001, p. 114). Kvale (1996) describes "interview as a way of bringing together multiple views of people" (cited in Barbour and Schostack, 2005, p. 43). Patton (2002) states that at interview:

"[o]pen-ended questions and probes yield in-depth responses about people's experiences, perceptions, opinions, feelings, and knowledge. Data consist of verbatim quotations with sufficient context to be interpretable" (p. 4).

Patton (1980) recognises three types of interview: informal conversational interview, the general interview guide approach and the standardised open-ended interview (cited in Punch, 1998, p.175). In-depth interviews are useful in probing individuals' experience and interpretation of experience (Patton, 1990).

Sanger (1996) considers interviewing one of the most significant methods of observation and documentation. The power, social position, value, trust, meaning, interpretation and uncertainty "problematise interviewing as a natural way of 'getting' the data" (Barbour and Schostak, 2005, p. 42). Mason (2002) refers to qualitative interviewing as "in-depth, semi-structured or loosely structured forms of interviewing" (p. 62). She considers that "qualitative interviewing therefore tends to be seen as involving the construction or reconstruction of knowledge more than the excavation of it" (p. 63). In order to collect meaningful knowledge during qualitative interviewing, Mason (2002) suggests that researchers need to do the following: make sense to, or be meaningful to, the interviewees; relate to interviewees' circumstances, experiences and so on, based on what they already know about them; be sensitive to interviewees' needs and rights, in accordance with the researcher's ethical position and moral practice; help the flow of the interview interaction – the 'conversation with a purpose' – rather than impede it; and ensure an appropriate focus on issues and topics to the research questions (p. 74).

Observation can be categorised as five paradigms: formal sociology, dramaturgical, studies of the public realm, auto-observation and ethno-methodology (Adler and Adler, 1994). Mason (2002) refers to observation as:

"methods of generating data which entail the researcher herself or himself in a research 'setting' so that they can experience and observe at first hand a range of dimensions in and of that setting. These might include: social actions, behaviour, interactions, relationships, events as well as spatial, locational and temporal dimensions" (p. 85).

Patton (2002) views observations as:

"fieldwork descriptions of activities, behaviours, actions, conversations, interpersonal interactions, organisational or community processes, or any other aspect of observable human experience. Data consist of field notes: rich, detailed descriptions, including the context within which the observations were made" (p. 4).

Patton (1987) relates four advantages of observations: gaining an understanding of the context of the activity; allowing for an inductive approach by engaging in a first-hand experience; seeing things of

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which others may not consciously be aware; and learning about things which the participant may not be willing to discuss.

LITERATURE REVIEW

The success of students depends on teachers' attitudes, knowledge and skills in utilizing new tools such web 2.0 where teaching involves communication and collaboration among peers. Teachers are expected to be trained as "guides on the side" and to move away from memory-based teaching to new kind of learning where 4Cs (Communication, Collaboration, Creativity and Critical Thinking skills) are celebrated in classrooms. It is hoped that classroom activities can "*stimulate thinking, creativity, and caring in all students, caters to individual abilities and learning styles and is based on more equitable access*" (MOE, 1997, p. 9). They are expected to make changes to the way they teach, adapt and adopt new teaching approaches, use ICT and/or the Internet as an educational tool, use a variety of teaching materials and assess students fairly based on their individual performance.

Continuing Professional Development (CPD)

With the advancement and development of ICT, teachers' Continuing Professional Development Training (CPDT) programmes should be geared to bring the effect the technology transfer form advanced nations and to build up local technology through Research and Development (R&D) within the Multimedia Super Corridor (MSC). CPDs are designed and delivered "*to move away from memory-based to an education that stimulate thinking, creativity, and caring in all students, caters to individual abilities and learning styles and is based on more equitable access*" (MOE, 1997, p. 9). The current training programmes are aimed at producing knowledge workers to operate the nation's high-tech industries in the 21st century.

It is expected teachers who are trained well with ICT skills help build up a highly competent workforce who are able to create new products and processes. Classroom practice will therefore focus on inquiry, discovery of knowledge and understanding, development processes and the design and creation of products. A practical emphasis as well as research, information gathering, design and production are some aspects to be implemented in classrooms. Undoubtedly, success cannot be achieved overnight as teachers need a gestation period to be comfortable with the ICT skills and the 21st century teaching skills.

Pedagogy

Teachers need to be flexible in their pedagogical approaches to enhance student engagement and interactions among their peers and teachers as well as content area materials. Teachers upon gaining new attitudes and knowledge can enhance their pedagogy and create better student engagement. A variety of pedagogy can certainly make learning in classrooms more interesting, motivating, stimulating and meaningful, involve children's minds, spirit and bodies in the learning process. Pedagogy in the 21st century should *use an appropriate mix of learning strategies to ensure mastery of basic competencies and promote holistic performance, accommodate individual different learning styles so as to boost performance and foster a classroom atmosphere that is compatible with different Learning-Teaching strategies*" (Government of Malaysia, 2001, 2012). The new learning and facilitation should bring about a systemic change in education, from an exam-dominated culture to a thinking and creative knowledge culture as well as to equip students with ICT skills and competence in order to prepare school leavers for the Information Age.

Teaching Materials

With CPD training, teachers are to design and develop their Learning-Teaching materials to cater for a variety of learners with different abilities. Equipped with knowledge on teaching and teaching and learning materials, teachers should play significant and effective roles in enhancing student learning and increase student achievements. Teachers are encouraged to develop and use their old and new teaching strategies in order to accommodate students' differing needs and learning abilities. Furthermore, cognitively challenging and motivating materials may give options to teachers to produce knowledge workers in the future (MOE, 2015). Besides stimulating the students' minds, the materials should be used to encourage students to be independent learners and take greater responsibility for managing and directing their own learning.

Assessment

MOE expects teachers to use a variety of activities to assess students' different abilities and skills. It is crucial for teachers to assess their students only when they are ready. Assessment in schools is being

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made distinctly different as students' individual differences and multiple intelligences should be considered in preparing lessons. Teachers are expected to be sensitive to individual differences among students. There is a movement from norm-referenced assessment to criterion-based assessment that gives opportunity to all learners to progress at their own pace. The uses of various methods can certainly help teachers in assessing students and provide a more complete and meaningful picture of a student's ability. In the long term, a student's performance in school level assessment will be combined with a centrally administered examination for the final performance report. It is noted that *"learner-centred assessment is a flexible system of assessment which is administered on an individual basis"* (Government of Malaysia, 1997, p. 52). To cater for students' differences, *"multiple approaches and instruments are used to assure the quality of assessment and to provide more holistic and accurate picture of a student's performance"* (Government of Malaysia, 1997, p. 11).

IT Integration in Classrooms


To function effectively in schools, CPDs prepare teachers to have curricular, school and content knowledge and to be critical as to when and how to integrate ICT into their subject curriculum. Teachers need to be skillful in integrating ICT into teaching and learning. Integrating technology is *"the process of determining which electronic tools and which methods for implementing them are appropriate for given classroom situations and problems"* (Roblyer and Edwards, 2014). It is also known as *"the combination of technology and traditional teaching procedures to produce student learning"* (Merill et al., 1996, p. 273).

Integration of ICT requires teachers to be prudent and to encourage them to make important decisions before teaching. Teachers' knowledge on theories of learning and teaching is significant to their teaching practice. This is crucial as *"teaching requires you (teachers) to transform the knowledge you (they) possess into suitable tasks that promote learning"* (Capel et al., 1998). Teachers' professional knowledge, professional judgement and subject knowledge are three important areas that affect teachers' performance and effective pedagogy in the classrooms (Capel et al., 1998). All in all, teachers' pedagogy must be based upon the attainment of clearly defined single instructional objectives within an instructional framework (Hallam and Ireson, 1999). They need to consider what teaching strategies to use after making careful analysis of their learners, learning environment and learning activities.

RESULTS AND DISCUSSION

As stated earlier, this study uses three methods - questionnaires, semi-structured interviews as well as documentary analysis to gather the data concerning the effectiveness of ICT training attended. The questionnaires documented certain ICT tools used in their classrooms.

Table 1 Teachers' Responses on the Frequency of Use of Instructional Tools

	Students' Responses in the Questionnaire
frequently used daily/almost daily  Least frequently used Daily/almost daily	Blackboard/ Whiteboard (94%)
	Textbook (88%)
	Workbook (61%)
	Overhead projector (OHP) (26.5%)
	Photograph (26%)
	Computer-assisted instruction (CAI) (14%)
	Models (12%)
	The Internet (12%)
	Slide projector (9%)
	Flipchart (4%)
	Newspaper (3%)
	Television (2.5%)

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	Video (2%)
	Radio (0.4%)

Table 2 Teachers' Questionnaire and Observation of Teaching Methods

	Teachers' Responses in the Questionnaire
frequently used daily/almost daily ↓ Least frequently used daily/daily almost	Discussion (88%)
	Lecture (79.5%)
	Problem-solving (62%)
	Drill and practice (58%)
	Tutorials (42%)
	Simulation (29%)
	Students' presentation (25%)
	Role play (12%)
	Game/adventure (0%)

The open-ended questions in questionnaires reveal some of the problems of integrating ICT into teaching and learning:

- a. Syllabus – too many topics to be completed;
- b. Lack of time – too many things to do, prepare and mark test questions;
- c. Lack of computers in a laboratory – cannot use it regularly;
- d. No computers in the classrooms;
- e. Expectations of parents – want their students to get as many A's as possible;
- f. Expectation of the head teachers – excellent schools that produce excellent results;
- g. Insufficient exposure on practical ICT integration;
- h. Insufficient ICT skills to integrate ICT confidently;
- i. Difficulty in finding teaching and learning materials;
- j. Poor network connection and system breakdown – slow to set up;
- k. Less ICT used due to insufficient skills of ICT;
- l. Inconsistent or no monitoring of teachers' use of ICT;

Based on the semi-structured interviews, three themes emerged from the data: (1) Challenges faced in schools; (2) Role of teachers as facilitators; (3) Facilitating learning and (4) Follow-up training.

Challenges Faced in Schools

As the teachers have all been trained to teach in smart schools, the MOE has high expectations of them. They want the teachers to accept the challenges and try to adopt as many as possible teaching strategies suggested during the training. They should always try to upgrade their knowledge and be able to deliver whatever that they feel useful for students. They should be sensitive to students' individual capabilities and needs. It is also their duties to understand their learners and maximise students' potentials. The teachers must always try very hard to ensure that they carry out their duties as best as possible. During the fieldwork, we would like to find out what kinds of challenges the teachers

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were facing when they were asked to teach using current school's curriculum and training. We had the opportunity to ask the teachers to tell me what the challenges were.

As a head of science, Nair says that *"I don't feel any different teaching here. I need to accommodate to the new ICT environment. I need to be learning new teaching and learning tools, worksheet, materials prepared to accommodate different students' learning styles, technical (computer) problems."* [nair/int/12.4.19].

Fauziah thinks that *"teaching now is more difficult as students are exposed to many media. There are multimedia resources and the Internet. Students have been exposed to many different skills. The teachers have been very creative and daring in bringing about changes. There are many resources that teachers could use to improve their knowledge. I am certain that the curriculum would encourage teachers to be creative and innovative"* [fauziah/int/19.4.19].

Another teacher says that the challenges he faced are *"Limited time and needs, I don't feel that I am up to face the challenges"* [nair/int/15.4.16]. Smart teaching could be implemented if teachers start to realise the importance of the needs to teach effectively. Azizah states that *"smart teaching as one of the factors to increase teaching effectiveness, teacher as important factor as guidance"* [azizah/int/22.2.19].

Suzan feels that *"it is a brave effort to move the country forward. The use of ICT and other skills are crucial in developing important citizens. The current ICT training can be used to produce ICT competent workers for the 21st century. It is also crucial for teachers to appreciate students' creativity"* [suzan/int/20.2.19].

Angie predicts that *"students and teachers will need to work hand-in hand. They should be working interdependently. The students are expected to be responsible for their own learning and the teachers should be able to provide and search more meaningful materials for the students. It is useful to have students who are responsible and I hope the "smart" students can achieve better with the help of teachers"* [angela/int/24.2.19].

Role of Teachers as Facilitators

During the interview sessions we have had with the teachers, they told us that they have been asked to make their classroom more student-centred. During training, they had been urged to play their roles as facilitators and could help make their classrooms more conducive for learning and their science lessons to be more interesting. The roles as facilitators could certainly help the teachers to be closer to their students. Teachers as students' mentors, the students would be able to work together with them to produce excellent students' performance. As the ex-head of science, Nair says that *"(t)he teachers as facilitators should try to provide help whenever necessary to improve students' performance and the grades in science. Keeping in mind the learners, they need to plan lessons as effectively as possible. They need to develop the atmosphere for learning and make students the focus of their teaching and learning. In this class, students will be at ease in learning science and retain as much information as possible"* [nair/int/12.4.19].

In our interview with Nair, he expresses that *"in the classrooms, I always play the role of a facilitator. The teachers' roles as facilitators are not something new. In my opinions, teachers should be students' peers and counsellors. The students have long been taught this way in my class. Therefore I welcome the move by the ministry. I have no problems regarding playing my role as a facilitator. It suits me well. It is suitable with my styles and helps in my teaching process. I don't like to teach if my students are afraid to ask question and contribute their ideas. I prefer my students to be active learners in my classes and contribute their ideas in my class. I want my students and I make the classroom alive. Certainly I would be very tired if I am the only one talking"* [nair/int/12.4.19].

Nair claims that *"the role as facilitator suits me well. I feel that students should not be afraid in learning. Teachers are there to help. I always encourage my students to ask questions and work as a team. They must make sure everybody pass the subject with flying colours. Not everybody is brave to ask questions, most of them are shy. I don't give up easily. I get them to do group work to get them to participate in my class. I try to organise small activities and games whenever I can but I am afraid that if I spend more time doing games, I am not able to finish the syllabus on time. I change my role whenever I feel necessary. If I am not serious, students may misunderstand me. This would be posing more problems as their teacher"* [nair/int/12.4.19].

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Another colleague of Nair, Abu feels that the role as facilitator is very useful in his classroom. However, he elaborates that “not all students are well-disciplined when they should be independent. I have to remind them all the time to do things on their own before copying their friend’s work. They need to try first. I always welcome students to teachers’ room and give them help whenever I can. For students who are faster learners, they will be given more exercises. To the weak students, I provide tutorial lessons” [abu/int/15.4.19].

Fauziah, who had been working for 5 years, says that “the role as facilitator is very relaxing. It is one of the ways to reduce stress among teachers. Teachers are as students’ friends. I like to be facilitator. I would try to help my students whenever I can. I want to be students’ friend and be there whenever I can. I want to help them pass the science subject. I try to be their close friend. I think students enjoy learning science with teachers who are friendly. I try to be flexible and try to cooperate when learning science. In my class, my students always contribute ideas in my class” [fauziah/int/19.4.19].

She continues that “as a facilitator, I always ask them what they want to learn and try to see if their ideas fit to my syllabus. If we play and play games in my lessons, I don’t think I can finish the syllabus. I will get into trouble if I don’t finish the syllabus on time. I like to conduct activities with my students if they behave well and read what they have been asked to read” [fauziah/int/19.4.19].

Suzan who has been working in the school for 8 years, asserts that “I don’t like my students to be afraid of me. I want my students to take part in my class discussion. My role as facilitator... I want to be their friend. I want to help as much as I could. I always get my students to participate in my class. I consider that teacher and students should be there for each other. I have no problem being a facilitator in my class” [suzan/int/20.2.19].

Angela states that being a facilitator, “building rapport with students is crucial. I should try to get students to take part in my lessons. I always welcome their contributions. But, not all students want to participate. Many of my students are afraid to take part as they need to speak in English. In year 7, English is used in Science. Can you imagine if they are forced to ask questions? I think it takes time. I try to use English and the Malay language (known as Bahasa Malaysia) in my science. If I use English throughout my lessons, maybe not everybody understands it. If I use the Malay language, it means that I am not following ministry’s directive, I will be in trouble. If I ask a student to say something, he or she will be quiet. I think it is difficult now when I teach Year 7” [angela/int/24.2.19].

Azizah who has been teaching Science for nearly 9 years feels that she always tries to play the role as facilitator too. She faces the similar problems, trying to get her students to cooperate with her. According to Azni, “my role as facilitator, yes, I think I try to be their facilitator. I think my students know that I always want them to cooperate and take part in my discussions with them. They like to work in groups. To take part, it is a bit difficult. They do not want to be put on spotlight. They are shy. I do wait to get them to take part but they are shy. I cannot just wait for them. I have my syllabus to complete and students have to sit for examination. I try to get them to collaborate in small group work. In a large group, I often play a bigger role. I try to get them to read the chapter before we meet. By doing so, I think students will be able to give their ideas and answers to me. I always welcome them to give me ideas in the beginning of the semester” [azizah/int/22.2.19].

Facilitating Learning

Fauziah explains that “to facilitate learning, I always ask them to read the section first before coming my class. If I don’t ask question, they will feel that don’t need to read anymore. They might think it is a waste of time reading the material before coming to the class. They get very dependent on me most of the time. They come to class expecting teachers to deliver the notes and summary for the chapters. I try to change students’ expectations. I want them to bring resource into the classroom and I will guide them through gradually depending on their abilities” [fauziah/int/19.4.19].

Angela states that “in the training we have been told to be facilitator as to guide students in their learning. They have been told to always focus on students. It is important for me to identify my students’ background and learning styles. With the knowledge about students’ learning styles, I should be able to facilitate each student. I am able to help students based on their own capability and provide remedial help whenever necessary” [angela/int/24.2.19].

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Nair indicates that the school has a lot of ICT facilities for students to use. He admits that *“students are busy reading examination reference books to prepare for the big tests. As a teacher, I try to help as much as I can. I always do group work and get students to talk to each other. In my class, I have identified some good students who would be helping weak students. I try to get them to gather in certain groups so that they don’t get the same students all the time. I want the good students to guide the passive students”* [nair/int/12.4.19]

Abu realises that his students need him to help them whenever they face problems in science. He states that *“students suppose to be taught to self-direct themselves. With the 3’s, the students should be guided to learn on their own and assess their knowledge from time to time. The teacher should not spoon-feed students. Many students expect teachers to come and bring notes for them. IT makes them lazy students. Therefore, we as teachers should provide guidance for learning whenever they can”* [abu/int/15.4.19].

Follow-Up Training

Since the teachers had undergone certain ICT training, we would think that teachers’ staff development would be sufficient. It was quite surprising when teachers felt that they still needed more training on smart schools. Angie says that *“I need more training. There was not enough exposure on smart teaching/approaches* [angela/int/24.2.19]. Moreover, Fauziah mentions that she needs *“more input regarding integration of ICT into teaching and learning”* [fauziah/int/19.4.19]. She realises that in order to be effective teacher, *“I needs input regarding ICT development and creativity in implementing teaching and learning. I think I need more preparation time to make my teaching interesting and effective. I feel that my knowledge needs to be upgraded. I think so!”* [fauziah/int/19.4.19].

Nair believes that *“as a teacher, I try to use whatever I have been taught during the training. I feel that the training is inadequate if there is no follow-up. I think it is crucial for teachers to be given clear examples regarding certain teaching techniques. I need to be trained in pedagogy of science. I don’t think I have enough skills, knowledge and ability if there is no follow-up training”* [nair/int/12.4.19].

Suzan thinks that the teachers function as secretaries in smart schools. She notices that 21st century skills require more unnecessary work for teachers who are already busy. She states that *“along lots of clerical work. Limited time, burdened with administrative tasks like clerical work, insensitive of top management in burdening teachers with other chores (even it is the task of the clerks). Regarding the training, I think I need to have more training on pedagogy. I don’t think it is enough exposure given during the training. Therefore, I feel I need more training”* [suzan/int/20.2.19].

Angela hopes that *“more courses for teaching and pedagogy are offered to teachers. I think we need to improve teaching. The administrative tasks should be given to clerks to handle them. I don’t think it is appropriate for teachers to handle both academic and administrative duties. I am willing to learn ways to improve my teaching than spending time learning and doing administrative duties”* [angela/int/24.2.19].

Azizah, who is one of the senior teachers feels that *“there are many things to learn as teachers. We have extra duties to handle now. I am sure that we all need training and re-training. I think the administrators should be focussing on providing more training for the teachers. It is about time for the schools to send more teachers for training. It is not fair for the same teachers to be sent for training. There should be some kind of monitoring to ensure that more teachers are sent for training”* [azizah/int/22.19].

CONCLUSION

This study reveals that ICT integration is still not prevalent in Malaysian schools despite a lot of money spent to train teachers to integrate ICT into subject teachers. As this study was intended to investigate the amount of IT that teachers used in their classrooms, the application of IT into classroom teaching is still poor. It was observed that teachers still are not confident enough to integrate IT into their subjects such as science. Despite training programmes in schools organized by the Ministry of Education (MOE), Malaysia teachers did not have the time to plan IT into their lessons. It is recommended that CPDT needs to be planned carefully so as to encourage teachers to provide opportunities for students to collaborate among peers in their classrooms. They need to be “guide by the side” which can persuade teachers to integrate IT that can motivate and enhance their learning. These teachers should be given the opportunities to attend specific workshops and training programmes that will equip themselves with

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appropriate attitude, knowledge and skills that can help them integrate IT into their classrooms. This is vital as IT can be used to increase productivity of teachers and learners/students. CPDT is vital to be designed and developed to enhance teachers' skills in making learning more enjoyable and fun.

To ensure the effectiveness of CPDT in IT skills and 21st century skills, teachers need to be trained not only to teach about computers but also to teach with computers. To increase the use and integration of ICT in the learning and teaching process, there must be changes in the roles of those involved in schools: administrators, teachers and students as well as communities. Students should be active learners, teachers as facilitators, principals as managers and communities as stakeholders in the context of today's schools (MOE, 1997). Whether or not technology is fully integrated into learning and teaching, teachers should facilitate learners by presenting information and providing feedback as often as possible in order to assess and improve student learning. Principals and headmasters as well as the policy makers must be sensitive in providing necessary infrastructure to help all schools in Malaysia. It the responsibility of all to ensure that schools provide equal opportunity and quality education for all learners regardless of different students' academic capabilities.

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The Urgency of Designing National English Curriculum for Elementary School in Indonesia

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ABSTRACT

To propose the idea of designing national English curriculum for elementary school in Indonesia, a literature review as a research methodology in this study was conducted to reveal the urgency of teaching English to young learners, based on a number of previous studies on this issue, as the preparation for the future generation facing the era of globalization. The fact that English is the language of world trade and technology has benefit the countries in which English is taught since Elementary level with their national standardized curriculum, such as Singapore, Malaysia, and Brunei to grow rapidly. Contrast to their conditions, In Indonesia, although there are many positive responses from the society about introducing English since elementary school, based on National Curriculum 2013, the government has just allowed schools to teach English since junior high school. As a result, there are great numbers of elementary schools start teaching English to their students without necessarily developing proper curriculum or even having qualified teachers. Therefore, providing national English curriculum for elementary school is strongly required to give teachers and schools clear guideline and proper standard to teach English at early stage. It is expected that proper and nationally standardized English curriculum will help teachers and schools to teach English according to the student needs and capacity and build strong foundation for learning English on the next stage.

Keywords: *National English curriculum for elementary school, young learners, National Curriculum 2013*

INTRODUCTION

English has been widely regarded as the world's language that makes more people learn this language to fulfill their needs of getting involved in numbers of international fields. As English has constantly been spreading around the world as a global language, it is no longer a language restricted to countries where it is spoken as the first language (mother tongue). Its spread is obviously seen in Southeast Asia, a sub-region of Asia which includes eleven multiethnic, multicultural and multi-language countries (Vu, 2014). As a response on this issue, Graddol, (1997) states in (Rachmajanti, 2008) that great numbers of non-native English speaking countries have made changes in their public policies, such as lowering the age at which English is taught in schools, such as introducing English as a subject in the school curriculum in the elementary level.

Looking at experiences from other countries definitely will be useful to have the best possible success in implementing teaching English in elementary level. Singapore, Malaysia and Brunei for years have already included English as their second language, used altogether with their native language. Even to make sure that their young generations can communicate properly in English, the governments have stipulated this language as a compulsory subject in all levels of education, including elementary schools. Those countries have utilized English as the constructive language for the nations without leaving their identities as countries with indigenous languages.

What about Indonesia? Contrast to Singapore, Malaysia and Brunei that have regarded English as their second language, Indonesia is even still in struggle of taking English as the compulsory subject in elementary school. English language teaching has then undergone numerous changes in its curriculum since the country's independence and brought no significant impact upon the learning outcomes. Although, in fact, primary English provision in Indonesia has started in 1994 in which English has the position as *the local content subject* in the elementary schools (Supriyanti, 2012), serious attention is still not taken due to its position in the curriculum. Since it is only a local content subject, the provision needs no specific methodology, no specific techniques nor appropriate materials and media. There has been no standard in how the English provision should be handled, therefore the result cannot be expected to help improving the quality of the English provision in the higher educational levels

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(Supriyanti, 2012). The similar cases repeated in every new curriculum launched by the new government, in which English has never been a priority for elementary schools. To make it even worse, the current 2013 curriculum implemented now in every school in Indonesia has removed English as the local content and take it slightly only as extracurricular activity.

Indonesia government needs to take English as the compulsory subject for elementary schools and design its curriculum. Countless research has shown children's natural talent to absorb foreign languages should not be wasted. It is scientifically proven that the most effective age for learning a foreign language is 10 or under (Saputra, n.d.-a). Thus this literature review of study is conducted to encourage the government and all stake holders of education in Indonesia to start the English teaching at the elementary level more seriously and designing its curriculum.

RESEARCH METHOD

LITERATURE REVIEW

Based on the review of previous literatures, this study is trying to build the proposal of designing national English curriculum for elementary schools in Indonesia. There are two aspects pertinent to the discussion of the paper; curriculum 2013 and the context in which English teaching in primary level situated in Indonesia and teaching English to young learners. A number of previous research also support this study.

Curriculum 2013 and the context in which English teaching in primary level situated in Indonesia

The practice of English was no longer only limited to international purposes but also local communication. In the countries that take English as their second language, English becomes the medium of communication among the people from different level of society. In the level of international interaction, most people choose English as communication medium which is generally known as English as a Lingua Franca. Unlike other countries, Indonesia took a different stance by putting English as its foreign language while neighbor countries such as Filipina, Singapore, and Malaysia view English as the second language (Gunantar, 2016). In education field, in fact, Indonesia is the only country in Southeast Asia that has not made English a compulsory subject at elementary level. As a result, based on the data from English First (EF) an education institution that runs English courses all over the country, Indonesia is ranked lowly 51 out of 88 countries in English proficiency, lagging far behind Singapore (3), the Philippines (14) and Malaysia (22). We are even outclassed by Vietnam (Saputra, n.d.-b). In line with this, based on the results of the study English proficiency Index (EPI) 2016, Indonesia got ranks 32nd of 72 countries in the world. The figure represents a decline from 2014. These results of the research demonstrate that the quality of English proficiency still needs to be improved.

It is hard to find the use of English in daily conversation in Indonesia. In schools, for many years English subject can only be found as compulsory subject since in junior high level. Yet, it is only taught approximately for four hours a week and focus mostly on preparing the students for the test rather than building their communicative skills. For elementary school level, until the last type of curriculum namely KTSP (*Kurikulum Tingkat Satuan Pelajaran*) English was only admitted as local content subject that schools can take it as an optional subject. Then, the current K- 13 curriculum (*Kurikulum 2013*) finally removed English subject from Elementary school and leaved it only as part of the extracurricular subject (Arif, 2015).

There are a number of changes in 2013 curriculum that bring significant impact towards the process of teaching and learning in elementary level. The new curriculum will focus on character development for elementary school students, skill development for junior high school and knowledge building for senior high school (Madkur, 2013). Then, Mulyasa (2013) in (Madkur, 2013) wrote some changes in 2013 curriculum for elementary level that distinguish it from previous curriculum. They are:

1. Thematic-integrative: The learning teaching process will be done based on theme. It means some subjects are combined into one based on the theme.
2. Eight subjects: There are ten subjects in the previous curriculum, but in the 2013 curriculum, the ten subjects become eight subjects. Namely Religion, Math, Indonesian, social, science, civics education, arts and skills (local content), and physical education (local content).

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3. Boy scouts as compulsory extra- curricular subject.

4. The learning time will be longer

5. **English is only as extracurricular subject**

Talking about English just as extracurricular Subject, or in other words, it is omitted from intra curricular subject, former Deputy Education and Culture Minister, Musliar Kaslim (2012) in Koran Sindo (2012) said that the omission aimed to give ample time for students to master the Indonesian language first before diving into foreign languages. His statement is in line with a number of people who agree with the removal of English from Elementary level. Sepyanda (2017) states in her studies that some people who agree with this situation believe that Elementary School students should focus on learning the national language (Bahasa Indonesia) related to their nationality by which the students should pay more attention to Bahasa Indonesia as their first language than English as foreign language.

A number of previous studies have shown that the interest in English teaching in primary schools is vastly growing in Indonesia (Zein, 2012). Various research have reported that parents would only send their children to study in a school that offers English instruction, while the local offices of the Ministry of National Education authorized primary school principals of schools that do not teach English to offer English instruction for prestige reason. Entering the new millennium, there was another increasing interest in English within Indonesian society. Parents in many parts of the country were aware that the increasingly globalized world meant that strong preparation in English education would be vital in the coming years. Furthermore, parents also believed in the importance of elementary English education for early language acquisition (Chodidjah, 2008; Lestari, 2003; Rachmajanti, 2008) as cited in (Zein, 2018). Parents believed in the notion ‘the earlier the better’, that is, the value of an early start and the advantages it offers to children as they learn to acquire a foreign language. They further assumed that elementary English education would contribute to the development of a more positive attitude and higher motivation toward the language among the Indonesian workforce of the future. It is no surprise that during the early years of 2000, there was a tendency for parents to enroll their children in a school that offers English (Zein, 2018). Therefore, school principals feared that numbers would decrease if they failed to respond to it, so they offered English instruction. Some even lowered the level at which English was introduced into the curriculum to as early as Grade 1. This particular responds show that the 2013 curriculum does not answer the demands both locally and internationally. In local context, the 2013 curriculum does not accommodate the demands of the parents who want their children to study English since elementary level. In international context, English has been required strongly to support the young generation facing the global world, thus, the 2013 curriculum should respond to this urgency.

Postponing English education until secondary education denies macro- policy factors that have contributed to the conception of elementary English education (Zein, 2018). Elementary education should be viewed as an important stage in education process that will determine the quality of the next stages. The demand of Elementary English education is overwhelmingly strong, and the support among parents for its implementation has never ceased (Egar et. Al., 2011; Hawanti, 2014; Lestari, 2003; Zein, 2009) as cited in (Zein, 2018). Since there is strong emergence of English demand among parents of students in elementary school level, Indonesia government should respond this in no more delay.

English Curriculum for Young Learners

Curriculum

The term curriculum refers to the lessons and academic content taught in a school or in a specific course or program. In dictionaries, curriculum is often defined as the courses offered by a school, but it is rarely used in such a general sense in schools. Depending on how broadly educators define or employ the term, curriculum typically refers to the knowledge and skills students are expected to learn.

Curriculum of teaching English for young learner is different from teaching English for adult. English for young learner is not as complicated as adult, for example, children do not comprehend abstract ideas such as grammar. Bourke (2006) as cited in (Pransiska & Pd, 2016) notes that young learners do not have a concept of ideas such as parts of speech, discourse or phonology. Any attempt to explain these abstract concepts at an early age will likely serve only to confuse them. In addition, from an early age, children first begin to sort out words involving concrete objects. When introduced to L2 classroom, they “need very concrete vocabulary that connects with objects they can handle or see”, states Cameron (2001) in (Musthafa, 2010). In contrast, adult learners are able to cope with abstract ideas. Therefore,

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teaching English for young learner has to avoid teaching grammar and focus on about vocabulary. Reading and writing are also suspended until appropriate age to introduce English literacy.

Teaching English for Young Learners

In teaching young language learners, Pinter (2006) in (Pransiska M. Pd, 2016) points out a number of reasons why children can benefit from learning a foreign language. It can develop children's basic communication abilities in the language. Communication abilities need to stimulate as early as possible. Teaching English also encourages enjoyment and motivation for language learning especially when it is in fun way. In addition, children can also promote learning about other cultures and develop children's cognitive skills as well as develop children's metalinguistic awareness.

Regarding the teaching of young learners, in this study refers to the students of elementary school, the teachers need to understand the concept of acquisition and learning. Acquisition is a process of acquiring the language naturally or sub- consciously. On the other hand, learning is a process of having the language consciously (Krashen and Terrel (1983) in (Saputri, 2017) state that acquiring a language is "picking it up", i.e., developing ability in language by using it in natural, communicative situations. Children acquire their first language, and most probably, second language as well. Language learning is different from acquisition. Language learning is 'knowing the rules', i.e., having a conscious knowledge about grammar. According to recent research, it appears that formal language learning is not nearly as important in developing communicative ability in second languages as previously thought. Therefore, in line with children's development and the two concepts above (acquisition and learning), the teaching of English to young learners at elementary school requires situation in which the students acquire abilities by means of acquisitions rather than learning. It means that the students acquire language naturally and communicatively.

Children are not little adult, instead, they have their own ways of doing things which are different from that of adults. In this way, they should be treated and appreciated in their own rights. To make English teaching work as expected, the characteristics of children related to the way the learn language need to be considered before designing proper English curriculum for elementary level.

Concerning how children learn, a number of researcher have provided very useful insight to understand about this matter. Bruner (1996) as cited in (Musthafa, 2010) proposes a hierarchy of children's learning modes: *enactive* (which means relying on physical activities), *iconic* (which represents residual mental images resulting from the contacts with material entities), and *symbolic* (which comes later by way of symbolic means such as language). Adding to these concepts, according to Piaget in (Musthafa, 2010), there are three kinds of knowledge children create from their engagement with physical objects and social intercourse: *physical knowledge* (which children construct out of their "interaction" with physical objects), *logico-matematical knowledge* (i.e., basic concepts children *acquire* – as a *mental residue*– from their actions on physical objects), and *social knowledge*.

Based on these hierarchies of learning modes and kinds of knowledge constructed by children, an Indonesian researcher Musthafa (2010) proposes certain learning principles in his study. The principles include the following: children learn from direct experiences; children learn from hands-on physical activities; children's thinking is embedded in here-and-now context of situation; and children have a short attention span. Another principle is proposed by (Saputri, 2017) that is children learn through language chunks.

1. Children learn from direct experience

Children learn and create knowledge from direct experience: from what they can really see, touch, listen and feel, simply from what they experience directly. In their young age, they still cannot generally learn from abstraction. This learning principle has a great implication for topic choice and materials development by the teachers.

2. Children learn from hands-on physical activities

Children learning process is improved when the learners are engaged in hands-on physical activities such as playing with physical objects or making physical movements. This learning tendency has a great implication for instructional design.

3. Children's thinking is embedded in here-and-now context of situation

Since children's thinking tends to be embedded in what is happening right now and what can be experienced on site, it would make a better sense if the topic they learn can easily be seen on their daily

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basis. In this way, the teaching and learning of English can serve a real purpose, and this will increase children's learning motivation because they can see for themselves that English is useful.

4. Children have short attention span

Different from adults who can concentrate hours and hours on the topic they are working on, children can hold their attention for about 15 to 20 minutes only. This relatively short attention span has a great implication for teaching procedures.

Another researcher, that is (Saputri, 2017) also proposes another principle in her study that is:

5. Children learns through language chunks

In learning English, the students need to use language chunks, phrases which have complete meaning. In this way, the students will be able to comprehend language function as a means of communication easily although at first they do not know the meaning of the phrases they use, such as, " Good Morning ", "Good Afternoon ", "Never mind", " Thank you", and so forth.

There are three dimensions of language learning that strongly determine the quality of the learning process (Musthafa, 2010). The dimensions are exposure to the language (where learners get exposed to language in use which can serve as examples to learn from), engagement (where learners get opportunities to use the language for communicative purposes), and consistent support (where the learners see for themselves that learning the language is useful;and the language they learn is socially recognized as prestigious). These three dimensions should be there if the learning of a language is to be effective as expected.

Review of Previous Research

A number of Indonesian researchers has conducted some research about English teaching in elementary level. They have already provided strong ground for designing English curriculum.

The first researcher is Subhan Zein (2018) whose study entitled Elementary English education in Indonesia: Policy developments, current practices, and future prospects. His literature study reveals the needs of adopting a holistic view of multilingualism in the Indonesian context that will give impact on teaching materials, which need to allow for the provision of communicative based activities while ensuring the preservation of local culture. It will also have an impact on pedagogy, which needs to change its current test-orientation to a more communicative and culturally inclusive pedagogy that raises awareness of the use of English as a global language and builds confidence in the linguistic repertoire and cultural diversity occurring in the classroom.

The second researcher is Marcellino (2006) who concerns about the challenge of language teaching in Indonesia. The title of his study is English Language Teaching in Indonesia: a continuous Challenge in education in Education and Cultural Diversity. His study reveals about the complex linguistic situations and conditions in Indonesia. How the students cultural backgrounds, values, customs, and beliefs as well as the political standpoint of the government determine the success of English teaching in Indonesia. He also mention the substantial unconstructive influence of the students' cultures and the non-conductive language environment affecting their language acquisition regarding this English. Finally, the teachers' performance and class preparations that equally contribute to the ineffective classroom.

Based on the review of previous literatures, this paper is trying to build the proposal of designing national English curriculum for elementary schools in Indonesia, including some practical recommendation concerning its content.

RESULTS AND DISCUSSION

For the investigation, this paper uses literature review method. Reviews of research literature are conducted for a variety of purposes. They include providing a theoretical background for subsequent research; learning the breadth of research on a topic of interest; or answering practical questions by understanding what existing research has to say on the matter (Okoli & Schabram, 2010). The main references used are concerning curriculum 2013 and the context in which English teaching in primary level situated in Indonesia and teaching English for young learners. Scientist journal print edition, on line edition and articles are gained from the internet. The writing was pursued the interconnection between each components according to the topic discussed. The data were selected and sorted according to the

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topic. Then they are arranged logically and systematically. The data analysis technique applied in this study is descriptive argumentative. The conclusions were obtained after referring back to the statement of the problem, the purpose of writing, and discussion. Conclusions were drawn to present the subject of writing, and supported with practical suggestions as subsequent recommendations.

Today, English has an undeniable global status, which is used either as a mother tongue, a second language, or as a foreign language in every continent of the world. Especially in ASEAN (Association of Southeast Asian Nations), English functions as an Asian and international lingua franca. It has become a medium of communication among groups of people who do not speak the same first language. As a response to this issue, most countries in Southeast Asia have taken English as their second languages, actively used together with their various mother tongues. They take English as a compulsory subject in all level of education, including elementary level.

Not to be left behind other countries, Indonesia government needs to pay more attention on English teaching in Indonesia. First strategic step is by including English as a compulsory subject for elementary schools and provide the national English curriculum to strengthen its implementation. These are the crucial reasons why the provision of English is strongly required since elementary level.

1. The widespread assumption that the younger the child learns a new language the better the result will be. This is in line with the majority of parents in Indonesia who support the English teaching in elementary school and the scientific research which proves that the most effective age for learning a foreign language is 10 or under.
2. The fact that economic globalization has pushed the demand of English in the form of the workforce who speak English to meet the need of the international economic forces. This also has been realized by the three countries, Malaysia, Brunei and Singapore, reviewed previously. Thus, they take English as their second language to attract overseas capital, trade, industrial investment, to gain access to advance technology and modernization. To equip their citizens with proper English skills, they have stipulated English as compulsory subject since elementary school. In fact, among southeast countries, Indonesia is the only country that has not made English a compulsory subject at elementary level.
3. The parents' enthusiasm for their children to learn English early in order to have social and economic benefit in the national context. In fact, English has a crucial role nowadays. To graduate from university, to get scholarship, to apply for jobs and even to apply for civil servant, Indonesian needs English scores, in the form of TOEFL, IELTS, TOEICs or others. Further, to walk through the international gate, it is indispensable for Indonesian to speak one foreign language, especially English. With the ability of communicating in English, young generations will have better opportunities to access more prestigious careers and professions that eventually help them to have social and economic benefit.

Proposed recommendation for the English curriculum design for elementary school

Here are some recommendations built from the previous discussion concerning the design of English curriculum for elementary school.

1. Indonesia government has to stipulate English as the compulsory subject for elementary school. Only through this way, English has strong position in elementary school education and deserves the design of proper curriculum to be nationally implemented over the nation.
2. The curriculum designed for elementary school should be relevant with the children needs, stages of learning process, the characteristics of children and the next curriculum of junior high school. This is to ensure that English learning process in elementary level can be a strong foundation for learning English in the next level. Thus, English learning process from elementary school until senior high school can become a solid continuation learning process that eventually build students communicative skills in English.
3. The government needs to provide in service training for English teachers in elementary schools. This training is required to prepare teachers knowledge and skills before implementing the curriculum into the classroom learning activities. Through this training, the teachers will have acquired knowledge and skills related to teaching young learners, approaches and methods of teaching, educational

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philosophies, teaching practices ,testing and assessment, and exposure to English teaching materials related to English for young learners.

Regarding the design of English curriculum for elementary level, based on the theories of children language teaching, this study proposes four basic principles that should be included within it.

The curriculum should encourage children language acquisition rather than language learning.

As mentioned previously, children acquire the language, not learn. Exposure represents an essential prerequisite for the acquisition of English to happen. Therefore, the curriculum has to provide the lesson and academic content that provide learners with opportunities to acquire the language rather than learning it.

The curriculum should focus on functional English for vocabulary development, and for immediate fulfillment of communicative needs of the learners.

Children learn through language chunks, words by words, phrases by phrases. Then they will construct their knowledge in their own way. Their learning will be strongly enhanced when they can feel English is related to their contextual needs. Therefore, the curriculum should provide the lesson and academic content that help students acquiring functional vocabulary items for their communicative needs. For example, in speaking practice, the curriculum content should encourage children to speak up their minds by supplying them with vocabulary and phrases, that suit their ages and needs so that genuine communication can take place. By doing so, learners can feel that learning English is useful and that English is related to their real life.

The curriculum should contain short periods of time of lesson and academic content to maintain the interest level of the children in engaging the English lessons

Since children have a short attention span, rather than using a large time block for an uninterrupted session, it would be better if the curriculum contain short periods of time of lesson and academic content to maintain the interest level of the children in engaging the English lessons. This is done to avoid boredom on the part of learners while at the same time, keep focus on the teaching items from one instructional move to another so that children's learning is ensured.

The curriculum should provide the lesson and academic content that give learners the opportunities to engage with English language usage in accordance to their real life

Children learn from direct experiences; children learn from hands- on physical activities, therefore the curriculum should supply children with the lesson and academic content that provide opportunities to engage with language usage that is in line with their daily life. For instance, supplying children with the topic of body parts, classroom objects, and family members that involve actively communicative activities will help students to engage with language usage that is suitable with their real life. Then, these will strongly improve learners' language foundation for their learning process on the next level.

CONCLUSIONS

"English is a global language", "English is an international language", or "English is a world language" – these are headlines which have appeared in thousands of newspapers, magazines and books in recent years. Nowadays, the majority of English speakers in the world are not native speakers of English but use the language either as a second language or as a foreign language. English was spreading rapidly in non-Western countries as an "additional language" and "alternative language" in such multilingual societies as Southeast Asian countries, in response to the demands of modernization and technology. Therefore , a high priority placed by Southeast Asian governments on the teaching and learning of English stems from the necessity of English for the development and modernization of their countries through making English as compulsory subject since elementary schools.

As part of the world community, Indonesian government should have made a big leap to ensure that Indonesia would not be left behind in a world that was rapidly becoming globalized. Stipulating English as compulsory subject and designing English curriculum for elementary school should become a new priority for the government to be realized. The curriculum designed for elementary school should be relevant with the children needs, stages of learning process, the characteristics of children and the next curriculum of junior high school. To support the implementation of the new English curriculum, the government needs to provide in service training for English teachers in elementary schools.

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Regarding the design of English curriculum for elementary level, this study proposes four principles that should be included within it. First, the curriculum should encourage children language acquisition rather than language learning. Then, the curriculum should focus on functional English for vocabulary development, and for immediate fulfillment of communicative needs of the learners. Considering the ability of children to concentrate, the curriculum should contain short period of time of lesson and academic content to maintain the interest level of the children in engaging the English lessons. Finally, the curriculum should provide the lesson and academic content that give learners the opportunities to engage with English language usage in accordance to their real life.

It is high time for the government to open the opportunity of starting teaching English at the elementary level to maximize children's natural talent to absorb foreign languages. By giving children the earlier start to learn English, they will have longer time of learning English and absorbing knowledge as well as building English skills. Then, it can be expected that the next generation will have better English skills to communicate with people around the globe and represent Indonesia globally.

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Pre-Service Teachers' Evaluation of E-Modules in Mathematics Materials

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ABSTRACT

This study is an advance research to evaluate the use of e-modules in mathematics learning. The research method used is developmental research. Total subjects were 52 pre-service mathematics teacher. The instrument used is a questionnaire which related with uses, advantages and disadvantages of e-modules in mathematical material. The focus of this study is to categorize the results of an evaluation questionnaire about the perceptions of prospective teacher the e-modules on. There are 41 subjects considered that the e-module facilitated the subject to more understand the material and practice questions easily. However, there are 11 subjects who argue that the e-module used is still not helpful in understanding material. Since they were difficult to accessing the module by using their gadget, they cannot understand the concept of the material. Moreover, the description of the material less and types of question were related with daily life make subjects cannot changed to mathematics model. Through the questionnaire, the subject also revealed some suggestions, namely the need for a hardcopy of the mathematical module in order to more easily understand the material and do the exercises directly. In addition, the subject also provides suggestions for adding steps to work on the problems in accordance with the material and provide some practice questions that are not in the form of story problems.

Keywords: Evaluation Teacher, E-Modules, Mathematic

INTRODUCTION

Mathematics have a role in many discipline field and always related with processes in learning (A. Faradillah, Hadi, & Tsurayya, 2018). Thus, mathematics learning strategy is a plan which designed by teachers to achieve the desired goals in mathematics (Kusumawati & Nayazik, 2018). The use of good learning strategies is also seen from the selection of learning resources such as textbooks, modules and others. Learning modules can help mathematics pre-service teachers to more easily understand subject matter (Kariman, Harisman, Sovia, & Prahmana, 2019). The results of his study revealed that the module can make pre-service teachers manage themselves to learn independently because there is guidance of the steps on description of the materials on the module. Therefore, they can learn without the guidance of their lecturer (Kariman et al., 2019; Kusumawati & Nayazik, 2018; Ng, 2016).

Good modules have several criteria that must be considered so problems which there can make learning objectives are achieved. The problem here is non routine type which is a question that need high order thinking skills to solve it (Ayu Faradillah, 2018). There are some arguments which state the criteria, such as the importance of focusing pre-service teachers on the appropriate content and prevent them suffering from information (McCrum, 2017). In addition, Irfan and Wanarti said one of criteria to develop modules is it can monitor pre-service teachers learning activity and progress (Kusumawati & Nayazik, 2018). Thus, lecturer can know information when his pre-service teachers have obstacle about the material. In addition, the module development two phases such as foster students' learning and as assessment and validation step to see suggestion from students (Mirkouei, Bhinge, McCoy, Haapala, & Dornfeld, 2016).

There are a lot of research which used module to develop mathematics learning such as (Date-Huxtable, Cavanagh, Coady, & Easey, 2018; Geiger et al., 2018; Hourigan & Leavy, 2017; Kariman et al., 2019; Kusumawati & Nayazik, 2018; Mirkouei et al., 2016; Prendergast, Spassiani, & Roche, 2017; Salmi, Vainikainen, & Thuneberg, 2015; Yao, 2016). According to the research, the module give positive effect such as subjects were easily to understanding the concepts although without their lecturer. Besides, the research above there are several research which did evaluation about the modules namely (McCrum, 2017; Ramírez-Noriega, Juárez-Ramírez, & Martínez-Ramírez, 2017; Uttl, White, & Gonzalez, 2017). All of the research did evaluation based on subjects perception. Student Evaluation of Teaching used to evaluate their lecturer's teaching strategy to see how effective the strategy used based on their

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assumption (Uttil et al., 2017). From the research about the evaluation above there is not used e-module in mathematics learning.

This research want to see the evaluation e-module about how preservice teachers perception of e-module design and content. The purpose of this research did evaluation of e-module in mathematics learning based on pre-service teachers assumption. The evaluation given by using google form so all of preservice teacher can said everything with honesty. This evaluation will be used to develop new module which are in accordance with the advice given.

RESEARCH METHOD

Once the module was developed and evaluated with a pre-service teachers who were enrolled in a higher mathematics education program. Mathematics e-module, in the course of Linier Program develop with 4D (Define, Design, Develop and Disseminate) development methods (Basori, Isnaini, Setyowati, & Phommavongsa, 2018). The first phase analysing the needs of the pre-service teachers obtained the results that they need instructional materials capable of guiding to find the concepts. After going through a defining phase, that is the analysis of the syllabus, previous module, interviews, mid and finale test question can be concluded that pre-service teachers require e-module. The second phase is the design stage. The module is designed with has mathematical creative thinking questions. The next phase is the validation. Lastly, this study reveals how the effectiveness of the modules that have been developed. The effectiveness of the module to be reviewed on the pre-service teacher evaluation of 52 pre-service teachers who participate in Linier Programme courses.

This research has been conducted for two years toward 52 students who took courses Linier. Programme in one of private University in Indonesia. One of the relevance of the subject matter that can be chosen for the study is conditioned by the difference between (a) the educational orientation pedagogical modern at future teachers and training based on the subject matter and content, and (b) the need to develop pedagogically (Kariman et al., 2019). There are two aspect which asked on the questionnaire such and module content and design and subject suggestion about development the module.

RESULTS AND DISCUSSION

Module Content and Design

The problem of the e-module related with mathematical creative thinking ability which have four indicators, namely fluency, flexible, originality and elaboration (Hadar & Tirosh, 2019). Questions about the learning module in the questionnaire were given as many as two questions, namely did the giving of modules in the subjects of this linear program help you in understanding the material and practice questions based on mathematical creative thinking abilities?. In question questionnaire No. 3, which is about how much influence or how much this linear program learning module helps in understanding material and questions based on mathematical creative thinking ability, 41 subjects stated that the module is very helpful and influential in helping the subject in understanding and solving problems based on mathematical creative thinking abilities. Learning by using modules will be more effective, efficient and relevant so that it can help in solving problems by issuing new ideas (Sari, Farida, & M.Syazali, 2016). The application of the module in learning allows the subject to study independently outside the classroom and repeats the material and examples of questions provided.

As many as 11 subjects argued that the learning modules provided lacked contribution in understanding the material and practice questions based on mathematical creative thinking abilities. They argue that the application of the module by using the gadget makes it difficult for the subject to do the exercises contained in it and also the discussion of the material. The discussion as follows.

a. Material

In the material contained in the learning module used, the subject gives his advice to provide steps for applying each method contained in the specific linear program material. It aims to make the subject easier to understand and differentiate the use of methods in accordance with the appropriate type of questions. Prastowo explained that the use of modules in the learning process in class has several goals, such as the subject being able to learn independently or with the help of the teacher to a minimum, the role of the lecturer not dominating and not authoritarian in learning, practicing honesty, accommodating various levels and speeds of learning and the subject is able

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to measure own level of understanding of the material that has been learned (Tjiptiany, As'ari, & Muksar, 2016). So that the application of modules in mathematics learning has many benefits for subjects in the classroom.

b. Exercises

The use of modules in a linear program course makes it easy for the subject to understand the questions and do the exercises in the questions contained therein. The subject needs to be given the opportunity to act as a problem solver in completing the exercises. So the subject can develop his ideas to solve the problems in the learning module provided (Tjiptiany et al., 2016). As well as about the purpose of applying the subject learning module can measure the extent to which he is able to understand the material learned so that in giving criticism and suggestions too the subject feels the need to add extra or multiply the example questions or exercises so that he can practice more.

c. Hardcopy

Giving this learning module using sofcopy in the form of a .pdf file raises opinions from several subjects. A total of three subjects felt that the use of this learning module should be presented in hardcopy format so that the subject could more easily do the exercises directly on the module and provide some additional notes on the existing material. The e-module on mathematics was not popular with pre-service teacher (Martin, Cupples, & Taherzadeh, 2019). Due to they were used to printed textbooks in their teaching and learning process.

Preservice Teacher Feedback

The subject expressed several criticisms and suggestions for the development of the module, like in terms of material, practice questions and hardcopy. In addition to several categories of criticism and there are 17 subjects who do not give their opinions about criticism and suggestions for the learning modules that are used and feel the modules are as expected in terms of the content of the material and the exercises. According to preservice teachers feedback were used to assess whether and higher order thinking to creatively solve the problems given (McCrum, 2017).

The discussion as follows.

a. Material

In the material contained in the learning module used, the subject give advice to provide implementation steps. As stated by one subject that is "the materials discussed in the module so that steps are added to solve the problems in accordance with the material sub-section". In addition, there are also subjects who expect that module writing is moretidy like "the composition of module writing is more tidy because this module is an e-module so there are some writing structures that are less appropriate". Feedback related to this material was given by most subjects, as many as 20 subjects gave suggestions relating to the material in the module.

b. Exercises

The use of modules in linear course subjects makes it easy for subjects to understand the questions and do the exercises the questions contained therein. Even some subjects asked to be given additional good examples and practice questions in order to try it at home. As one subject said, "modules for more questions in it with various operations on linear program material". Learning can be defined as personal change since the learners's experience (Ramírez-Noriega et al., 2017). On the theme of the question exercise given by the subject as a suggestion, there are 13 subjects that discuss it.

c. Hardcopy

The last category the preservice teacher gives regarding this module is hardcopy. There are as many as 3 subjects who revealed that "the module should also be available in hardcopy format so that the subject can immediately solve the problems by writing it in the module". Further, they said that they were more likely to write their answers by using pencil rather than Microsoft Office.

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CONCLUSIONS

Subjects were given a questionnaire to evaluate the use of the learning module by asking ten essay questions on the Google form. Based on the questionnaire the percentage of subjects who liked the learning modules used and the selection of learning methods in the linear program subjects was higher than those who disliked it. Although the application process in the classroom experienced some obstacles or difficulties such as lack of time to implement it, the lack of presentation of the material in the module and the difficulty of the subject to understand the material and complete the practice questions presented in the module because the form of the module was still in the form of a soft file. In addition, the use of discussion methods in these courses makes it difficult for other subjects to understand the material presented by the presenter group. So that an explanation or reinforcement of the material is needed again. As for suggestions for further research, in order to pay attention and consider the suggestions given by subjects related to 3 things namely material, practice questions and hardcopy module.

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Application of Blended Learning in Citizenship Education Learning as Digital Literacy Efforts for Students

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ABSTRACT

Digitalization in the world of education has become a necessity in this era of digital and technological development. The educational process is directed to be implemented no longer conventional in face-to-face classes, but can also be implemented in virtual classrooms. It aims to build students' abilities in the digital world and eliminate the limitations of space in the education process. Likewise the case in learning Citizenship Education. As one of the subjects taught at all levels of education in Indonesia, Citizenship Education learning must also be able to apply digital-based learning, one of which is by implementing a Blended Learning system. This research is intended to find out how the role of the application of blended learning in learning Citizenship Education as an effort to improve students' digital abilities. This research was conducted at Pasundan 1 Cianjur High School by using descriptive research methods. The research technique used was observation and field study. From this research, the results are obtained that after technology-based learning in Citizenship Education, students' understanding and ability to the digital world emerge, especially digital learning. Students become more capable of Digital Literacy than before the implementation of this blended learning.

Keywords: Blended Learning, Civic Education, Digital Literacy

INTRODUCTION

Currently the development of globalization, especially in the field of technology has been so rapid. This condition has led Indonesia to enter the era of the digital revolution. The existence of the digital revolution has entered into all lines of community life is no exception in the line of education. The entry of digitalization into the world of education has brought significant changes in the implementation of education in Indonesia. The digital revolution has demanded an educational process to be carried out digitally as well. Therefore, it requires competence of the teacher, and students who are the main actors in the education process to have a capable digital literacy ability so that they are able to utilize the sophistication of digital technology for the implementation of the educational process.

The Digital Revolution is a phase in which there has been a change in human life that was originally using an analog system turned into a digital system (Rojko, 2017). Mastery of the digital world is one thing that is certain in the face of this era of digital revolution. Teachers and students are expected to have good digital literacy. Digital literacy is needed in order to build digital skills that are indeed very necessary in facing the challenges of the digital revolution. Digital literacy is an ability possessed by an individual to use information in various forms from a wide variety of sources that are accessed through computer devices (Gilster, 1997). Someone who has good digital literacy, means that the individual is able to use digital media, communication tools well, wisely, precisely, and carefully to be used as a tool for processing information.

The existence of a digital revolution in the world of education has brought a new paradigm in the world of education (Afrianto, 2018), one of which is the emergence of online learning or e-learning. E-learning makes it easy in the learning process, where teachers and students no longer have to be in one classroom together. The rise of the implementation of e-learning does not necessarily make learning must be done in full through e-learning by leaving face-to-face meetings in class. Therefore, to integrate the concept of online learning with face-to-face learning, the concept of blended learning emerged.

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RESEARCH METHOD

The method used in this research is descriptive method. In this study, researchers will describe the application of the blended learning learning model in Citizenship Education learning as digital literacy for students. The study was conducted at Pasundan 1 Cianjur High School.

RESULTS AND DISCUSSION

Blended learning is a learning system that collaborates face-to-face learning systems with online-based learning systems (Susilawati, 2018). In blended learning, the teacher conducts the learning process through two learning systems, namely the face-to-face system and at one time the meeting is conducted online by utilizing existing technology.

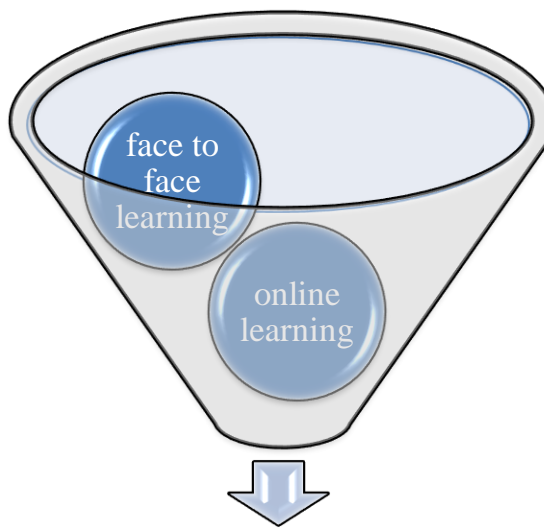


Figure 1. Blended Learning Concept

Basically, this blended learning model can be implemented in all subjects, including citizenship education. The application of this blended learning model provides various benefits, one of which is as one of the means for digital literacy (Lu & Price, 2018). The use of blended learning learning models in learning Citizenship Education is used as a means of digital literacy for students so that students can become individuals who have good digital literacy skills. In this blended learning-based learning, teachers do learning both face-to-face and also use the internet and learning management systems to manage their online-based learning (Fuller, 2016). Learning management system is used to make it easier for teachers to manage the learning process online so that teachers are more facilitated in conducting online learning. Learning management system used is google classroom. The selection of google classroom has gone through various considerations only one is the use of google classroom which is relatively easy.

Blended learning learning model implemented in citizenship education learning. In its implementation, the researcher applies this blended learning model to class XI and XII students in both science and social classes. The learning process of blended learning is carried out as many as 4 meetings, where 4 meetings consist of 2 meetings face-to-face and 2 meetings conducted online.

For each face-to-face meeting, even though the meeting was held face-to-face in the classroom, in its implementation it was integrated with the use of the internet as a medium and learning resource. So that students can still do digital literacy even though learning is done face-to-face. At face-to-face meetings, students are asked to surf to find relevant learning resources related to the learning material delivered.

Table 1: Syntax of Learning

Face to Face Learning	Online Learning
1. The teacher gives the core concepts of the learning material	1. The teacher asks students to join a virtual class that the teacher has provided in Google Classroom
2. The teacher asks students to look for explanations on the internet for each concept given by the teacher	2. After all students are confirmed to join in the virtual class provided by the teacher, the teacher posts the learning material that will be the material in the meeting.
3. Students write their findings from the internet.	3. The teacher asks students to study the learning material that has been posted by the teacher
4. Students present their findings	4. The teacher opens a question and answer session through a virtual classroom.
5. The teacher together with students formulates conclusions about the learning material that has been discussed.	5. At the end of the meeting, the teacher asks students to give their conclusions each related to the learning material provided which is then, the conclusions posted in the virtual classroom.

At each meeting, the teacher in this case is also a researcher conducting an analysis based on observations in the classroom of students' digital literacy abilities. As for the findings are as follows:

- a. At the initial meeting, students still looked stiff and were not even able to use Google's data search engine quickly, accurately and precisely.
- b. At the second meeting, students have gotten used to it and have begun to be able to use the Google impeller quickly, accurately and precisely. No more chaos in the process of finding data. However, when the teacher asks students to join a virtual classroom through google classroom, students begin to look more confused.
- c. At the third meeting, when students were asked to study material in Google classroom, students began to get used to the e-learning process and even they had started to be creative to use other learning resources such as YouTube to find out independently about how to use Google classroom.
- d. At the fourth meeting, students already have better digital literacy skills. This shows students are able to manage the Google data search engine carefully, quickly, and precisely and are able to operate and follow learning using Google classroom.

Based on the findings in the field, it is able to show that the use of the blended learning model has been able to teach students about digital literacy so that the ability of digital literacy students can also experience an increase.

CONCLUSIONS

Based on research that has been done by researchers, it can be concluded that the use of blended learning learning models in learning citizenship education is very helpful in improving the quality of digital literacy of students that is needed to face challenges in the era of the digital revolution.

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Daily Food Content Test for Fifth Semester Students of Pgsd Uhamka

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ABSTRACT

Research on the detection of daily food ingredients consumed by semester V PGSD UHAMKA students has been carried out. Retrieval of sample data trial. This study aims to identify daily foodstuffs consumed by students containing starch, fat and protein. Random sampling was taken at PGSD fifth semester students. Experimental processing techniques by testing various reagent solutions, using Lugol reagents to test the starch content, biuret reagents to test protein content, and oil paper to test fat content. From this research it has been identified. Carbohydrate test using Lugol reagents obtained data that is bananas, rice, biscuits, wheat flour and potatoes, this is evident because of a change in color from the original color of food ingredients to black or purplish blue, while apples, boiled eggs, white tofu, margarine, and sugar does not contain carbohydrates. Fat test obtained data of foodstuffs that were tested and left oil stains on brown oil paper that is peanuts, coconut milk, milk, oil, margarine, and hazelnut this happens because when food is smoothed and placed on brown paper will leave traces of transparent stains and proven food ingredients contain fat, while celery, carrots, corn, cassava, papaya, and water do not leave traces of oil stains. Protein test using Biuret reagents obtained data acquisition of types of food ingredients bread, tempeh, chicken meat, milk, and boiled eggs proved to contain protein this can be seen from changes in food color that had previously been mashed and then dropped by reagan biuret will change color from the color according to the color of food becomes purplish. While the types of food ingredients, sugar and wheat flour do not contain protein, this can be seen when the food is dropped by a biuret reagent there is no change in color of the food. From the results of the research data it can be concluded that some of the food ingredients used by students do not all contain carbohydrates, fats and proteins only a few foods that contain carbohydrates, fats, and proteins.

Keywords: food, fat, protein, reagents, starch

INTRODUCTION

There are many kinds of food that you eat everyday. Food contains different vitamins. The Functions of those vitamins are also different. To stay alive and to be able to do many activities, the humans needs foods. The foods that enter into the body will be oxidized to produce energy. The foods also has some other functions, those are; for the growing and the formation of the body, to replace broken body cells, to maintain body metabolism, to defend the body against many kinds of diseases, and to keep the body homeostatis.

The Foods that you eat must be nutritious. What is meant by nutritious is that the food contains some base goods, those are; carbohydrates, fat, protein, vitamins, minerals and water. The food containing all of the starting material in a balanced number is called balanced food. Beside nutritious, food has to be easy to digest and hygienic. The hygienic foods are the foods that do not have any disease and dangerous substance for the body in it. (Campbell et.al, 2010).

As a mentioned, the foods that you eat must contain some base goods, those are carbohydrates, fats, proteins, vitamins, minerals, and water. Crbohydrates are compounding arraged by carbon elements (C), hydrogen(H), and oxygen(O). The body needs carbohydrate as the main source of energy (every 1 gram of carbohydrate contains 4,1 calories); to keep the acid base balance of the body, as a substance to form cell structures, and as a substance to form organic compounds like fat and protein.

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Carbohydrates are categorized into monosaccharide, disaccharides, and polysaccharides. Monosaccharide is a simple compound of carbohydrate that is composed of a group of sugar, e.g. glucose, galactose, and fructose. Glucose can be found in fruits like grape, onion, and honey. Galactose can be found in milk sugar. Fructose is the sweetest sugar and normally can be found in fruits and honey. Disaccharide is a carbohydrate compounding with two clusters of sugar. Maltose, lactose and sucrose are examples of the most general of disaccharide. Two molecules of glucose from maltose, glucose and galactose molecules from lactose, while glucose and fructose molecules from sucrose. Sucrose can be found in sugar cane, banana, sweet fruits and certain tubers. Maltose can be found in millet's sprout. Lactose can be found in mammal's milk including mother's milk. Polysaccharide is compounding of carbohydrate that is arranged of many simple sugar molecules. e.g. glycogen, amylopectin and cellulose.

Fat is compounding arranged from C, H, and O substance. Fat cannot be dissolved in the water. But it dissolves in a variety of fat solvent, like alcohol, chloroform, and ether. As carbohydrate, fat also functions as source of energy (1 gram of fat produce 9,3 calorie of energy). Even though produce the biggest energy, fat is not main energy producer for it is kept as back up energy. The other functions of fat, that is as vitamins A, D, E, K solvent; as protector of organs of body, such as heart, kidneys, and flank. Fat also functions as substance to form cell membrane, preventing losing body heat when the weather is cold so that body temperature is kept balance.

Based on the source, fat is divided into fat derived from plants, and fat derived from animals. From plants for example coconut milk, coconut oils, nuts, and avocado. The examples of fat derived from animals are meat, eggs, milk, butter, fatty portion of meat, and cheese. In the body, fat is separated and absorbed in the form of fatty acid and glycerol. Fatty acid divided into unsaturated fatty acid and saturated fatty acid. Saturated fatty acid organized as liquid and normally derived from the plants. Saturated fatty acid organized as solid and can be found in the brain, liver and meat. (Ngili, 2009).

Protein is arranged from C, H, O and N (Nitrogen) substance. Some kinds of protein also contain S (Sulphur), and P (Phosphorus). Protein has some important functions, such as source of energy (1 gr protein produces 4,1 calorie); as substance to form hormone, enzyme, antibody, and chromosome. Besides, protein also functions as substance to form new cells and as solution of prop (buffer system). Solution of prop functions to defend the balance of acid and base of the body fluids.

Inside the body, protein is absorbed in the form of amino acid. Amino acids are divided into the essential amino acids and non essential acids. The essential amino acid is the one that the body needs, however the body cannot synthesize it, therefore the amino acids must be supplied outside the body through food. The examples of the essential amino acids are arginine, histidine, isoleucine, leucine, methionine, phenylalanine, threonine, tryptophan, and valine. Whilst, non essential amino acid is the one that can be synthesized by the body, for example alanine, asparagine, aspartic acid, cysteine, glycine, and glutamic acid, glutamine, proline, serine, and tyrosine. There are two kinds of protein, protein derived from plants and the one derived from animals. Protein derived from plants can be found in beans and its product especially soybean. Protein derived from animals can be found in meat, eggs, milk and fish.

To have a healthy body and a normal body, every person needs food substances such as carbohydrates, protein, fat, vitamins, minerals, and water. Food is an ingredient, usually derived from animals or plants, eaten by living things to provide energy and nutrition. Every living thing needs food. Without food, living things will find it difficult to do their daily activities. Food can help us get energy, help the body and brain growth. Eating nutritious foods will help our growth, both brain and body. Each food has a different nutritional content. Protein, carbohydrates, fats, etc. are examples of the nutrients we will get from food.

Carbohydrates or starch is a compound consisting of elements of carbon, hydrogen, and oxygen. To find out starch in food can be tested by giving iodine solution. Food that is doped with iodine solution will turn blue-purple. To find out the characteristics of food sources that contain fat can be done as follows. For example cooking oil, if the material is held or touched it will feel slippery and if it is placed on newspaper, then the paper will be seen leaving traces of oil on the paper. Protein is an important food for growth, development and replacing damaged body cells. If the food ingredients are dropped with biuret, the food will turn purple. The purpose of this study is to identify daily food items that are usually consumed that contain carbohydrates, fats and proteins.

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RESEARCH METHOD

This research was carried out in the Integrated Science Laboratory PGSD UHAMKA, conducted in November 2018. The food tests carried out were the carbohydrate test, fat test and protein test. The tools used include: pipette, drip plate, knife, brown paper cover, flashlight, label paper, pen. Ingredients used include: bananas, apples, rice, boiled eggs, white tofu, margarine, biscuits, flour, granulated sugar, potatoes, hazelnut, carrots, celery, corn kernels, boiled cassava, peanuts, papaya, coconut milk, cooking oil milk, water, bread, tempe. Food test solutions used were lugol reagents, greaseproof, and biuret reagents.

Carbohydrate Test work procedures as follows:

Pounded each food material tested. Foodstuffs in the form of flour and sugar are given a small amount of water to become a concentrated liquid, put foodstuffs to be tested on a drip plate, lugol drops on foodstuffs to be tested two to three drops, observe what happens and note the observations on the observation sheet.

Fat Test Work Procedure as follows:

Apply water on one brown paper, oil on the other brown paper, left the two papers for about five minutes. After that checked both with facing the light. Observe and note the state of the paper surface. Taken ten pieces of the same brown paper. Give the number and name of the type of food material tested in the form of hazelnut, margarine, celery, carrots, corn kernels, cassava, beans, papaya, coconut milk and milk. Mashed hazelnut, rubbed on brown paper about ten times and cleaned of the remaining hazelnut, then left for about five minutes. While waiting for time, something similar was done for the other nine ingredients. Melt margarine on a spoon using heat from the flame of the candle. Put margarine on brown paper. Allow about 5 minutes. After 5 minutes, observe the brown paper one by one. Use the lamp or flashlight kerarah former strokes of food ingredients tested. Which paper leaves oil stains. Observation results are recorded in a table on a worksheet.

Protein Test Working Procedure as follows:

Pound each food material to be tested, and dissolve the sugar and flour with water so that it becomes a concentrated liquid. Arranged food ingredients to be tested on a drip plate, then name the food ingredients using a label. Give two drops of biuret for each food item to be tested. Observe and record the color changes that occur in the worksheet that is already available

RESULTS AND DISCUSSION

Based on observations in the food test for starch using the lugol reagent the results are listed in the table below.

NO.	FOOD MATERIAL	COLOUR		DESCRIPTION
		BEFORE GIVEN LUGOL	AFTER GIVEN LUGOL	
1.	Banana	same as the original color	+	✓✓✓✓✓
2.	Apple	same as the original color	+	✓✓✓✓
3.	Rice	same as the original color	+	✓✓✓✓✓
4.	Boiled eggs (white)	same as the original color	-	✓✓
5.	White tofu	same as the original color	-	✓✓
6.	Margarine	same as the original color	-	✓
7.	Biscuit	same as the original color	+	✓✓✓✓✓
8.	Wheat flour	same as the original color	+	✓✓✓

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9.	Sugar	same as the original color	-	✓✓
10.	Potato	same as the original color	+	✓✓✓✓✓
11.	Boiled chickens	same as the original color	+	✓✓✓
12.	Boiled Corns	same as the original color	-	✓✓✓✓

Based on observations in the food test for fat using brown paper or greaseproof paper, the results are listed in the table below.

NO.	TESTED MATERIAL	LEAVING USED OIL STAINS		DESCRIPTIONS
		Yes	No	
1.	Celery	✓		✓✓✓✓
2.	Carrot		✓	Doesn't contain fat
3.	Corn	✓		✓✓✓✓
4.	Cassava	✓		✓✓✓✓
5.	Peanut		✓	Doesn't contain fat
6.	Papaya		✓	Doesn't contain fat
7.	Coconut milk	✓		✓✓✓✓✓
8.	Milk powder	✓		✓✓
9.	Water		✓	Doesn't contain fat
10.	Cooking oil	✓		✓✓✓✓✓
11.	Margarine	✓		✓✓✓✓
12.	Candlenut	✓		✓✓✓✓
13.	Tempe	✓		✓✓

Based on observations on food tests for protein using biuret reagents, the results are listed in the table below.

NO.	TESTED MATERIAL	COLOUR		DESCRIPTIONS
		BEFORE GIVEN BIURET	AFTER GIVEN BIURET	
1.	Sugar	same as the original color	-	Doesn't contain protein
2.	Bread	same as the original color	+	✓✓
3.	Tempeh	same as the original color	+	✓✓
4.	Chicken	same as the original color	+	✓✓✓✓✓
5.	Wheat flour	same as the original color	-	Doesn't contain protein
6.	Milk	same as the original color	+	✓✓✓✓✓
7.	Boiled eggs (white)	same as the original color	+	✓✓✓✓✓
8.	Biscuit	same as the original color	-	✓✓

Descriptions:

- ✓✓✓✓✓ : Very high
- ✓✓✓✓ : High
- ✓✓✓ : Medium

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✓✓ : Low
✓ : Very low

Carbohydrate Test

Through these observations it is proven that the food ingredients prepared have various carbohydrate contents. After dropping by lugol these food ingredients change color with different color thickness. For those who have a very high carbohydrate content are bananas, rice, biscuits, and potatoes. With high carbohydrate content, namely apples and boiled corn. Which has a moderate carbohydrate content, boiled chicken and flour. For kabohhid with a low content of boiled eggs, white tofu, and sugar. And that has a very low carbohydrate content is margarine.

Fat Test

Through these observations can prove that the food ingredients carried contain fat. It is known after applying to oil paper that it can be seen that if the spots are left transparent, it indicates that the material contains food. Each food ingredient has a different fat content. Very high fat content, namely coconut milk and cooking oil. For those who have high fat content, namely cassava, peanuts, margarine and hazelnut. Milk powder and tempeh have a low fat content. And besides it has no fat content.

Protein Test

Through observations, after dropping biuret food ingredients will turn purple. Boiled chicken meat, milk powder and boiled eggs have a very high protein content. For bread, tempeh and biscuit have a low content. And for other ingredients do not contain protein.

CONCLUSIONS

Foodstuffs brought by the 5th semester students of PGD Uhamka. Foods that contain carbohydrates are bananas, rice, biscuits, flour, and potatoes. Ingredients that contain fat are peanuts, coconut milk, milk, oil, margarine and hazelnut. Meanwhile, food ingredients that contain protein are bread, tempeh, chicken meat, milk, and boiled eggs. The rest does not contain carbohydrates, fats and proteins.

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