

A Sequential Explanatory Investigation in using ICTs on Arabic Language and Islamic Values Education: Teacher-Students Perspective

Muhammad Ikhlas¹, Kuswanto², Sri Ramdayeni Sakunti³, M. Rivanda Debi⁴,
Leila M. Collantes⁵

¹⁻⁵College of Education, Central Luzon State University, Philippines

DOI: 10.23917/ijolae.v3i3.13872

Received: March 9st, 2021. Revised: June 13rd, 2021. Accepted: June 22nd, 2021

Available Online: August 17th, 2021. Published Regularly: September 1st, 2021

Abstract

This study aims to see the extent of the application of ICT in the ALIVE program at Munoz Central School, as well as its effectiveness in the use of ICT. Furthermore, this study uses a mixed methods research design with a sequential explanatory approach. The sample of this study were students who took the ALIVE program at Munoz Central School. Quantitative and qualitative results indicate that the implementation of ICT in the ALIVE program is already good, it can be seen from the utilization of some ICT features performed by the teacher, as well as the effectiveness of ICT, where the presence of ICT in ALIVE learning is very helpful in the learning process. This certainly indicates that the use of ICT in the ALIVE program at Munoz Central School is good but needs improving that the learning that is carried out is even more increasing. With the increased use and facilities of the ICT in the ALIVE program, of course, it will make learning much better in the future and requires the attention of various related stakeholders.

Keywords: ALIVE, ICT in education, islamic values education, sequential explanatory investigation

Corresponding Author:

Muhammad Ikhlas, College of Education, Central Luzon State University, Philippines

Email: muhammadikhlas@clsu.edu.ph

1. Introduction

Inclusive education is not new in the world of education. Inclusive Education means education for all who have been initiated since 1994, at the Conference of Salamanca (Kiuppis, 2014). Then proceed with the Declaration of Dakar in the year 2000 which is a framework to respond to the needs of the basic public, education without knowing boundaries, race, religion, and the ability of potential which is owned by each student (Nguyen, 2010). The practices and applications continue to grow to this day. In more detail, inclusive education is an education system service set in a way so that the minority can be served in the nearby school, in regular

class together with other students of the same age (Ainscow, & Sandill, 2010). Inclusive Education is a form of implementation of the philosophy that recognizes the diversity among human beings who carry out the mission single to build a life together that much better. Inclusive education aims to unite the rights of all people without exception in obtaining an education. It is achieved in the system of Inclusive Education which allows the association and interaction among students who varied to encourage an attitude that is full of tolerance and mutual respect.

Inclusive education is education that gives the opportunity of learning for all children in one place. Lalvani (2013) explained

that inclusive education is a way of thinking and acting that shows universal acceptance of, and belonging to, all students. This is an approach based on value to accept responsibility for all students. This also means that all students will have a fair chance to be included in a typical learning environment or elective program. Program selection is friendly for children to develop their potential. The science community has produced a lot of discourse about inclusion which depends on the assumption of the alternative of knowledge (Artiles & Kozleski, 2016). On the whole, the school as a center of study continues to evolve, over time, the ethics of inclusion and the data collected resulted that the staff also believes the school can be an environment for students to develop talents and interests (Messinger-Willman, & Marino, 2010). Inclusive Education will make students and society more conscious about students' needs and it is related to the needs of knowledge of the existence of a culture. Inclusive Education has a range of comprehensive and positive. The findings have demonstrated that the majority of the group of students did not involve in the issue of inclusiveness in the content curriculum despite attempts to embrace "diversity" (Ferdinand, 2012).

In the Philippines, inclusive education becomes opportunities and challenges, however, it gives a positive meaning for equal opportunity to learn (Muega, 2016). Therefore, Inclusive Education requires the support of all parties. Teachers, parents, and schools have an important role in increasing the success of inclusive schools (Baguisa & Ang-Manaig, 2019). As the development of the model implementation of inclusive education has various variety. One part that is concerned is the Arabic Language and Islamic Value Education or known as the ALIVE program. ALIVE is a teaching program to teach Arabic as a foreign language in the Philippines, especially

for Muslim students. In this case, Muslims are part of the minority in the school. As in inclusive understanding, Muslim students want to learn the culture, language, and all about Islam which is held at school. Muhamat, Kawangit, and Aini (2015) said that the people of Islam have the right and the capacity of intellectual and education to participate actively in the efforts of the social, economic, and political in the Republic of the Philippines.

Deped implements the program ALIVE to make Muslim children have a broad knowledge of their religion and the language of the Quran, which is Arabic (Guleng, Muhamat & Aini, 2017). The teaching of Arabic as a language both in the Muslim region of the Philippines is implicitly recognized by the provisions of the Constitution of the Philippines that are new. Muhamat et al. (2015), states that the ALIVE program is new and with special features so that additional criteria for the recruitment and selection of ALIVE teachers have been established to ensure implementation of the quality of the program. As a result of research (Solaiman, 2017) stated that to assess the needs of the ALIVE program and possibly a plan of action can be proposed to the authorities related to improving the implementation of the effectiveness and potent of the ALIVE program.

Furthermore, ALIVE is a very important program. Because ALIVE is a very important program, in its application the relevant departments, especially the education department can be fair in popularizing this program (Berry, 2008). One way to see the seriousness of the education department in implementing this program is through an analysis of the extent to which the application of ICT in learning is on the ALIVE program. In the current digital era, ICT is one of the important features in learning (Maryska, Doucek, & Kunstova, 2012). ICT is a set of tools used to communicate and create, disseminate, store and

manage information (Kumar, 2008). The technology in question includes computers, the internet, broadcasting technology (radio and television), and telephone.

ICT in learning can be used as a learning presentation media (Saputri, Sukirno, Kurniawan, & Probowasito, 2020), for example in the form of PowerPoint slides and animations with flash programs (Hosein, Ramanau & Jones, 2010) and also as a medium for independent learning or E-Learning, for example, students are given the task to read or find resources from the internet, sending assignment answers, even trying and doing learning material (Aoki, 2010). Through E-Learning, learning is no longer limited by space and time. Learning can be done anytime and anywhere. This encourages students to conduct analysis and synthesis of knowledge, explore, process, and utilize information, produce their writing, information and knowledge. Students are stimulated to explore science. Facilities that can be used by students to learn through E-Learning include E-Book, E-Library, interaction with experts, email, mailing List, News Group, and others.

The benefits of using ICT to support the implementation of learning can be done by: improving the quality of learning; expanding access to education and learning; help visualize abstract ideas; facilitate the understanding of the material being studied; displaying learning material becomes more interesting; and allows interaction between learning and the material being studied (Barak, 2014; Pavel, Fruth & Neacsu, 2015; Kori, Pedaste, Leijen & Tõnisson, 2016). If you pay attention to the benefits of using ICT, surely the use of ICT in learning and the school environment is unavoidable. Schools must always strive to meet the needs of these ICT facilities. Furthermore, using technology in the learning process undoubtedly has advantages, such as simplifying and accelerating student work

(streamlining), also fun because students interact with colors, images, sounds, videos, and something instant (Fu, 2013; Slechtova, 2015). These pleasant situations and conditions become a very important and essential factor for achieving learning effectiveness. In addition, technology can generate positive emotions in the learning process. Thus, ICT can be used as a support for learning in the ALIVE program.

Every city in the Philippines is allowed to have an ALIVE program implemented in schools (Muhamat, Kawangit & Aini, 2015). The implementation can be applied in elementary schools or high schools, only it has to follow the applicable requirements, such as the minimum number of students being fulfilled. One example is the ALIVE program implemented at Munoz Central School, the Science City of Munoz, Philippines. In the city of Munoz, the school was the only one to implement the ALIVE program, which was directly directed by the Department of Education. Based on this, the researchers conducted research related to the implementation of ICT in the ALIVE program, specifically at Munoz Central School.

The purpose of this research are (1) determine the extent of ICT integration in the ALIVE program in Munoz Central School by students and teacher perception; and (2) determine how effective is the integration of ICT in the ALIVE program in helping the students to learn Arabic by students and teacher perception.

2. Method

In order to answer the research questions, the researcher conducted this study by using the mixed-method study, sequential explanatory design. This design was conducted to explore a phenomenon of the study within involving some data sources as well as

establishing the reliability and validity of the findings (Creswell, 2014). The sequential explanatory design relies on the quantitative data supported by qualitative data to achieve the purposes of the study (Creswell, 2014). Through this method, the researchers investigate the perception of teacher and students related to ICT implementation on the Arabic Language and Islamic Values Education (ALIVE) – DEPED program as support in the learning process.

This design uses two kinds of data sources, survey, and interview, in order to answer the research questions. In mix method study, multiple data methods e.g. survey, observation, interviews, group discussion, and document analysis are significant (Flick, 2014). The data collection method should be related to research approaches. The two data collection methods are important to provide full and detailed information in this study. This study will begin with a quantitative process supported by qualitative data collection and analysis.

Participants

The population of this study is a student who enrolls in the ALIVE program and the

teacher who handles the ALIVE program. The Quantitative respondent was the students who enroll in the ALIVE program in the Munoz Central School. Table 1 shows the quantitative respondent of this study. This study using a total sampling technique, where total sampling is a sampling technique where the number of samples is equal to the population (Ary, Jacobs, Sorensen, & Razavieh, 2010). Based on this, there were 21 students enrolled in the ALIVE program at the elementary school level. Furthermore, for the qualitative study, the respondents were students from the quantitative study and the teacher who was handled the ALIVE program. Purposive sampling has been used to decide the respondent for the qualitative study. Purposive sampling is a sampling technique that is based on the criteria of the researcher (Marshall & Rossman, 2014). The criteria taken by researchers for students are based on gender differences as well as low and high-class differences, while the criteria for teachers are teachers who teach the ALIVE program. Based on this, 4 students and 1 teacher were found.

Table 1. The Respondent for The Quantitative Study

		n (21)	Percentage (%)
Gender	Male	10	47.62
	Female	11	52.3
Grade	Grade – 1	2	9.52
	Grade – 2	6	28.56
	Grade – 3	4	19.05
	Grade – 4	3	14.29
	Grade – 5	3	14.29
	Grade – 6	3	14.29

Data Collection Tool

In this study, researchers used a questionnaire instrument, interview guides, and documentation. The questionnaire aims to take quantitative data (Muijs, 2010), while interview guides and documentation are used to collect qualitative data (Marshall & Rossman, 2014). In this study the questionnaire used

was a questionnaire about the extent of ICT integration (Bosah, Obumneke-Okeke, and Anyachebelu, 2015); and the effectiveness of ICT integration in learning (Ghavifekr and Rosdy, 2015). The questionnaire used consisted of 21 items, with 5-point Likert Scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). Ghavifekr

and Rosdy reported the Cronbach's alpha coefficients for the effectiveness of ICT integration was 0.87, meanwhile, Bosah, Obumneke-Okeke, and Anyachebelu reported the Cronbach's alpha coefficient for the extent of ICT integration was 0.79. Furthermore, the interview guide was developed by the

researcher himself by following the indicators in the questionnaire used.

Collection of Data

Furthermore, the collection of data procedures in this study is shown in Figure 1 below.

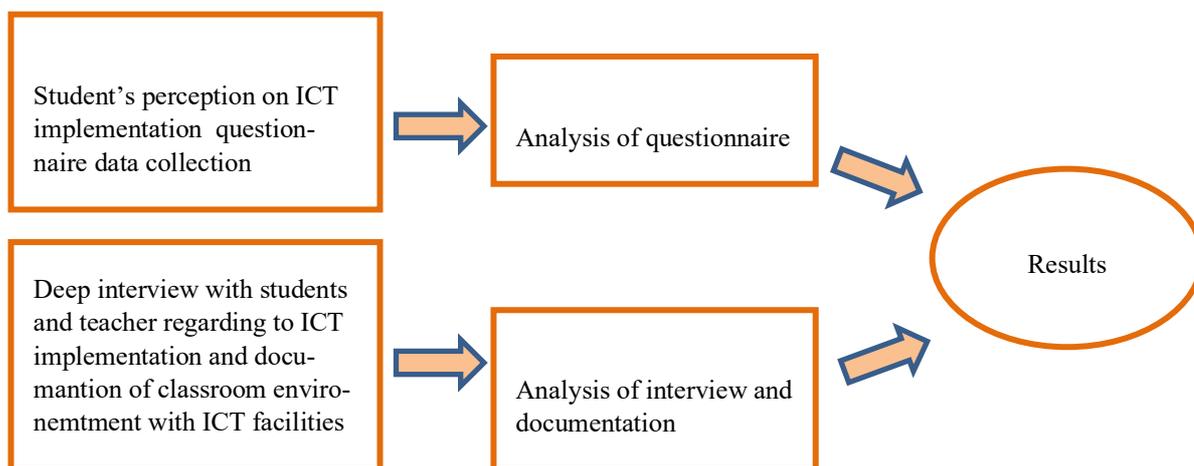


Figure 1. Data Collection Procedure

During the data collection, the first activity undertaken was to select students and teacher at Munoz Central School, the Science City of Munoz as the sample of the study. Furthermore, the questionnaire is related to students' perception on ICT implementation in the ALIVE program given to students. Along with giving questionnaires to students, interviews were also conducted with students and the teacher. Furthermore, after all, quantitative data were collected, the data was analyzed using SPSS 25, as well as qualitative data which were further analyzed to strengthen the statistical data obtained.

Data Analysis

In this stage, the data has been categorized, tabulated, and analyzed following the objectives of the study. Descriptive statistics such as mean, standard deviation, frequency, and the percentage has been used to analyze the finding that described or interpreted the socio-demographic characteristics of the respondents, the extent of ICT integration in ALIVE program in Munoz Central School. This is also applicable to analyze the effectiveness of ICT integration in the ALIVE program in helping the students to learn Arabic on the ALIVE program. Furthermore, for the categories of questionnaire of student's perception on ICT Implementation as support for the ALIVE program very high, high, fair, low, and very low, shown in table 2 below.

Table 2. Category of ICT Implementation as Support for the ALIVE Program

Category	ICT Implementation as Support for ALIVE Program		
	The Extent of ICT integration in learning	The effectiveness of ICT integration in learning	Overall
Very low	11.0 – 19.8	10.0 – 18.0	21.0 – 37.8
Low	19.9 – 28.6	18.1 – 26.0	37.9 – 54.6
Fair	28.7 – 37.4	26.1 – 34.0	54.7 – 71.4
High	37.5 – 46.2	34.1 – 42.0	71.5 – 88.2
Very High	46.3 – 55.0	42.1 – 50.0	88.3 – 105.0

3. **Result and Discussion**

The novelty of this study is to explore the implementation of ICT in the ALIVE program, of which the ALIVE program is part of the Inclusive program. This study also focuses more on the Science City of Munoz, which is a city with few or minority Muslim residents. Some of the study results that are found are discussed in this section, quantitative findings are explained through several forms such as frequency, frequency, standard deviation,

mean, min, mode, and max, meanwhile, qualitative findings are presented through transcripts and documentation.

Quantitative Finding

The Extent of ICT Integration in Learning

Perception on ICT implementation of the extend of ICT integration in learning indicator of Munoz Central School students' can be described in Table 3.

Table 3. Descriptive Result of the Extent of ICT Integration in Learning

ICT Integration	Category			SD	Mean	Min	Modus	Max
	Range	F	%					
Very low	11.0 – 19.8	0	0.00					
Low	19.9 – 28.6	3	14.29					
Fair	28.7 – 37.4	8	38.10	5.47	33.81	25	38	44
High	37.5 – 46.2	10	47.62					
Very High	46.3 – 55.0	0	0.00					
Total		21	100					

Based on table 3 shows that the extent of ICT integration in learning of students' perception as much as 21 respondents, dominated by high category, as many as 10 respondents or 47.62%. So, the students' perception of the extent of ICT integration in ALIVE program learning is good. Then table 3 also states that students' perception of the extent of ICT integration of the category is low as much as 14.29%, the extent of ICT integration of the category is fair. There is 38.10%. Meanwhile, for the very low and very high categories, no

respondents answered or 0%. From the 21 students having a mean value of 33.81 (SD = 5.47), a mode value of 38, a min value of 25, and a max value of 44. The minimum value obtained also indicates that there are no respondents who are classified into the very low category. Likewise with the maximum value, which, when viewed from the categories, does not have a respondent who can be categorized as very high. In addition, we get a fairly far range between the minimum value and the maximum value.

The effectiveness of ICT integration in learning

Perception on ICT implementation of the effectiveness of ICT integration in learning

indicator of Munoz Central School students' can be described by the following table 4.

Table 4. Descriptive result of the effectiveness of ICT integration in learning

Category				SD	Mean	Min	Modus	Max
ICT Integration	Range	F	%					
Very low	10.0 – 18.0	0	0.00	8.26	39.24	22	46	49
Low	18.1 – 26.0	1	4.76					
Fair	26.1 – 34.0	4	19.05					
High	34.1 – 42.0	6	28.57					
Very High	42.1 – 50.0	10	47.62					
Total		21	100					

Based on table 4 shows that the effectiveness of ICT integration in learning of students' perception as much as 21 respondents, dominated by very high category, as many as 10 respondents or 47.62%. So, the students' perception in the effectiveness of ICT integration in ALIVE program learning mostly is very good. Then table 4 also states that students' perception in the extent of ICT integration of the category is low as much as 4.76%, the effectiveness of ICT integration of the category is fair there are 19.05%, and for the high category is 28.57 %. Meanwhile, for the very low category, no respondents answered or 0%. From the 21 students having a mean value of 39.24 (SD = 8.26), a mode value of 46, a min value of 22, and a max value of 49.

The mean value indicates that from 21 respondents it can be categorized as a whole that the effectiveness of ICT integration in learning is good. The minimum value obtained also indicates that there are no respondents who are classified into the very low category. Meanwhile, the maximal value indicates that there are respondent/s who answered almost perfectly to the given questionnaire. In addition, we get a relatively far range between the minimum value and the maximum value.

The Overall of ICT integration in learning

Perception on ICT implementation overall of Munoz Central School students' can be described in Table 5.

Table 5. Descriptive Result of The Overall of ICT Integration in Learning

Category				SD	Mean	Min	Modus	Max
ICT Integration	Range	f	%					
Very low	21.0 – 37.8	0	0.00	8.30	72.71	58	75	93
Low	37.9 – 54.6	0	0.00					
Fair	54.7 – 71.4	9	42.86					
High	71.5 – 88.2	11	52.38					
Very High	88.3 – 105.0	1	4.76					
Total		21	100					

Based on table 5 shows that the overall ICT integration in learning of students' perception as much as 21 respondents, dominated by high category, as many as 11 respondents or 52.38%. So, the students' perception on the ICT implementation in ALIVE program learning is good. Then table 5 also states that students' perception in the implementation of the category is fair as much as 4.76%, the ICT implementation of the category is very good that is 4.76%. Meanwhile, for the very low and low category is no respondent answered or 0%. From the 21 students having a mean value of 72.71 (SD = 8.30), a mode value of 75, a min value of 58, and a max value of 93. From these results, it can be concluded that the average student feels that the implementation of ICT in ALIVE learning is very useful, which is marked by most students feeling that ICT implementation is very effective and some ICT features have been implemented.

Qualitative Result

Qualitative data has been used to deepen the study findings from quantitative data. Qualitative data were obtained in two ways such as interview and observation. Interviews were conducted by researchers with four students and a teacher, while observations were based on direct observation by researchers.

The Extent of ICT integration in learning

In answering the question of how far the integration of ICT in the ALIVE program at Munoz Central School, the interview protocol that the researchers used adjusted to the questionnaire used. Table 2 shows how far the use of ICT in learning in the ALIVE program at the Munoz Central School by students' perception. The table shows that most student students answer that ICT implementation is good. This is supported by the results of interviews with four students and one teacher.

Suppose students A and B say "sometimes we use television". Furthermore, student C stated that "in learning Arabic we more often use TV, the internet, and projectors". In line with student D who stated that "we more often use TV, projectors, and computers".

More clearly, seen from the results of interviews between researchers and teachers, as shown by the following transcript.

Q: "what do you think the application of ICT in learning is done on the ALIVE program in your school? Is there support from the government or the school?"

A: "...definitely our government serious in integrating the ICT in the educational system, like here we have television here to help us for the teaching Arabic language especially in sounds. It is very important to grade 1, is more focus on sounds, and how to pronounce the Arabic language very well..... the projector, the speaker, in ICT office right now, when we need the projector and speaker, we can easily get here to conduct the program..... related to support from the government or the school, yes it really supports us in conducting learning, where we are given access to use some school facilities such as computer laboratories, and it is very useful because, with these facilities, I can teach students to access material related to Islamic value and Arabic language".

Similar results were also shown by direct observations made by researchers, where the television display that is usually used in the ALIVE room, television could be used to play films, audio and PowerPoint presentations, as shown in Figure 2. In addition, the ALIVE room is adjacent to the room ICT, ICT rooms are usually utilized by computer features that are directly connected to the internet. These facilities are commonly used to search for information related to Arabic learning, as shown in Figure 3.



Figure 2. Shows ALIVE Class Atmosphere which Shows the Television



Figure 3. Computer Facilities in The ICT Room Commonly Used for Arabic Learning

Based on the interview and observation data, it is very clear that in the ALIVE program the ICT commonly used is laptop or computer that could be used to obtain information related to Arabic learning and television which is commonly used for PowerPoint presentations, film, and audio screenings. It could be concluded that at least the ALIVE program has integrated ICT in learning Arabic and Islamic values.

The effectiveness of ICT Integration in Learning

Similar to answering the question of how far the integration of ICT in learning ALIVE program at Munoz Central School, to answer the question of the effectiveness of ICT integration in learning, researchers deepen the study with the interview protocol, which was adjusted to the questionnaire. Table 4 also shows the results of a survey of the effectiveness of ICT integration in learning in the ALIVE program at the Munoz Central School. From this table, we could see very good results with the conclusion that the use of ICT is very effective in learning. This is

supported by the results of interviews with students. Where the four students answered that ICT allows them to be more creative and imaginative in Arabic lesson; helps them to find information for learning Arabic; encourages them to communicate more with classmates; increases their confidence to participate actively; help them to learn Arabic more effectively; helps them to improve their knowledge about Arabic; helps them to improve their ability in reading, writing and speaking Arabic; make them more behaved and under control with the use of ICT in Arabic class; enables them to express their ideas and thoughts better in Arabic, and promotes active and engaging lesson for their best learning experience.

Even more, this was revealed by a teacher at the ALIVE program explaining that ICT integration makes students more creative and imaginative in learning Arabic, as the teacher said:

“.....I found more learning for fun. When hearing something from ICT, they love to learn, they love to sing. So, they learn Arabic faster than compare only if they

see a whiteboard on the wall. The more interested to learn the Arabic language, more excited as well, and excited attended the class”.

The teacher also explained if ICT absolutely could help the students to find more information on learning Arabic. Furthermore, the teacher also explained that ICT increase student’s confidence in Arabic class, as the teacher said:

“.....I found them more confident in learning Arabic when we integrated with ICT in teaching the Arabic language”.

Related to integrating ICT in learning Arabic improve or not the student’s language skills (reading, writing, speaking), the teacher explained that it could increase the student skills as the teacher said:

“improve very well. Before ICT integration we don’t have TV, Speaker, Projector I found them not motivation attend the class....”.

Moreover, the teacher described that ICT could make students behave more and under control as the teacher said:

“.....when you integrate something we make sure catch the attention, so that the reason why we put television at in front,So that way, we can catch the attention because they are thinking after they learn, they can watch the movie Arabic, I think it is strategic as the teacher...”.

And also, because using ICT the students could easily express their ideas and be active in the classroom, as the teacher explained:

“Yes, because before I found them shy. When I use ICT, for example, use the computer, laptop I found them very active. they easy to raise their hand what they see something except then when they hear something, for example, the

student says.. ustadz (teacher) I know the answer”.

Based on the results of the interview it could be concluded that ICT integration in learning is very helpful in the effectiveness of learning.

This era has greatly influenced the development of existing Information and Communication Technology or ICT (Odewumi, Falade, Adeniran, Akintola, Oputa & Ogunlowo, 2019). For example, in developed countries, they must have used ICT facilities and facilities that are also very advanced and modern because to support their needs (Kanematsu & Barry, 2016). The same thing in the world of education is that they cannot avoid not following the development of ICT. The target is students to produce students who are intelligent, personable, and ready to undergo all challenges in the development of this age.

Utilization of ICT in learning cannot be avoided and must be done, including the ALIVE (Arabic Language and Islamic Values Education) program which is a positive response to the development of information and communication technology in the current digital age (Bai, Mo, Zhang, Boswell, & Rozelle, 2016). Therefore, the use of ICT in supporting ALIVE learning is a necessity, not only to improve the effectiveness and quality of learning but more importantly is to increase the mastery of ICT both for teachers and students as a provision of life in an era of technology that is constantly changing and developing.

In the context of ALIVE learning, the use of language and the empowerment of ICT media, including multimedia technology, can increase the effectiveness and efficiency of learning (Malik & Agarwal, 2012; Ljubovic, Vaskovic, Stankovic & Vaskovic, 2014), which is expected to provide public satisfaction by providing excellent service

with results under expected standards and goals. With ICT, of course it will provide convenience for teachers who teach ALIVE programs including, with ICT, learning materials provided by teachers through the internet can provide connections (connectivity) and a very broad reach (global) (McLoughlin & Lee, 2008); Access to information is not limited by time because the virtual world that is presented globally never sleeps (Papp, 2011), meaning that teachers can search for information via the internet at any time 24 hours a day; Access to information through the internet is faster than finding information on the pages of books in the library (Valentino, Hutchings, VBanks, & Davis, 2008), Students just need to click on a certain icon, then what they want will appear on our computer screen; Internet access can also provide interactive learning activities organized by certain institutions that can improve students' reasoning abilities and knowledge (Chu, Hwang & Tsai, 2010); teachers can discuss various matters with students, such as via mailing lists or chatting; Compared to buying original books or magazines, searching for information via the internet is much cheaper (Ellison & Ellison, 2009), especially at this time many sites that provide free information services, teachers or students just download or print the required script files. If these things are done naturally learning ALIVE programs will be easier to do.

From the results that have been shown both quantitatively and qualitatively, it was found that ICT helps the implementation of learning, not only that the implementation of ICT that has been implemented in ALIVE learning by teachers is already good, even schools and governments have provided quite good supporting facilities. Furthermore, the results show that the implementation of ICT is very effective in learning ALIVE programs, as agreed by both teachers and students. It is

known that ICT in learning is very effective to apply, because with the ICT that is applied in learning specifically the ALIVE program, it can provide benefits, including, students more creative and imaginative in ALIVE lessons (Fisher, Yefimova & Yafi, 2016); helps students to find information for learning Arabic or Islamic values (Menon, Alias & DeWitt, 2014); encourages students to communicate more with classmates (Hammond, Crosson, Fragkouli, Ingram, Johnston-Wilder, Johnston-Wilder, Kingston, Pope & Wray, 2009); increases students confidence to participate actively (Rocca, 2010); help students to learn Arabic and Islamic values more effectively (Aqsha & Pei, 2009); helps students to improve their knowledge of Arabic and Islamic values (Aina, 2013); helps students to improve their abilities in Arabic reading, writing and speaking (Chotimah, Bernard & Wulandari, 2018); make students more behaved and under control with the use of ICT in ALIVE class (Aoki, 2010); enables students to express their ideas and thoughts better in ALIVE lesson (Noytim, 2010); and promotes active and engaging lessons for their best learning experience (Barreh & Abas, 2015). With the results shown, of course, it is desirable for the consistency of teachers and schools and the government to always implement ICT in learning, especially in the ALIVE program, even if it is possible to improve the quality of the use of ICT in the ALIVE learning program.

From the research that has been done, it can be concluded that the application and effectiveness of ICT in ALIVE learning are good. With good effectiveness in implementing ICT in the ALIVE program, this can be a tool for facilitating the learning process and improving learning output. This is in accordance with the theory by Januszewski and Molenda (2013), which is educational technology, including ICTs, has study and practice to

facilitate learning and improve performance, by creating, modifying, using, and managing appropriate technological processes and resources. In addition, educational technology has a philosophy such as so that everyone has the opportunity to learn, both individually and within organizational bonds, as optimally as possible through a systematic and systemic approach to learning processes, resources, and systems in such a way as to achieve efficiency, effectiveness, and harmony with society development, (Miarso, 2004), which is, the utilize of ICTs in the ALIVE program is part of the application of the philosophy of educational technology itself.

4. Conclusions

The result of this study, of course, it needs to be maintained and improved, so that the learning outcomes obtained get maximum result. Furthermore, this research is expected to not only stop looking at the extent of the application and effectiveness of the use of ICT in learning ALIVE programs, it is hoped that further research will be carried out, such as seeing how the influence of ICT is used on motivation, interest and even student learning outcomes in ALIVE program learning.

5. References

- Aina, J. K. (2013). Integration of ICT into physics learning to improve students' academic achievement: Problems and solutions. *Open Journal of Education*, 1(4), 117-121.
- Ainscow, M., & Sandill, A. (2010). Developing inclusive education systems: the role of organisational cultures and leadership. *International journal of inclusive education*, 14(4), 401-416.
- Aoki, K. (2010). The use of ICT and e-learning in higher education in Japan. *World Academy of Science, Engineering and Technology*, 66(6), 868-872.
- Aqsha, M., & Pei, C. (2009). Language learning via ICT: Uses, challenges and issues. *Wseas transactions on information Science and applications*, 6(9), 1453-1467.
- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to Research in Education*. Belmont, California: Cengage Learning.
- Artiles, A.J., & Kozleski, E. B. (2016). Inclusive education's promises and trajectories: Critical notes about future research on a venerable idea. *Education Policy Analysis Archives*, 24(43). <http://dx.doi.org/10.14507/epaa.24.1919>
- Baguisa, L. R., & Ang-Manaig, K. (2018). Knowledge, skills and attitudes of teachers on inclusive education and academic performance of children with special needs. *PEOPLE: International Journal of Social Sciences*, 4(3).
- Bai, Y., Mo, D., Zhang, L., Boswell, M., & Rozelle, S. (2016). The impact of integrating ICT with teaching: Evidence from a randomized controlled trial in rural schools in China. *Computers & Education*, 96, 1-14. <https://doi.org/10.1016/j.compedu.2016.02.005>
- Barak, M. (2014). Closing the gap between attitudes and perceptions about ICT-enhanced learning among pre-service STEM teachers. *Journal of Science Education and Technology*, 23(1), 1-14. <http://dx.doi.org/10.1007/s10956-013-9446-8>
- Barreh, K. A., & Abas, Z. W. (2015). A Framework for Mobile Learning for Enhancing Learning in Higher Education. *Malaysian Online Journal of Educational Technology*, 3(3), 1-9.
- Berry, R. A. W. (2008). Novice teachers' conceptions of fairness in inclusion classrooms. *Teaching and Teacher Education*, 24(5), 1149-1159.
- Bosah, I., Obumneke-Okeke, I., & Anyachebelu, F. (2015). Extent of integration of ICT in the teaching of Mathematics in demonstration primary schools in Anambra State. In *2nd National Conference of Association of Childhood Educators Nigeria*

- at Nnamdi Azikiwe University, Awka.
- Chotimah, S., Bernard, M., & Wulandari, S. M. (2018, January). Contextual approach using VBA learning media to improve students' mathematical displacement and disposition ability. In *Journal of Physics: Conference Series* (Vol. 948, No. 1, p. 012025). IOP Publishing.
- Chu, H. C., Hwang, G. J., & Tsai, C. C. (2010). A knowledge engineering approach to developing mindtools for context-aware ubiquitous learning. *Computers & Education*, 54(1), 289-297.
<https://doi.org/10.1016/j.compedu.2009.08.023>
- Creswell, J. W. (2014). A concise introduction to mixed methods research: SAGE publications.
- Ellison, G., & Ellison, S. F. (2009). Search, obfuscation, and price elasticities on the internet. *Econometrica*, 77(2), 427-452.
<https://doi.org/10.3982/ECTA5708>
- Ferdinand, D. (2012). Curriculum Inclusiveness Challenge: Responding to Multiculturalism Among Workforce Education and Development (Wed) Graduate Students - A Mixed Methods Study. *Journal of the Department of Behavioural Sciences*, 1(1), 80-98.
- Fisher, K. E., Yefimova, K., & Yafi, E. (2016, June). Future's butterflies: Co-designing ICT wayfaring technology with refugee syrian youth. In *Proceedings of the The 15th International Conference on Interaction Design and Children* (pp. 25-36).
- Flick, U. (2014). *An introduction to qualitative research*. Sage.
- Fu, J. (2013). Complexity of ICT in education: A critical literature review and its implications. *International Journal of education and Development using ICT*, 9(1), 112-125.
- Ghavifekr, S., & Rosdy, W. A. W. (2015). Teaching and learning with technology: Effectiveness of ICT integration in schools. *International Journal of Research in Education and Science*, 1(2), 175-191.
- Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. *The Internet and Higher Education*, 19, 18-26.
- Guleng, M. P., Muhamat, R., & Aini, Z. (2017). Issues on Islamic Education in The Philippines. *Al-Irsyad: Journal of Islamic and Contemporary Issues*, 1-12.
- Hammond, M., Crosson, S., Fragkouli, E., Ingram, J., Johnston-Wilder, P., Johnston-Wilder, S., Kingston, Y., Pope, M., & Wray, D. (2009). Why do some student teachers make very good use of ICT? An exploratory case study. *Technology, Pedagogy and Education*, 18(1), 59-73.
- Kanematsu, H., & Barry, D. M. (2016). ICT and the Impact on Education. In *STEM and ICT Education in Intelligent Environments* (pp. 33-36). Springer, Cham.
- Kiuppis, F. (2014). Why (not) associate the principle of inclusion with disability? Tracing connections from the start of the 'Salamanca Process'. *International Journal of Inclusive Education*, 18(7), 746-761.
- Kori, K., Pedaste, M., Leijen, Ä., & Tõnisson, E. (2016). The role of programming experience in ICT students' learning motivation and academic achievement. *International Journal of Information and Education Technology*, 6(5), 331.
- Kumar, R. (2008). Convergence of ICT and Education. *World Academy of Science, Engineering and Technology*, 40(2008), 556-559.
- Januszewski, A., & Molenda, M. (2013). *Educational technology: A definition with commentary*. Routledge.
- Lalvani, P. (2013). Privilege, compromise, or social justice: Teachers' conceptualizations of inclusive education. *Disability & Society*, 28(1),

- 14-27.
- Ljubojevic, M., Vaskovic, V., Stankovic, S., & Vaskovic, J. (2014). Using supplementary video in multimedia instruction as a teaching tool to increase efficiency of learning and quality of experience. *International Review of Research in Open and Distributed Learning*, 15(3), 275-291.
- Malik, S., & Agarwal, A. (2012). Use of multimedia as a new educational technology tool-A study. *International Journal of Information and Education Technology*, 2(5), 468.
- Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Sage publications.
- Maryska, M., Doucek, P., & Kunstova, R. (2012). The importance of ICT sector and ICT university education for the economic development. *Procedia-Social and Behavioral Sciences*, 55, 1060-1068.
- McLoughlin, C., & Lee, M. J. (2008). Future learning landscapes: Transforming pedagogy through social software. *Innovate: Journal of Online Education*, 4(5).
- Menon, S., Alias, N., & DeWitt, D. (2014). Wikipedia in Promoting Science Literary Skills in Primary Schools. *Malaysian Online Journal of Educational Technology*, 2(3), 42-47.
- Messinger-Willman, J., & Marino, M. T. (2010). Universal design for learning and assistive technology: Leadership considerations for promoting inclusive education in today's secondary schools. *Nassp Bulletin*, 94(1), 5-16.
- Miarso, Y. (2004). *Sowing Seed of Educational Technology*. Jakarta: Prenada Media.
- Muhamat, R., Kawangit, M., & Aini, Z. (2015). Impact of the Implementation of Arabic Language and Islamic Values Education (ALIVE) Program in the Philippines. *Educational Research Journal*, 2(January), 27-32. <https://doi.org/10.6084/m9.figshare.1599781>
- Muega, M. A. G. (2016). Inclusive Education in the Philippines: Through the Eyes of Teachers, Administrators, and Parents of Children with Special Needs. *Social Science Diliman*, 12(1), 5-28.
- Muijs, D. (2010). *Doing quantitative research in education with SPSS*. Sage.
- Nguyen, T. X. T. (2010). Deconstructing Education for All: discourse, power and the politics of inclusion. *International journal of inclusive education*, 14(4), 341-355.
- Noytim, U. (2010). Weblogs enhancing EFL students' English language learning. *Procedia-Social and Behavioral Sciences*, 2(2), 1127-1132. <https://doi.org/10.1016/j.sbspro.2010.03.159>
- Odewumi, M. O., Falade, A. A., Adeniran, A. O., Akintola, D. A., Oputa, G. O., & Ogunlowo, S. A. (2019). Acquiring Basic Chemistry Concepts through Virtual learning in Nigerian Senior Secondary Schools. *Indonesian Journal on Learning and Advanced Education (IJOLAE)*, 2(1), 56-67. <https://doi.org/10.23917/ijolae.v2i1.7832>
- Papp, R. (2011). Virtual worlds and social networking: Reaching the Millennials. *Journal of Technology Research*, 2, 1.
- Pavel, A. P., Fruth, A., & Neacsu, M. N. (2015). ICT and e-learning—catalysts for innovation and quality in higher education. *Procedia economics and finance*, 23, 704-711.
- Rocca, K. A. (2010). Student participation in the college classroom: An extended multidisciplinary literature review. *Communication education*, 59(2), 185-213.
- Saputri, A., Sukirno, S., Kurniawan, H., & Probowasito, T. (2020). Developing Android Game-Based Learning Media “Go Accounting” in Accounting Learning. *Indonesian Journal on Learning and Advanced Education (IJOLAE)*, 2(2), 91-99.

- <https://doi.org/10.23917/ijolae.v2i2.9998>
- Slechtova, P. (2015). Attitudes of undergraduate students to the use of ICT in education. *Procedia-Social and Behavioral Sciences*, 171, 1128-1134. <https://doi.org/10.1016/j.sbspro.2015.01.218>
- Solaiman, S. M. (2017). Implementation of Arabic Language and Islamic Values Education (ALIVE) in Marawi City, Philippines: Unveiling the Perceptions of ALIVE Teachers. *Education Journal*, 6(1), 38.
- Valentino, N. A., Hutchings, V. L., Banks, A. J., & Davis, A. K. (2008). Is a worried citizen a good citizen? Emotions, political information seeking, and learning via the internet. *Political Psychology*, 29(2), 247-273.