

# Analysis of Competence Development of the 21<sup>st</sup> Century in Islamic Religious Education Subject

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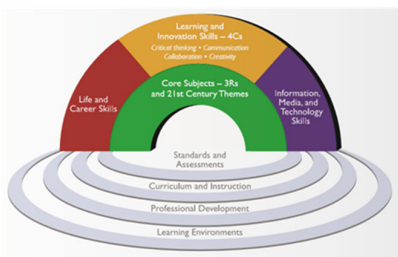
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**Abstract.** In this 21st century Islamic Religious Education (PAI) subject need to develop learning models that are able to develop 21st century competencies. There is a relationship between information technology and Islam in which the Quran contains various instructions on the universal principles of science which is the main domain of information technology. This means that the use of information technology such as the internet in learning Islamic Religious Education is in accordance with Islamic principles. This research is descriptive research and uses survey method. The data collection techniques used closed and open questionnaires. The development of 21st century competencies in PAI is still not optimal. There are three ways to develop 21st century competencies in PAI subject. First, connecting between PAI materials with 21st century life so that PAI material becomes more contextual. Second, developing innovative and creative PAI learning methods and strategies. Third, utilizing the advances in information technology (IT), especially the internet in PAI learning.

**Keywords:** 21st Century Competence; Information Technology; Islamic Religious Education subject

## 1 Introduction

21st century competence is a topic that has been most discussed in recent times. Many education experts suggest a variety of competencies that must be developed in the 21st century. Wagner identified seven competencies and skills in the 21st century, namely: (1) critical thinking and problem solving skills, (2) collaboration and leadership, (3) agility and adaptability, (4) initiative and entrepreneurial spirit, (5) able to communicate effectively both orally and in writing, (6) able to access and analyze information, and (7) have curiosity and imagination [18]. The OECD describes three dimensions of learning in the 21st century, namely information, communication, and ethics and social influence<sup>1</sup>. It is not much different, the Assessment and Teaching of 21st Century Skills (ATC21S) categorizes 21st century skills into 4 categories, namely way of thinking, way of working, tools for working and skills for living in the world [6]. Meanwhile, Trilling and Fadel initiated the concept of a rainbow of skills and knowledge as the main competencies that must be developed in the context of 21st century education [16].



In the rainbow of skills and knowledge above, Trilling & Fadel explained that there are three main skills that must be possessed in this 21st century context, namely first, learning and innovation skills; second, skills in mastering media, information, and technology (ICT); and third, life and career skills. Islamic Religious Education is an educational program that instills Islamic values through the learning process, both in the classroom and outside the classroom, packaged in the form of subjects named Islamic Religious Education abbreviated as PAI (*Pendidikan Agama Islam*) [14]. In General Universities, PAI is part of the General Compulsory Subject (MKWU/ *Mata Kuliah Wajib Umum*) which aims to cultivate the values of faith and devotion to Allah SWT and noble character. PAI is expected to be able to shape the attitudes and behavior of students so that they become human beings who are aware of their functions and responsibilities as *abdullah* and *khalifatullah*. The theological nature of PAI often leads to the assumption that PAI is less related to advances in technology, information and communication. In other words, PAI courses do not need to develop 21st century knowledge and skills in the learning process, but PAI only needs to develop religious knowledge.

In fact, this is a wrong assumption because Islam is a religion that is *rahmatan lil'alamin* and is suitable for all ages. According to Yousif, there is a relationship between information technology and Islam [19]. Although Quran is not a scientific text book, it is a guide that contains general principles that apply to all times and is universal, including instructions that contain universal principles of science which are the main domain of information technology. With implementing information technology, especially the internet is for Islam, means applying Islamic principles. The same thing was also expressed by Giddens who said that the use of technology media in Islamic religious learning in this digital era is a must because modernization cannot be avoided<sup>4</sup>. Based on the above background, the research on PAI learning especially at Universitas Negeri Medan needs to be carried out to see the characteristics of PAI learning and the extent to which PAI learning contributes to developing 21st century competencies. This research is also expected to be able to record various obstacles that exist in PAI lectures and find solutions to achieve optimal PAI learning objectives.

## 2 Research Methods

This research is descriptive research and uses survey method. The data collection techniques used closed and open questionnaires. The research was conducted at the end of the even semester of the 2020-2021 academic year at Universitas Negeri Medan. The research subjects were 46 students who came from 3 majors, namely the Department of Culinary Education, Physics Education, and Mathematics Education. The students from this department

were chosen because they had received PAI subject at Universitas Negeri Medan for a full semester and were taught by different PAI lecturers. Researchers also obtained document data from the PAI Lecture Program Unit (SAP/ *Satuan Acara Perkuliahan*) and other sources of information. The data obtained from the research results are then processed and analyzed using the Miles and Huberman model, namely through three flow of activities carried out simultaneously, namely: data reduction, data presentation, and conclusion drawing/verification [13].

### 3 Results and Discussion

#### 3.1 The Factual Condition of PAI Learning at Universitas Negeri Medan

From the results of the distribution of the questionnaire distributed to the respondents, the following data were obtained:

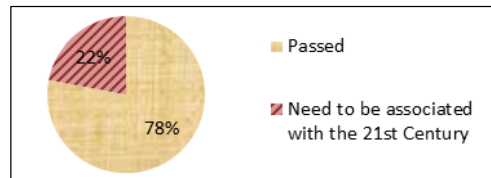


Fig. 1. Scope of PAI course material at Universitas Negeri Medan

From figure 1 above, it can be seen that 78.2% of respondents stated that the scope of PAI material at Universitas Negeri Medan was good. However, as many as 21.8% of respondents suggested the need to relate PAI material to life in the 21st century.

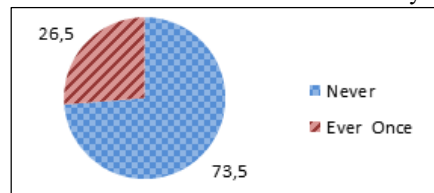
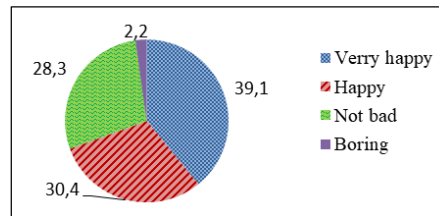


Fig. 2. Application of Project-Based Learning Model (PjBL) in Subject PAI at UNIMED

Related to the PAI learning methods and strategies, from figure 2 it can be seen that 73.5% of respondents said they never got project assignments during their PAI lectures at UNIMED. As many as 26.5% of respondents said they had PAI project assignment in once. From these data, it can be seen that the learning method that activates students, namely the project-based learning model (PjBL) is still rarely given in PAI learning. From an open questionnaire, it was revealed that the most frequently used learning method by PAI lecturers was the lecture method, followed by question and answer and discussion.



**Fig. 3.** Students' feelings about attending PAI lectures at UNIMED

From figure 3 it can be seen that the feelings of students in participating in PAI lectures at the Universitas Negeri Medan are varied. 69.5% of respondents said they were happy to take part in PAI lectures. However, there were 28.3% of respondents who said their feelings were normal, and there were even 2.2% who said that PAI lectures were boring. From the results of the questionnaire above, a factual picture of PAI learning at Universitas Negeri Medan is obtained, both in terms of learning materials, as well as strategies and learning methods. In terms of learning materials, it is still necessary to add and improve the PAI material at Universitas Negeri Medan by linking PAI material with life in the 21st century so that PAI material becomes more contextual. This was also conveyed by as many as 21.8% of respondents. Contextualizing PAI material is in line with the special objectives of PAI as stated by Ramayulis, the special purpose of PAI is that Islamic religious education should be adapted to the demands of the situation and conditions as well as needs at a certain time, thus education will have effectiveness [11]. If we look at the generational categorization, students studying in higher education are currently Generation Z, where since birth they are familiar with the internet, then linking PAI material with 21st century life and the internet and things related to it is very urgent to do because with If this is the case, the PAI material will have great meaning for students.

In terms of strategies and learning methods, the results of the questionnaire show that PAI learning at Universitas Negeri Medan is still teacher-centered. This can be seen from the dominant method in PAI learning is the lecture method, followed by question and answer and discussion. In an open questionnaire, it was revealed that as many as 68% of respondents said it was necessary to apply innovative and varied learning methods in PAI lectures, so that students do not feel bored and PAI learning is also not monotonous. The variety of methods expected by students include project-based learning (PjBL), experimental methods, socio-drama, field trips and fieldwork. Regarding PjBL, almost all students agree that project-based learning (PjBL) needs to be applied in PAI subject because it can broaden students' horizons. In addition PjBL can increase students' creativity and ability to communicate and collaborate. Based on the above, PjBL needs to be applied in PAI learning at Universitas Negeri Medan. Projects that can be carried out in PAI learning include Da'wah projects in the form of making Islamic posters, Islamic videos, Islamic short stories or Islamic comics. Differences in student feelings in attending PAI lectures also need attention. From an open questionnaire, it was revealed that the differences in students' feelings were the result of not being accommodated to all the needs of students, who had various habits and ways of learning. The dominance of the lecture method and the lack of use of information technology in PAI learning of course also affect the low interest in student learning. The problem in PAI learning at Unimed is actually a general problem for PAI as stated by Nurudin, PAI learning even at the university level is still indoctrinative [10]. In other hand PAI teachers still often interpret PAI as merely memorizing and understanding, or only dwelling on normative matters

[9]. Meanwhile, according to Tan the weakness of PAI learning in Indonesia is that its implementation has not fully developed strong rational thinking skills and independence [15].

When viewed from the side of cognitive development according to Piaget, the group of students is in the formal-operational stage where the level of intellectual, moral development and the sequence of thinking is far developed. Meanwhile, when viewed from the side of mental development according to Daradjat, students have been able to accept or reject abstract ideas or notions, so that their views on nature and all its contents and events have changed, from willing to accept without understanding, become receptive by analysis [3]. Based on this, the PAI learning model at Universitas Negeri Medan should be adjusted to the level of mental development of students who are already far developed, namely by placing an emphasis on in-depth analysis activities.

### 3.2 21st Century Competency Development in PAI Learning at Universitas Negeri Medan

According to Trilling & Fadel there are three main skills that must be possessed in life in the 21st century, namely first, learning and innovation skills; second, skills in mastering media, information, and technology (ICT); and third, life and career skills<sup>16</sup>. The following will show the results of the questionnaire related to the development of 21st century skills in PAI learning at Universitas Negeri Medan. The first is learning and innovation skills. These skills have indicators such as: able to think creatively, able to solve problems, able to communicate clearly and effectively, able to collaborate and work in groups, and able to work creatively and innovate.

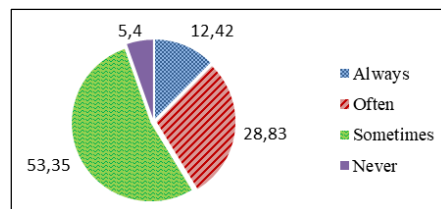
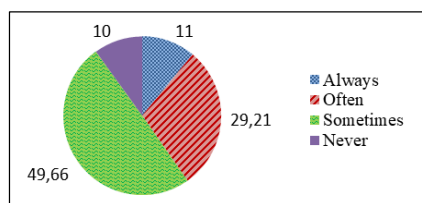


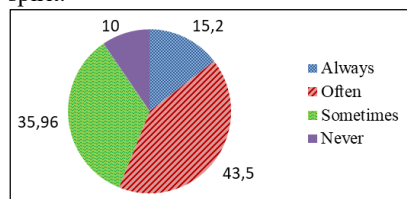
Fig. 4. Development of Learning Skills and Innovating in Learning PAI at UNIMED

From figure 4 above, it can be seen that most of the respondents, namely 53.35% stated that sometimes they were trained in learning and innovating skills in PAI lectures at UNIMED, even 5.4% of respondents said they had never been trained in these skills. The remaining 28.83% of respondents said they were often trained in learning and innovation skills and 12.42% of respondents said they were always trained in these skills. The second, 21st century skill is the skill in mastering media, information, and technology (ICT). These skills have indicators, including: being able to access information effectively and efficiently, able to assess and criticize information, able to use information accurately and creatively, able to use media as a learning resource, able to use media as a tool for work and creativity, able to use ICT as research tools, communication tools, and evaluation tools as well as understanding the code of ethics for using ICT.



**Fig. 5.** Skill Development for Mastering Media, Information and Technology In PAI Learning at UNIMED

Figure 5 above shows that 49.66% of respondents said they were sometimes trained in using and utilizing media, information, and technology (ICT) in PAI lectures, even 10% of respondents said that they had never been trained in these skills. 29.21% of respondents stated that they were often trained in using and utilizing media, information, and technology in PAI lectures and 11% of respondents stated that they were always trained in these skills. The third 21st century skill is life and career skills. These skills have indicators, including: being able to live flexibly, having an adaptive attitude, taking initiative, being independent, being able to interact socially and cross-culturally, being productive and accountable, and having a leadership and responsible spirit.



**Fig. 6.** Life Skills Development and Career in PAI Learning at UNIMED

From figure 6 above, it can be seen that as many as 43.5% of respondents said they were often trained in life skills and careers in PAI lectures, even 15.2% said they were always trained in these skills. The remaining 35.96%, respondents said they were sometimes trained in these skills and 5.34% said never. Based on the facts above, it can be seen that PAI lectures at Universitas Negeri Medan have contributed to developing 21st century knowledge and skills although their contribution is not significant. Of the three 21st century skills and knowledge developed by Trilling & Fadel, the development of life and career skills is higher than the development of the other two skills, namely learning and innovation skills and skills in mastering media, information, and technology. The last two skills are still underdeveloped in PAI subject at Universitas Negeri Medan, for that these two skills need more emphasis from PAI lecturers. There are three ways that can be taken in developing 21st century knowledge and skills in PAI subject, namely first through PAI materials; secondly through PAI learning methods and strategies and thirdly through the use of technology, information and communication (ICT) in PAI learning. PAI material needs to be related to problems and life in the 21st century, so that PAI material becomes more contextual and students are helped in dealing with their life problems. This was also conveyed by 21.8% of respondents who thought that PAI lecture materials should be related to problems and life in the 21st century.

The second way to develop 21st century competencies in PAI subject is to apply innovative and varied learning strategies and methods that are more active for students. From an open questionnaire, it is known that 74% of respondents said the dominant method in PAI lectures was lecture, then discussion and question and answer. When viewed from learning

theory, PAI learning does not include learning that activates students. It is not surprising that PAI lectures are not very interesting, especially for students who want to study more actively. According to Ginnis, the more active students are, the more meaningful the learning will be in students' hearts because experiences that are multi-sensory, dramatic, unusual or emotionally strong will be remembered much longer than regular routine experiences [5]. From the results of the open questionnaire, it was revealed that several variations of learning methods were expected by respondents to be applied in PAI lectures, so that PAI learning was not monotonous and boring, including project-based learning (PjBL), experimental methods, socio-drama, field trips and fieldwork. From the results of the open questionnaire, we can see several reasons why almost all students say PjBL needs to be applied in PAI courses. According to their opinion, PjBL can broaden students' insights, increase student creativity and build their ability to communicate and collaborate. With PjBL PAI learning will also be more interesting and can hone students' skills in making projects. The various advantages of PjBL expressed by the students above are also in line with the results of several studies. By implementing PjBL students no longer learn by listening but they will learn by doing (*learning by doing*) [12]; with PjBL students will be trained to think in higher order<sup>7</sup> and find solutions to real-life problems [2]. In addition, with PjBL, students will be trained to work in teams or groups [17], so that they will develop their skills in communication, planning and team working<sup>8</sup>.

The third way to develop 21st century knowledge and skills in PAI subject is to utilize advances in technology, information (IT) in PAI learning. Lecturers can take advantage of various online applications that are currently available to make PAI learning interesting and meaningful for students, such as making interesting teaching materials in the form of Islamic videos, making interactive teaching materials in the form of e-books or e-modules and making online evaluations. with Quizizz, Kahoot or Google Forms.

#### 4 Conclusion

From this research, the writer concludes several things, namely:

- a) PAI subject at UNIMED have contributed to developing 21st century competencies, although their contribution is not significant. PAI's biggest contribution is in the development of knowledge and skills in life and career. Meanwhile, the development of learning and innovation skills as well as skills in mastering media, information, and technology is still low, for this reason the development of these two competencies needs to be further improved.
- b) There are three ways that can be taken in developing 21st century competencies in Islamic Education subject, namely first, connecting and linking Islamic Education material with life in the 21st century so that Islamic Education material becomes more contextual and meaningful for students. Second, apply innovative and varied learning methods and strategies that can activate students. Third, by utilizing advances in technology, information (IT) in PAI learning such as making interesting teaching materials in the form of Islamic videos, making interactive teaching materials in the form of e-books or e-modules and making online evaluations with Quizizz, Kahoot or Google Forms. , and others.
- c) Innovative and effective learning methods to develop 21st century competencies in PAI subject include project-based learning (PjBL), experimental methods, socio drama, field trips and work.

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