

PRE-SERVICE TEACHERS' SELF-EFFICACY AND VALUES ON 21ST CENTURY SKILLS MASTERY

Dedi Irwan

IKIP PGRI Pontianak

Email: dediirwanphd@gmail.com

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Abstract

This research focuses on how the knowledge and values of prospective teachers in mastering skills in the 21st century, such as understanding and implementing 4C, Classroom Management, and mastering technology as a supporting medium in the teaching and learning process. The purpose of this study is to determine the Self-Efficacy of prospective teachers in the mastery of 21st century skills, as well as to determine the values of prospective teachers in mastering 21st century skills. Then the method used in this study is a quantitative descriptive method, which is a study to analyze data by describe or describe the data that has been collected. Technique of data collection that used in this research was questionnaire, and the technique of data analysis is statistic descriptive which used to analyze the data from the questionnaire, with the findings that prospective teachers assess that 21st century skills can be mastered and have excellent self-efficacy for these skills. It can be said that prospective teachers already have high self-efficacy and place values that are important for 21st century skills.

Keywords: 21st century, self-efficacy, prospective teachers

Abstrak

Tujuan dari penelitian ini adalah untuk mengetahui Self-Efficacy calon guru dalam penguasaan keterampilan abad 21, serta untuk mengetahui nilai-nilai calon guru dalam penguasaan keterampilan abad 21. Kemudian metode yang digunakan dalam penelitian ini adalah metode deskriptif kuantitatif, yaitu suatu penelitian untuk menganalisis data dengan cara mendeskripsikan atau mendeskripsikan data yang telah terkumpul. Teknik pengumpulan data yang digunakan dalam penelitian ini adalah angket, dan teknik analisis data adalah statistik deskriptif yang digunakan untuk menganalisis data dari angket, dengan temuan bahwa calon guru menilai bahwa keterampilan abad 21 dapat dikuasai dan memiliki kemandirian yang sangat baik. kemandirian untuk keterampilan ini. Dapat dikatakan calon guru sudah memiliki efikasi diri yang tinggi dan menempatkan nilai-nilai yang penting bagi keterampilan abad 21.

Kata kunci: Abad 21, self-efficacy, calon guru

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INTRODUCTION

The mastery of 21st century skills refers to a set of new skills, there are some new general consensus and emphasizes about these skills. In the past centuries, only few people needed to mastered those skills such as creativity, critical thinking, and problem solving, but these days, almost all part of citizen were forced to mastered those skills due to the need of surviving (Akgündüz & Ertepinar 2015, cited from (Erdem, 2020) This research was being be conducted to the pre-service teacher which in the phase of studying in IKIP-PGRI PONTIANAK. Researched



find out that in most of the time, the main problem was the lack of acknowledgement of the 21st century skills by the pre-service teacher, such as critical thinking, creativity, and innovation. Teacher has become one of the essential part in future and have to be able to plan a good quality of teaching-learning process and execute it.

However, the common issue that often occurred is the lack of skills mastery from the pre-service teacher in organizing the class, especially the judgement skills, or any further skill which need to be mastered and these problems were also discovered in the pre-service teacher which studying in IKIP-PGRI PONTIANAK. Moreover, in the 21st century, technology have grown fast and teachers are forced to mastered those kind of technologies in order to simplify the teaching-learning process in the classroom. Unfortunately, there were still lot of pre-service teacher that still unable to master the 21st century skills.

This research was focusing on how's the self-efficacy and values from the pre-service teachers towards the 21st century skills mastery, such as the comprehension and the implementation of 4C (Critical Thinking, Communication, Collaboration, Creativity and Innovation). The past research that had been conducted entitled *Pre-service Teachers' Mastery of Technological Pedagogical Content Knowledge for Teaching English Language*, put their focus on the mastery of skills by the pre-service teacher especially in the use of TPACK as the supporting media in teaching English. Another previous study entitled *Integrating 4C Skills of 21st Century into 4 Language Skills in EFL Classes*, this research focusing on the integration and implementation of 4C as the 21st century skills into 4 linguistic skills (Speaking, Reading, Writing, and Listening) in EFL Classes.

This research purposely conducted to know about how the self-efficacy and the values of the 21st century skills by the pre-service teacher. The variables that being discussed in this research are *self-efficacy* and *values* of the 21st century skills by the pre-service teachers in IKIP-PGRI PONTIANAK in order to improve the teaching-learning practice in the future of 21st century skills.

Pre-service teacher is a college student that enrolled in the teacher education program and will be a teacher in the future. According to (Atar & Bağci, 2019), in a book entitled "Current studies in Pre-Service Teacher Education", he explain that Pre-service teachers are people who pursue a relevant degree in order to become a teacher in the future. In the literature, the term "prospective teacher" is occasionally used. Pre-service teacher education can be defined

as degrees or programs in which student teachers acquire different kinds of knowledge and skills. They are required to learn about relevant theoretical and pedagogical issues which include various theories, frameworks, and models (Atar & Bağci, 2019).

Not only that, Atar also wrote that as a pre-service teacher, they will carry out teaching which is likely to have a big impact on hundreds, maybe even thousands of students who will be taught later (Atar & Bağci, 2019).. It can be said that in the field of education, the education that will be received by pre-service teachers is an issue that is as important as improvements in teaching methods, approaches, and applications. If the teacher who will later apply the new application or method is not trained enough and has adequate skills, then any efforts that have been made will be in vain, even though the new method or application found has a significant influence on teaching and learning practices. Therefore, training is needed in dealing with the times in the form of mastery of 21st century skills.

There's no specific definition and purpose about 21st century skill, however researcher has the effort to giving a general view about 21st century skill according to credible sources. According to (Scott, 2015:8, Cited in (Erdem, 2020), 21st Century skills are the knowledge, skills, and attitudes that needed and essential in order to competing in the 21st century skills workforce, the use of new technologies suddenly increasing in the diverse society and cope with rapidly changing work places. In research had been doing by Voogt and Roblin had been quoted by Joynes said that 21st century skill is 'New Competency' which more demanded by society from labour force which class, and from education term, and from young people which need to teach and train from today and for their futures, including work and career.

They also propose that term '21st century skill' is the whole concept from knowledge, skill, and disposition which needed by people for society knowledge (Joynes et al., 2019). Jacinto (2016), cited from (Erdem, 2020) define 21st skill century into four main categories: way of thinking, way of thinking (creativity, critical thinking, solution of problem, decision – making, and learning): procedure (communication and collaboration): tools for work (information technology and communication (TIK) and Information literacy): and life skill in the world (citizenship, life, and career, and personal and social responsibility). So, it can be concluded that 21st century skill has the benefit on developing skill in face the times who has entered the 4.0. Industrial Revolution besides that, masteries 21st century skill can improve and develop skill in Creativity, critical thinking, problem solving, decision making, learning, communication, and collaboration,

technology and communication masteries, as well life skill in the world. This applies to student and teacher, because student will learn about 21st century skill from teacher who teach them, quoted from (Erdem, 2020).

Problem-solving, teamwork and communication are the top three skills that companies require and will increasingly need in the next years (Kenworthy and Kielstra, (2015), cited in (Erdem, 2020)). As proposed by Kim et al. (2019), the main problem that need to be solved in the national education level is how to implement that 21st century skills into the educational system and align with it. Kenworthy and Kielstra, (2017), cited in (Pasedan & Nadeak, 2021), identified four main problems in the education system, such as 1). Problem-solving, teamwork, and communication. 2). No sufficient skills for the needs of students and the workplace. 3). Students work by themselves to cover the lack of the education systems. 4). Teaching practices and resource use have been changed by the use of technology but the education system is still transforming and even leading it.

According to the oxford dictionary, mastery is a comprehensive knowledge or skill in a subject or achievement. Mastery itself can be interpreted as control or superiority over someone or something. So, the mastery referred to here is having a competent understanding and being able to apply the 21st century skills that you have mastered. The successful use of technology in the classroom has more potential to engage students, promote more conceptual understanding, and build spatial intelligence. (Hennessy, Deaney, & Ruthven, 2006, cited in (Kent & Giles, 2017). 21st century mastery skills relate to self-efficacy and pre-service teachers' perceptions of how important 21st century skills are to master. When someone considers that an ability is valuable, then he will put more effort into the skill in order to master it, and the otherwise also.

From the previous explanation, we can conclude that mastery of 21st century skills itself cannot be separated from self-efficacy and the value of these skills. In the Journal written by (Versland, 2016), that in 1977, Bandura introduced the theory of self-efficacy on the basis of self-regulation and self-reflection. Specifically, it is explained in the journal that he argues that self-efficacy can be given as the right of people given to themselves to organize and carry out the actions necessary to achieve the specified type of performance. Based on this understanding, we know that self-ability cannot be removed and separated from Value. This is in line with the theory put forward by Bandura, as quoted from (Versland, 2016) “that beliefs and judgments about personal abilities, rather than actual abilities, encourage people to achieve the goals they set for

themselves. People act on their beliefs about what they can do, as well as their beliefs about the possible outcomes of their actions.” Based on this theory, it is known that values greatly affect a person's self-efficacy, and both of these things greatly affect the mastery of 21st century skills.

Value itself can be interpreted as a person's assessment of something, related to how important it is. In the oxford dictionary it is explained that value is the regard that something is held to deserve; the importance, worth, or usefulness of something. The value that being discussed in this study is the pre-service teacher's perception of how important it is to master 21st century skills for them to master in facing the times. This research is in line with previous research conducted by (Ait et al., 2015), which was written in a journal entitled, "Students' Self-Efficacy and Values Based on A 21st Century Vision of Scientific Literacy – A Pilot Study. " The difference between the previous journal and this journal are that the subject used is a pre-service teacher who is pursuing education in the Department of Education within the scope of the Institute of Education and Teacher Training, and the objective goal of this research was to measure the self-efficacy and values of 21st century skills mastery. This research and previous studies have a slightly different scope of research, both of which are looking for how much self-efficacy and perceptions of 21st century skills can affect the mastery of these skills.

METHOD

The design that used in this research was descriptive quantitative method. Quantitative method can be known as a research design which based on the philosophy of positivism and implemented into the sample by gathering data using the quantitative/statistic data collection instruments in order to test the hypothesis that has been determined. As stated by (Aliaga, and Gunderson, cited from Apuke, 2017), Quantitative research method deals with the measurement and analysis the variable (s) in order to get the final result. It includes the measurement and analysis of numerical data that being gathered by using specific instruments and techniques for statistical data in order to answer the issue that being questioned like who, how much, what, where, when, how many, and how. Quantitative approach describes the analysis of an idea in order to build narrow assumptions and using data gathering techniques to support the assumptions (Creswell, 2014).

This research was conducted in IKIP-PGRI PONTIANAK, which research and the institution have reach an agreement with the terms and conditions that has been set out at first. The technique that used to gather the data was questionnaire. In conducting this research, research also

using the questionnaire technique in the process of gathering data to fulfil the need of valid information and data for this research. Questionnaire is one of the data collection technique which using the method of delivering sets of questions to the sample in form of text and being answered by the respondents who have agreed and willing to give their knowledge and information. Well-prepared questionnaire will serve you some huge advantages in delivering the best, and most accurate responses from the respondents (Brace, 2018). Generally, the term ‘questionnaire’ refers to both questionnaire as a self-completion by the respondent and as an instrument for that administrated by the researcher (Brace, 2018). The total questions of each variable that have been set were 43 question and the questionnaire were distributed to all of the pre-service teacher in IKIP-PGRI PONTIANAK on January 10th, 2022. In this research, researcher use the close-ended questionnaire type and have set out 4 options for the respondents and they have to choose one of the options in order to answer the questions.

In this research, research used the statistic descriptive technique to analyse the data that had been gathered because the researcher used the quantitative method and this kind of data analysing technique was the most suitable for this research. According to (Yellapu, 2018), there are two main approaches in statistic method, those are (1) Descriptive analysis, which summarize the raw data from the sample or population, and (2) inferential analysis, which describe the motive, imaginary, and conclusion from the data. Descriptive analysis is the main substance in order to build the inferential statistic. Data analysis in this research was done after all the data being gathered from the questionnaire that we had shared using the google-form, and the technique that we used to analyse the data was descriptive statistic. In the process of analysing the data, we conduct two kind of test, which are Validity and reliability test. Validity test was conducted in order to explain about how good did the data that been collected from the research field (Taherdoost, 2018) and also with the method of Bivariate Pearson Correlation.

Researcher also conducting the reliability test for the research in order to strengthen the research instrument that been used. Reliability can be classified as consistency of measurement. in answering the research item, respondents shall give the same answer for every item test that being completed. Although there’s a low chance of count the exact number of reliability, but it still can be achieved through some measurement as the reliability test is repeatable, or can be done several times (Heale & Twycross, 2015), researcher conduct reliability test to measure the indicator of the questionnaire. Questionnaire can be categorized as reliable of the responses from

respondents are consistent. In this research, researcher measure the value of reliability for each variable, variable can be categorized as reliable of the reliability value is upon 0,6 (Alpha Cronbach > 0,6).

FINDINGS AND DISCUSSION

These days, 21st century skills had become one of the most essential instrument in the educational aspect. By those fact, it is important for the teacher or pre-service teacher to master the 21st century skills in order to going along with the world development of technologies. In order to develop their 21st century skills mastery, Pre-Service Teacher need to be provided with support and so they will feel confidence in integrating the 21st century skills into their teaching (Urbani et al., 2017).

The data in this research was collected from 1791 Respondents, all of the respondents are the one who still participating in Pre-Service Teacher Education in IKIP-PGRI PONTIANAK and could be classified as the representation of Pre-Service Teachers in West-Kalimantan. There were several characteristics in the sampling technique, such as GPA (Grade Point Academic), Semester, Gender, Regional Origin, Study Program, NIM, and E-mail. Researcher have served all the characteristics data on the chart below:

Chart 1: GPA

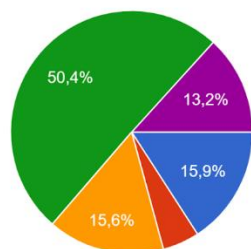


Chart 2: Gender

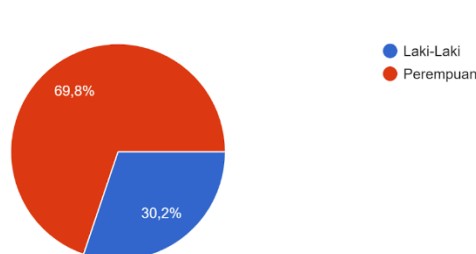


Chart 3: Semester

Chart 4: Study programs

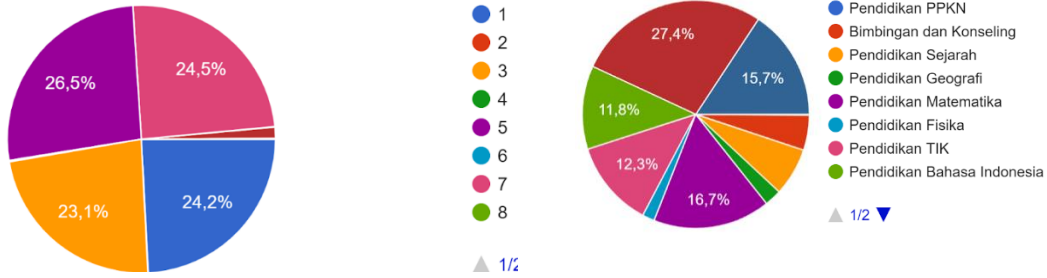
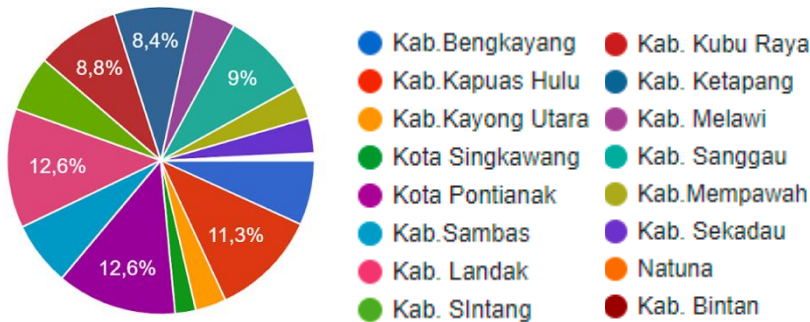
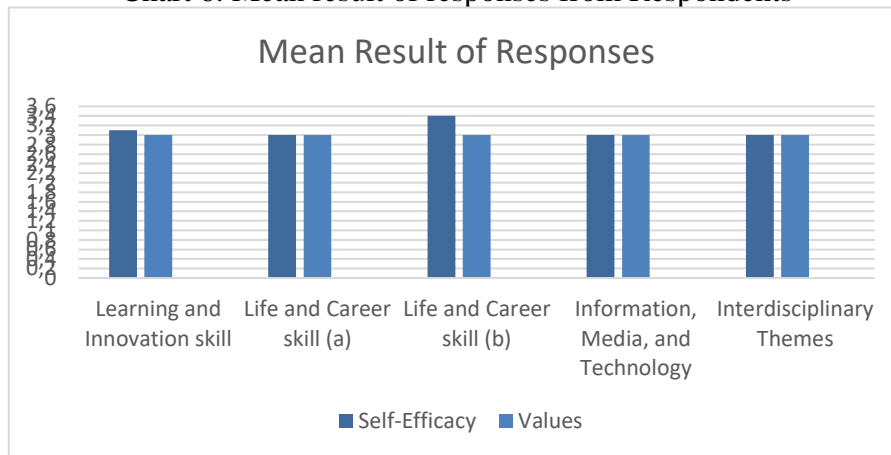


Chart 5: Regional Origin



On this research, researcher used 2 kinds of category in order to measure responses from respondents, those are Self-efficacy and Values Each categories has it owns criteria. As for self-efficacy, it has four criteria, such as *very Incapable (0-1.1)*, *Incapable (1.2-2.0)*, *capable (2.1-3.0)* and *very capable (3.1-4.0)*. Values also has it owns criteria, such as *Very Invaluable (0-1.1)*, *Invaluable (1.2-2.0)*, *Valuable (2.1-3.0)* and *Very Valuable (3.1-4.0)*.

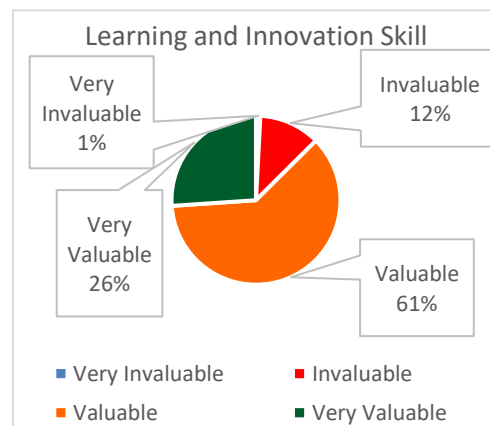
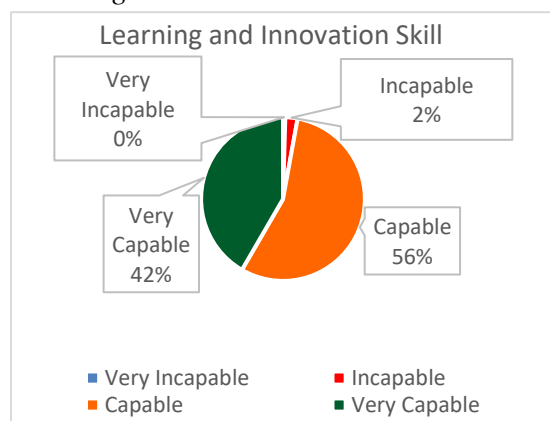
Chart 6: Mean result of responses from Respondents



It can be seen from the data on the chart above that the gap between *Self-Efficacy* and *Values* was not in a high range of difference. The *Mean* of all aspects were in the range of 3

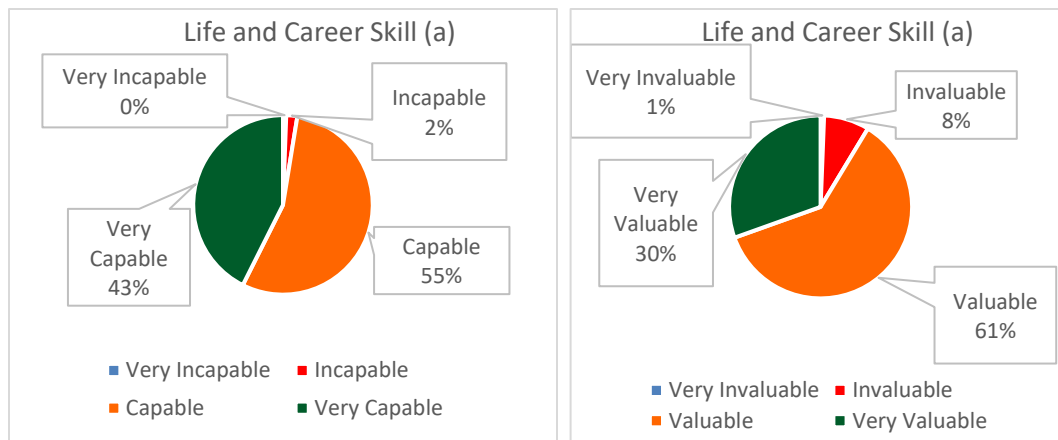
(Capable for *Self-efficacy* and Valuable for *Values*), and two of the aspects has some gap that we need to discuss. On the *Learning and Innovation Skill*, there were 0,1 gap of *Mean* between *Self-efficacy* towards *Values*. Meanwhile, on the aspect of *Life and Career Skill (b)*, there were 0,4 gap of *Mean* between *Self-efficacy* towards *Values*. From the chart above, most of the responses showed that respondents have a higher *Self-efficacy* than *Values* but it was not in a big gap between them.

Learning and Innovation skill



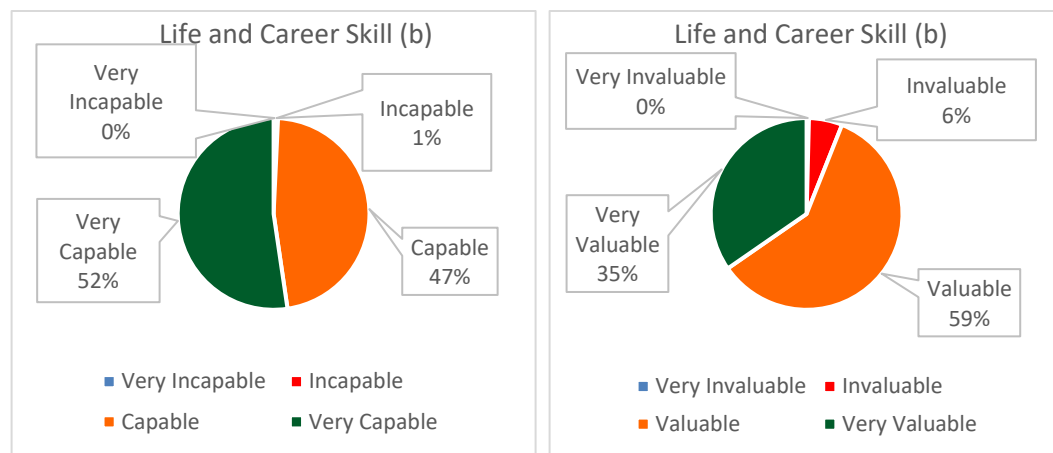
The results that we gained from the *Learning and Innovation skills* aspect based on the table above can be concluded that most of the responses that given from the respondents are in the category of *Very Capable* for *self-efficacy* variable and *Valuable* for the *Values* variable. 56% of the respondents shows great responses for the questions that given related to the 21st century skills, while 42% of it shows very great responses for *self-efficacy*. 61% of the respondents shows great responses for the questions that given related to the 21st century skills, while 26% of it shows very great responses for *Values*. But somehow, there are several unique things that was found on the questionnaire that we distributed before, where there were some respondents who categorized some items as *Invaluable* (i.e; Calon guru mampu melampaui keterampilan kurikulum dasar untuk mendapat keterampilan baru untuk diri sendiri). As for the values, there were 5% (89 Respondents) of the respondents who picked this item as *Invaluable* and for the self-efficacy, there were 16% (287 Respondents) of the respondents who picked this item as *Incapable*.

Life and Career skill (a)



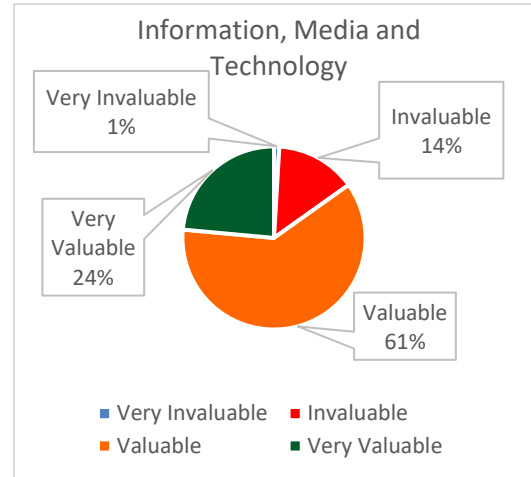
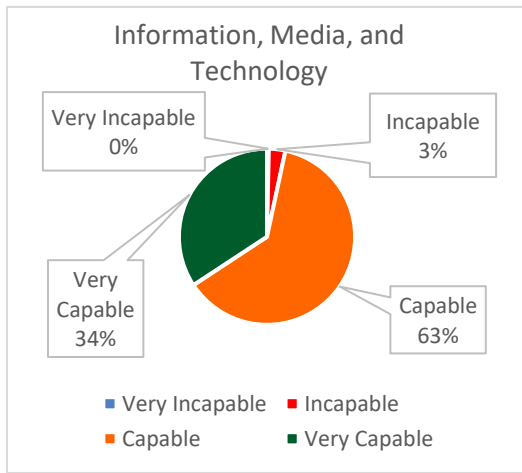
The result that has been gathered from the *Life and Career skill (a)* aspect on the table above shows that most of the respondents' respond are in the category of *Capable* for the *Self-efficacy* variable and *Valuable* for *values* Variable. There are 55% of respondents that shows great responses towards the question that has been given related to the aspect, while 43% of the other respondents shows very great responds for *Self-efficacy*. Meanwhile, 61% of respondents that shows great responses towards the question that has been given related to the aspect, and 30% of the other respondents shows very great responds for *Values*. In this aspect, there were also some of the respondents who made and shared some unique ideas, as showed in the items (i.e; Calon guru mampu melakukan tugas dengan sukses tanpa mengharapkan pujian atau imbalan). In this item, there were some unique responses from the respondents, where 3% (53 Respondents) of the respondents are put a low value and choosing *Invaluable* as their answer, and as for their self-efficacy shown that 6,8% (122 Respondents) of the respondents picked the answer of *Incapable*, this might be caused by the needs of some person who need to be cheered or praised in order to improve their performance.

Life and Career Skill (b)



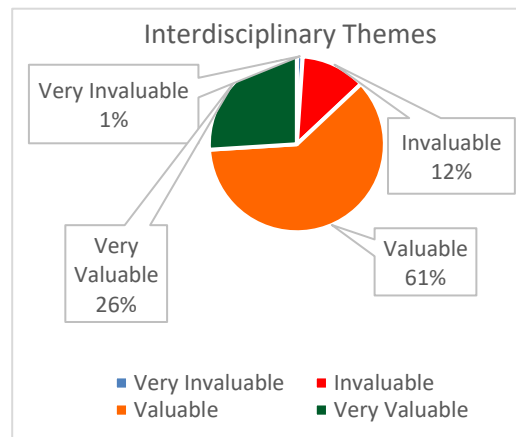
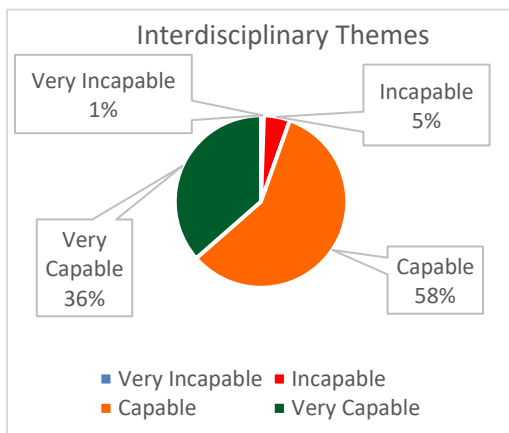
The result that can be drawn from the mean of the data from the *Life and Career skill (b)* based on table above is that most of the responses that given by the respondents are in the category of *Very Capable* for *Self-efficacy* variable and *Capable* and *Valuable* for *Values* variable. There are 47% of the respondents who gives great responses towards the question that given related to the aspect of 21st century skills, while 52% of the respondents shows very great responses for *Self-efficacy*. Meanwhile, 59% of the respondents who gives great responses towards the question that given related to the aspect of 21st century skills, and 35% of the respondents shows very great responses for *Values*. Even though most of the respondents were giving very great responses as researcher have speculated before, there were still some of the respondents who were giving unique responses (i,e; Calon guru mampu menerima perspektif orang lain ketika mengambil keputusan), from this item, researcher have seen that there are 1% (18 Respondents) of the respondents who were put low value on this item by choosing *Invaluable* as their response and on the other side, there are 6,8% (122 Respondents) of the respondents who picked *Incapable* as their answer for the self-efficacy variable.

Information, Media, and Technology



The results that researcher can conclude from the *Information, Media, and Technology* based on the table above is that most of the responses that given by the respondents are in the category of *Capable* for the *Self-efficacy* variable and *Valuable* for the *Values* Variable. There are 63% of the respondents show great responses to the aspects that related to the 21st century skills, while 34% of the respondents shows very great responses for *Self-efficacy*. Meanwhile, 61% of the respondents show great responses to the aspects that related to the 21st century skills, and 24% of the respondents shows very great responses for *Values*. Calon guru mampu membuat dan menyebarkan produk-produk media massa), there were 14,1% (252 Respondents) of respondents choose *Invaluable* and 18,4% (328 Respondents) of respondents choose *Very Invaluable*, the result from the item above shows that there were varieties of ideas that given by respondents and contradiction is a common thing in the society, this might be caused by the mind-set of the pre-service teachers which having the thoughts of the use of mass media as not important to be comprehended.

Interdisciplinary Themes



The result that researcher can draw from the *Interdisciplinary Themes* aspect as shown on the table above, it can be drawn that most of the respondents' responses are in the category of *Capable* for the *self-efficacy* variable and *Valuable* for the *Values* variable. There are 58% of the respondents who gives very great responses towards the aspects related to the 21st century skills, while 36% of the respondents shows very great responses for *Self-efficacy*. Meanwhile, 61% of the respondents who gives very great responses towards the aspects related to the 21st century skills, and 26% of the respondents shows very great responses for *Values*. As expected by researcher, there were some of the respondents who gave low values and self-efficacy for some item and the item can be classified as "unique" (i.e; Calon guru mampu mengetahui bagaimana proses pemerintahan secara local dan global), in this item, there were 3,8% (68 Respondents) of the respondents believe that this item was *Invaluable* for themselves to begin with, and as for the self-efficacy, there were high amount of respondents who has a low self-efficacy of the process of government as showed on the item, where there were 16,1% (288 Respondents) of the respondents choose *Invaluable* as their response.

Discussion

Based on the result of the research that has been drawn above, there are several components that need to be discussed. Those components are *Learning and Innovation skill*, *Life and Career skill (a)*, *Life and Career skill (b)*, *Information, Media, and Technology*, and *Interdisciplinary Themes*. Researcher compared the result that gained in this research with the previous study and there are several points that can be concluded from the result (Giles & Kent, 2016). The research that was conducted by Giles & Kent, it was found that there's a high intensity of efficacy of technology by the teachers that they observed in their research, they stated that pre-service teacher that have graduated need to implement the philosophy of technology integration in the teaching-learning field because it is important (Giles & Kent, 2016). From the previous study that was conducted by Giles & Kent, there are no much different compared to the result that was concluded from this research which researcher found that most of the respondent beliefs that the 21st century skills mastery is important and respondents also have high confidence related to their self-efficacy in the mastery of 21st century skills. The conclusion that can be drawn is that mastering the 2st century skills, for example technology and integrating it to the teaching-learning field is so important and become one of the most needed aspect in the field because there are some sectors that involving the mastery of technology (Miles, 2013, in Giles and Kent, 2016) where they stated

that either technical knowledge or skills were only two of those aspects that can establish the successfulness in the teaching-learning field.

This research shows the result that having the ability of mastering the 21st century skills and integrating it in the teaching-learning process is essential. Those are the reason of why pre-service teacher need to be provided with the philosophy of the use and the mastery of 21st century skills are the essential aspect. This research shows that most of the pre-service teacher in IKIP-PGRI PONTIANAK are having the confidence in their self-efficacy of 21st century skills, as shows on the mean of 3,1 which can be categorized as “Very Capable”. On the other side, this research also shows that most of the pre-service teacher in IKIP-PGRI PONTIANAK are having the thoughts of the urgency of 21st century skills, which shows on the mean of 3, which they think of the values of 21st century skills are “Valuable”. It tells us that pre-service teachers in IKIP-PGRI PONTIANAK and as respondents of this research beliefs that the integration of 21st century skills in the teaching-learning process is essential. Even though there were high amount of respondents who giving great responses, there were also some of the respondents who gave answer like “Invaluable” for the respondents with low-value towards the item that being questioned, and “Incapable” for respondents who has low-efficacy towards the item than being questioned and those item were classified as *Unique*.

This result are also having the similarities with the research that being conducted by (Erdoğan, 2019), the final result shows that 4C as the part of 21st century skills are essential to be mastered, either for the in-service teacher or pre-service teacher and it also need to be taught to the students in order to build the quality of the students. This research found that pre-service teacher in IKIP-PGRI PONTIANAK beliefs that the mastery of 21st century skills are important and respondents also shows positive perception towards those skills mastery.

In relation to self-efficacy and values related to 21st century skills, we found that teachers' self-efficacy was very important by value perceptions of how important those skills were to them. The results showed that most pre-service teachers who have the perception that 21st century skills are important/very important would have the ability and confidence to apply and master these skills well. On the other hand, pre-service teachers who believe that 21st century skills are neither important nor important have a low level of self-confidence. This may be due to a lack of understanding regarding 21st century skills in today's educational environment. The small

percentage of the sample that responds poorly to 21st century skills is evidence of the need for early understanding of 21st century skills. This results is in line with the theory of studies on which provide empirical evidence that a teacher's belief in the efficacy of their prior teaching and successful outcomes affects students' self-efficacy, motivation, and performance (Cannon & Scharmann, 1996; Ross et al., 2001; Rutherford et al., 2017, citation from (Han et al., 2021)

CONCLUSIONS

After analysing the final data from the respondents that we have collected from the questionnaire that used as the method to collecting data which consist of 43 questions and 5 aspects for each variable, so researcher distributed the questionnaire to all of the Pre-service teacher in IKIP-PGRI PONTIANAK which they were agreed and willing to become respondents in this research, there are two final conclusions that can be drawn in order to answer the research questions.

Based on the mean of the data, the conclusion from the aspect of *Learning and Innovation Skill* that can be drawn are that respondents shows that they are very confidence with their *self-efficacy*, On the *values* shows that most of the respondents determined the aspect of *Learning and Innovation skills* as important skills. Based on the mean of the data, the conclusion from the aspect of *Life and Career skill (a)* that can be drawn are that respondents shows that they are having the confidence with their *self-efficacy*, On the *values* shows that most of the respondents determined the aspect of *Life and Career skill (a)* as important skills to be mastered. As for the aspect of *Life and Career skill (b)*, Respondents beliefs with their self-efficacy as shown on the mean table where it tells that respondents are very confidence with their self-efficacy, as for the values, the respondents also think that the *Life and Career skill (b)* aspect is important. *Information, Media, and Technology* as the next aspect, respondents also shows that they are having the confidence in their *self-efficacy* and as for the *values*, respondents are having the thoughts that *Information, Media, and Technology* are one of the valuable aspect as shown in the mean of data where it showed that the respondents think of the aspect as important. As for the final aspect, *Interdisciplinary Themes* aspect also get the positive perception from the respondents, where the respondents are having their confidence in their self-efficacy as questioned in this aspect, and for the values, respondents also showed that *Interdisciplinary Themes* is one of the valuable aspect in the 21st century skills mastery.

Besides of the explanation above, there were also some unique responses found from the

items in the research instrument that we have shared and it shows that there were some contradiction showed by the respondents, even if it was only in a small number of sample (I.e; Calon guru mampu melakukan tugas dengan sukses tanpa mengharapkan pujian atau imbalan), there were found that 3% (53 Respondents) of the respondents thought that this item is not valuable and choosing “Invaluable” as their responses, while 6,8% (122 Respondents) of the respondents giving “Very Incapable” as their responses, which shows that the respondents were not able to perform the item that we questioned, these were classified as unique item.

In order to answer the *research questions* that have been determined before, the final conclusion that can be drawn from above, where the mean of the data that shown on the table 4.1, respondents shows that they are very confidence with their *self-efficacy* and most of the respondents also having the thought of that the 21st century skills are having the high values and valuable to be mastered.

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