

## 6C LEVELS AMONG TRAINEE TEACHERS IN A TEACHER TRAINING INSTITUTE

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### Abstract

Institute of Teacher Education Malaysia, (IPGM) has initiated Pedagogical Capacity for Deep Learning (PCDL) to develop 6Cs global competencies namely character, citizenship, collaboration, communication, creativity and critical thinking among the trainee teachers. This study is to measure the six global competencies (6Cs) among TESL trainee teachers from an Institute of Teacher Education. Data were gathered quantitatively from 80 respondents through a 30 items online questionnaire. Each item has five options based on descriptive statement indicators which are ranked hierarchically from high to low to show the level of competencies which are: proficient, accelerating, developing, emerging and limited. Generally the results show that most of the respondents viewed themselves as having all six global competencies which ranged from developing to proficient although there are items that need to be given further enhancement.

Key words: 6Cs, global competencies, PCDL, trainee teachers, 21st century skills

### Abstrak

*Institut Pendidikan Guru Malaysia, (IPGM) telah memperkenalkan Kapasiti Pedagogi Pembelajaran Bermakna (PCDL) untuk membangunkan kecekapan global 6C iaitu sahsiah, kewarganegaraan, kolaboratif, komunikasi, kreativiti dan pemikiran kritis dalam kalangan guru pelatih. Kajian ini adalah untuk mengukur enam kompetensi global (6C) dalam kalangan guru pelatih TESL dari sebuah Institut Pendidikan Guru. Data dikumpul secara kuantitatif daripada 80 responden melalui 30 item soal selidik dalam talian. Setiap item mempunyai lima pilihan berdasarkan petunjuk pernyataan deskriptif yang disusun mengikut hierarki dari tinggi ke rendah untuk menunjukkan tahap kecekapan iaitu: cemerlang, kemajuan, berkembang, permulaan dan bukti terhad. Secara amnya, keputusan menunjukkan bahawa kebanyakan responden melihat diri mereka mempunyai keenam-enam kecekapan global yang terdiri daripada tahap berkembang hingga cemerlang walaupun terdapat item yang perlu diberi perhatian untuk penambahbaikan.*

*Kata kunci: 6C, kecekapan global, PCDL, guru pelatih, kemahiran abad ke-21*

Education is the core for the betterment of humanity as well as for the development of modernisation. It is considered a pillar of development and enables students to develop their attributes and skills to achieve their potential as human beings in society. Students' output and attributes could be achieved through quality teaching and learning in schools. Due to the dynamic education system in 21st century learning that keeps on evolving and changing accordingly, the student-centred learning process has been introduced in Malaysia in 2014. This is to ensure the development of a quality education system relevant to the recent progressive environment. In 21st century learning, 4 key elements (4C)

emphasised are communication, collaboration, creativity, and critical thinking. The main objective of the 4C elements is to equip students with the essential skills to face 21st century challenges.

In order to achieve the aims of 21st century learning, Institute of Teacher Education (IPG) plays a significant role to produce qualified teachers. In this regard, TS25 programme has been designed by the Ministry of Education (KPM) as stated in the Malaysia Education Blueprint 2013 - 2025. Deep learning is part of the TS25 programme activator to produce qualified teachers who manage to give an outstanding impact on the production of quality schools and perceived student outcomes. In addition to that, the Institute of Teacher Education, Malaysia (IPGM) has initiated Pedagogical Capacity for Deep Learning (PCDL) in 2018 to produce quality teachers who have deep learning pedagogical capacity in line with the PCDL programme. This is to prepare teachers who have the skills in linking and dismantling learning standards to get the main ideas to produce teaching quality that suits the interests and abilities of the students to explore knowledge and various skills across the curriculum that makes learning more meaningful in their daily lives.

Thus, Pedagogical Capacity for Deep Learning (PCDL) which is a new pedagogy in teacher training programme at all Institute of Teacher Education Campuses helps to develop 6Cs global competencies among the trainee teachers (Ellyza Karim et. al, 2021). The 6C competencies are vital to be included in the teacher education curriculum as to ensure that the trainee teachers master the 21 st century skills or the 21 st century competencies. The aim to embed character, citizenship, collaboration, communication, creativity and critical thinking competencies is vital so that the trainee teachers who are future teachers in Malaysian primary schools are able to implement teaching and learning process which are interesting and meaningful as well as to meet the latest trend in this contemporary era.

### **PROBLEM STATEMENT**

Since 6Cs represent a paradigm shift in education, it is expected that lecturers and teachers have to work hand in hand to ensure that Malaysia has quality education of an international standard (KPM, 2013). As to this, it is necessary for the Institute of Teacher Education trainee teachers to master the 6C skills as they are the future teachers who are expected to teach and apply the 21st century skills. In line with the aim to educate the trainee teachers with 6Cs, the role of lecturers in Institute of Teacher Education has to change from being a facilitator to an activator. This new role is to ensure that the teaching and learning process is effective and student – centred because the aim of the teaching is not only to achieve the teaching objectives but it is geared to achieve the mastery of 6Cs. In lieu of this, Institute of Teacher Education, Islamic Education Campus (IPGKPI) has implemented PCDL since 2019 and the practice has been widespread in the teaching and learning activities as well as assessments among the students.

In order to train trainee teachers to be able to pack and unpack the curriculum, they must master the 6Cs (Character , Citizenship, Collaboration, Communication, Creativity and Critical thinking) global competencies. Besides, by mastering the 6Cs, trainee teachers would be able to overcome the challenges of globalisation with more confidence in the field of education and in teaching professionalism. This would help to fulfil the competency standard set by IPGM. However, no concrete study has been done to identify the level of 6Cs among trainee teachers in IPGKPI. Thus, this study was conducted to study the TESL trainee teachers of the IPGKPI 6Cs global competencies level. The results of this study could be used by other IPG, to assist in producing competent trainee teachers.

### **RESEARCH OBJECTIVES**

Based on the purpose of this study, the specific objectives are:

1. Identify the level of 6Cs competencies among TESL trainee teachers.
2. Identify trainee teachers perceptions on their highest and lowest level of 6Cs competencies.

## RESEARCH QUESTIONS

The findings of this study answered the following research questions:

1. What are the levels of 6Cs competencies among TESL trainee teachers?
2. What are the trainee teachers perceptions on their highest and lowest level of 6C competencies?

## LITERATURE REVIEW

The global education system has undergone a transformation, and Malaysia has also implemented various changes in the education system in order to remain relevant and competitive globally. The government's efforts to develop a transformation plan for the national education system aim to produce a balanced first-class human capital, as intended by the National Education Philosophy. Various efforts are being made to plan changes in accordance with the Malaysia Education Blueprint 2013-2025. When implementing changes to ensure human capital development, the teaching approach must also cater to the current demands.

Today, learning requires more than content knowledge only. 'The changing global dynamic, connectivity and societal changes force education to be parallel with the changing world. So, students at the same time are facing a more turbulent world where what they know is not important but what they can do is being sought by the employers. Parallel with the current trend, learning is thus geared to what is called Deep learning. Deep learning is the latest trend in this ever-changing dynamic world of learning. It changes the outcome of almost all the learning competencies constructed before where heavy emphasis is placed on what learners should acquire in the learning. In other words, deep learning sees learning as knowing all the content and being able to manipulate it into skills' (Fullan, Quinn & McEachen, 2018). By having the ability to manipulate the knowledge, it will lead to the skills of entrepreneurship, creativity, and problem-solving which are necessary to this thriving world. Basically, deep learning incorporates six global competencies namely character, citizenship, collaboration, communication, creativity, critical thinking, or overall better known as 6Cs.

In IPG, the 6Cs elements are regarded as the relevant standard for the development of trainee teachers. This is because the 6Cs elements in deep learning are predicted to bring changes in teaching and learning. According to Fullan, Quinn, and McEachen (2018), implementing deep learning will prepare students to face globalisation challenges with confidence. This is due to the fact that deep learning approaches improved the quality of education as it empowered students to become an active part of the learning process, and to develop an understanding of the real world (Tahir, 2015). In this regard, researchers see a need to implement the most recent student design model in the classroom where teachers are able to pique students' interest, disseminate knowledge, employ effective teaching methods, and provide enjoyable learning activities that encourage creativity, critical thinking, collaboration and active communication. These elements correspond to the 6Cs elements, which serve as the reference standard for PCDL learning development.

To measure the effectiveness, student outcomes are the most important factor in determining the strength of deep learning. Here, the student's performance is evaluated not only academically, but also in terms of character development and citizenship which include a strong, collaborative, creative, and critical mind, good citizenship, and a good communicator (Stoll & Fink, 2000). In terms of collaborative, there are five basic elements that are considered as collaborative features which are positive interdependence, significant interaction, individual accountability, and personal responsibility to achieve group goals, application of relevant interpersonal and small group skills, and frequent and regular group processing of current functioning to improve the group's future effectiveness (Marjan, Mozghan & Zhina, 2012). Collaborative activities among students can provide a meaningful experience in achieving knowledge and professionalism. Learners gain the opportunity to converse with peers, debate ideas, exchange various beliefs, challenge other conceptual frameworks, and participate actively.

Meanwhile, the element of communication acquired knowledge includes formulas or rules of interaction, cultural rules that form the basis of the context and content of communication events (Abdul Rashid & Amat Johari, 2012). Here, novice teachers should emphasize the importance of communication skills in fostering a positive classroom environment and enhancing more effective teacher-student relationships. By developing effective communication between teacher-students, students can adapt and learn how to get their points across with different people in real world. Nevertheless, to enhance and improve communication in the deep learning process, teachers must develop strong communication skills first. Khan et. al (2017) emphasised that teacher with poor communication skills may cause failure of students to learn and adapt in a context effectively. Khan et. al (2017) further added that students need to understand that what is right, and what is wrong while it totally depends upon the communication skills of teachers which he adopts in classroom especially in the deep learning approach (p.18).

To complement the elements of deep learning approach, teachers should implement activities that encourage the students to combine ideas from different sources and stimulate their metacognitive processes (Nelson-Laird et al., 2014). According to Maynbayeva (2017), one of the most important pedagogical principles in the twenty-first century is professional activities in teaching and learning. This includes innovative aspects that rely on teachers' personalities, as well as an attitude toward pedagogical efficiency and skill that can stimulate creativity among teachers and students, such as i-Think, a thinking map that helps students to stimulate their thinking capability. This method also indirectly improves their potential and creates creative and innovative human capital as well as the ability to think at a higher level, thus achieving the National Education Philosophy (Muhamad Sidek, 2013) rather than simply transmitting existing knowledge. According to Birgili (2015), in a study, creativity is labelled as a universal ability that is practiced in a person's daily life. These practices consequently help students to develop critical thinking skills as well as the ability to make choices based on information in their daily lives.

Critical thinking allows students to study different views on the impact of an issue or event in daily life and evaluate these issues from the perspective of society and the environment. Based on this situation, Ruslan and Nyet (2015) run a critical thinking test in Science for Year Five pupils, using Problem-Based Learning. Their test confirmed that the three best constructs in the critical study are; making contrast, analyzing, and identifying causes and consequences. Thus, it can be interpreted that those students who can think critically are certainly able to master these three constructs. Therefore, critical thinking mastery can be attributed to high-order thinking skills or HOTS.

Overall, it can be concluded that the six elements of the 6Cs global competence level that are used to assess the competency of current trainee teachers in this study are highly relevant. Mastery of the 6Cs elements in trainee teachers can prepare them to face real-world challenges in education that require physical, mental, and emotional strength. It is thus necessary to investigate the level of development of students as well as the level of success of this new pedagogy, namely PCDL.

## METHODOLOGY

### Research Design

The study was conducted quantitatively based on a survey design using online questionnaire. There are two sections in the questionnaire. Section A contains items on the respondents' backgrounds, whereas section B contains 30 items on 6Cs elements. The 30 items consist of four items on character element, five items from citizenship, collaborative, communication and creativity elements and six items from the critical thinking element. The questionnaire contains five options adapted from deep learning rubric developed by PCDL panels appointed by IPGM. The five options based on descriptive statement indicators are ranked hierarchically from high to low to show the level of competencies which are: proficient, accelerating, developing, emerging and limited.

### **Respondents of The Study**

The respondents of the study were 80 TESL trainee teachers from IPGKPI. The senior trainees comprised of 47 PISMP June 2020 intake from two classes who were in their fourth semester and the junior trainees were 33 second semester PISMP June 2021 intake who were also from two classes. They were 65 females and 15 males and their ages were between 20 to 21 years old.

### **Data Gathering Method**

A total of 80 online questionnaires were given to the respondents where they had to choose which level of competencies they perceived they had according to the descriptors for each item. The data were analysed based on the 5-point scale of 6C dimension to show the level of competencies. The quantitative data was analysed using descriptive analysis to obtain information based on the questionnaire. According to Jackson (2016), descriptive statistics are numerical measures which describes a distribution by giving vital information on the central tendency of the distribution as well as the width and shape distribution.

## **FINDINGS**

The findings from this study were based on the survey carried out to the PISMP TESL June 2020 and June 2021 intakes from Institute of Teacher Education, Islamic Education Campus in Bangi, Selangor. Findings from the questionnaires display the results on the level of 6Cs competencies namely character, citizenship, collaboration, communication, creativity and critical thinking among respondents and their perceptions on their highest and lowest level of 6Cs competencies.

The question on the first C in the 6Cs Global Competencies is on the element of character. There were four sub-elements: learning to deep learn; grit, tenacity, perseverance and resilience; self-regulation, integrity responsibilities; and digital use. 1.3% of the respondent believed that he was proficient in learning to deep learn (sub-element 1), 36.3% claimed they were at the accelerating level, 45% believed they were at developing level, 12.5% were at emerging while 5% believed that they had limited competency in their learning to learn sub-element of the first C in the 6Cs Global Competencies. For sub-element 2 of grit, tenacity, perseverance, diligence and resilience, the respondents viewed themselves as having level of competencies as such; 17.5% believed they were proficient, 27.5% believed they were accelerating, 40% viewed themselves as developing and 15% believed that they were still emerging in this sub-element. In view of their self-regulation, integrity and responsibilities (sub-element 3), the respondents scaled their competencies as 16.3% proficient, 27.5% accelerating, 38.7% developing, 11.3% emerging and 6.3% viewed themselves as having limited competency. For digital use (sub-element 4), 37.5% of the respondents viewed themselves as proficient, 46.3% as accelerating, 13.8% as developing and 1.2% each viewed themselves as still at the levels of emerging and limited competencies.

The question on the second C in the 6Cs Global Competencies is on the element of citizenship. There were five sub-elements: understanding of diverse global values and view; global perspective; genuine interest in human beings and environmental sustainability; ability to solve ambiguous and complex real-world problems that impact human sustainability; and digital use. 33.8% of the respondent believed that they were proficient in understanding of diverse global values and view (sub-element 1), 35% claimed they were at the accelerating level, 20% believed they were at developing level, and 11.3% were at emerging competency in their understanding of diverse global values and view. For the sub-elements of global perspective (sub-element 2), the respondents viewed themselves as having level of competencies as such; 6.3% believed they were proficient, 51.2% believed they were accelerating, 18.8% viewed themselves as developing and 6.3% each believed that they were still at the emerging and limited competencies in this sub-element. In view of their genuine interest in human beings and environmental sustainability (sub-element 3), the respondents scaled their competencies as 10% proficient, 60% accelerating, 26.2% developing, 2.5% emerging and 1.2% viewed themselves as having limited competency. In the ability to solve ambiguous and complex real-world problems that impact human sustainability (sub-element 4), 11.3% of the respondents viewed themselves as proficient, 46.3% accelerating, 23.8% developing, 11.3% emerging and 7.5% limited. For digital use (sub-element 5),

7.5% of the respondent viewed themselves as proficient, 36.3% as accelerating, 36.3% as developing and 12.5% viewed themselves as still at the level of emerging and 7.5% as having limited competency.

The third C in the 6Cs Global Competencies is the element of collaboration. There were five sub-elements: interpersonal and team-related skills; team dynamics and challenges; social, emotional and intercultural skills; working interdependently as a team; and digital use. 51.2% of the respondent believed that he was proficient in interpersonal and team-related skills (sub-element 1), 10% claimed they were at the accelerating level, 20% believed they were at developing level, 13.7% were at emerging while 5% believed that they had limited competency in their interpersonal and team-related skills which is the sub-element of the third C in the 6Cs Global Competencies. For the sub-elements of team dynamics and challenges (sub-element 2), the respondents viewed themselves as having level of competencies as such; 20% believed they were proficient, 42.5% believed they were accelerating, 30% viewed themselves as developing and 7.5% believed that they were still emerging in this sub-element. In view of their social, emotional and intercultural skills (sub-element 3), the respondents scaled their competencies as 11.3% proficient, 50% accelerating, 30% developing, 7.5% emerging and 1.2% viewed themselves as having limited competency. In the ability to work interdependently as a team (sub-element 4), 31.3% of the respondents viewed themselves as proficient, 31.3% accelerating, 33.8% developing, 1.2% emerging and 2.5% limited. For digital use (sub-element 5), 27.5% of the respondent viewed themselves as proficient, 28.7% as accelerating, 36.3% as developing and 6.3% as emerging and 1.2% as having limited competencies.

The question on the fourth C in the 6Cs Global Competencies is on the element of communication. There were five sub-elements: communication designed for specific audience; coherent communication with a variety of communication modes; differences and importance of multi-modal communication; reflection on the learning process to further develop & improve communication; and digital use. 3.8% of the respondent believed that they were proficient in their competency in the communication designed for specific audience (sub-element 1), 55% claimed they were at the accelerating level, 30% believed they were at developing level, 7.5% were at emerging competency and 3.7% were at limited competency. For sub-element 2 of coherent communication with a variety of communication modes, the respondents viewed themselves as having level of competencies as such; 20% believed they were proficient, 22.5% believed they were accelerating, 43.8% viewed themselves as developing and 11.3% believed that they were still at the emerging and 2.5% believed they had limited competency in this sub-element. In view of their competency in differences and importance of multi-modal communication (sub-element 3), the percentages of respondents who believed that their competencies in this sub-element were as such: 7.5% proficient, 46.3% accelerating, 40% developing and 6.3% emerging. In the reflection on the learning process to further develop & improve communication (sub-element 4), 8.8% of the respondents viewed themselves as proficient, 43.8% accelerating, 36.2% developing and 11.3% emerging. For digital use (sub-element 5), 22.5% of the respondent viewed themselves as proficient, 35% as accelerating, 32.5% as developing and 8.8% viewed themselves as still at the level of emerging and 1.2% as having limited competency.

The fifth C in the 6Cs Global Competencies is the element of creativity. There were five sub-elements: asking the right inquiry questions to generate novel ideas; leadership to take action; economic and social entrepreneurialism; pursuing and expressing novel ideas and solutions; and digital use. 22.5% of the respondent believed that they were proficient in asking the right inquiry questions to generate novel ideas (sub-element 1), 43.8% claimed they were at the accelerating level, 20% believed they were at developing level and 5% were at emerging. For sub-element 2 of leadership to take action, the respondents viewed themselves as having level of competencies as such; 13.8% believed they were proficient, 32.5% believed they were accelerating, 16.2% viewed themselves as developing, 30% believed that they were still emerging and 7.5% believed they were still having limited competency in this sub-element. In view of their economic and social entrepreneurialism (sub-element 3), the respondents scaled their competencies as 3.8% proficient, 21.3% accelerating, 36.3% developing, 25% emerging and 13.7% viewed themselves as having limited competency. In pursuing and expressing novel ideas and solutions (sub-element 4), 11.3% of the respondents viewed themselves as proficient, 25% accelerating, 50% developing and 13.7% emerging. For digital use (sub-element 5), 11.3% of the

respondents viewed themselves as proficient, 57.5% as accelerating, 21.3% as developing and 8.8% as emerging and 1.2% as having limited competencies.

The question on the sixth C in the 6Cs Global Competencies is on the element of critical thinking. There were six sub-elements: make connections and identify patterns; evaluate information and arguments; construct meaningful knowledge; construct collaborative knowledge; experiment, reflect & perform idea-based actions in the real world; and digital use. 11.3% of the respondent believed that they were proficient in their competency in making connections and identify patterns (sub-element 1), 22.5% claimed they were at the accelerating level, 47.5% believed they were at developing level, 16.2% were at emerging competency and 2.5% were at limited competency. For the sub-elements of evaluating information and arguments (sub-element 2), the respondents viewed themselves as having level of competencies as such; 43.8% believed they were proficient, 22.5% believed they were accelerating, 11.3% viewed themselves as developing and 3.7% believed that they were still at the emerging and 2.5% believed they had limited competency in this sub-element. In view of their competency in constructing meaningful knowledge (sub-element 3), the percentages of respondents who believed that their competencies in this sub-element were as such: 7.5% proficient, 46.3% accelerating, 40% developing and 6.3% emerging. 13.8% of the respondents believed that they were proficient in their competency in constructing collaborative knowledge (sub-element 4), 42.5% believed they were accelerating, 26.2% viewed themselves as developing, 12.5% viewed themselves as emerging and 5% of the respondent viewed themselves as having limited competency. In the experiment, reflect & perform idea-based actions in the real world (sub-element 5), 8.8% of the respondents viewed themselves as proficient, 43.8% accelerating, 36.2% developing and 11.3% emerging. For digital use (sub-element 6), 22.5% of the respondents viewed themselves as proficient, 35% as accelerating, 32.5% as developing and 8.8% viewed themselves as still at the level of emerging and 1.2% as having limited competency.

From the 6Cs elements; character, citizenship, collaboration, communication, creativity and critical thinking the element which has the highest claimed level of competency among the participants is collaboration. 28.3% of the participants claimed that their highest level of competency is on the element of collaboration compared to other elements; character (18.2%), critical thinking (14.4%), citizenship (13.8%), communication (12.5%) and creativity (9.8%).

Among the 6Cs elements, the participants claimed that they had limited competency on creativity which is 5.5% of the participants, 4.5% of the participants claimed that their second lowest level of competency is citizenship, whereas 3.2% on critical thinking, 3.1% on character, 1.9% on collaboration and 1.4% on communication.

## DISCUSSION AND RECOMMENDATION

The discussion of this study refers to the analysis of the level of global competencies of 6Cs among IPGKPI TESL trainee teachers namely character, citizenship, collaboration, communication, creativity and critical thinking. The findings indicate that respondents consider themselves to have varying level of competencies in the 6Cs.

The first element of the 6Cs is character. The data show that among the 4 sub-elements, respondents has highest level of competency in digital use (37.5%); followed by self-regulation, integrity and responsibilities (17.5%); and grit, tenacity, perseverance and resilience (16.3%). Surprisingly, sub-element of learning to deep learn has the lowest level of competencies because none of the respondents chose the highest level for that sub-element. Many of them think they are still at developing level. This shows that the respondents still need more guidance from lecturers to help them to be able to learn more effectively. The findings of this study correspond with Mynbayeva et al. (2017) and Sofia, Kamarul Azmi and Muhammad Azhar (2016), studies in which reported that teachers now need to grow in line with the global trend of educational development. As learner and teacher is seen to be more effective in learning, partnership relationship is needed to hold this trend. With that in mind,

trainee teachers will appreciate new learning experiences which emphasis on efficiency in a variety of teaching, informative, digital and global use approaches.

The findings on the second element, which is citizenship, show out of 5 sub-elements, the two sub-elements that have the highest competency are sub-element 3; genuine interest in human beings and environmental sustainability by 60%, and sub-element 2 which is the global perspective by 51.2%. Meanwhile, sub-element 3 is the lowest at 1.2 % where respondents admit to having limited competence. Most respondents stated that they are in the second level of competency which is accelerating where all sub-elements show that they understand and have a level of understanding of the given questions. In addition to social and economic factors, the environment is a major pillar of sustainability. A safe, clean, self-sufficient environment can give humans everything they need to express their dignity and live in genuine freedom and unity with one another. Education is regarded as the most effective means of producing a generation with a high level of environmental knowledge and awareness. The goal of environmental education is to create a society that is more sensitive and concerned about environmental issues, as well as to acquire knowledge, skills, values, and a commitment to strive for and act individually or collectively toward environmental resolution. (Center for Curriculum Development 1998).

The third element of 6Cs is collaboration which has 5 sub-elements. The findings show that collaboration has the highest level of competency especially for sub-element 1- interpersonal and team-related skills, where 51.2% of the respondents claimed they are at proficient level. The findings of this study correlate with the study of Ellyza et al. (2021) and Raja Abdullah and Daud (2018) who explained that various benefits are obtained through group activities such as interpersonal skills, cooperation and mutual support. These competencies prepare trainee teachers to perform active responsibilities to complement each other in a team. The mastery of this competency corresponds to PCDL which is practised in IPG which requires trainee teachers to collaborate not only in completing their projects and but also during their tutorial activities. However, although the use of digital tools can improve the quality of collaboration and external networking, most of the respondents (36.3%) viewed themselves at developing level of competency.

The findings of the study show that among the 6C elements, communication has the least limited competency level (1.4%). Among the 5 sub-elements in communication, the highest sub-element for proficient level is sub element 5 which is digital use. The findings of this study is in line with the study of Ellyza Karim et. al. (2021) who reported that the trainee teachers claimed that they are at the proficient level of this element because this element is easy for them to practise and they have been using digital elements to enhance their learning process. However, the lowest sub-element for proficient level is sub-element 1 which is communication design for specific audience (3.8%). 55% of the respondents claimed that they are at the accelerating level of this sub element. This shows that they are still learning on getting to the best level of communicating for specific audience. Mitra (2004) suggested that opportunities should be given to the trainee teachers to have their voice heard and contribute to the organisation.

Based on the findings of the level of 6Cs elements, the element which has the lowest level of competency among the respondents is creativity (5.5%). Among the 5 sub-elements in creativity, it is found that the highest sub-element is sub-element 1 and the lowest is sub-element 3. Respondents realised and recognised that the element of creativity should be developed. The findings of this study support the study of Muhammad Wafiy (2021) and Raja Abdullah and Daud (2018) who explained that creativity as a 21st century way of learning required teacher trainees to be able to generate and solve complex problems and tasks. Due to this, some improvements should be made on the creativity competency since it will help the trainee teachers to analyse the potential and resources around them. This enables them to solve problems, develop their high leadership skills and accomplish tasks that inspire others. Therefore, Inquiry-Based Learning, Project-Based Learning, Problem-Based Learning, Blended Learning, Flipped Classroom, STEM Approach, and 21st Century Learning activities which involve lifelong learning skills and real-world problem solving should be incorporated into the lectures. These will develop and enhance the creativity of the trainee teachers to deal with life's challenges.

The sixth element of 6Cs in this study is critical thinking. The findings from this study are in line with Ellyza et. al (2021) study who reported that critical thinking is considered as one of the challenging competencies. In this study, the respondents only viewed themselves as competent in evaluating information and arguments. They believed that they are accelerating proficiency in constructing meaningful knowledge; and experiment, reflect & perform idea-based actions in the real world. However, they mostly believed themselves as developing in making connections and identifying patterns. This shows that the three best constructs that students should possess in the critical thinking element according to Ruslan and Nyet's (2015) study is not evident among the respondents in this current study. In other words, the respondents of this study have not mastered the critical thinking skills. This study is in line with Atiqah and Ruslin (2016) who claimed that even though students have high curiosity, they lack strong reasoning, and constructing meaning.

## CONCLUSION

Pedagogical Capacity for Deep Learning (PCDL) in Teacher Education Institute (IPG) is an effort to realise the goals and aspirations of the National Philosophy of Education, and the Philosophy of Teacher Education, in producing educative and competent teachers. The new learning environment and pedagogical practices, community collaboration as a learning partner and leveraging digital are the PCDL factors that necessitate trainee teachers to master 6Cs global competencies. The mastery of 6Cs among trainee teachers will contribute to the nation's aspirations in achieving educational transformation. It is hoped that the production of future teachers assists in increasing quality of students and school. Therefore, it is hoped that the successful transformation of the education system will result in teachers competent in the areas of collaboration, citizenship, character, critical thinking, creativity and communication.

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