BASELINE SURVEY REPORT

GLOBAL CITIZENSHIP EDUCATION IN TEACHER EDUCATION INSTITUTIONS IN CAMBODIA

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List of Acronyms

APCEIU	Asia-Pacific Centre of Education for International Understanding
ASEAN	Association of Southeast Asian Nations
BTEC	Battambang Teacher Education College
ESD	Education for Sustainable Development
GCED	Global Citizenship Education
NIE	National Institute of Education
PTEC	Phnom Penh Teacher Education College
S&M	Sciences and Mathematics
SDG	Sustainable Development Goal
SEAMEO	Southeast Asian Ministers of Education Organization
SS	Social Science
TEIs	Teacher Education Institutions
UNESCO	United Nations Education, Scientific and Cultural Organization

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Summary

The "GCED Cooperation Centre Project" was established in the National Institute of Education in February 2022 with support from the Ministry of Education Youth and Sport and the APCEIU of the Republic of Korea to enhance the capacities of teacher education institutions in promoting the GCED in Cambodia. In order to implement the project effectively, the GCED Cooperation Centre Project conducted the baseline survey to assess the current situation of GCED in teacher education institutions and to identify the possible methods to integrate GCED into the teacher training program in Cambodia. There were 211 teacher trainers out of the 827 teacher trainers, and there were 1,531 teacher trainees out of the total 4,344 teacher trainees in Cambodia who responded to the questionnaires in this survey. There were three focus group discussions in each teacher education institution: management team, trainer team, and trainee team. Each team generally has 9 to 15 people.

Trainers' and trainees' knowledge and skill related to GCED are still limited. The trainers' awareness about the GCED concepts related to the 9 GCED topics proposed by UNESCO 2015 were majority unsure or aware. The social science subject group trainers were generally more aware of the GCED concepts than those of the sciences and mathematics trainers. The level of inclusion of the GCED concept by trainers in their teaching was a higher percentage in behavioral dimensions and a lower percentage in cognitive and socio-emotional dimensions. Trainers sometimes included the GCED concepts in the 9 GCED topics in their teaching. Trainers' knowledge and skills concerning the goals and objectives of GCED were moderate. The training programs in the teacher education institution were adequate in preparing teacher trainees to teach GCED in the future. Trainees showed positive responses that they have confidence in teaching the GCED topics at schools. The trainees are willing to integrate or permeate the GCED concept in teaching when they are assigned to work at schools.

The constraints for implementing GCED in teacher education institutions are the trainers' lack of knowledge of GCED, the institutions' lack of GCED teaching materials, and as well as the trainers' do not know how to assess students' achievements and global citizenship issues. The GCED training was not yet implemented widely and most trainers have never participated in any GCED training.

The possible interventions to promote GCED in teacher education institutions in Cambodia are to conduct in-service training for teacher trainers about the GCED content knowledge and the methods to integrate GCED in each subject. Systematic training for both pre-service and in-service is required. The internal monitoring and evaluation of the implementation of GCED integration in the teacher education institution should be done in order to ensure effectiveness and quality. Moreover, external assessment and evaluation are also required in order to evaluate the result of the project to enhance the capacities of teacher education institutions in Cambodia.

1

INTRODUCTION

1.1 BACKGROUND AND RATIONAL

Education in the 21st century aims to provide students with the competencies in core subjects such as critical thinking, complex problem solving, collaboration, and multimedia communication. In addition to promoting students' understanding of academic content at much higher levels, Global Awareness such as understanding global issues, other nations and other cultures is equally important for them to learn in 21st century education (Robinson & Kay, 2010). In the agenda of 2030 education, Sustainable Development Goal 4 (SDG-4) has emphasized on promoting lifelong learning opportunities for all. The promotion of sustainable development, sustainable lifestyles, human rights, gender equality, culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development were set in the target 4.7 of the SDG-4 (UNESCO, 2016). The knowledge, skills, values and attitudes required by citizens to lead productive lives, to resolve global challenges, to appreciate cultural diversity, to create peace, etc., can be acquired through education for sustainable development (ESD) and global citizenship education (GCED). The aims of the ESD are to raise knowledge, awareness and action of learners in three learning dimensions: cognitive, social and emotional, and behavioral (UNESCO, 2020). These three learning dimensions are also being emphasized in Global Citizenship Education (GCED): cognitive dimension focuses on acquiring knowledge, understanding and critical thinking about global, regional, national and local issues and the interconnectedness and interdependence of different countries and populations; socio-emotional dimension focuses on having a sense of belonging to a common humanity, sharing values and responsibilities, empathy, solidarity and respect for differences and diversity; and the behavioral dimension focuses on acting effectively and responsibly at local, national and global levels for a more peaceful and sustainable world (UNESCO, 2018). Through these three dimensions, GCED aims to empower citizens of all ages to perform active roles in building a more peaceful, tolerant, and sustainable world. However, the world is still far from being truly peaceful and harmonious. Science and technology have accelerated the rate of industrialization, urbanization and globalization. These factors have greatly benefitted human development, yet there is still hunger, malnutrition, child mortality and a huge lack of basic services that the majority of the world's population require (UNESCO, 2018). These are the significance and relevance of some of the limitations of GCED in schools as well as in society. Teachers are tasked with the responsibility to make education happen in schools. To ensure that the teachers have the competencies in educating their students about GCED, we should evaluate the teacher education curriculum and teacher educators' capacity in teacher training institutions.

The Asia-Pacific Centre of Education for International Understanding (APCEIU) under the auspices of UNESCO and the National Institute of Education (NIE) of Cambodia have expressed their commitment and interest in joining efforts to promote and develop cooperation in GCED in Cambodia. The collaboration will enhance the capacities of teacher education/training institutions (TEIs) to promote GCED through the implementation of the "GCED Cooperation Centre Project," in 4 areas: Teacher Training on GCED, GCED Curriculum/Course Development, GCED Research and Policy Development, and Dissemination of Information on GCED.

Globalization and rapid changes in technology that make trans-global communication easy and inexpensive have heightened the imperative for teachers and teacher educators to develop global perspectives and corresponding pedagogies that will help learners see themselves as members of a global community. In this context, the initial stage of the GCED Cooperation Centre (GCC) is to set clear objectives for the establishment of the center on the campus of NIE and the design of the GCED curriculum/course to best fit the context of teacher education in Cambodia. In order to design the most optimal GCED curriculum/course for the teacher education, the baseline survey research was organized.

1.2 RESEARCH OBJECTIVES

The main purpose of the baseline survey research is to understand the current situation of GCED in TEIs in Cambodia. The result of the baseline survey will be used as basic information to help develop the GCED training curriculum and the methods to integrate the selected GCED-related concepts of TEIs in Cambodia. To achieve the purpose, two objectives were set:

1. To assess current Cambodian teacher trainers' and trainees' knowledge and skills on the selected GCED related concepts and topics.
2. To identify the possible methods to integrate the selected GCED-related topics into the training program of the teacher education/training institutions in Cambodia.

2

LITERATURE REVIEW

2.1 GLOBAL CITIZENSHIP EDUCATION

Global citizenship is a term that has become widely used and its focus is often on young people's positive response to global issues and their actions taken in pursuit of change. The values, attitudes and skills of citizenship is a common goal of modern education systems (Shaw & Padilla, 2017). GCED is used in an educational context, describing the knowledge, skills, values, and attitudes fostered through teaching and learning about global citizenship, and it denoted a sense of belonging to a global community as well as the rights, duties, and entitlement that come with belonging to national political communities (UNICEF & SEAMEO, 2017). GCED has main objectives to empower learners to engage in activities both locally and globally, and to resolve both local and global problems with enhancing mutual understanding (UNESCO & APCEIU, 2021).

The world has become volatile, uncertain, complex, and ambiguous; therefore, people need to look for ways to co-exist peacefully. GCED presents itself as a method to help people feel unified and share a sense of identity and humanity. Ban Ki-moon, UN Secretary-General, said that "Education gives us a profound understanding that we are tied together as citizens of the global community and that our challenges are interconnected" and "We must foster global citizenship" (UNESCO-APCEIU, 2017a). He also emphasized that education is about more than just literacy and numeracy; it is also about citizenry and how it plays an essential role in helping people to forge more just, peaceful and tolerant societies. GCED is used to educate young people so that they are able to develop a positive response to global issues, and GCED learning outside of the classroom promotes stronger support and acceptance of GCED among learners and in society (UNESCO-APCEIU, 2017b). GCED enables learners to become responsible and positive citizens who think globally and act locally to build inclusive, peaceful, and sustainable societies. The integration of GCED allows a nation to achieve peace and prosperity as it builds peace and respect in the minds of all learners, especially young learners who carry the future of our societies (Al'Abri et al., 2022). Therefore, the GCED concepts should be widely integrated into school curricula.

2.2 GCED INTEGRATION IN INTERNATIONAL CONTEXTS

In recent decades, many countries have begun to integrate GCED into their curricula. Frequently, this integration occurs alongside an increasing emphasis on national and nationalistic values within schools and education systems (Al'Abri et al., 2022). GCED concepts are integrated into various curricula in schools and institutions across the world.

South Korea integrated GCED concepts into their school curriculum to develop the skills, attitudes, and values that their enable citizens to lead healthy and fulfilled lives, to make informed decisions and to able to respond to local and global challenges (UNICEF & SEAMEO, 2017). Se Yeon Kim

expressed that in South Korea, GCED is imperative to address the negative effects of rapid technological changes and globalization in the country because of the gap that continues to widen between high and low-income students that are determined to climb the education ladder (UNESCO & APCEIU, 2016a). He added that "Korea was once poor, but due to the endless amount of support that it used to once receive from other countries, it would be best for the present, highly-developed Korea to return the favor and to not remain free riders within the international community". As for South Korea's challenges in implementing GCED, he mentioned the country's strong sense of nationalism as an obstacle in teaching GCED values to Korean students.

In Mongolia, GCED contents were integrated into policy documents, curricula, and teacher training programs, but it is absent or very lightly touched upon to the point where the scope of the core curriculum for civic education is restricted to traditional practices and customs, heritage and morals. This leads to widespread limitation of integrating GCED concepts into the Mongolian education system (UNESCO & APCEIU, 2018). Furthermore, the different units of Mongolia address the topic through activities that foster students' critical thinking and reflection on topics of education such as violation of human rights, respect of conventions, and fundamental human rights, among others, and it is considered fundamental Global Citizenship skills. Moreover, GCED is also connected to the global values of Mongolia and involves some issues that are happening on a global level with a sense of Mongolian and brings the global perspective into Mongolian identity (UNESCO & APCEIU, 2018).

In Uganda, the idea of mainstreaming GCED across the education system is challenged by the lack of understanding, awareness, and preparedness of teachers on GCED and other GCED-related concepts as well as the unavailability of materials. Ugandan national experts pointed out the importance of enhancing pre-service orientation and in-service professional development programs in order to promote GCED as well as to advocate and sensitize GCED across all levels. Uganda has developed the GCED teachers' resource book, teachers' orientation manual for GCED, and teaching and learning resources by equipping teachers with GCED knowledge and methodological skills so that they are able to integrate GCED into their daily teaching practices. GCED practices can also be further promoted in schools. One of the objectives of integrating GCED into the primary curriculum, as stated in the Orientation Manual, is "to engage and mobilize learners proactively in Global Citizenship Education adaptation and mitigation issues to influence behavioral change." Thus, the Ugandan action plan encompassed three main priority areas: i) enhance the existing curriculum; ii) enable teachers to teach GCED in their classrooms; and iii) create awareness about GCED. At the

classroom level, they integrated GCED through music, poems, and reading, but one concern was the lack of resources (posters/leaflets) as well as copies of the readers. Furthermore, GCED in Ugandan schools focused on 'Human Rights and Peace, 'Gender equality, "Global issues", and Peacebuilding. These characteristics emphasized the importance of living together as well as the promotion of peace and non-violence within the country and globally (UNESCO & APCEIU, 2018).

In Colombia, the education system has carried out much educational effort towards the promotion of a more peaceful, tolerant, and inclusive and fair society, given that the country signed a peace agreement back in 2016. The two main propose impacts on GCED implementing are: i) the enhancement of teachers' knowledge, skills and resources (pedagogical and didactic) for the inclusion of GCED and Citizenship Education in the school curriculum and their pedagogical practices; and ii) all students develop citizenship competencies and socio-emotional skills that will enable them to co-exist, to participate as active citizens, to value diversity, to be sympathetic, and to help solve local, national and global issues and build peace. On the other hand, Colombia GCED is still a new concept. Civic education is important in school, and it is emphasized through centralized policy and guidelines (UNESCO & APCEIU, 2018).

In Oman, the idea of promoting global citizenship has gained momentum in education as part of a movement to advance twenty-first century skills or critical thinking skills. A study conducted by Al-Maamari on GCED in a social studies primary teacher preparation program showed that both teachers and students have suffered from limited and traditional applications of GCED in the social studies preparation program. The education policy in Oman has been seriously affected by the challenges of globalization, leading to profound shifts in the ways in which educational policies are developed, implemented, and evaluated. In Oman, GCED appears in a separate subject within the optional subject, "The World Around Me", as an element integrated into social studies curricula and as an extracurricular activity. Moreover, GCED concepts are still associated with the field of social studies. The role of other subjects such as English, geography, science, and Islamic culture must be strengthened in order increase the effectiveness of GCED, but the lack of adequate levels of GCED in both initial teacher preparation and in-service teacher education impedes the promotion of global citizenship among school students. The new educational reform in Oman has emphasized the use of interactive teaching methods. The results of some national studies have shown that teachers' existing methods of discussing the global issues in Omani social studies textbooks are still somewhat dominant in Omani schools (UNESCO & APCEIU, 2018).

GCED can be integrated across a range of subjects with civics, social studies, environmental studies, geography, history, religious education, science, music and arts subject, and all of those subjects can

build capacity for self-expression, develop a sense of belonging and facilitate better understanding of dialogue with people from different cultures. Sports can also provide an opportunity for learners to develop their understanding on team work, diversity, social cohesion and fairness. As an example, an activist in South Africa describes how he works in his local community to discourage young people from joining gangs and engaging in substance abuse (UNESCO, 2015).

2.3 GCED INTEGRATION IN CAMBODIA CONTEXT

Currently, the Cambodian Ministry of Education, Youth, and Sport (MoEYS) have conducted a reform of the education system including the development of documents such as the Policy for Curriculum Development (2005-2009), the Education Strategic Plan (2014-2018) and The Teacher Policy Action Plan (2015). The priorities of this reform include: increasing the number of textbooks, reducing teacher-student ratios, improving attendance of students (particularly in rural areas), and continuing improvements in teacher training, including training in student-centered pedagogies (UNESCO & APCEIU, 2018). The educational system of Cambodia maintains a great emphasis on providing an adequate and reasonable curriculum to students in Cambodia to prepare them to become well-rounded citizens. The new curriculum framework, developed in 2015, has been translated into detailed guidelines in 2016, and new instructional materials to support this are expected to be in schools in 2018. In terms of GCED, the MoEYS has committed to integrating GCED across the curriculum; key GCED topics have been present in Cambodia's curricula since the late 1990s/2000s, such as human rights, peace education, gender equality, environmental education, and reproductive health (UNESCO & APCEIU, 2018). The MoEYS described how GCED can be integrated into History and Moral Civics subjects (UNESCO & APCEIU, 2016b). Moreover, the education system in Cambodia has undergone numerous curriculum reforms since the 1960s, and the country is experiencing one at this moment. This reform in particular aims to address some of the challenges that the Cambodian education system faces, such as unqualified curriculum developers and teachers. In this regard, the Cambodian team stated, "GCED in the Cambodian education system is introduced at the right time for curriculum and teacher education reform" (UNESCO & APCEIU, 2018). In order to provide learners with the core knowledge and skills to act as responsible citizens and enable them to address global issues, as highlighted in the educational vision of the new national curriculum framework, the Cambodian team integrated GCED learning outcomes, pedagogical approaches and assessment methods into the syllabi of the relevant subjects, namely History and Moral-civics. Since 2018, the country's focus is on teachers' understanding of GCED through the means of continuous training and professional development and a nationwide expansion of teacher training programs by 2020 (UNESCO & APCEIU, 2018).

Among the most important pilot results found, the material excelled in connecting Cambodian history with world history. The piloting revealed that there was a willingness on behalf of teachers and 16 principals to incorporate GCED into their schools and classrooms. There was also curiosity among both teachers and students about GCED concepts and practices. This made GCED integration into the classrooms more positive. However, the remaining identified challenges were, i) teachers' readiness in relation to two key aspects: the understanding of GCED and of the linkage between GCED and the History subject. These aspects also take into account the way in which GCED is delivered in the classroom (in terms of teaching and assessment methodologies) and how it should should focus more on learning outcomes; ii) making the classroom and school environments more GCED-oriented; and iii) the sensitivity of some GCED related topics and case studies due to their close link to the country's recent socio-historical background, which makes it hard for teachers to cover them in the classroom (UNESCO & APCEIU, 2018). It is important to note that the History team developed three specific, personalized learning domains - cognitive, psychomotor, and affective, and they are present across the documents. The documents further explain that the cognitive, psychomotor, and affective domains are a complement to global citizenship, 21st-century skills as well as History competencies. These three domains, together with the ones of GCED-cognitive, socio-emotional and behavioral (although in some cases they overlap) are key components for enabling Cambodian citizens to live in the 21st century (UNESCO & APCEIU, 2018).

Besides the History subject, Moral-Civic education has also experienced development, and the sub-committee has conducted a workshop (April 2017) with 35 participants from MoEYS, the Royal University of Phnom Penh (RUPP), NIE, and other related institutes. The aim of the workshop was to discuss the possibility to integrate GCED topics and learning objectives into the Moral-civics subject syllabus. A three-day capacity-building workshop was held in May 2017, and APCEIU is a key trainer on elevating understanding and awareness of GCED as well as to incorporate GCED values, knowledge, competencies, and attitudes for learners to acquire within 22 Moral-civics education. Finally, the 35 Moral-civics subject members from MoEYS and NGOs were brought together to work on the draft of the Moral-civics education syllabus with the aim to integrate GCED into the syllabi of all grade levels by focusing on primary education, the second one in lower secondary and the final one in upper secondary (UNESCO & APCEIU, 2018).

The results of the piloting process revealed substantial differences from one piloting region to another. The issues noted were: i) the school and classroom environment, in general, did not reflect the local or global community nor did it provide spaces for GCED-related activities; ii) the lesson plans used

for the piloting hardly reflected GCED issues, and iii) the lack of GCED training for teachers and principals (to familiarize with GCED content) resulted in a lack of confidence and knowledge to deliver the topic (UNESCO & APCEIU, 2018). Given these results, both History and Moral-civics education sub-committees agreed that their focus for the way forward would be developing resourceful teaching and learning materials like textbooks, guidelines, lesson plans, etc., and strengthening teachers' and schools' capacities by providing pre-and in-service teacher training and professional development opportunities so that teachers can internalize the new pedagogies into practice (UNESCO & APCEIU, 2018).

Moreover, the monitoring and evaluation of the GCED integration have been conducted with three schools of different levels and characteristics, namely one city school, one semi-urban school, and one rural school of the Takeo Province. Throughout the process, emphasis was placed on what teachers thought with regards to the attention that their school provides to global citizenship or its underlying themes. The result showed that both teachers and directors consider GCED as a very important issue that should be included in the curriculum, although not as a compulsory subject. The importance of implementing GCED not only in classroom activities but also in extra-curricular activities had also been discussed. The teachers paid more attention to it at the primary level than at the lower and upper secondary levels. In addition, primary teachers focus more on the integration of GCED skills, leading to the development of students' ability to cooperate/to solve conflicts and the ability to adopt an attitude of responsibility, respect and involvement, and the ability to think critically and to form one's own opinion. Some of the main concerns expressed by teachers and directors in relation to integrating GCED were: i) the difficulty of some GCED-related topics for students, especially at the primary level; ii) the lack of time to include GCED in their lessons since other topics were prioritized over GCED, and iii) the lack of knowledge on GCED topics (UNESCO & APCEIU, 2018).

2.4 TEACHER EDUCATION AND GLOBAL CITIZEN IDENTITY DEVELOPMENT

GCED policy and curriculum are existing in many documents. However, the integration of GCED in teacher education is still the challenges of many countries. Saperstein (2020) highlighted the continuing need for increased pre-service and in-service training opportunities for teachers of global studies related courses, and global studies training and certification programs in the United States. GCED was promoted through pre-service teacher training program in the United States and other countries. GCED content knowledge and pedagogical training are necessary to prepare prospective educators to strengthen GCED (Carr et al., 2014). Pre-service teachers are required to have strong competency, confidence, and readiness on GCED before graduating from teacher education

(Gallavan, 2008). Even though GCED in teacher training program is necessary, many countries have not yet made GCED a mandatory part of their traditional teacher education programs (McEvoy, 2016).

Cambodia as well as some other countries attempted to transform GCED in the education system and integrate it into some of the important subjects within the curriculum. In order to bring about peace, sustainable development, human rights preservation, cultural diversity, abolishment of discrimination, and inner peace for citizens as well as people around the world, it is necessary to promote and strengthen school heads', teachers', and students' abilities, skill, and attitudes toward GCED contents and concepts. On the other hand, integrating GCED into the education system creates more challenges for those countries. They would require much support from the government, educators, and other organizations. Furthermore, students helped contribute to the success of GCED contents and concepts in order to push towards achieving educational objectives. Teachers, on the other hand, are the heart of GCED implementation, and they should have the capacity and motivation to implement GCED effectively at the school level. TEIs play an important role to provide concrete ways to strengthen teachers' capacities to allow them to deliver GCED and to consider their morals and mindsets in order to develop teachers that can effectively deliver GCED. GCED capacity building for teachers needs to be strengthened and systemized in Cambodia.

3

METHODOLOGY

3.1 SAMPLING

There are different levels of teacher training institutions in Cambodia. There are one Preschool Teacher Training College to train kindergarten teachers, 16 Provincial Teacher Training Colleges (PTTCs) to train primary school teachers, 4 Regional Teacher Training Centers (RTTCs) to train lower secondary school teachers, 2 teacher education colleges (TECs) to educate primary school and lower secondary school (or basic) teachers, and the National Institute of Education (NIE) to train upper secondary school teachers. The total teacher trainees in all teacher education/training institutions (TEIs) are 4,344 (female: 2,732) in the academic year 2021-2022. The total trainers in all TEIs are 827 (female: 338) in the academic year 2021-2022. In this survey, the research team selected only TEIs that are regarded to be advanced teacher education institutions in Cambodia, namely Battambang Teacher Education College (BTEC), Phnom Penh Teacher Education College (PTEC), and the National Institute of Education (NIE). NIE's training curriculum gets updated every year, and the TECs curriculum were also newly developed because these TECs were upgraded from the combination of PTTC and RTTC. The trainers or management groups working in these TECs also had experience in teaching at PTTCs or RTTCs. Therefore, the TECs trainers involved in responding to the baseline survey also can represent the trainers in PTTCs and RTTCs. The total number of teacher trainers and teacher trainees in the 3 TEIs are shown in the Table 3.1. In this baseline research, the research team wanted to involve all directors, deputy directors, trainers, and teacher trainees at the 3 TEIs as much as possible.

Table 3. 1: Number of trainers and trainees by TEI in academic year 2021-2022

Teacher Education Institutions	Trainers		Trainees	
	Total	F	Total	F
National Institute of Education (NIE)	95	24	1109	532
Phnom Penh Teacher Education College (PTEC)	124	53	755	508
Battambang Teacher Education College (BTEC)	69	25	888	509

3.2 RESEARCH INSTRUMENTS

The research instruments were designed to collect both qualitative and quantitative data. There are two different questionnaires. One questionnaire was designed to collect information from teacher trainers and another questionnaire was designed to collect data from the teacher trainers. The contents of the questionnaire were designed based on the topics and learning objectives of GCED developed by UNESCO in 2015. There are 9 topics proposed by UNESCO: 1) local, national and global systems and structures, 2) issue affecting interaction and connectedness of communities at local, national and

global levels, 3) understanding assumptions and power dynamics, 4) different levels of identity, 5) different communities people belong to and how these are connected, 6) difference and respect for diversity, 7) actions that can be taken individually and collectively, 8) ethically responsible behavior and, 9) getting engaged and taking action (UNESCO, 2015). Some GCED aspects were also adapted from those in the GCED research on Malaysian Teachers' Preparedness towards the Implementation of Global Citizenship Education in Malaysia (Yaakub et al., 2021). The teacher trainers and trainees have taken part in evaluating their knowledge and skills on these 9 topics and the GCED aspects by using a 5-point Likert type (Sözen & Güven, 2019). Interview question lists were produced for 3 different-groups discussions, namely the management group, trainer group, and teacher trainee group in accordance to the questions in the questionnaires. The questionnaires and the interview question lists are attached.

All the research instruments were developed in English in order to get feedback from comments from an international APCEIU in South Korea for validation. After finalizing the research instrument in English, all the instruments were translated into Khmer for the trainers and trainees to respond.

3.3 DATA COLLECTION

For ease of data collection, the questionnaires for both trainers and teacher trainees were set up in Google Forms. The answers to each questionnaire were not required because the research team wanted to allow the trainers or teacher trainees to have the option to not answer the questions they did not want to provide answers to. The links of questionnaire completion were sent to the existing Telegram groups of the trainers and trainees of the 3 TEIs two days before the research teams went to visit their institutions for data collection. By the time the research teams arrived at the TEIs, some of the trainers and trainees had already responded to the questionnaires. The research team wanted all trainers and trainees to respond or at least to match the sample size determined by Toro Yamane (1967) with the confidence level of 95% (Sözen & Güven, 2019). The data provided by some of the trainers and trainees before a focus group discussion were the basic information to ask for more detail during the discussion. Four research team members were assigned to one TEI. Focus group discussions were organized physically at each TEI. There were 3 focus group discussions in each TEI (management team, trainer team, and trainee team). Members from the social sciences subject group (SS) and the sciences and math subject group (S&M) were put together to form teams that had 7 to 10 members each. Each focus group discussion spent 1.5 to 2 hours. The focus group discussions were orderly organized from the management team, to the trainer team, and to the teacher trainee team.

3.5 DATA ANALYSIS

The 5-point Likert type data were calculated by using the Mean and standard deviation (SD) in each answer, and the interpretation followed the scoring range of Likert scale of the survey with the range and value as indicated in the Table 3.2 (Sözen & Güven, 2019). The other quantitative data were calculated as a percentage for analysis. The respondents were classified in two subject groups: SS and S&M. The major subjects including Mathematics, Physics, Chemistry, Biology, Earth Science, Electricity, Electricity, Electronics, Agronomy, Animal Husbandry, Mechanics, Food Processing and ICT are classified as S&M. The major subjects including History, Geography, Khmer Literature, English literature, French literature, Moral civics, and Economics are classified as SS. The quantitative data were calculated by excel spreadsheet formulas. The qualitative data were set in themes, and then, they were used to confirm the quantitative data.

Table 3. 2: Scoring the likert scale of the survey

Range	Value	Meaning
1.00-1.80	1	Strongly disagree
1.81-2.60	2	Disagree
2.61-3.40	3	Neither/Nor agree
3.41-4.20	4	Agree
4.21-5.00	5	Strongly agree

4

FINDING AND DISCUSSION

The general information about the participants, the participant's knowledge and skills concerning the 9 GCED topics and the GCED aspects, and the suggested methods of integration of GCED in the TEIs are discussed in this baseline survey. The finding analysis is concerned with two different subject groups - social sciences (SS) and sciences and mathematics (S&M).

4.1 PERSONAL INFORMATION

The participants in the survey were the management team, trainers, and teacher trainees. The general information of the trainers and teacher trainees is shown in the following. The management team was involved in focus group discussions only.

4.1.1 Teacher Trainers

Teacher trainers responded in this baseline survey were 207 among the total 288 teacher trainers in the 3 TEIs. The respondents were 86 (total: 95) for NIE, 72 (total: 124) for PTEC and 49 (total: 69) for BTEC. The trainers that responded in this baseline survey can represent statistically to the trainers in these 3 TEIs because about 72% of them completed the questionnaires. The trainers responded are more male, NIE: 56, PTEC: 38, BTEC: 39, than female, NIE: 30, PTEC: 34, BTEC: 10 (Table 4.1).

Table 4. 1: General information of teacher trainers by TEIs (n=207)

Subject groups	NIE			PTEC			BTEC		
	Male	Female	Others	Male	Female	Others	Male	Female	Others
SS	31	21	0	17	16	0	14	4	0
S&M	25	9	0	21	18	0	25	6	0
Total	56	30	0	38	34	0	39	10	0

The majority of the trainers (in both SS and S&M for all 3 TEIs) that completed the questions are master's degree holders. The trainers in all TEIs are at least holding a bachelor's degree (Table 4.2). Based on their qualification, their high academic degree can ensure good accuracy within the self-evaluation process of their knowledge and skills related to GCED contents and aspects.

Table 4. 2: Percentage of trainers by qualification in subject groups (n=207)

Institutions	Subject groups	Number	Bachelor	Master	PhD.
NIE	SS	56	2%	89%	9%
	S&M	30	6%	85%	9%
PTEC	SS	37	17%	77%	6%
	S&M	35	16%	79%	5%
BTEC	SS	25	23%	77%	0%
	S&M	24	0%	95%	5%

Table 4.3 indicated that NIE trainers had more experience in education, 79% for SS and 85% for S&M had experiences of more than 10 years, 85%, and only 6% for both SS and S&M had experience between 1 to 5 years. PTEC trainers with more experience than 10 years are 76% for SS and 63% for S&M. With experiences of 5 years or more in their working places, they are aware of the situation of the training in their institutions.

Table 4. 3: Trainers' experience in education field (n=210)

Institutions	Subject groups	1-5 Years	6-10 Years	11-15 Years	16-20 Years	More than 20 years
NIE	SS	6%	15%	22%	22%	35%
	S&M	6%	9%	29%	15%	41%
PTEC	SS	2%	22%	25%	20%	31%
	S&M	26%	11%	26%	11%	26%
BTEC	SS	3%	16%	37%	19%	25%
	S&M	5%	35%	25%	5%	30%

4.1.2 Teacher Trainees

In the academic year 2021-2022, there are 1109 for NIE, 755 for PTEC, and 888 for BTEC. The teacher trainees who responded to the baseline survey are 729 (66% of the total) for NIE, 308 (41% of the total) for PTEC, and 494 (56% of the total) (Table 4.4). These respondents can represent all teacher trainees in the 3 TEIs statistically. For gender, the number of males and females are almost identical, while the other 2 TEIs have more females than males. However, gender might not have significant effects in this baseline research. The majority of the participants are between 20 to 29 years old for the 3 TEIs. Of the teacher trainees in NIE with ages over 30 years old, some of them were already teachers in primary or lower secondary schools. Those teacher trainees might know

Table 4. 4: General information of teacher trainees by each TEI (n=1531)

Institutions/ Number	Gender	Number	Teacher trainees' age			
			Under 20Yrs	20 -29Yrs	30 - 40Yrs	Over 40Yrs
NIE	Male	376	0	257	104	15
	Female	352	0	305	45	1
	Others	1	0	1	0	0
PTEC	Male	95	6	88	1	0
	Female	213	23	190	0	0
	Others	0	0	0	0	0
BTEC	Male	143	9	131	3	0
	Female	350	27	316	5	0
	Others	1	0	1	0	0

better the actual circumstances of GCED in the school they had worked at or in the TEI they are studying.

The majority of teacher trainees are in their 1st year of study. There were two programs to become upper secondary school teachers through training in NIE. The students who graduated from other universities holding a bachelor's degree are selected through a national exam to receive training in NIE for one year, namely "BA+1". The "BA+2" program began to recruit for the 1st batch in 2021. The qualification of the graduated students to study in this training program are the same as those in the "BA+1", but in the "BA+2" program, the teacher trainees have to study for two years in NIE with a more advanced curriculum than the "BA+1" program. The teacher trainees who completed all requirements to finish their training at NIE can receive the teacher license certificate equivalent to a Master's degree. BTEC and PTEC were upgraded from RTTC and PTTC. These TECs are implementing two teacher education programs to produce primary school teachers and basic education teachers. Students who passed the 12th-grade national exam can apply to take the entrance exam to study in these TECs for 4 years in order to fulfill all requirements to become teachers teaching at primary school or lower secondary school levels. BTEC trainees of the "12+2" program still remained (Table 4.5). The trainees of "BA+1" in NIE and the 4th year trainees in TECs were exposed

Table 4. 5: Teacher trainees' training program, subject group, and year of study (n=1301)

Institutions/ Number	Name of Program	Subject groups	Current year of study			
			1st year	2nd year	3rd year	4th year
NIE	BA+1	SS	245	0	0	0
		S&M	253	0	0	0
	BA+2	SS	19	0	0	0
		S&M	54	0	0	0
PTEC	Primary (12+2)	SS	0	0	0	0
		S&M	0	0	0	0
	Primary (12+4)	SS	43	0	21	29
		S&M	14	0	11	27
	Basic (12+4)	SS	11	0	7	12
		S&M	45	0	29	28
BTEC	Primary (12+2)	SS	18	0	1	0
		S&M	14	0	0	0
	Primary (12+4)	SS	38	0	56	44
		S&M	67	0	36	16
	Basic (12+4)	SS	20	0	13	3
		S&M	60	0	23	44

to all curricula provided by their training institutions. The other trainees of the 1st and 3rd years (600 trainees) have not yet covered all the curriculum provided by their institutions. However, 701 trainees (more than 53%) had covered all of the curricula. The trainees in each subject group were also not different between SS and S&M (Table 4.5). Therefore, the trainees who responded to this baseline survey are qualified to provide the GCED in their TEIs.

Most of the trainees in the 3 TEIs are Khmer, with only 13 Cham and 8 Others (Table 4.6). These indicate that there is not much diversity in terms of ethnic groups.

Table 4. 6: Teacher trainees classification by ethnics (n=1531)

Institutions/ Number	Khmer	Chinese	Vietnamese	Cham	Others
NIE	718	0	0	8	2
PTEC	307	0	0	0	2
BTEC	485	0	0	5	4

The teacher trainers and trainees responded that the questionnaires are precise in terms of statistical representation, subject groups, gender, and others to provide the information in this baseline survey. The focus group discussion participants also meet the criteria set in the sample selection described in the introduction part of this baseline survey.

4.2 KNOWLEDGE AND SKILLS ABOUT GCED
The trainers' knowledge and skills about GCED are essential to ensure the implementation of the GCED in their TEIs. The trainees' knowledge about GCED can reflect the training program in the TEI they are studying.

4.2.1 Awareness of GCED topics
The topics in the cognitive dimension seem the most difficult for the trainers compared to the other two dimensions. The overall mean score for this dimension is 3.07, which means that the trainers are unsure of the contents of the GCED in this dimension (Table 4.7). Even though SS trainers have a higher mean score (3.13) than the S&M trainers (2.95), these ranges are in the same interpretation that they are unsure of. The most difficult topic for the trainers is topic 1 (with a mean score of only 2.91), which was about the local, national, and global systems and structure. This means that they are unsure. They are also unsure concerning the other 2 topics because the mean score is 3.03 and 3.26. The topics in the socio-emotional dimension are also "unsure" (3.27) for the trainers, and there is no big difference between SS and S&M trainers, where the mean scores are 3.39 for SS trainers and 3.05

for S&M trainers (within the same range as "unsure"). The SS trainers are aware of the GCED contents in topic 6 concerning the difference and respect for diversity with a mean score of 3.72. The topics in the behavioral dimension seem easier for the trainers compared to the other 2 dimensions. The overall, SS, and S&M mean scores for this dimension are more than 3.41, which indicates that both SS and S&M trainers are aware of the GCED contents in this dimension. In general, the SS trainers have better understanding than the S&M trainers in all GCED topics in these 3 dimensions, but their mean scores are still within the same range for the SS and S&M trainers. These indicate that their understanding of the 9 GCED topics is at the same level.

Table 4. 7: Trainers' awareness of the GCED topics (n=211)

Topics	Over all		SS trainers		S&M trainers	
	Mean	SD	Mean	SD	Mean	SD
Cognitive dimension	**3.07**		**3.13**		**2.95**	
1.Local, national and global systems and structure	2.91	0.90	2.96	0.88	2.81	0.94
2.Issue affecting interaction and connectedness of communities at local, national and global levels	3.03	0.85	3.10	0.82	2.90	0.88
3.Understanding assumptions and power dynamics	3.26	0.81	3.33	0.79	3.13	0.84
Socio-emotional dimension	**3.27**		**3.39**		**3.05**	
4.Different levels of identity	3.03	0.84	3.12	0.81	2.85	0.89
5.Different communities people belong to and how these are connected	3.22	0.80	3.33	0.73	3.03	0.90
6.Difference and respect for diversity	3.56	0.80	3.72	0.70	3.27	0.91
Behavioral dimension	**3.61**		**3.70**		**3.43**	
7.Actions that can be taken individually and collectively	3.37	0.83	3.46	0.75	3.21	0.95
8.Ethically responsible behaviour	3.71	0.78	3.84	0.66	3.46	0.93
9.Getting engaged and taking action	3.74	0.70	3.81	0.64	3.61	0.80

Note: Scoring range are 1-18: totally unaware, 1.81-2.60: unaware, 2.61-3.40: undecided/unsure, 3.41-4.20: aware, and 4.21-5.00:fully aware.
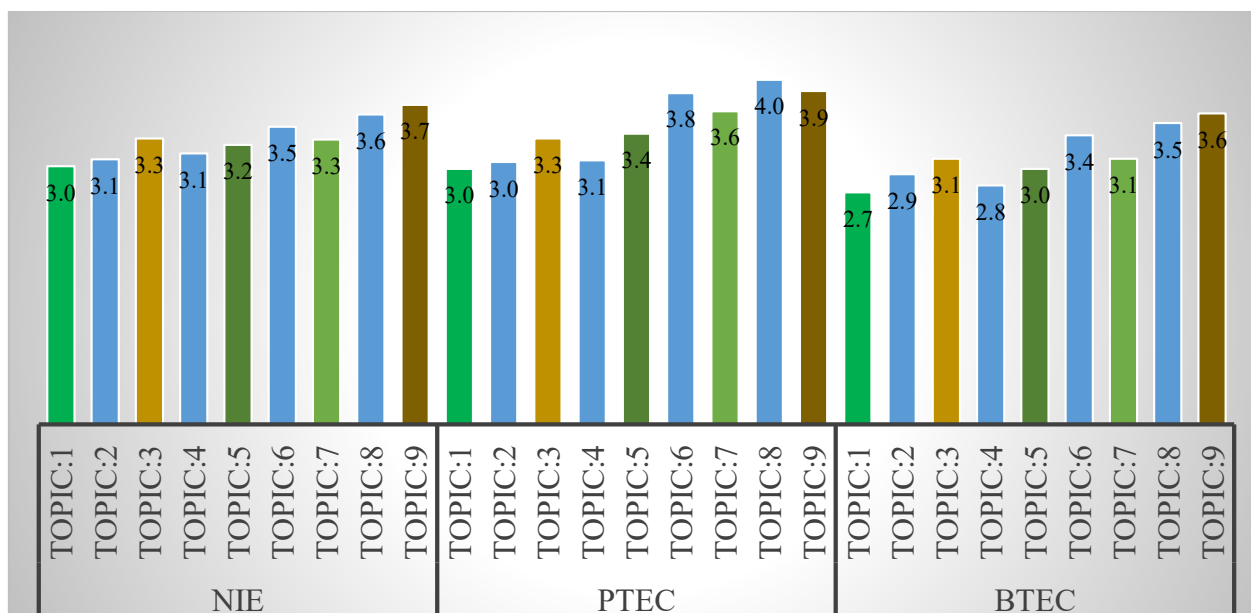
Figure 4. 1: Trainers' awareness of the GCED topics by TEIs.
TOPIC 1: Local, national and global systems and structure, TOPIC 2:Issue affecting interaction and connectedness of communities at local, national and global levels, TOPIC 3:Understanding assumptions and power dynamics, TOPIC 4:Different levels of identity, TOPIC 5:Different communities people belong to and how these are connected, TOPIC 6: Difference and respect for diversity, TOPIC 7:Actions that can be taken individually and collectively, TOPIC 8: Ethically responsible behavior, and TOPIC 9:Getting engaged and taking action. *Scoring range are 1-18: totally unaware, 1.81-2.60: unaware, 2.61-3.40: undecided/unsure, 3.41-4.20: aware, and 4.21-5.00:fully aware.*

Figure 4.1 indicates that the knowledge of the trainers in the 3 TEIs is not different. They are unsure of the contents of GCED topics 1 to topic 5, and the mean scores fall under 3.40 for the 3 TEIs. The trainers in the 3 TEIs are aware of GCED topics 6, 8, and 9. The NIE trainers are unsure for 6 topics, aware for 1 topic, and fully aware for 2topics among the total 9 topics. The PTEC trainers are unaware of 5 topics and aware 4 topics. And the BTEC trainers are unsure of 6 topics and aware of3 topics. These results showed that the trainers of the 3 TEIs had limited knowledge related to the 9 GCED topics proposed by UNESCO 2015. Topic 9 about "getting engaged and taking action" seems to be understandable by the trainers of the 3TEIs. Figure 4.2 showed that 79% of SS trainers and 72% of S&M trainers are aware and above the awareness. Topic 1 seems to be the most difficult for the trainers to understand. Only 29% of SS trainers and 25% of S&M trainers are aware of the GCED content on this topic. Most trainers (45% for SS and 43% for S&M) are unsure of the GCED contents in topic 1. The GCED contents in topics 6and 8 are also aware by the trainers.
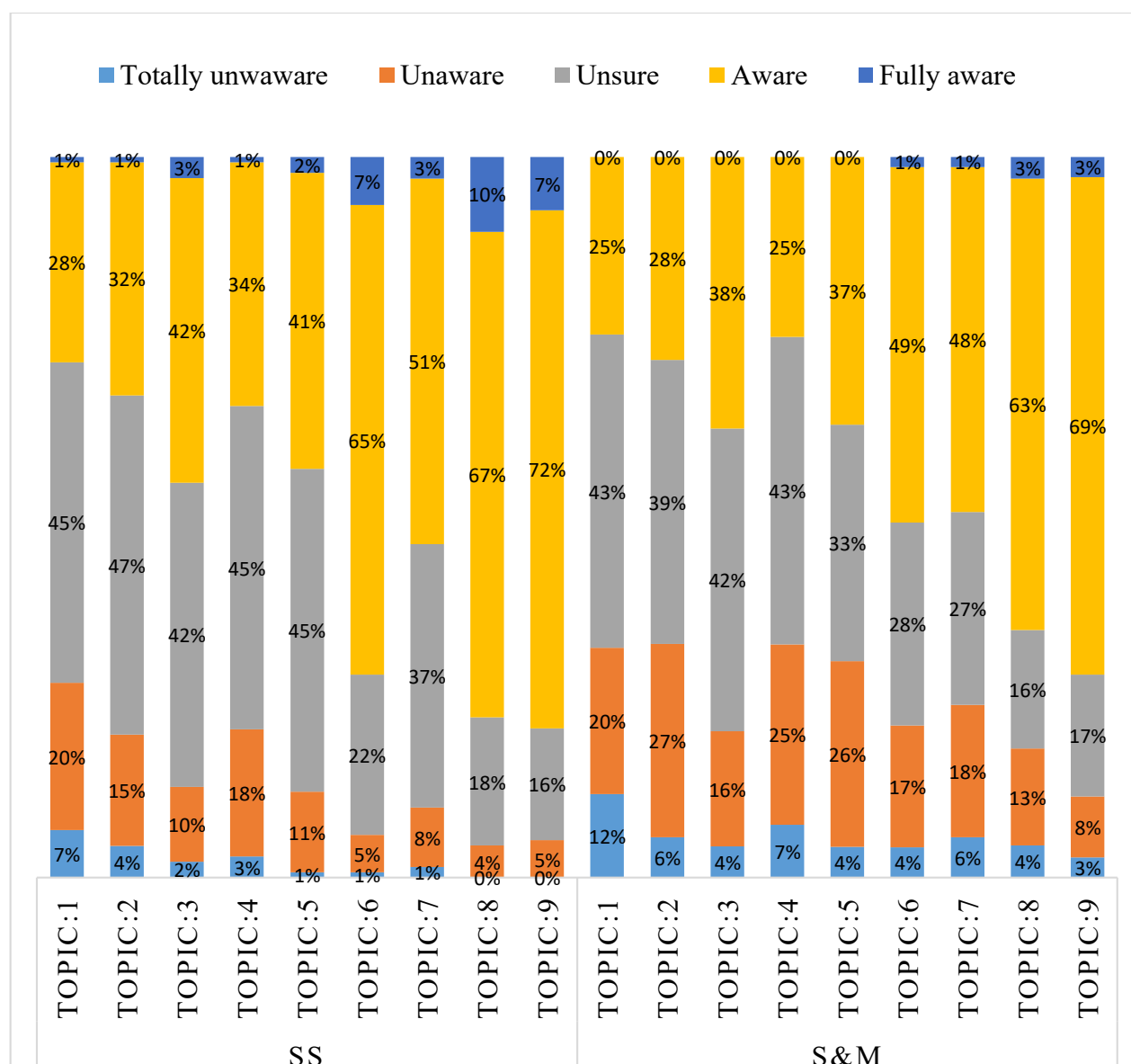
Figure 4. 2: The levels of trainers' awareness of each GCED topic.
TOPIC 1: Local, national and global systems and structure, TOPIC 2:Issue affecting interaction and connectedness of communities at local, national and global levels, TOPIC 3:Understanding assumptions and power dynamics, TOPIC 4:Different levels of identity, TOPIC 5:Different communities people belong to and how these are connected, TOPIC 6: Difference and respect for diversity, TOPIC 7:Actions that can be taken individually and collectively, TOPIC 8: Ethically responsible behavior, and TOPIC 9:Getting engaged and taking action.

GCED was integrated across the curriculum; key GCED topics have been present in Cambodia's curricula since the late 1990s/2000s, such as human rights, peace education, gender equality, environmental education, and reproductive health (UNESCO & APCEIU, 2018). However, this baseline survey research showed that GCED in Cambodia has not yet disseminated widely. This statistical result can be confirmed by the result of the focus group discussion. In the focus group discussion, the most of management team, trainers, and trainees in the 3 TEIs said that the word

GCED is a new term for them. Some management team members, trainers, and trainees in BTEC said that "I have never heard this word before. This is the first time I have heard of this word." However, some management teams, trainers, and trainees could give the definition of GCED related to human rights, diverse cultures, and the environment. These contents have been integrated in school curricula into the History and Moral Civic Education subjects in 2018 (UNESCO & APCEIU, 2018). The trainers could not define the meaning of GCED, but they already implemented GCED concepts into their teachings. The management team, trainers, and trainees could give the definition of GCED in relation to education for sustainable development (ESD) topics. For instance, NIE has integrated the ESD into its existing training curriculum. Even though some of them could not define the GCED, some GCED activities are being implemented in their teaching.

4.2.2 Inclusion of GCED Topics in Teaching Subjects

There is a relation between the trainers' understanding of each GCED topic and their inclusion and integration of the GCED topic in their teaching. The results in table 4.7 indicated that the trainers are

Table 4. 8: Inclusion of GCED topics in teaching by subject groups and TEI (n=211)

Topics	NIE		PTEC		BTEC	
	SS	S&M	SS	S&M	SS	S&M
Cognitive dimension						
1.Local, national and global systems and structure	57%	38%	42%	26%	26%	17%
2.Issue affecting interaction and connectedness of communities at local, national and global levels	54%	35%	53%	38%	27%	11%
3.Understanding assumptions and power dynamics	47%	24%	49%	26%	23%	12%
Socio-emotional dimension						
4.Different levels of identity	46%	21%	49%	35%	34%	12%
5.Different communities people belong to and how these are connected	57%	38%	72%	57%	32%	22%
6.Difference and respect for diversity	78%	50%	91%	74%	58%	33%
Behavioral dimension						
7.Actions that can be taken individually and collectively	66%	41%	71%	74%	43%	35%
8.Ethically responsible behaviour	85%	65%	92%	95%	71%	59%
9.Getting engaged and taking action	85%	62%	87%	95%	63%	65%

aware of the GCED topics in the behavioral dimension. The percentage of trainers who included the GCED topics in this dimension is also high from 66 to 85% for NIE-SS, from 41 to 65% for NIE-S&M, from 71% to 92% for PTEC-SS, from 74 to 95% for PTEC-S&M, from 43 to 71% for BTEC-SS and from 35 to 65% for BTEC-S&M (Table 4.7). In general, the result showed that a higher percentage of SS trainers than S&M trainers included each GCED topic in their teaching. These might be caused by the content knowledge in SS being more related to GCED, and the GCED concepts were already integrated in the History and Moral Civics subjects at school (UNESCO & APCEIU, 2018). For many GCED topics, the trainers in NIE and PTEC had a higher percentage of integration in their teaching than BTEC.

The result in table 4.9 can confirm the result in table 4.8. The trainers depicted a higher percentage of inclusion of GCED topics in the behavioral dimension. Table 4.9 also showed that the GCED topics in the behavioral dimension had a higher percentage of inclusion in the major subject they learned. The trainees in NIE and PTEC showed a higher percentage of inclusion of GCED topics than BTEC. The result in this baseline survey showed that the trainers have tried their best to include the GCED topics in their teaching even with their vague awareness on GCED topics.

Table 4. 9: Inclusion of the GCED concepts (topics) in the major subject you learn (n=1516)

Topics	NIE		PTEC		BTEC	
	SS.	S & M	SS.	S & M	SS.	S & M
Cognitive dimension						
1.Local, national and global systems and structure	86%	82%	79%	74%	61%	62%
2.Issue affecting interaction and connectedness of communities at local, national and global levels	87%	78%	90%	85%	67%	63%
3.Understanding assumptions and power dynamics	79%	73%	73%	60%	50%	45%
Socio-emotional dimension						
4.Different levels of identity	78%	77%	80%	73%	50%	63%
5.Different communities people belong to and how these are connected	90%	88%	90%	86%	72%	79%
6.Difference and respect for diversity	97%	94%	97%	94%	72%	91%
Behavioral dimension						
7.Actions that can be taken individually and collectively	91%	85%	80%	88%	67%	91%
8.Ethically responsible behaviour	98%	96%	90%	95%	83%	80%
9.Getting engaged and taking action	96%	96%	97%	93%	83%	94%

The frequency of inclusion of the GCED topics in the trainers' teaching is also parallel to the result shown in table 4.8 and table 4.9. The SS trainers often included the GCED concept concerning ethically responsible behavior (topic:8) in their teaching with a mean score of 3.53 (Table 4.10). The relation between the awareness of the GCED topics and the frequency of inclusion in the teaching was also indicated in this baseline survey result. While the trainers' awareness of the GCED topics in cognitive dimension and socio-emotional dimension were low, the frequency of the GCED topics included in this dimension were also low (cognitive dimension: 2.32 and socio-emotional dimension: 2.65). This meant that the trainers rarely included GCED topic in their teaching (Table 4.7 and Table 4.10). On the other hand, the SD in table 4.10 is also high, which means the responses to the questions are much more different among the responders.

Table 4. 10: Frequency of trainers' inclusion the GCED topics in teaching (n=211)

Topics	Over all		SS trainers		S&M trainers	
	Mean	SD	Mean	SD	Mean	SD
Cognitive dimension	**2.32**		**2.47**		**2.01**	
1.Local, national and global systems and structure	2.29	0.96	2.42	0.93	2.01	0.99
2.Issue affecting interaction and connectedness of communities at local, national and global levels	2.35	1.01	2.51	0.96	2.01	1.04
3.Understanding assumptions and power dynamics	2.33	1.04	2.49	1.02	2.00	1.00
Socio-emotional dimension	**2.65**		**2.83**		**2.30**	
4.Different levels of identity	2.29	1.00	2.43	0.98	2.01	0.99
5.Different communities people belong to and how these are connected	2.67	0.99	2.82	0.96	2.35	0.98
6.Difference and respect for diversity	3.00	1.10	3.24	1.02	2.54	1.13
Behavioral dimension	**3.11**		**3.24**		**2.82**	
7.Actions that can be taken individually and collectively	2.80	1.05	2.94	1.02	2.51	1.07
8.Ethically responsible behaviour	3.37	1.08	3.53	1.01	3.03	1.14
9.Getting engaged and taking action	3.15	0.99	3.26	0.96	2.91	1.01

Note: Scoring range are 1-18: never, 1.81-2.60: rarely, 2.61-3.40: sometimes, 3.41-4.20: often, and 4.21-5.00:always.

NIE and PTEC sometimes included the GCED topics concerning different communities people belong to and how these are connected (Topic 5), difference and respect for diversity (Topic 6), actions that can be taken individually and collectively (Topic 7), ethically responsible behavior (Topic 8), and getting engaged and taking action (Topic 9) in their teaching (Figure 4.3). BTEC also sometimes included the GCED topics concerning different communities people belong to and how

these are connected (Topic 5), difference and respect for diversity (Topic 6), ethically responsible behavior (Topic 8), and getting engaged and taking action (Topic 9) in their teaching. The GCED topics concerning local, national, and global systems and structure (Topic 1), issues affecting interaction and connectedness of communities at local, national, and global levels (Topic 2), understanding assumptions and power dynamics (Topic 3), and different levels of identity (Topic 4) were rarely included in their teaching in all 3 TEIs (Figure 4.3).
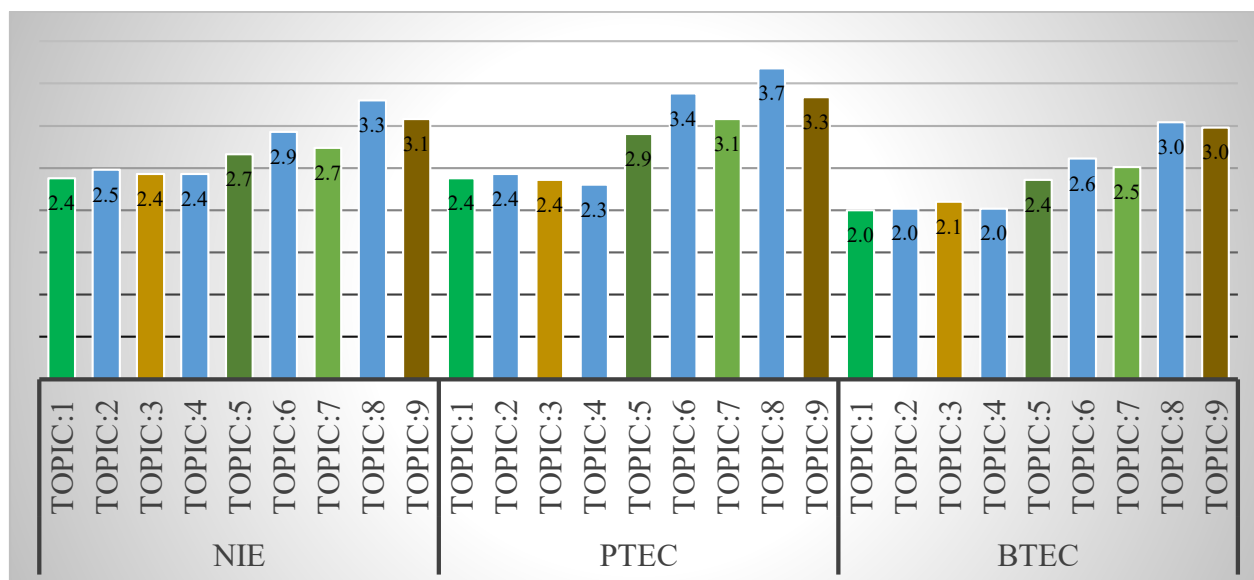
Figure 4. 3: Frequency of inclusion the GCED topics in teaching by TEIs.
TOPIC 1: Local, national and global systems and structure, TOPIC 2:Issue affecting interaction and connectedness of communities at local, national and global levels, TOPIC 3:Understanding assumptions and power dynamics, TOPIC 4:Different levels of identity, TOPIC 5:Different communities people belong to and how these are connected, TOPIC 6: Difference and respect for diversity, TOPIC 7:Actions that can be taken individually and collectively, TOPIC 8: Ethically responsible behavior, and TOPIC 9:Getting engaged and taking action. *Scoring range are 1-18: never, 1.81-2.60: rarely, 2.61-3.40: sometimes, 3.41-4.20: often, and 4.21-5.00:always.*

The inclusion of GCED topics was higher in SS than in S&M, and that might be caused by the concepts of GCED that was already included in SS. Through focus group discussions, trainers in TEIs said that the GCED concepts are included in Psychology, Psycho-pedagogy, and Moral civic.

4.2.3 Knowledge and Skills in Related GCED Aspects

Table 4.12 showed that the trainers' knowledge and skills concerning goals and objectives of global citizenship education aspects (Mean score: 2.67) and pedagogical skills to teach various global citizenship education perspectives (Mean score: 2.63) are moderate, while other aspects fall in the not very well range (Mean score: 2.58 and 2.59). The trainers in the 3 TEIs did not understand the key concepts and themes in global citizenship education, how to connect teacher training curriculum

and global citizenship, and how to assess global citizenship education within teacher training curriculum, which are the essential aspects of inclusion of GCED concept in TEIs. Overall, the trainers' knowledge and skills concerning these GCED aspects did fit the requirements to include the GCED concepts in the TEIs.

Table 4. 11: Trainers' knowledge and skills concerning the following GCED aspects (n=211)

GCED aspects	Over all		SS trainers		S&M trainers	
	Mean	SD	Mean	SD	Mean	SD
1.Goals and objectives of global citizenship education	2.67	0.96	2.74	0.94	2.51	0.99
2.Key concepts and themes in global citizenship education	2.59	0.97	2.65	0.95	2.46	1.01
3.How to connect teacher training curriculum and global citizenship	2.58	1.07	2.69	1.02	2.35	1.14
4.Pedagogical skills to teach various global citizenship education perspectives	2.63	1.01	2.75	0.97	2.38	1.06
5.Assess global citizenship education within teacher training curriculum	2.58	1.01	2.62	0.97	2.47	1.09

Note: Scoring range are 1-18: not at all well, 1.81-2.60: not very well, 2.61-3.40: moderate, 3.41-4.20: well, and 4.21-5.00:very well.
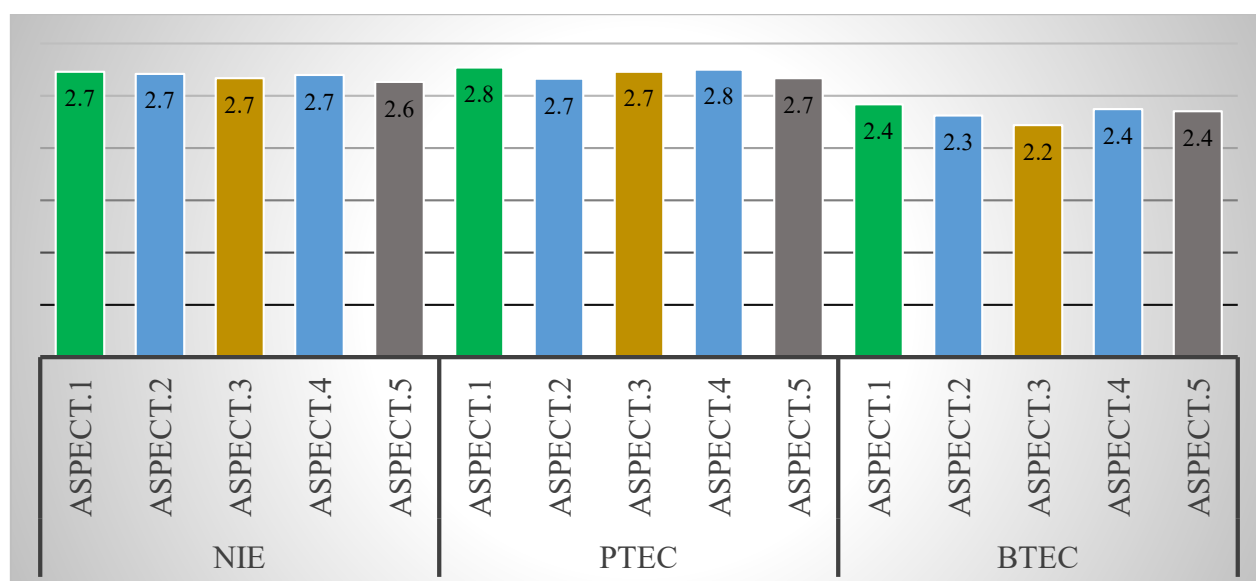
Figure 4. 4: Trainers' knowledge and skills relating to the GCED aspects.
ASPECT.1: Goals and objectives of global citizenship education, ASPECT.2: Key concepts and themes in global citizenship education, ASPECT.3: How to connect teacher training curriculum and global citizenship, ASPECT.4: Pedagogical skills to teach various global citizenship education perspectives, ASPECT.5: Assess global citizenship education within teacher training curriculum.
Scoring range are 1-18: not at all well, 1.81-2.60: not very well, 2.61-3.40: moderate, 3.41-4.20: well, and 4.21-5.00:very well.

NIE and PTEC trainers have moderate knowledge and skills concerning the 5 GCED aspects (score range from 2.6 to 2.8), and BTEC trainers are not adept in all aspects either, with the score range from 2.2 to 2.4 (Figure 4.4). In the focus group discussion, the researchers did not ask participants these questions because they said that they did not know about GCED. Therefore, they were not able to provide answer related to this question. This statistic result indicates that they do not have enough knowledge and skills to conduct GCED training in their TEIs.

4.2.4 Preparation of Teacher Trainees to Teach GCED

The trainees in the 3 TEIs have expressed optimism in evaluating the training curriculum they are studying. Overall, the trainees evaluated the training curriculum in the 3 TEIs adequately to prepare themselves to teach GCED concepts concerning the 3 dimensions with a mean score of 3.44 for the cognitive dimension, 3.67 for the socio-emotional dimension, and 3.96 for the behavioral dimension

Table 4. 12: Adequateness of the training curriculum to prepare trainees to teach GCED in the future (n=1510)

Topics	Over all		SS trainees		S&M trainees	
	Mean	SD	Mean	SD	Mean	SD
Cognitive dimension	**3.44**		**3.49**		**3.41**	
1.Local, national and global systems and structure	3.56	0.78	3.61	0.72	3.53	0.82
2.Issue affecting interaction and connectedness of communities at local, national and global levels	3.45	0.73	3.50	0.70	3.42	0.75
3.Understanding assumptions and power dynamics	3.30	0.79	3.36	0.77	3.27	0.80
Socio-emotional dimension	**3.67**		**3.71**		**3.66**	
4.Different levels of identity	3.36	0.74	3.44	0.71	3.36	0.74
5.Different communities people belong to and how these are connected	3.67	0.68	3.68	0.68	3.67	0.69
6.Difference and respect for diversity	3.97	0.58	4.00	0.56	3.95	0.59
Behavioral dimension	**3.96**		**3.98**		**3.94**	
7.Actions that can be taken individually and collectively	3.73	0.64	3.78	0.61	3.69	0.68
8.Ethically responsible behaviour	4.12	0.54	4.13	0.53	4.11	0.56
9.Getting engaged and taking action	4.03	0.51	4.04	0.53	4.03	0.51

Note: Scoring range are 1-18: not adequate at all, 1.81-2.60: less adequate, 2.61-3.40: somewhat adequate, 3.41-4.20: adequate, and 4.21-5.00:very much adequate.

(Table 4.12). Based on result in table 4.7, the trainers evaluated themselves to show that they are unsure about these GCED topics, but the trainees also evaluated to show that the training curriculum can prepare them to teach GCED. Through these results, the GCED concept might be included or integrated into some major subjects and/or common subjects in the TEIs. Figure 4.5 indicated some differences among the TEIs in preparing their trainees to teach GCED in the future. NIE trainees evaluated and showed that the training program they are studying adequately prepares them to teach the GCED topics in the future with mean scores from 3.45 to 4.06. PTEC training curriculum can prepare adequately the trainees for 7 topics and somewhat adequately for 2 topics concerning understanding assumptions and power dynamics and different levels of identity. BTEC training curriculum can prepare the trainee adequately to teach 5 GCED topics concerning different communities people belong to and how these are connected, differences and respect for diversity, actions that can be taken individually and collectively, ethically responsible behavior, and getting engaged and taking action with the mean score from 3.40 to 3.89.
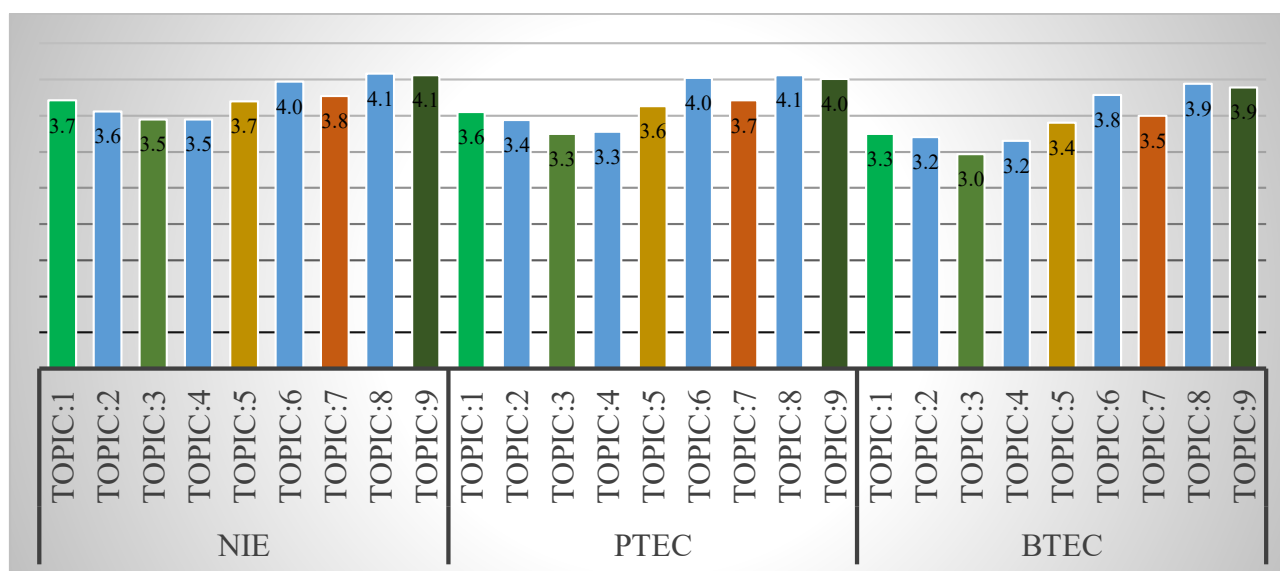
Figure 4. 5: Adequateness of the training curriculum to prepare trainees to teach GCED in the future by TEI.
TOPIC 1: Local, national and global systems and structure, TOPIC 2:Issue affecting interaction and connectedness of communities at local, national and global levels, TOPIC 3:Understanding assumptions and power dynamics, TOPIC 4:Different levels of identity, TOPIC 5:Different communities people belong to and how these are connected, TOPIC 6: Difference and respect for diversity, TOPIC 7:Actions that can be taken individually and collectively, TOPIC 8: Ethically responsible behavior, and TOPIC 9:Getting engaged and taking action. *Scoring range are 1-18: not adequate at all, 1.81-2.60: less adequate, 2.61-3.40: somewhat adequate, 3.41-4.20: adequate, and 4.21-5.00:very much adequate.*

Overall, the trainees in the 3 TEIs showed that they have confidence in teaching the GCED topics in the 3 dimensions with a mean score from 3.41 to 3.84 (Table 4.14). The levels of confidence were high in the behavioral dimension and lower in the cognitive dimension. There were also no big differences between SS and S&M trainees. Confidence levels of the trainees are also relevant to the training curriculum that prepares them to teach the GCED topics (Table 4.12 and Table 4.13).

Table 4. 13: Trainee's confidential levels to GCED concepts schools in the future (n=1510)

Topics	Over all		SS trainees		S&M trainees	
	Mean	SD	Mean	SD	Mean	SD
Cognitive dimension	**3.41**		**3.45**		**3.40**	
1. Local, national and global systems and structure	3.44	0.71	3.48	0.66	3.41	0.73
2. Issue affecting interaction and connectedness of communities at local, national and global levels	3.45	0.71	3.48	0.70	3.45	0.71
3.Understanding assumptions and power dynamics	3.34	0.80	3.38	0.77	3.33	0.80
Socio-emotional dimension	**3.67**		**3.70**		**3.65**	
4.Different levels of identity	3.48	0.60	3.50	0.69	3.46	0.70
5.Different communities people belong to and how these are connected	3.68	0.65	3.70	0.61	3.66	0.69
6.Difference and respect for diversity	3.86	0.63	3.90	0.58	3.83	0.61
Behavioral dimension	**3.84**		**3.88**		**3.82**	
7.Actions that can be taken individually and collectively	3.66	0.65	3.71	0.61	3.63	0.68
8.Ethically responsible behaviour	3.95	0.63	3.98	0.61	3.93	0.64
9.Getting engaged and taking action	3.91	0.63	3.94	0.63	3.90	0.63

Scoring range are 1-18: not at all confident, 1.81-2.60: not very confident, 2.61-3.40: quite confident, 3.41-4.20: confident, and 4.21-5.00: very confident.

The trainees' confidence levels to teach each GCED topic were different among TEIs. NIE trainees are confident to teach the GCED topics 4, 5, 6, and 7. PTEC trainees are confident with the GCED topics 1, 2, 5, and 7. BTEC trainees are not confident (quite confident) to teach all 9 GCED topics (Figure 4.6).
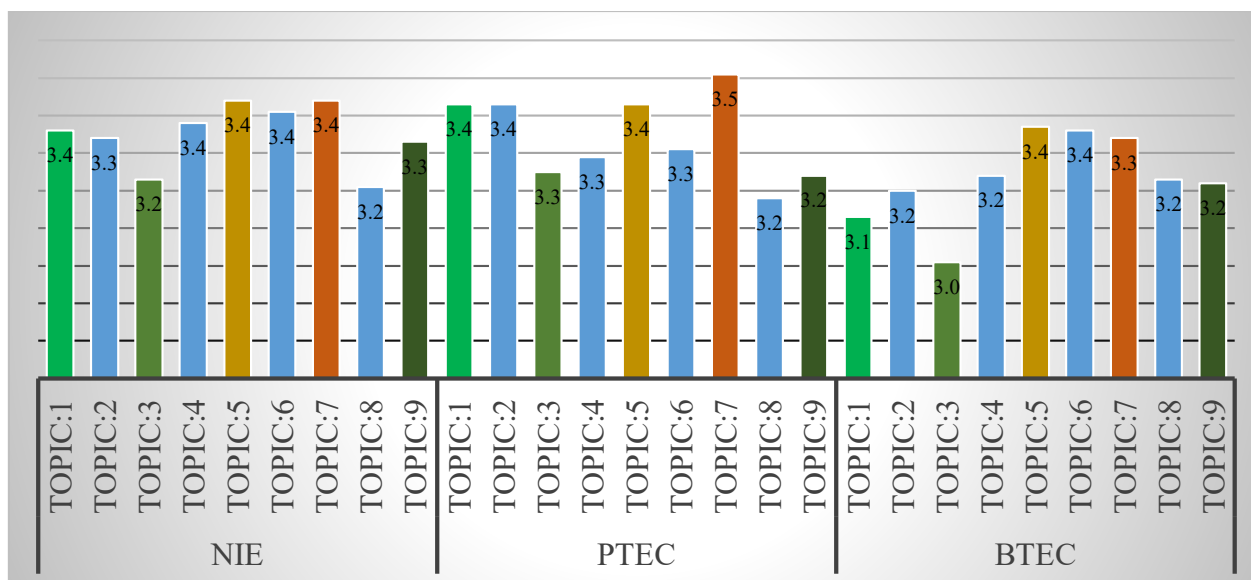
Figure 4. 6: Trainee's confidential levels to GCED concepts schools in the future by TEI.
TOPIC 1: Local, national and global systems and structure, TOPIC 2:Issue affecting interaction and connectedness of communities at local, national and global levels, TOPIC 3:Understanding assumptions and power dynamics, TOPIC 4:Different levels of identity, TOPIC 5:Different communities people belong to and how these are connected, TOPIC 6: Difference and respect for diversity, TOPIC 7:Actions that can be taken individually and collectively, TOPIC 8: Ethically responsible behavior, and TOPIC 9:Getting engaged and taking action. *Scoring range are 1-18: not at all confident, 1.81-2.60: not very confident, 2.61-3.40: quite confident, 3.41-4.20: confident, and 4.21-5.00: very confident.*

4.3 CONSTRAINS FOR IMPLEMENTING GCED IN TEIs

Overall, the trainers in the 3 TEIs agreed that the constraints in implementing GCED in the TEIs were related to "lack of knowledge of global citizenship education, mean score: 3.60", "do not know how to assess students' achievement on global citizenship issues, mean score: 3.58", "not included in the exam, mean score: 3.47", and "lack of GCED teaching materials" (Table 4.14). The trainers in the 3 TEIs showed moderate agreement with the statements "global citizenship education is not related to my major subject, mean score: 2.77" and "global citizenship issue is very difficult to teach, mean score: 2.75". Thus, the constraints trainers may face are related to their knowledge and skills to teach the GCED topics such as "lack of knowledge of global citizenship education" and "do not know how to assess students' achievement on global citizenship issues". The S&M trainers had higher constraints than SS trainers in all statements. The reasons might be due to the lower level of knowledge and skills that S&M trainers have with regards to the GCED contents than the SS trainers because of the GCED contents integrated in social science subjects (UNESCO & APCEIU, 2018).

Table 4. 14: Constrains trainers may face in implementing GCED in their TEI (n=211)

N.	Statements	Over all		SS trainers		S&M trainers	
		Mean	SD	Mean	SD	Mean	SD
1	Lack of time to finish the existing curriculum	3.35	0.83	3.32	0.83	3.39	0.83
2	Lack of GCED teaching materials	3.46	0.81	3.45	0.81	3.49	0.81
3	Lack of knowledge of global citizenship education	3.60	0.94	3.55	0.91	3.70	1.00
4	Not included in the exam	3.47	0.95	3.46	0.91	3.47	1.05
5	Do not know how to assess students' achievement on global citizenship issues	3.58	0.93	3.56	0.91	3.61	0.98
6	Global citizenship education is not related to my major subject	2.77	1.00	2.66	0.99	2.99	1.01
7	Global citizenship issue is very difficult to teach	2.75	0.77	2.69	0.76	2.84	0.80

Note: Scoring range are 1-18: strongly disagree, 1.81-2.60: disagree, 2.61-3.40: moderate, 3.41-4.20: agree, and 4.21-5.00: strongly agree.
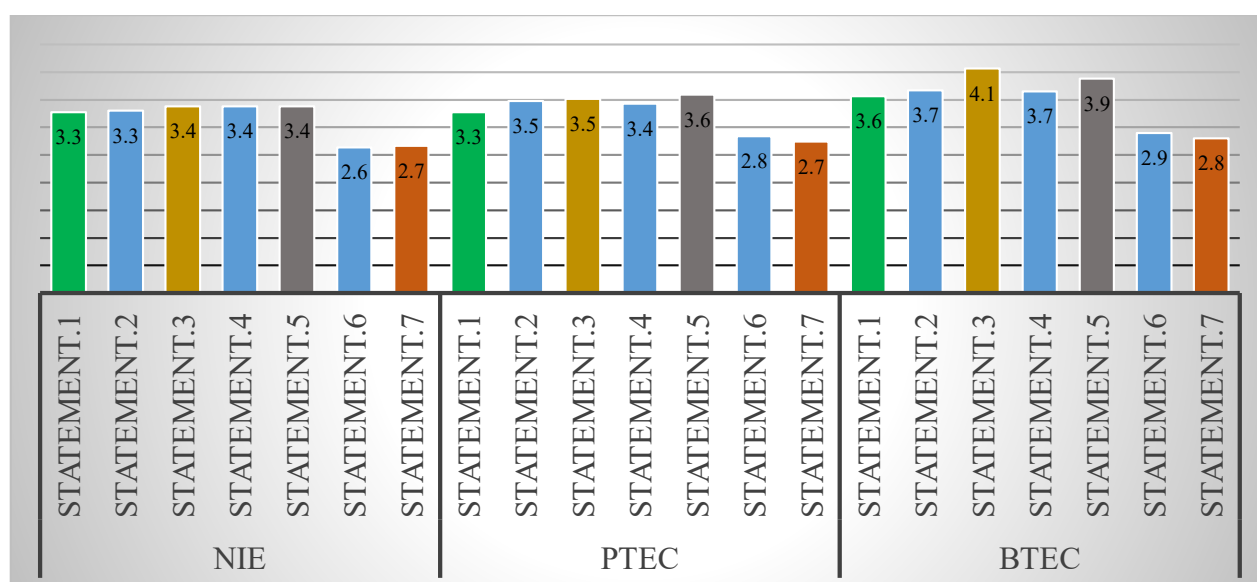
Figure 4. 7: Constrains trainers may face in implementing GCED by each TEI.
STATEMENT 1: Lack of time to finish the existing curriculum, STATEMENT 2: Lack of GCED teaching materials, STATEMENT 3: Lack of knowledge of global citizenship education, STATEMENT 4: Not included in the exam, STATEMENT 5: Do not know how to assess students' achievement on global citizenship issues, STATEMENT 6: Global citizenship education is not related to my major subject, STATEMENT 7: Global citizenship issue is very difficult to teach. *Scoring range are 1-18: strongly disagree, 1.81-2.60: disagree, 2.61-3.40: moderate, 3.41-4.20: agree, and 4.21-5.00: strongly agree.*

Trainers' concerns with these constraints in implementing GCED are different among the 3 TEIs. NIE trainers showed moderate agreement to constrain all statements. PTEC showed moderate agreement to constrain statements 1, 6, and 7. They agreed to constraints concerning "Lack of GCED teaching materials", "Lack of knowledge of global citizenship education", "Not included in the

exam", and "Do not know how to assess students' achievement on global citizenship issues". PTEC trainers agreed that they have constraints related to statements 1 to 5, and they showed moderate agreement to statements concerning "Global citizenship education is not related to my major subject", and "Global citizenship issue is very difficult to teach". PTEC showed higher constraints in implementing GCED than the other 2 TEIs (Figure 4.7).

The lack of adequate levels of GCED in both initial teacher preparation and in-service teacher education impedes the promotion of global citizenship among school students in Uganda (UNESCO & APCEIU, 2018). Lack of enhancement of teachers' knowledge, skills and resources (pedagogical and didactic) for the inclusion of GCED in the school curriculum and their pedagogical practices are constrains in Colombia (UNESCO & APCEIU, 2018). Uganda has developed the GCED teachers' resource book, teachers' orientation manual for GCED, and teaching and learning resources by equipping teachers with GCED knowledge and methodological skills in order to enhance GCED (UNESCO & APCEIU, 2018). Cambodia has two main constraints: the understanding of GCED and of the linkage between GCED and the History subject, and the way in which GCED is delivered in the classroom (UNESCO & APCEIU, 2018).

4.4 TRAINERS' AND TRAINEES' PARTICIPATION IN GCED TRAINING
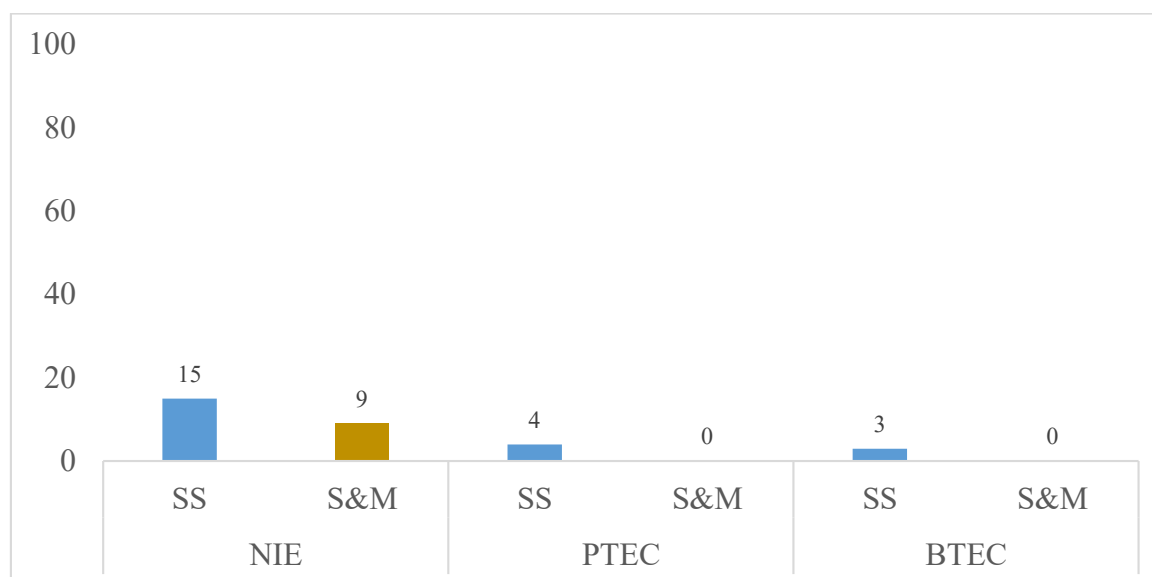
Figure 4. 8: Trainers' participation in GCED training by TEI.

Most of the trainers in the 3 TEIs have never participated in the GCED training. All S&M trainers (respondents) in PTEC and BTEC have never participated in the GCED training, while 3 to 4% of

the SS trainers (respondents) have participated in the training. The percentage of NIE trainers who participated in the GCED training is also not high, with only 15% for SS and 9% for S&M trainers (Figure 4.8). These results showed that most of the trainers are unsure about the GCED concept, and moreover through focus group discussion, the trainers said that "it is the first time to hear the word GCED".

Trainees showed that they have occasionally participated (NIE:50%, PTEC:56%, and BTEC:34%) in GCED training (Figure 4.6). It is certainly favorable to be able to see that some of them sometimes participated in the GCED training. The trainees' responses were much better than those of the trainers. However, some of them might not be able to define GCED training. They might participate in some training related to human rights as well as the environment. Even though these contents are in the GCED, they are not part of the full GCED training. Therefore, the percentage of trainees' participation in the GCED training was higher than the trainers' (Figure 4.8 and Figure 4.9).
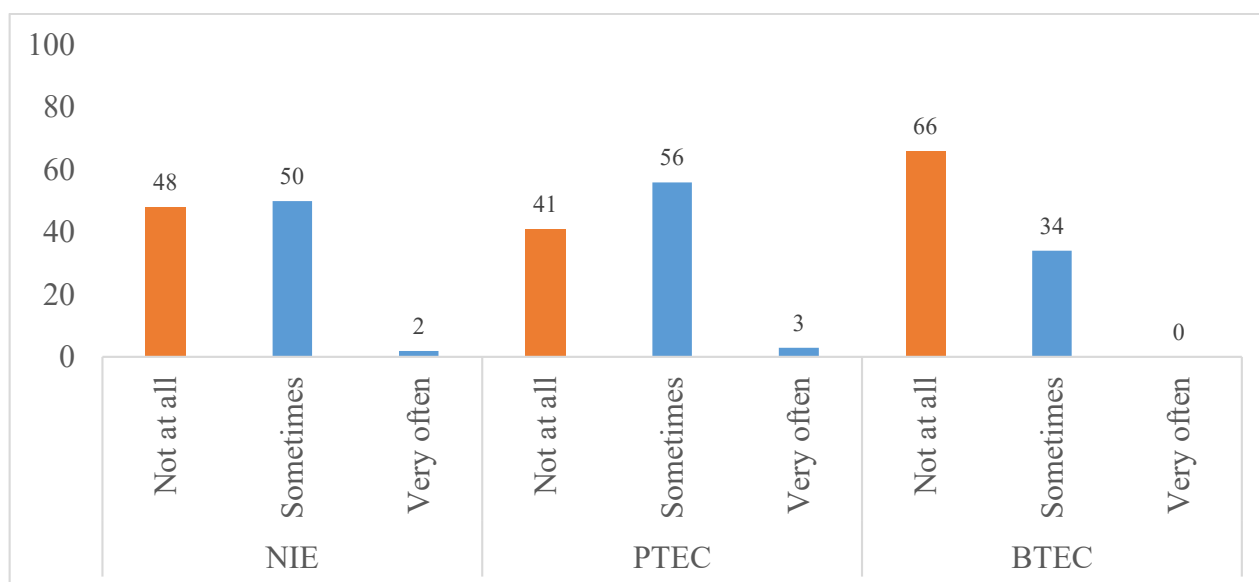
Figure 4. 9: Trainees' participation in GCED training by TEI.

Training is required to provide formal knowledge of GCED to teachers, teacher trainers, and teacher trainees. Ugandan national experts pointed out the importance of enhancing pre-service orientation and in-service professional development programs in order to promote GCED as well as to advocate and sensitize GCED across all levels (UNESCO & APCEIU, 2018).

4.5 POSSIBLE METHODS OF GCED INTEGRATION IN TEACHER EDUCATION INSTITUTIONS

Overall, the majority of trainers (59%) in the 3 TEIs suggested that the better method to integrate the GCED in the teacher training curriculum is "integration in every subject". NIE trainers (68%) and PTEC trainers (58%) suggested "integration in every subject", but BTEC trainers (55%) wanted to integration into "a major subject" (Figure 4.10).
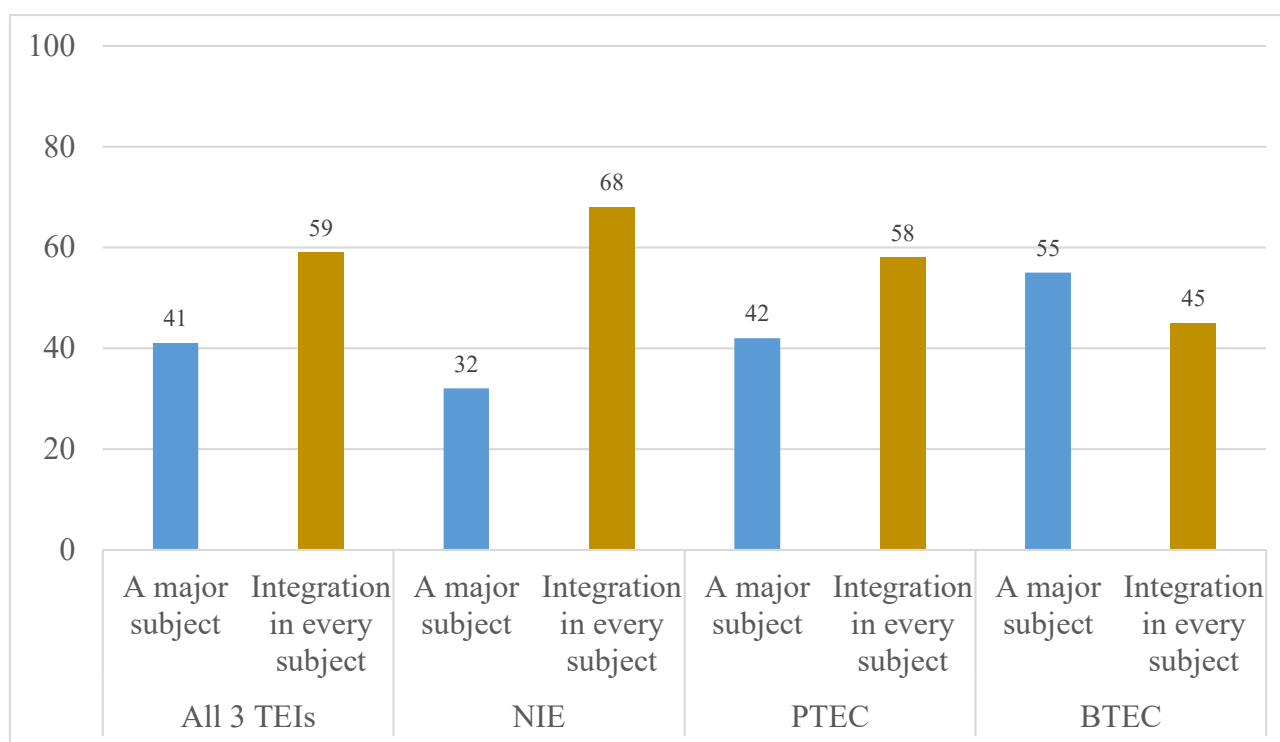
Figure 4.10: Trainers' opinion to integrate GCED in teacher training curriculum by TEI.

GCED concept can be integrated across a range of subjects like civics, social studies, environmental studies, geography, history, religious education, science, music, arts subject, and sports (UNESCO, 2015). In Uganda, GCED concepts are integrated through music, poems, and reading (UNESCO & APCEIU, 2018). However, the more complex GCED contents were integrated in main subject in some country such as. Cambodia integrated GCED concepts mainly into History and Moral Civic (UNESCO & APCEIU, 2018), Mongolia integrated GCED concepts mainly into core curriculums of Moral Civic, and Oman integrated GCED concepts in a separate subject within an optional subject and their social studies curricula (UNESCO & APCEIU, 2018). However, Oman suggested that the role of other subjects (English, geography, science, and Islamic culture) must be strengthened in order increase the effectiveness of GCED (UNESCO & APCEIU, 2018). Norman (2021) had reported the successful GCED integration in English language classroom by secondary English language teachers.

Therefore, integration of GCED concepts in every subject is a predominantly strong consideration in order to educate young learners and mold them into responsible citizens.

4.6 TRAINERS AND TRAINEES' WILLINGNESS TO INTEGRATE GCED IN TEACHING

Overall, the majority of the trainers (69%) of all the 3 TEIs wanted to integrate or permeate the GCED concepts in their teaching (Figure 4.11). There were only 6% of the trainers in these TEIs that did not want to integrate GCED into their teaching. These 6% of trainers might not have fully understood the GCED concept because the majority of the trainers who responded to this baseline survey evaluated and showed that they themselves were unsure with regards to the GCED topics used in the questionnaire. The trainers in PTEC showed a higher percentage than the other 2 TEIs with how they did not want to integrate the GCED into their teaching. In this baseline survey, PTEC trainers generally evaluated their knowledge and skills concerning the GCED concept to be lower than those in NIE and PTEC.
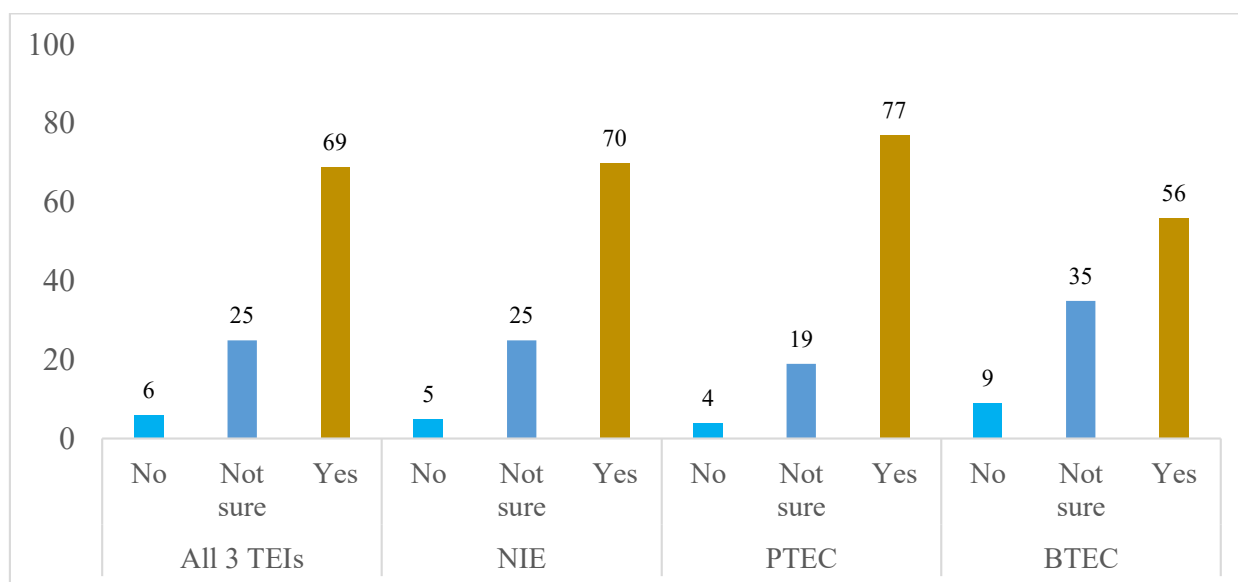
Figure 4. 11: Trainers' willingness to integrate or permeate the concept of GCED in their teaching subject by TEI.

The majority of the NIE trainees (81%), PTEC trainees (78%), and BTEC trainees (71%) want to integrate GCED concepts into their teaching when they are assigned to work at schools after they finished their training from the TEIs (Figure 4.10). On the other hand, 1% of NIE trainees, 1% of PTEC trainees, and 5% of BTEC trainees did not want to integrate GCED into their teaching. These numbers are relatively low compared to the total number of trainees. The percentages of trainees who are hesitant to integrate GCED into their teaching are also high (18% for NIE, 21% for PTEC,

24% for BTEC). However, these trainees might change their opinion if they understand the GCED concepts well.
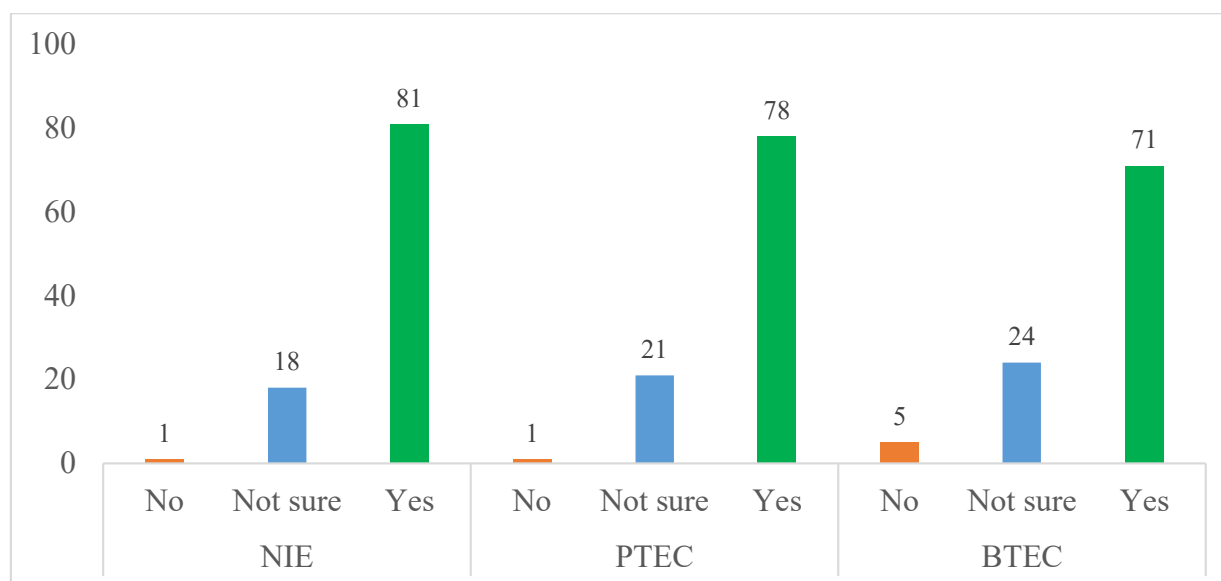
Figure 4. 12: Trainees' willingness to integrate or permeate GCED concept in their teaching by TEI.

The trainees who responded to the questionnaires are strongly committed to assisting their students to be responsible global citizens (96% for PTEC, 95% for NIE, 92% for BTEC). Only 1% of the BTEC trainees lack commitment to assist their students to become responsible global citizens in the future (Figure 4.13).
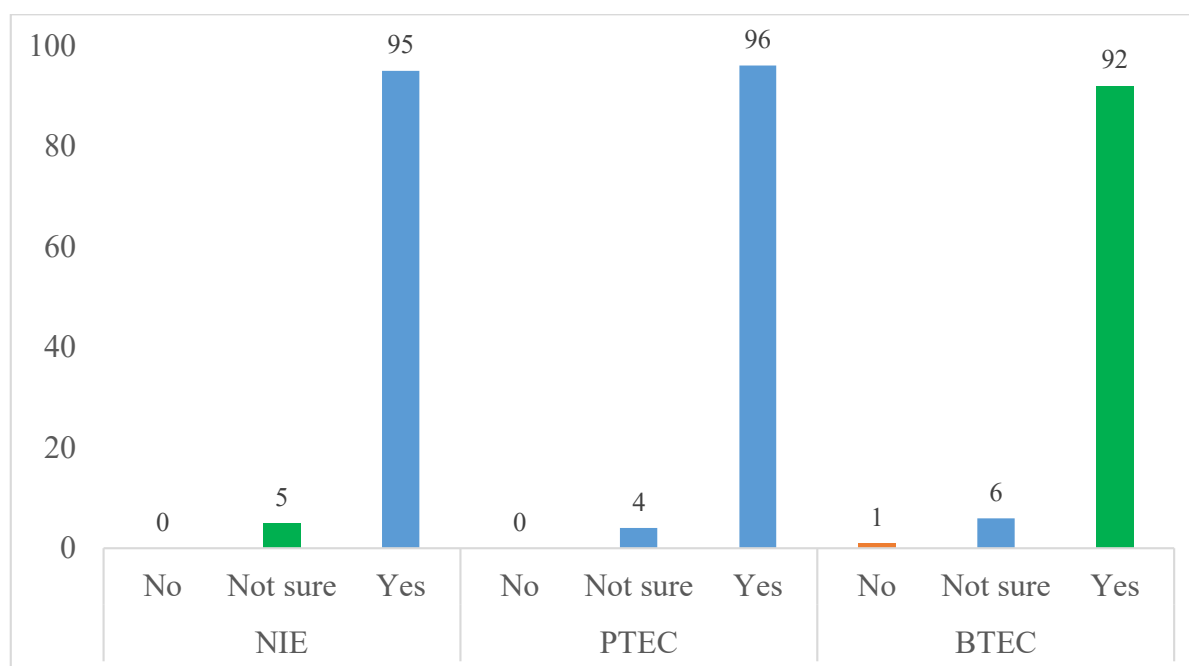
Figure 4. 13: Trainees' commitment to assist students in becoming responsible global citizens by TEI.

4.6 TRAINERS' AND TRAINEES' COMMENTS AND SUGGESTIONS

The common suggestions and comments from all management teams, trainers, and trainees are (1) to conduct training in GCED for them and in order to make them integrate those concepts into their training curriculum, and (2) to produce GCED training documents to be used in the TEIs as well as to be stored in libraries. Some trainers suggested that GCED be spread within the educational field, and some suggested creating visual tutorials or guides related to GCED. The trainees in BTEC who are in their 4th year requested in-service training to be conducted for them because they will soon complete their studies at BTEC this year. They have also requested for implementations of scholarly debates related to GCED in the TEI, as they believe that friendly competition could act as motivational sources for the trainees to put more effort into their studies. PTEC trainees also suggested producing teaching materials for GCED training.

5

CONCLUSION AND

RECOMMENDATION

5.1 TRAINERS AND TRAINEES' KHOWLEDGE AND SKILLS OF GCED

GCED training in the TEIs in Cambodia has not yet officially started. The management teams, trainers, and trainees are not familiar with the term "Global Citizenship Education". Most of the management teams, trainers, and trainees cannot define the meaning of GCED correctly. The trainers were not aware of the 9 GCED topics proposed by UNESCO in 2015. The trainers' knowledge and skills related to GCED aspects are also not high. Most trainers have never participated in any GCED training. No training program for the trainers in the TEIs concerning the GCED had ever been organized. Therefore, the trainers do not have formal GCED knowledge. Even though they have used GCED content throughout their everyday lives or in their teaching, they are still unsure about those GCED aspects or topics.

The trainers in TEIs should receive training related to GCED content knowledge and pedagogy in order to prepare their teacher trainees to be ready to share the GCED concepts at schools. The GCED content knowledge related to the 9 topics proposed by UNESCO in 2015 is covered with wide content from primary level to secondary level.

5.2 GCED MATERIALS

GCED training curriculum and manuals do not exist in the TEIs yet. GCED content cannot be found in the 3 TEIs involved in the baseline survey. Furthermore, other TEIs in Cambodia might, likewise, not have the relevant documents either.

Training curricula and manuals are needed to be sure that the training exists. GCED core trainers under the support of APCEIU-South Korea need to prepare the GCED contents for the training of teacher trainers in the TEIs. The contents of GCED in each topic should align with the objectives defined by UNESCO in 2015. More than the GCED documents related to the 9 topics, some pedagogy training materials like short videos and posters describing GCED contents and training methodology should be produced for the teaching and learning at the TEIs.

5.3 GCED INTEGRATION METHODS AND TRAINING

Through this baseline survey results and the experiences implemented in other countries, the appropriate GCED integration methods should be permeated in every subject in order to ensure the sharing of GCED concepts effectively in TEIs and at schools. The mode of integration should be focused on knowledge, skills, and attitudes. Since the contents of social subjects are related directly to GCED concepts, GCED can be integrated in knowledge, skills, and attitudes in some lessons in social subjects. However, in the sciences and math, the GCED concept should be integrated in skills and attitudes.

In-service training for the trainers at TEIs should exist in two steps: step 1, the trainers in all subjects should receive training about the GCED content knowledge related to the 9 topics proposed by UNESCO, and step 2 the teachers in each subject check the existing curriculum of the subject and identifying some lessons that are suitable to integrate GCED. The pre-service training for teacher trainees at TEIs should be organized in two steps as well. Step 1, the GCED content knowledge should be organized as the common training program at the start of their first academic year. It should be aware that at the beginning of each academic year, all teacher trainees are required to receive a common training for one week to study about the general knowledge related to administration, regulation, health education, environmental education etc. Therefore the GCED content knowledge should be trained in this common training week in order to make sure all the teacher trainees have the same knowledge. Step 2, teacher trainees will learn the GCED contents through each subject trainers integrating in their teaching and the trainees will be trained how to integrate the GCED content in the teaching methodology subjects.

5.4 MONITORING AND EVALUTION OF THE PROGRAM

The evaluation should be considered internal and external evaluators. The internal evaluators should monitor and evaluate the implementation of GCED in the TEIs and the external evaluators should evaluate the whole program.

Internal monitoring and evaluation should be organized in order to support the implementation of GCED integration in TEIs. The support activities should be focused on both GCED content knowledge and pedagogy. The GCED core trainers who are the members of the technical and secretariat committee of the GCED Cooperation Centre in NIE will go to monitor the implementation of GCED integration in each TEI by observing trainers' teaching or other GCED activities in the TEI. Feedback is given to the trainers and management team after observation.

External evaluation should be organized at the middle or the end of the 5 programs in order to evaluate the effectiveness and quality of the project independently. National and international experts who are not involved in the project will be considered as external evaluators.

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Annex 1: Questionnaire for Trainers

Dear Trainers,

We, the research team, would like to express our profound thanks for taking the time to complete our questionnaire. We are currently conducting the baseline survey research to understand the current situation of GCED in the teacher education institutions in Cambodia. The purposes of the research are to find out the trainers' and trainees' understanding of GCED and related concepts and the methods to integrate GCED in teacher education training curriculum in Cambodia. The questionnaire is divided into 3 parts, part 1 about the personal information, part 2 about the trainers' knowledge and skill about the GCED concepts, and part 3 about others.

Please provide the information base on your actual capacity, practices and experiences. The information received from this baseline survey research will be the foundation for designing a GCED training curriculum for teacher education institutions in Cambodia. Your individual identity will be kept confidential and will be used only for educational research purposes. Thank you!!!

Part I: Personal Information

Please tick (√) in the box to describe your personal information

1. To which institution are you belonging? 1.☐ NIE　　2.☐ PTEC　3.☐ BTEC

2. Gender: 1.☐ Male　　2.☐ Female　　3.☐ Prefer not to say

3. What is your qualification (academic degree)?

1.☐ Lower secondary education 2.☐ Upper secondary education　　3.☐ Bachelor degree

4.☐ Master degree　　5.☐ PhD.　6.☐ Post PhD.　　7.☐ Others.......................................

4. What are your working experiences in Education?

1.☐ From 1 to 5 years　　　2.☐ From 6 to 10 years　　　　3.☐ From 11 to 15 years

4.☐ From 16 to 20 years　　5.☐ More than 20 years

5. What major subjects are you teaching? (You can choose two if you teach two major subjects.)

1.☐ Math　　2.☐ Physics　　　3.☐ Chemistry　　4.☐ Biology　5.☐ Earth Science

6.☐ History　　7.☐ Geography　　8.☐ Khmer Literature 9.☐ General Culture

10.☐ Student learning Assessment　11.☐ ICT　　　　12.☐ English　13.☐ French

14.☐ Psychology 15.☐ Pedagogy　　16.☐ Physical Edu cation (sport)　　17.☐ Economic

18.☐ Arts　　19.☐ Current Trend of Education　　　20.☐ Moral civic

21.☐ Others………………………

Part II: Trainers' Knowledge and Skills about GCED
1. How well do you UNDERSTAND the following GCED topics?

Please read and tick (√) in the boxes below to describe your awareness.

1. Not understanding at all
2. Partially understand
3. Undecided/Unsure
4. Understand
5. Fully understand

Do.	No.	Topics	Levels of awareness				
			1	**2**	**3**	**4**	**5**
Cognitive	1	Local, national and global systems and structure	1.☐	2.☐	3.☐	4.☐	5.☐
	2	Issue affecting interaction and connectedness of communities at local, national and global levels	1.☐	2.☐	3.☐	4.☐	5.☐
	3	Understanding assumptions and power dynamics	1.☐	2.☐	3.☐	4.☐	5.☐
Socio-emotional	4	Different levels of identity	1.☐	2.☐	3.☐	4.☐	5.☐
	5	Different communities people belong to and how these are connected	1.☐	2.☐	3.☐	4.☐	5.☐
	6	Difference and respect for diversity	1.☐	2.☐	3.☐	4.☐	5.☐
Behavioral	7	Actions that can be taken individually and collectively	1.☐	2.☐	3.☐	4.☐	5.☐
	8	Ethically responsible behaviour	1.☐	2.☐	3.☐	4.☐	5.☐
	9	Getting engaged and taking action	1.☐	2.☐	3.☐	4.☐	5.☐

2. Which of the following GCED topics are included in the subjects you teach?

Do.	No.	Topics	Included	Not included
Cognitive	1	Local, national and global systems and structure	☐	☐
	2	Issue affecting interaction and connectedness of communities at local, national and global levels	☐	☐
	3	Understanding assumptions and power dynamics	☐	☐
Socio-emotional	4	Different levels of identity	☐	☐
	5	Different communities people belong to and how these are connected	☐	☐
	6	Difference and respect for diversity	☐	☐
Behavioral	7	Actions that can be taken individually and collectively	☐	☐
	8	Ethically responsible behaviour	☐	☐
	9	Getting engaged and taking action	☐	☐

3. How often do you include the following GCED topics in your teaching?

Please read and tick (√) in the boxes below.
1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

Do.	No.	Topics	Frequency level				
			1	2	3	4	5
Cognitive	1	Local, national and global systems and structure	1.☐	2.☐	3. ☐	4. ☐	5. ☐
	2	Issue affecting interaction and connectedness of communities at local, national and global levels	1.☐	2.☐	3. ☐	4. ☐	5. ☐
	3	Understanding assumptions and power dynamics	1.☐	2.☐	3. ☐	4. ☐	5. ☐
Socio-emotional	4	Different levels of identity	1.☐	2.☐	3. ☐	4. ☐	5. ☐
	5	Different communities people belong to and how these are connected	1.☐	2.☐	3. ☐	4. ☐	5. ☐
	6	Difference and respect for diversity	1.☐	2.☐	3. ☐	4. ☐	5. ☐
Behavioral	7	Actions that can be taken individually and collectively	1.☐	2.☐	3. ☐	4. ☐	5. ☐
	8	Ethically responsible behaviour	1.☐	2.☐	3. ☐	4. ☐	5. ☐
	9	Getting engaged and taking action	1.☐	2.☐	3. ☐	4. ☐	5. ☐

4. How do you assess the level of your knowledge and skills concerning the following GCED aspects?

Please read and tick (√) in the boxes below.
1. Not at all well
2. Not very well
3. Moderate
4. Well
5. Very well

No.	GCED aspects	Confident Levels				
		1	2	3	4	5
1	Goals and objectives of global citizenship education	1.☐	2.☐	3. ☐	4. ☐	5. ☐
2	Key concepts and themes in global citizenship education	1.☐	2.☐	3. ☐	4. ☐	5. ☐
3	How to connect teacher training curriculum and global citizenship	1.☐	2.☐	3. ☐	4. ☐	5. ☐
4	Pedagogical skills to teach various global citizenship education perspectives	1.☐	2.☐	3. ☐	4. ☐	5. ☐
5	Assess global citizenship education within teacher training curriculum.	1.☐	2.☐	3. ☐	4. ☐	5. ☐

5. The following statements indicate constrains you may face in implementing GCED in your teacher training institution.

Please read and tick (√) in the boxes below.
1. Strongly disagree
2. Disagree
3. Moderate
4. Agree
5. Strongly agree

No.	Statements	Level of agreement				
		1	**2**	**3**	**4**	**5**
1	Lack of time to finish the existing curriculum.	1.☐	2.☐	3.☐	4.☐	5.☐
2	Lack of GCED teaching materials	1.☐	2.☐	3.☐	4.☐	5.☐
3	Lack of knowledge of global citizenship education	1.☐	2.☐	3.☐	4.☐	5.☐
4	Not emphasized in the exam	1.☐	2.☐	3.☐	4.☐	5.☐
5	Do not know how to assess students' achievement on global citizenship issues.	1.☐	2.☐	3.☐	4.☐	5.☐
6	Global citizenship education is not related to my major subject.	1.☐	2.☐	3.☐	4.☐	5.☐
7	Global citizenship issue is very difficult to teach.	1.☐	2.☐	3.☐	4.☐	5.☐

IV. Others

1. Have you ever participated in any GCED training? 1.☐ Yes   2.☐ No
   If you choose "Yes" please answer the following:
   Where (Training avenue):……………………………………………………………………
   When and How long:……………………………………...………………………………………
   Which institution organize the training?:…………………………………………………

2. In your opinion, what would be a better method to integrate GCED in teacher training curriculum?
   1.☐ It should be a major subject.   2.☐ It should be integrated in every subject
   Explain your opinion: …………………………………………………………………………
   …………………………………………………………………………………………………
   …………………………………………………………………………………………………

3. Are you willing to integrate or permeate the concept of GCED in the subject you are teaching?
   1.☐ No
   1.☐ Not sure
   3.☐ Yes

4. Please share your comments and/or suggestion (if any)
   …………………………………………………………………………………………………
   …………………………………………………………………………………………………
   …………………………………………………………………………………………………

Thank you very much for participation

APCEIU
United Nations · Asia-Pacific Centre of
Educational, Scientific and · Education for International Understanding
Cultural Organization · under the auspices of UNESCO
국제연합 · 유네스코 아시아태평양 국제이해교육원
교육과학문화기구

Appendix 2: Questionnaire for Teacher Trainees

Dear Trainees,

We, the research team, would like to express our profound thanks for taking the time to complete our questionnaire. We are currently conducting the baseline survey research to understand the current situation of GCED in the teacher education institutions in Cambodia. The purposes of the research are to find out the trainers' and trainees' understanding of the GCED concepts and the methods to integrate the GCED concepts into the teacher education training curriculum in Cambodia. The questionnaire is divided into 3 parts, part 1 about the personal information, part 2 about the trainers and trainees' knowledge and skill about the GCED concepts, and part 3 about others.

Please answer all questions. All details and answers you provide are CONFIDENTIAL and intended for research purposes only. Your willingness, patience, and cooperation to answer this questionnaire are greatly appreciated. Thank you!!!

Part I: Personal Information
Please tick (√) in the box to describe your personal information

1. To which institution are you belonging?
   1.☐ NIE   2.☐ PTEC 3.☐ BTEC

2. Gender: 1.☐ Male   2.☐ Female   3.☐ Other

3. Age:
   1.☐ 18-25 years old   2.☐ 26-30 years old   3.☐ 31-40 years old   4.☐ Over 40 years old

4. Ethnic:
   1.☐ Khmer   2.☐ Chinese   3.☐ Vietnamese   4.☐ Cham (Khmer Islam)
   5.☐ Khmer Loeu   6. ☐ others Specify…………………

5. Name of program you studying:
   1.☐ Primary (12+2)   2.☐ Primary (12+4)   3.☐ Fundamental (12+4)   4.☐ (BA+1)
   5.☐ (BA+2)

6. Current year of study:
   1.☐ First year   2.☐ Second Year   3.☐ Third year   4.☐ Fourth year

7. What is your major subject? (You can choose more OPTION)
   1.☐ Math   2.☐ Physics   3.☐ Chemistry   4.☐ Biology   5.☐ Earth Science

   6.☐ History   7.☐ Geography   8.☐ Khmer Literature 9.☐ English   10.☐ French

   11.☐ Electricity   12.☐ Electronics   13.☐ Mechanics   14.☐ Animal Husbandry

   15.☐ Food Processing 16.☐ Agronomy   17.☐ Moral Civic   18.☐ Economics

   19.☐ ICT   20.☐ Others………

Part II: Trainers and Trainees' Knowledge and skills about GCED

1. Do you think the teacher training curriculum in your teacher training institution adequately prepare you to teach about the following topics?

Please read and tick (√) in the boxes below to describe your understanding.

1. Not adequate at all
2. Less adequate
3. Somewhat adequate
4. Adequate
5. Very much adequate

Do.	No.	Topics	Levels of awareness				
			1	2	3	4	5
Cognitive	1	Local, national and global systems and structure	1.☐	2.☐	3.☐	4.☐	5.☐
	2	Issue affecting interaction and connectedness of communities at local, national and global levels	1.☐	2.☐	3.☐	4.☐	5.☐
	3	Understanding assumptions and power dynamics	1.☐	2.☐	3.☐	4.☐	5.☐
Socio-emotiona	4	Different levels of identity	1.☐	2.☐	3.☐	4.☐	5.☐
	5	Different communities people belong to and how these are connected	1.☐	2.☐	3.☐	4.☐	5.☐
	6	Difference and respect for diversity	1.☐	2.☐	3.☐	4.☐	5.☐
Behavioral	7	Actions that can be taken individually and collectively	1.☐	2.☐	3.☐	4.☐	5.☐
	8	Ethically responsible behaviour	1.☐	2.☐	3.☐	4.☐	5.☐
	9	Getting engaged and taking action	1.☐	2.☐	3.☐	4.☐	5.☐

2. Which of the GCED concepts (topics) are integrated into the major subject you learn?

Do.	No.	Topics	Included	Not included
Cognitive	1	Local, national and global systems and structure	☐	☐
	2	Issue affecting interaction and connectedness of communities at local, national and global levels	☐	☐
	3	Understanding assumptions and power dynamics	☐	☐
Socio-emotiona	4	Different levels of identity	☐	☐
	5	Different communities people belong to and how these are connected	☐	☐
	6	Difference and respect for diversity	☐	☐
Behavioral	7	Actions that can be taken individually and collectively	☐	☐
	8	Ethically responsible behaviour	☐	☐
	9	Getting engaged and taking action	☐	☐

3. How confident are you to teach your students the following GCED concepts when you are assigned to teach at school?

Please read and tick (√) in the boxes below.
1. Not at all confident
2. Not very confident
3. Quite confident
4. Confident
5. Very confident

Do.	No.	Topics	Confident level				
			1	2	3	4	5
Cognitive	1	Local, national and global systems and structure	1.□	2.□	3. □	4. □	5. □
	2	Issue affecting interaction and connectedness of communities at local, national and global levels	1.□	2.□	3. □	4. □	5. □
	3	Understanding assumptions and power dynamics	1.□	2.□	3. □	4. □	5. □
Socio-emotiona	4	Different levels of identity	1.□	2.□	3. □	4. □	5. □
	5	Different communities people belong to and how these are connected	1.□	2.□	3. □	4. □	5. □
	6	Difference and respect for diversity	1.□	2.□	3. □	4. □	5. □
Behavioral	7	Actions that can be taken individually and collectively	1.□	2.□	3. □	4. □	5. □
	8	Ethically responsible behaviour	1.□	2.□	3. □	4. □	5. □
	9	Getting engaged and taking action	1.□	2.□	3. □	4. □	5. □

4. The following statements indicate constrains the teacher training institution may face in implementing GCED.

Please read and tick (√) in the boxes below.
1. Strongly disagree
2. Disagree
3. Moderate
4. Agree
5. Strongly agree

No.	Statements	Level of agreement				
		1	2	3	4	5
1	Lack of time to finish the existing curriculum.	1.□	2.□	3. □	4. □	5. □
2	Lack of GCED teaching materials	1.□	2.□	3. □	4. □	5. □
3	Lack of knowledge of global citizenship education	1.□	2.□	3. □	4. □	5. □
4	Not emphasized in the exam	1.□	2.□	3. □	4. □	5. □
5	Do not know how to assess students' achievement on global citizenship issues.	1.□	2.□	3. □	4. □	5. □
6	Global citizenship education is not related to my major subject.	1.□	2.□	3. □	4. □	5. □
7	Global citizenship issue is very difficult to teach	1.□	2.□	3. □	4. □	5. □

III. Others

1. Have you taken or enrolled in any global citizenship education courses while studying at your training institution?
   1.☐ Never   2.☐ Sometimes   3.☐ Very Often

2. Are you willing to integrate or permeate the concept of GCED in the subject you are teaching when you are assigned to work at school?
   1.☐ No
   1.☐ Not sure
   3.☐ Yes

3. Do you have commitment to assist students in becoming responsible global citizens?
   1.☐ Yes   2.☐ No

4. Please share your comments and/or suggestion (if any)
   ………………………………………………………………………………………………………
   ………………………………………………………………………………………………………
   ………………………………………………………………………………………………………
   ………………………………………………………………………………………………………
   ………………………………………………………………………………………………………

Thank you very much for participation

Appendix 3: Focus Group Discussion with Management Team

Dear Director and Vice directors,

We, the research team, would like to express our profound thanks for taking the time to participate in our focus group discussion. We are currently conducting the baseline survey research to understand the current situation of GCED in the teacher education institutions in Cambodia. The purposes of the research are to find out the trainers' and trainees' understanding of the GCED concepts and the methods to integrate the GCED concepts in the teacher education training curriculum in Cambodia.

Please provide the information based on your actual capacity, practices and experiences. The information received from this baseline survey research will be the foundation for designing GCED training curriculum for the teacher education institutions in Cambodia. Your individual identity will be kept confidential and will be used only for educational research purposes. Thank you!!!

Guided questions for discussion:
1. What is GCED?
2. What are the subjects in the teacher training curriculum at your teacher training institution related to GCED?
3. Have your teacher training institution ever received training on GCED?
   - Who organize?
   - When?
   - Where?

- How long?
- What topic?

4. How well do you and your trainers at your teacher training institute share GCED?
5. What are constrains your teacher training institution may face in implementing the integration of GCED?
6. In your opinion, what is a better methods to integrate GCED in teacher training curriculum?
7. Comment and suggestion (if any)

Thank you very much for participation

Appendix 4: Focus Group Discussion with Trainers

Dear Trainers,

We, the research team, would like to express our profound thanks for taking the time to participate in our focus group discussion. We are currently conducting the baseline survey research to understand the current situation of GCED in the teacher education institutions in Cambodia. The purposes of the research are to find out the trainers' and trainees' understanding of the GCED concepts and the methods to integrate the GCED concepts in the teacher education training curriculum in Cambodia.

Please provide the information based on your actual capacity, practices and experiences. The information received from this baseline survey research will be the foundation for designing GCED training curriculum for the teacher education institutions in Cambodia. Your individual identity will be kept confidential and will be used only for educational research purposes. Thank you!!!

Guided questions for discussion:
1. What major subjects are you teaching?
2. What is GCED?
3. Have you ever received training on GCED?
   - Who organize?
   - When?
   - Where?
   - How long?
   - What topic?
4. Which of the GCED concepts are included in your teacher training curriculum or the subject you are teaching?
5. What constrains may you and your teacher education institution face in implementing GCED integration?
6. In your opinion, what is a better methods to integrate GCED in teacher training curriculum?
7. Comment and suggestion (if any)

Thank you very much for participation

Appendix 5: Focus Group Discussion with Trainers

Dear Trainees,

We, the research team, would like to express our profound thanks for taking the time to participate in our focus group discussion. We are currently conducting the baseline survey research to understand the current situation of GCED in the teacher education institutions in Cambodia. The purposes of the research are to find out the trainers' and trainees' understanding of the GCED concepts and the methods to integrate the GCED concepts in the teacher education training curriculum in Cambodia.

Please provide the information based on your actual capacity, practices and experiences. The information received from this baseline survey research will be the foundation for designing GCED training curriculum for the teacher education institutions in Cambodia. Your individual identity will be kept confidential and will be used only for educational research purposes. Thank you!!!

Guided questions for discussion:
1. What major subjects are you studying?
2. What is GCED?
3. Have you ever received training on GCED?
   - Who organize?
   - When?
   - Where?
   - How long?
   - What topic?
4. Which of the GCED concepts have you ever learned in your teacher training curriculum or the subject you are studying?
5. What constrains may you and your teacher education institution face in implementing GCED integration?
6. In your opinion, what is a better methods to integrate GCED in teacher training curriculum?
7. Comment and suggestion (if any)

Thank you very much for participation