

# Supporting sustainable development Goals (SDGs): Embedding Global Citizenship Education Across Malaysian Primary Schools Curriculum

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## ABSTRACT

The phenomenon of globalization has resulted in public concern about the best approach to prepare future generations as global citizen. Learning institutions are the centre of knowledge distribution and schools as the medium of learning process, can play the important role, in setting the action towards nurturing global citizenship. Global citizenship is not a new additional subject, but it is a culture that needs to be applied. As such, it is a challenge for educators to determine the essential elements for the development of global citizenship, which is of course very subjective and have some definitions and vary according to needs and objectives. This study aims to identify the existence of the elements of the Global Citizenship in key components of the Primary School Standard Curriculum (KSSR) such as 21st Century Skills, High Level Thinking Skills developed by the Ministry of Education (MOE). These elements are examined using document analysis methods based on the syllabus of KSSR's main subjects; Malay Language, English Language, Science Education, Islamic Education, Moral Education and History Education. Based on the analysis of the documents, these subjects do contain the elements of the Global Citizenship. Although the contents varied according to the subjects but the application of 21st Century Skills and the High Level Thinking Skills could be found embedded in the curriculum.

*Key words* : Global citizenship, 21st century skills, High-level thinking skills

## Introduction

Education in Malaysia as outlined in the National Education Philosophy is an ongoing effort to further develop the potential of a comprehensive and integrated individual with the aim of producing a balanced, intellectual, spiritual, emotional and healthy individual (Ministry of Education Malaysia 2013). To achieve this, the Primary and Secondary School

Curriculum Standards were developed by the Ministry of Education (MOE) by setting the benchmark on par with education in the developed world. Each subject is structured to meet the needs of creating a scientific, progressive, inclusive and far-sighted society not only to utilize the latest technology but also contributing to the future of science and technology civilization. In addition, the curriculum also nurtures students to be critical, creative and competent

citizens who practice science and technology culture from the early years of school.

In 2011, due to the transformation of the education system in Malaysia, the Primary School Standard Curriculum (KSSR) was drafted and implemented in phases and was revised in 2017 to improve the quality of the curriculum to be in line with the international curriculum. KSSR has been built on six key areas: Communication, Attitude and Values, Humanities, Self-Skills, Physical and Aesthetic Development and Science and Technology. The six pillars are the main domains that support each other and are enhanced with critical thinking, creative and innovative (Ministry of Education Malaysia, 2013; CDD, 2015).

Among the key components of KSSR are the 21st Century Skills and the High Level Thinking Skills, which aimed at creating an aspirational, resilient, passionate, hard-working human capital and capable of contributing nation building, unity and development among many other goals. Each element is clearly stated in KSSR to help teachers deliver sound knowledge and perform effective teaching and learning processes. These components are also part of MOE's initiatives to create an informative, innovative and creative society to be globally competitive and also willing to face the challenges of the 21st century. According to Aminrad *et al.* (2011) there is a strong relationship between the awareness and the attitude of students, thus, the curriculum should not only create a facts-content syllabus but also elements that could build a positive attitude among students in becoming a global citizen.

### 21<sup>st</sup> Century Skills

Malaysia is a developing country, aspiring to become a developed nation hoping to produce citizens that can contribute towards the sustainable technology (Ali *et al.*, 2020; Kanapathy *et al.*, 2019; Bur and Razman, 2017; Khairil *et al.*, 2017), therefore, Ministry of Education Malaysian has introduced the 21st Century skills in all subjects in the primary school level which are parallel with the initiative of education for sustainable development (Ali *et al.*, 2017; Razman *et al.*, 2015; Razman *et al.*, 2014; Zakaria 2011) and currently the global citizenship initiative as mentioned in SDG 4. According to UNESCO (2014), Global Citizenship refers to the sense of belonging to the wider community and the shared the same human values (Basir-Cyio *et al.*, 2019; Golar *et*

*al.*, 2019; Arham *et al.*, 2018). It emphasizes on political, economic, social and cultural interdependence (Syafrinaldi *et al.*, 2016; Shomary *et al.*, 2016; Rushy *et al.*, 2016) and the relationship between countries throughout the world (Razman *et al.*, 2012; Samsurijan *et al.*, 2014; Zakaria *et al.*, 2012). With the impact and change brought about by globalization, the importance of teaching the element of global citizenship through education has increased. Schools as knowledge transfer centre must be willing to introduce or integrate existing educational programs to help young people develop value, knowledge and skills that will enable them to become responsible global citizens. Integration in the curriculum can help students to improve the quality of life on earth while supporting justice for all people.

In Malaysia, MOE has identified appropriate local contextual skills in preparing Malaysians to be internationally competitive. Along with the need to prepare students with the challenges of the 21st century, MOE through the Malaysia Education Blueprint 2013-2025 (PPPM) has incorporated the 21st Century Skills into the Lower School Standard Curriculum (KSSR). The 21<sup>st</sup> Century Skills focuses on thinking skills as well as life skills and career based on ideal value practice. As contained in KSSR, the 21st Century Skills aim is to produce pupils with resilient, passionate, principled, informative, innovative, high-spirited spirit, teamwork and thinking skills high level and able to communicate well (Ministry of Education Malaysia 2013). The importance of applying 21st Century Skills at students can be seen through their listings placed in each description of KSSR subjects. The table below shows the aimed description of the student profiles regarding the 21st Century Skills.

The above mention student's profiles and items are the criteria that should be achieved through the teaching and learning process. Teachers are encouraged to instil the profile listed above as one of the aims, which could be measured or evaluate according to the items shown by students during the teaching and learning process. The items are good values, positive behaviour and attitude which should be the second nature of every student, thus this will ensure students will not only gain knowledge but will also practice sustainable life style.

### High Level Thinking Skills (KBAT)

Educating students in schools as a global citizen

through sustainability in education, is the foundation for students to gain the opportunity to learn and engage with issues related to climate change, social justice, dependency, health, wellbeing, biodiversity, and other issues that must be dealt with globally (Rauf *et al.*, 2017). The high level thinking skills (KBAT) are skills that require organizing thinking based on the ability to interpret, create, reflect and relate to current situations. This emphasis on KBAT in the national education system is a continuation of the implementation of critical and creative thinking skills that have been implemented since 1993. The implementation process in Malaysia is based on the taxonomy bloom through the top four heiraki namely applying, analysing, evaluating and creating.

It is also the ability to apply knowledge, skills and values in making reasoning and reflection to solve problems, make decisions, innovative and creative. KBAT covers critical thinking, creative thinking and thinking skills as well as thinking strategies. Critical thinking skills are the ability to judge an idea logically and rationally to create reasonable judgment by reason and reasonable evidence. Creative thinking skills are the ability to produce or create something new and could be applied for imaginative and unconventional thinking.

The ability to think is an individual's ability to make logical and rational judgment, while KBAT's thinking strategy is a structured way of thinking that focuses on solving problems. KBAT can be applied in the classroom through activities, inquiry learning, problem solving and projects. Teachers

need to use thinking tools such as thinking maps and mind mapping and high level questions to encourage students to think.

The transformation of the education curriculum in the Malaysian Education Development Plan (PPPM) 2013-2025 places a strong emphasis on the concept of high-level thinking skills that enable the generation of critical thinking and creative thinking (Ministry of Education Malaysia, 2013). This approach was introduced to achieve the ultimate goal of education which is to produce more students with high level cognitive ability through active pedagogy in teaching and learning. However, the goals have not yet been fully realized and various approaches have been introduced to create intelligent, creative and innovative human capital to meet the challenges of the 21st century so that the country can compete at the world level. Thus, the skills mentioned above should be emphasize more in the curriculum directly and indirectly because all these skills are the skills required to become a productive global citizen.

#### Elements across the Curriculum

Cross- Curriculum Elementis a value-added element applied in the teaching and learning process other than those specified in the content standard. This element is implemented aimed at strengthening the skills and skills of human capital that is intended and able to address current and future challenges. According to Ministry of Education Malaysia (2013), the elements are as follows:

1. Language - The use of proper introductory lan-

**Table 1.** 21<sup>st</sup> Century Skills Descriptions

| Student Profile      | Items  |
|----------------------|--|
| Resilient            | Able to face and overcome difficulty, overcome challenge with wisdom, conviction, tolerance and empathy.   |
| Powerful communicate | Able to voice-out and express own thoughts, ideas and information with confidence and creativity orally and in written forms, using various media and technology |
| The thinker          | Critical, creative and innovative; able to handle complex problems and making ethical decisions.   |
| Teamwork             | Able to work effectively and harmoniously with others.   |
| Knowing              | Developed natural curiosity to explore new strategies and ideas.   |
| Principle            | Integrity and honesty, equality, fairness and respect for the dignity of individuals, groups and communities.  |
| Informative          | Gain knowledge and form a broad and balanced understanding across various disciplines of knowledge.  |
| Caring / Caring      | Empathy, compassion and respect for the needs and feelings of others.  |
| Patriotic            | Show love, support and respect for the country.  |

Source: CDD (2015)

**Table 2.** Higher Order Thinking Skills (KBAT)

| Thoughts | Description  |
|----------|--|
| Apply    | Knowledge, skills , and value  |
| Analyse  | Define and understand information, in depth, as well as the interrelationships of those sections |
| Assess   | Generate considerations and decisions using knowledge, experience, skills, and values            |
| Creating | Generate ideas or products, or creative and innovative methods                                   |

Source: CDD (2015)

guage should be emphasized in all subjects. During the T and L process for each subject, speaking aspects, sentence structure, grammar, terms and language adjustments need to be emphasized to help students formulate ideas and communicate effectively.

2. Environmental conservation - The knowledge and awareness towards the environment among the student needs to be nurtured through the T and L process. These are important due to the aspect that it will affect the students' behaviour and attitude in appreciating the environment.
3. Good values – The good values which incorporate the aspects of everyday life are emphasized in all subjects for the students to know, to learn and to practice it in their daily life.
4. Science and Technology – imply the importance of scientific and technological literacy which can also be taught using the use of technology itself which will contribute to a more effective learning.

The integration of Science and Technology in the T and L are as follows:

- (i) Knowledge of science and technology (facts, principles, concepts related to science and technology)
  - (ii) Scientific skills (specific thinking and manipulative thinking processes)
  - (iii) Scientific attitudes (such as accuracy, honesty, safety)
  - (iv) Use of technology in T and L activities
5. Patriotism - Patriotism can be nurtured through all subjects, co-curricular activities and community service, it can be the foundation in cultivating a patriotic citizen among the students from an early age
  6. Creativity and Innovation – the creativity and innovation will enable student to be more creative in innovating new ideas. These elements are also essential in ensuring the positive development of human capital in meeting the

challenges of the 21<sup>st</sup> century.

7. Entrepreneurship- Entrepreneurial elements aimed in shaping entrepreneurial characteristics and practices to be a culture among students and it can be incorporated into the T and L through activities that can foster strong, honest, trustworthy and responsible behaviors and develop creative and innovative minds which can provide new ideas into the industrial market.
8. Information and communication technology - The application of the ICT element in the T and L ensures that students can apply and reinforce the basic knowledge and skills of the ICT learned. ICT skills will not only encourages students to be creative but also able to create a more interesting and fun T and L process and at the same time improves the quality of learning
9. Global Sustainability – Global Sustainability elements aim to produce students who are responsive to the environment in their daily lives by applying the knowledge, skills and values gained. The Global Sustainability elements is essential in preparing students to meet current, national and global challenges and issues, these elements are taught across the curriculum.
10. Finance – Implementation of financial education elements aimed at shaping future generations with the ability to make wise financial decisions, practice ethical financial management and to manage financial affairs responsibly.

From the list above the essential elements that should be embedded in the curriculum has all been emphasized and stressed. It is the role of the teachers to ensure these elements to be taught directly or indirectly in their T&L activities. All aspect of knowledge regarding the daily life that are needed to be a productive and supportive citizen can be found in the curriculum and these proof that the primary school curriculum supported the values

and practice towards a global citizenship agenda. For example in the science education, it contains not only science knowledge but also the skills of the enabling scientific process that can be mastered, analyzed, evaluated and subsequently applied within daily life (Zakaria and Halim, 2009).

## Methodology

This study was conducted using a content analysis method based on the curriculum developed by the Ministry of Education Malaysia (MOE), to analyse the elements of global citizenship that exists in the education system in Malaysia. In this analysis it focused on the documents of the Primary School Standard Curriculum (KSSR) by the Ministry of Education Malaysia (CDD 2015). There are 16 subjects offered for Primary School in Malaysia and the entire curriculum were developed by the Curriculum Development Centre, Ministry of Education Malaysia but for the purpose of this study, only 6 curriculums were analysed. These curriculums were the core subjects under the KSSR and generally were studied by all Year 1 until Year Six students. The subjects were Malay Language, English Language, Science Education, History Education, Islamic Education and Moral Education.

Each of these subjects has been reviewed based on its content, whether it contains elements of citizenship, knowledge, including titles, descriptions, words, and in any informational form, which has the same meaning or similar to the element of global citizenship. The identified data was then compiled in a table to enable researcher to compare the findings from the KSSR component (21st Century Skills, High Level Thinking Skills (KBAT) and Cross-Curriculum Elements. This is significant to the study

because it can explain the entire contents of KSSR. This process is implemented to assist researchers in making a comprehensive conclusion on the element of global citizenship that can be found in the curriculum of primary school in Malaysia.

## Results and Discussion

Based on KSSR's description, each subject emphasizes the 21st Century Skills in Content Standard (SK) and Learning Standard (SP) in the curriculum of the subject. Table 3 shows a summary of student profiles for 21st Century Skills and subjects.

The researcher's findings on the KSSR content have found the existence of elements of the 21st Century Skills content similar to the guidelines issued by the United Nations Educational, Scientific and Cultural Organization (UNESCO) to schools that wish to apply the Global Citizenship element in the system their education. These 7 guides mentioned by Walker (2006). Table 4 shows the elements of the Global Citizenship contained in the 21st Century Skills, KBAT and EMK. Based on the table above, researchers found that the 21st Century Skills "skilled communicate" were the skills that gained the two elements of the Global Citizenship, namely "multilingual skills" and "capable of using new communication technologies". In addition, KBAT also implies "apply", the thinking skill is dominating the GC elements in KBAT. For curriculum across the curriculum, each element has a similarity with GC elements framed by Walker (2006). The results of this study also found the importance of a new generation that can communicate well. This skill is needed, in order for the global community to understand each other and live in a peaceful and harmony environment. Communication skills

**Table 3** - Student Profile and Subjects KSSR

| Student Profile             | Subject  |
|-----------------------------|--|
| <b>Resilient</b>            | Malays, English, Science, Islamic Studies, Moral                     |
| <b>Powerful communicate</b> | Malays, English, Science, Islamic Studies, Moral Education, History  |
| <b>The thinker</b>          | Malays, English, Science, Islamic Studies, Moral Education, History  |
| <b>Teamwork</b>             | Malay, English, Science, Islamic Education, Moral Education, History |
| <b>Want to Know</b>         | Malay, English, Science, Islamic Education, Moral Education, History |
| <b>Principle</b>            | Malay, English, Science, Islamic Education, Moral Education, History |
| <b>Informative</b>          | Malays, English, Science, Islamic Studies, Moral Education, History  |
| <b>Caring / Caring</b>      | Malays, English, Science, Islamic Studies, Moral Education, History  |
| <b>Patriotic</b>            | Malays, English, Science, Islamic Studies, Moral Education, History  |

Source: CDD (2015)

**Table 4.** Global Citizenship elements in KSSR component

| PKG Element (Walker, 2006) / KSSR Component                                      | 21st Century Skills          | High Level Thinking Skills (HOTS) | Cross-Curriculum Elements (EMK)                  |
|--|------------------------------|-----------------------------------|--|
| 1. Have the ability to handle fast changes in all walks of life                  | ✓ Resilient                  | ✓ Analyse                         | ✓ Creativity and Innovation                      |
| 2. Become an active citizen, following the development of a broad political life | ✓ Informative<br>✓ Patriotic | ✓ Assess<br>✓ Apply               | ✓ Patriotism                                     |
| 3. Maintain and promote human rights   | ✓ Principle<br>✓ Concerned   | ✓ Assess<br>✓ Apply               | ✓ Positive attribute                             |
| 4. Bringing closer local communities to the wider world                          | ✓ Teamwork                   | ✓ Apply                           | ✓ Environmental Conservation                     |
| 5. Learning multiple languages   | ✓ Skilful communication      | ✓ Apply                           | ✓ Language                                       |
| 6. Know how to assess the impact on daily life based on scientific progress      | ✓ Thinker                    | ✓ Apply                           | ✓ Science and technology                         |
| 7. Be able to use new communication technology                                   | ✓ Skilful communication      | ✓ Creative                        | ✓ Information and Communication Technology (TMK) |

includes mastery of language, culture and values. For KBAT, applying skills is a key element of the Malaysian education system. According to UNESCO (2014), education for global citizenship needs to be more focused on applying knowledge than just theory. Students will understand better and appreciate knowledge if they experience it on their own, and this could enable them to contribute to the global well-being.

**Conclusion**

The analysis of this study has highlighted the element of the Global Citizenship Education (GCE) element which is contained in the component of the Primary School Standard Curriculum (KSSR) enacted by the Ministry of Malaysia (MOE). Of the 3 main components assessed, each contains the GCE elements. The most common element in KSSR subjects is “Being an active citizen” and “Bringing the local community to the world”. Nevertheless, the curriculum should emphasize more on the importance of students and teachers to master communication skills using the latest technology. The lack in communication skills will cause the people in this country being left behind compared to other countries. Therefore, the education curriculum development sector in the country needs to produce a

curriculum that provides teachers and students opportunities to empower the communication skills globally, there by contributing positively to their thoughts and attitudes. It will also empower students as future leaders and contributors that help the country to become a developed nation with democratic system being practiced.

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