21ST CENTURY CURRICULUM DEVELOPMENT IN MALAYSIA

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ABSTRACT

Through the frameworks produced by several organizations in several different Countries in Europe as well as in America, it is agreed that the terminology related to 21st century competencies is very diverse. Some use terms like 21st Century learning in most countries in America in general and the United States in particular. According to Voogt & Roblin (2012), another term used is lifelong learning which is recommended by the OECD and Law. As well as the term key competence in some European countries. This development makes curriculum development change according to its own needs and terminology. Today’s curriculum has been applied with various terminology as suggested including the introduction and emphasis on the objectives and the importance of lifelong learning. Taking an approach to the terms and awareness proposed by some organizations in their frameworks, education practitioners and curriculum policymakers can incorporate these values into curriculum planning. According to Carolyn et al (2001), lifelong education encompasses formal and informal learning throughout an individual’s life cycle for continuous improvement in society.

Keywords: curriculum development, teaching strategies, pedagogy, ICT, 21st century

I. INTRODUCTION

The introduction and exploration of lifelong learning as well as 21st century competencies, should be incorporated formally or informally in the school curriculum based on current needs. According to Robert (1997), lifelong learning is a way to enhance students’ ability to adapt and shape the context of their environment and subsequently choose their future career environment. According to Peter (2004), an ever-changing social environment requires learning to take place all the time. The next finding is the widespread influence of ICT technology and literacy in educational practice. With the rapidity of technology gripping human beings at the moment, education practitioners should take this opportunity to build a technology integration-oriented curriculum. Incorporate elements of the use of computers or other gadgets in learning and curriculum determination. Frank (1999) states that the innovation of the use of this technology will determine the originality of progress as well as a good investment in a field.

II. LITERATURE REVIEW

According to Law & Chaw (2002), the use of ICT can help students to acquire and organize knowledge, solve complex problems, collaborate, exchange knowledge, collaborate with experts, communicate, give convincing presentations, build knowledge products, integrate and evaluate critically knowledge and identify and evaluate secondary effects. These skills are all important in facing the challenges of this century. It is becoming necessary to develop the curriculum by applying this element of ICT literacy.

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Judy (2008) argues that the use of such technology puts us in a world that is almost unlimited to the flow of trivial or critical information which gives students ample opportunity to understand everything. Taking into account this opinion, the determination of ICT literacy in curriculum construction is seen as very necessary. Similarly, Rebecca’s (2009) opinion, that the use of technological tools and semiotic forms is important for communicating, sharing information, and negotiating across borders. Therefore, ICT literacy is an important matter to consider in curriculum development.

Sector collaboration is another finding that can be given attention for the purpose of curriculum development. This collaboration between the public and private sectors provides many benefits to the world of education and comprehensive curriculum development. With the cooperation between these sectors, we can adapt various skills and also the use of sustainable technology. Tanja & Thomas (2005) argue that, cooperation between these sectors will produce a quality product.

As for the aspect of curriculum development, the products meant are such as student development, the effectiveness of learning outcomes and also student achievement. In order to produce a good product, the curriculum is one of the main foundations that need to be given attention. By including the element of cooperation between these sectors in the curriculum, it is seen to help achieve this objective.

Consistent with the need for this collaboration are James & Evelyn (2012), who state that with this collaboration, the parties involved will benefit through efforts such as sharing expertise, exchanging information and implementing projects. In stating this need in curriculum development, the parties involved can implement the matter of cooperation of this sector in the implementation of learning activities by inviting the parties concerned to give talks or present demonstrations.

Once again, it is explained that the findings of 21st century competencies related to cooperation between the public and private sectors are very important in the formation of the curriculum and also the professional development of the teachers themselves. According to Voogt & Roblin (2012) good student academic achievement is also dependent on teacher attitudes, beliefs, competencies, and teaching and learning practices. Cooperation between sectors in providing courses to teachers can also contribute something useful to the formation of a better curriculum.

### III. DISCUSSION

The emergence of new approaches in assessment implementation in this century is one of the most obvious implications for education (Abdul Jalil et al., 2021; Mohd Noh et al., 2021; Mustafa et al., 2021; Roszi et al., 2021; Tumisah et al., 2021). Rapid changes in technology and student readiness, making assessment methods also change according to current demands. Students grow rapidly in terms of knowledge due to unlimited exposure through internet literacy and global communication (Irma et al., 2021; Suzana et al., 2021; Rohanida et al., 2021; Nazrah et al., 2021; Shahrulliza; et al., 2021). Students need to be assessed comprehensively and holistically to provide fairness and equity in their academic achievement.

Given this situation, good curriculum development must include the latest assessment methods. This should be clearly stated in the curriculum which is the basic teaching material. With the help of the introduction of new subjects such as the World of Science and Technology, Technology Design and Information Communication Technology, the assessment that needs to be given attention is the use of computers or technological gadgets (Mohd Arafat et al., 2021; Sumaiyah et al., 2021; Hifzan et al. ., 2021; Shahrul et al., 2021; Helme et al., 2021). Students need to be assessed on their level of achievement by using internet access, virtual and also the use of computers. According to Caroline et al (2008) in their study, the use of computers and gadgets is an instrument used to test the competence of students developing websites. This opinion tells us that, the use of technology in assessment has been widely applied, moreover for some specific subjects related to it.

In addition, formative and summative assessment that is proposed for implementation is also an appropriate method to be implemented. This method should also be included in the construction of the curriculum so that it can be implemented formally. This formative and summative assessment can also indirectly influence teachers ‘teaching methods (Farah et al., 2021; Syahrul et al., 2021; Quah et al., 2021; Ahmad Syarifuddin et al., 2021; Jumiah et al., 2021). According to Eric (2002), the goal of formative assessment is to gain knowledge about the level of ability of students and teachers to make changes responsive to teaching. Whereas according to Catherine & Michael (2011), summative assessment goes too far down the path of learning to provide information at the classroom level and to make teaching changes and interventions during the learning process.
Both of these opinions reflect that formative and summative assessment are highly appropriate in conducting testing in schools. There are some times and purposes, the instrument used does not have to be too specific as the traditional method which does set pencil and paper as instruments (Mohd Ali et al., 2021; Parimala et al., 2021; Siti Jamilah et al., 2021; Nor Fauziyana et al., 2021; Noel et al., 2021). This is because the new assessment is more student-centered and comprehensive. According to Eric (2002), no specific instrument is used but teachers can assess by asking students to do something. With this, it can be stated that assessment methods are also important in curriculum development today.

The findings of a study by Voogt & Roblin (2012), that what is clear from 21st century learning competencies among them is the emphasis given to social and cultural skills. These skills are considered important in balancing the influence of rapidly evolving and rapidly evolving technologies. These cultural and social skills in particular are very important in facing this borderless world. With this awareness, then these social and cultural skills should be included in curriculum development today. In particular, it can be implemented by creating related subjects such as Civics and Citizenship Education, History, Moral Education and so on.

However, it is more significant if it is applied to every teaching process regardless of the specific subject. It can be implemented indirectly across the curriculum or more easily known as a hidden curriculum. According to Heidi & Clive (2004), this hidden curriculum is a set of influences that function at the level of implicit organizational and cultural structure, for example, implicit rules for survival, customs, rituals, and behaviors. The same is true of the opinion by Kay & Liz (1998), who state that the hidden curriculum is expressed in a shadow, described implicitly and involves the environment as well as experience. With this hidden curriculum in place, students will learn about these social and cultural skills more frequently (Ahmad Shafarin et al., 2021; Junaidah et al., 2021; Farah Adibah et al., 2021; Ahmad Shakani et al., 2021; Muhamad Amin et al., 2021). Curriculum development that incorporates these elements either implicitly or explicitly is very important nowadays.

The advent of the 21st century is very much a great challenge to the world of education especially to teachers and students. With the rapid development of technology and the push for various advances, various changes have taken place in various aspects in education itself (Santibuana et al., 2021; Nor Diana et al., 2021; Zarina et al., 2021; Khairul et al., 2021; Rohani et al., 2021). As clearly stated by Voogt & Roblin (2012) who are the review article that there is a set of proposed frameworks covering various discussions related to 21st century competencies. By examining all the frameworks selected by the researcher, we can generally list some competencies that need to be mastered by students and teachers nowadays (Badaruddin et al., 2021, Abdul Rasid et al., 2021).

IV. CONCLUSION

More oriented towards computer literacy and ICT, various implications have been observed in various fields especially on the curriculum structure, pedagogy, teaching approaches and also the assessment conducted. Educational practitioners should pay serious attention to some studies relevant to the 21st century so that we can produce something useful to society. Indeed, the 21st century is an era where technology is evolving rapidly and urges people to move fast and need to master various skills to be competitive and move with the passage of time. To teachers and students, a readiness to prepare for the more challenging needs to be done. Effective cooperation is also required from various parties, both from the public and private sectors, to face this globalization.

REFERENCES


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