



## **BALTIC JOURNAL OF LAW & POLITICS**

A Journal of Vytautas Magnus University  
VOLUME 16, NUMBER 3 (2023)  
ISSN 2029-0454



Cite: Baltic Journal of Law & Politics 16:3 (2023): 857-869  
DOI: 10.2478/bjlp-2023-0000066

### **Competence And Implementation Of The Independent Learning Curriculum In 21st Century Learning**

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Received: December 21, 2022; reviews: 2; accepted: January 16, 2023

#### **Abstract**

This study aims to find out how the implementation of the 21st century independent learning curriculum is implemented. The implementation of 21st century learning is oriented towards literacy thinking, work skills, life skills and the ability to master tools for work. This study uses a qualitative approach, which describes and describes the implementation and competence of 21st century education. The data collection technique used in this research is library research. The results of the study show that the implementation of the independent learning curriculum (KMB) in 21st century learning is one of the solutions to improve the quality of learning in schools. By implementing KMB, teachers can facilitate a more interactive, fun, and effective learning process for students. In addition, KMB can also help students to learn independently, work together with others, and develop critical and creative thinking skills. However, to be able to implement the KMB properly, teachers need to pay attention to several things such as providing varied and interesting learning resources, providing comfortable and conducive learning spaces, and providing a transparent and fair evaluation system. The main competencies that must be possessed in 21st century learning are; 1) thinking literacy, 2) work skills, 3) life skills, 4), ability to master work tools.

#### **Keywords**

21st Century Learning, Competence, Curriculum, Independent Learning

## **Introduction**

21st century education is education that is expected to be able to create excellent human beings who focus on efforts to produce advanced generations who can keep up with the flow of technology and information. This has an impact on the formation of a competitive, innovative and competitive life order, so that the development of the quality of human resources becomes a necessity. Increasing human resources needs to be oriented towards efforts to build critical awareness about life which needs to be based on cultural values (particularly and universally).

Efforts to meet the needs of knowledge-based education, knowledge-based economic development, knowledge-based social empowering and development, and knowledge-based industry development. Mukhadis, 2013). Due to rapid economic and social changes, schools must prepare students for jobs that have not yet been created, technologies that have not yet been discovered and unknown problems that have the possibility to emerge in the future (Wijaya, Sudjimat, & Nyoto, 2016).

21st century learning enables technology-based learning which is now growing rapidly. These technological developments encourage various developments, innovations that keep up with the challenges of the times, including assessments. If previously conventional assessments still used paper, now modern assessments can take advantage of technology. 21st century learning itself has its own characteristics and uniqueness, where learning conducted in educational institutions must focus on 21st century skills (Rosnaeni, 2021).

According to Abidin (2018) if you want to achieve the goal of improving the quality of superior and competent human resources, you must have four main competencies, namely: First, thinking literacy, 21st century education aims to develop graduates who have the ability to solve problems, think metacognition, and think creatively. . Second, work skills which include communication and collaboration skills. Third, life skills, namely having a strong civic spirit, mature religious character, and quality social character. Fourth, the ability to master tools to work includes the ability to master information and information and communication technology.

Of the four competencies, improving human resources needs to be guided by efforts to build critical awareness in life, which must be based on cultural values (particularly and universally). This is according to Freire's opinion in (Nuryani, Abidin, & Herlambang, 2019) which reveals that "an era is always marked by the complexity of problems, ideas, concepts, hopes, and challenges in dialectical interactions to formulate solutions".

Learning at this time must be based on these four skills so that the characteristics of 21st century learning can be achieved. Therefore, teachers must develop a learning design that is in accordance with the skills of 21st century learning. The development of learning models adapted to 21st century learning is very important to provide learning experiences to students. The model used must

also increase student involvement in learning (Handayani & Wulandari, 2021). This is because, in this century, learning is no longer teacher-centered, but student-centered as implemented in the independent learning curriculum. Responding to the development of the 21st century, teachers must maximize the application of learning patterns in class. Teachers must have the skills and expertise to teach in the 21st century.

Freedom to learn is part of a new policy established by the Ministry of Education and Culture of the Republic of Indonesia (Kemendikbud RI). According to Nadiem, curriculum policies related to independent learning must be made an initial breakthrough to educators before this is conveyed or applied to students. In addition, Nadiem also said that regarding the competence of teachers whose level is at any level, without a process of translating the existing basic competencies and being closely related to the curriculum, learning will not occur (GTK, 2020).

Several studies on the implementation of the independent learning curriculum have an important role in the independent learning program in the 4.0 era to improve the quality of education. This can be seen from the implementation of the independent learning policy which gives freedom to schools, teachers and students to innovate and learn independently. With the independent learning program and the support of the four basic competencies that must be possessed in the digital and globalization era, students can grow and develop to face the era of society 5.0 and become more qualified human resources in the future. (Hadiapurwa, Riani, Yulianti, & Yuningsih, 2021; Widiyono & Millati, 2021).

According to Marisa (2021), the concept of Freedom to Learn has not actually determined the direction of educational goals in our country. However, the concept of independent learning brings direction to be able to contribute properly in demanding economic improvement for students so that they can learn freely. Once again, that education in our country does not demand anything for it, but is divided into several parts which result in social problems in Indonesia not being completely resolved. This is because education is prepared to be able to anticipate various kinds of social problems that are currently in society. This article questions how the 21st century learning competencies and how the implementation of independent learning curriculum learning.

### **Research Methods**

This study uses a qualitative approach, namely to describe and elaborate on the 21st century educational competencies in the Free Learning Curriculum (KMB). The data collection technique used in this study is library research, where library research is the activity of collecting research-related materials from books, scientific journals, literature and other publications that are worthy of being used as sources. for research that will be examined by the author, by describing and describing the data through several expert opinions (Sugiyono, 2016).

## **Discussion**

### **1st Century Learning Competency**

21st Century Learning Competencies are a set of skills deemed essential for students to prepare them for success in a changing world in the 21st century. These include skills such as critical thinking skills, effective communication, teamwork, ability to manage information, and ability to learn independently. The world's demands on the education system in preparing students for 21st century competencies in order to face more complex challenges today and in the future. What is meant by 21st century competence is knowledge, skills, and other attributes that can help students to achieve their full potential (Mu'Minah & Aripin, 2019).

21st century learning competencies are a set of skills deemed essential for students to prepare them for success in a changing world in the 21st century. These include critical thinking skills, effective communication, teamwork, ability to manage information, and ability to learn independently (Kim, Raza, & Seidman, 2019). 21st century learning competencies are the skills required by students to become effective members of a changing society in the 21st century. These include the ability to think critically, communicate effectively, cooperate with others, and learn independently (Ataizi & Donmez, 2020).

The 21st century learning competencies are a set of skills that are considered important for students to prepare them for success in a world that is constantly changing in the 21st century. These include critical thinking skills, effective communication, teamwork, the ability to manage information, and the ability to learn independently (Syapudin, 2019).

Along with the passage of time causes changes in competencies that have existed throughout history, such as collaboration and communication. Collaborative abilities in the 21st century are required to further develop (Rosnaeni, 2021) as explained (Priyanti, 2019) that apart from face-to-face collaboration with colleagues, also with a wider range of personalities that have never been encountered before. This makes collaboration worthy of being included as a 21st century competency because of the importance of better interpersonal cooperative skills than in the previous era.

An important reason for focusing students more on 21st century skills according to Abidin (2018) in the education system is to be able to keep up with changing times, which are often associated with the following: (1) changes in workforce from production industrial models to technology-based industries, and interconnected with global economic growth, thus requiring competencies suitable for dynamic and unpredictable economic and social development, (2) emerging evidence on how to optimize learning, including the use of technological innovation to deepen and transform learning, (3) changes in expectations in students who demand an education system that is more complex with technology and relevant to their daily lives.

Key competencies can be identified on the basis that these competencies can be measured for their contribution to educational attainment, relationships, work, and can be carried out for all individuals (Nanzhao, 2004). The most prominent 21st century competencies are found within international frameworks that have proven to provide measurable benefits in various areas of life related to critical thinking, communication, collaboration, and creativity and innovation.

One of the largest research efforts to date is assessment and teaching of 21st century skills (ATC21S). The aim of this international collaboration between academia, government and three major technology companies is to empower students with the right skills to succeed in 21 workplaces (ATC21S, 2013). The initial aim of the ATC21S project was to develop a clear operational definition of 21st century skills. The author begins by conducting what is perhaps the most recent literature review in this field, by analyzing definitions developed and used by eleven major organizations, the Partnership for 21st Century Skills (2013) in the United States and the Lisbon Council (2007) of the European Union. The ATC21S researchers concluded that 21st Century skills can be grouped into four broad categories: (1) ways of thinking, (2) ways of working, (3) tools for work, and (4) skills for living in the world (Ankiewicz, 2016).

Another perspective, many 21st century skills including creativity, problem solving, decision making, communication, collaboration, citizenship, and personal and social responsibility, are closely related to the personality characteristic known as emotional intelligence (EI). EI is a constellation of behavioral dispositions and self-perceptions regarding a person's ability to recognize, process, and utilize emotionally charged information (Kaliská, 2015). EI is conceptualized as an aspect of a person's personality that is malleable and still well-developed into their twenties, and is not related to non-verbal reasoning abilities (Suto, 2013). These 21st century skills are:

### **Creativity and innovation**

Many studies show the importance of creativity for the development of social skills to compete in the world of work, and the ability to generate economic growth. The 2012 PISA results (OECD, 2014b) noted a relationship between high academic achievement, problem solving and creativity. Creativity is often described as the pursuit of new ideas, concepts, or products that meet the needs of the world. Innovation contains elements of creativity and is often described as the realization of new ideas in order to make a useful contribution to a particular field. Creativity includes the concept of "social and economic entrepreneurship and leadership to act" (Fullan, 2013)

### **Critical thinking, problem solving, and making decisions**

Critical thinking in the 21st century is described as the ability to design and manage projects, solve problems, and make effective decisions using a variety of

tools and resources (Evans, 2020) highlighting the challenges of experience in designing learning that addresses local and real-world problems that have not yet been acquired. The answer is clear. Critical thinking directs students to acquire, process, interpret, rationalize, and critically analyze a number of often conflicting information so that they can make decisions and take timely actions (C21, 2012). Digital tools and resources can support critical thinking processes especially when used to create authentic and relevant learning experiences that enable students to discover, create, and use new knowledge (Fullan, 2013).

### **Metacognition (learning to learn)**

Metacognition is understood as (knowledge) of a set of self-instructions to regulate performance in completing tasks, while cognition is a prerequisite for being able to instruct oneself (Muhali, 2018). According to experts, metacognition is the ability to think about thinking (Evans, 2020; Flavell, 1976; Fullan, 2013). The definition of metacognition is not only limited to thinking about thinking, but follows the notion of knowledge from one's knowledge, processes, and cognitive and affective states; and the ability to consciously and intentionally monitor and regulate one's knowledge, processes, and cognitive and affective states.

### **Communication**

Communication in the context of the 21st century refers not only to the ability to communicate effectively, orally and in writing, and with various digital tools, but also listening skills (Fullan, 2013). Many frameworks include information and digital literacy in the concept of communication. Other frameworks such as P21 (2011) have different information, media and technology skills. Some jurisdictions (eg, UK, Norway) include information and communication technology (ICT) skills with literacy and numeracy as a foundation curriculum.

### **Collaboration**

Collaboration in the 21st century context requires the ability to work in teams, learn from and contribute to the learning of others, use social networking skills, and demonstrate empathy in working with diverse others (Fullan, 2013). Collaboration also requires students to develop collective intelligence and build together, meaning to be content creators as well as consumers. New skills and knowledge are needed to enable team members to collaborate digitally and contribute to a collective knowledge base, whether working remotely or in a shared space. Collaboration as a collective or shared intelligence that arises from the collaboration and competition of many individuals and aims to increase the existing body of knowledge (DiCerbo, 2014; Rosnaeni, 2021).

## **Information literacy**

Information literacy requires students to go beyond the information provided; use and contribution of information to construct knowledge, identify and expand ideas to advance knowledge and information resources (Suto, 2013). Information literacy is a set of abilities that a person needs to be aware of when information is needed and the ability to locate, evaluate and use the information needed effectively.

## **Implementation of Free Learning Curriculum**

According to the book "The New Education: How to Revolutionize the University to Prepare Students for a World in Flux" by Cathy N. Davidson and David Theo Goldberg, KMB is a very important approach in preparing students to be able to face challenges in the modern era. In the book it is stated that: "The independent learning curriculum (KMB) is an approach that emphasizes the freedom of students to choose and develop their own interests. The KMB emphasizes direct experience and learning by self-discovery, as well as providing opportunities for students to develop their abilities." capabilities necessary for future success." (Davidson & Goldberg, 2018) With this approach, students are given the freedom to determine what they want to learn and how best to learn it, so they can learn according to their own needs and interests. In addition, KMB also emphasizes direct experience and learning by self-discovery, so that students can learn in a more effective and enjoyable way.

KMB also provides opportunities for students to develop the skills needed for success in the future, such as critical, creative and collaborative thinking skills. Thus, KMB is a very important approach in preparing students to be able to face challenges in the modern era.

In addition, KMB is also considered capable of increasing student motivation and participation in learning. According to a study conducted by Smith and MacGregor (2017), students who study using the KMB approach tend to be more engaged and have higher motivation compared to students who study using the traditional curriculum approach. This happens because students feel more involved in the learning process and feel they have the freedom to choose topics according to their interests.

The implementation of the independent learning curriculum (KMB) can be done by giving freedom to students to choose and develop their own interests, as well as providing opportunities for students to develop the abilities needed for success in the future. The KMB approach is a process that emphasizes the freedom of students to choose and develop their own interests, as well as providing opportunities for students to develop the abilities needed for success in the future." (Davidson & Goldberg, 2018) Implementation of the KMB must be carried out with due regard the needs and interests of students, as well as providing opportunities for students to develop the abilities needed for future success (Coleman & Money, 2020). To implement KMB effectively, a system is needed that allows students to

choose and develop their own interests, as well as providing opportunities for students to develop the skills needed for future success (Luke et al., 2021).

The implementation of KMB must be carried out by taking into account the needs and interests of students, as well as providing opportunities for students to develop the skills needed for success in the future. In addition, teachers must also provide support and guidance to students so that they can develop their interests and abilities optimally. (Agustini, Wahyuni, Mertayasa, Wedhanti, & Sukrawarpala, 2021). KMB implementation must be carried out using a flexible approach, so that students can learn according to their own needs and interests. In addition, teachers must also facilitate the learning process by providing support and guidance to students so they can develop their interests and abilities optimally" (Johnson et al., 2014).

Implementation of the independent learning curriculum (KMB) in 21st century learning can be done by giving freedom to students to choose and develop their own interests, as well as providing opportunities for students to develop the abilities needed for success in the future. The following are several ways that can be done in implementing KMB in 21st century learning:

1. Give freedom to students to choose topics according to their interests. In this case, the teacher can provide several choices of topics that students can study, or propose topic ideas that students can develop. In addition, teachers can also provide opportunities for students to develop topics according to their own interests.
2. Provide opportunities for students to develop the skills needed for future success, such as critical, creative and collaborative thinking skills. In this case, the teacher can provide challenging assignments and invite students to think critically and creatively. In addition, teachers can also invite students to work collaboratively with their classmates in completing these tasks.
3. Provide support and guidance to students so they can develop their interests and abilities optimally. In this case, the teacher can provide suggestions and directions to students to develop their interests and abilities. In addition, the teacher can also provide constructive feedback for students in completing the assignments given.
4. Using a flexible approach and in accordance with the needs and interests of students. In this case, the teacher can adapt the learning methods used to the needs and interests of students.
5. Facilitating the learning process by using various available learning media and technologies. In this case, teachers can use learning media such as books, videos, or the internet as learning resources for students. In addition, teachers can also use learning technologies such as learning applications, educational games, or simulations to facilitate the learning process.
6. Apply the principles of 21st century learning, such as problem-based learning, structured learning, and collaborative learning. In this case, the teacher can focus learning on solving real problems faced by students, or using structured



- learning methods that help students to understand the material better. In addition, teachers can also invite students to work collaboratively with their classmates in completing the assignments given.
7. Providing varied and interesting learning resources for students, such as books, videos, and more. In this case, the teacher can provide several choices of learning resources that can be studied by students, such as textbooks, reference books, journals, or video tutorials. In addition, teachers can also provide access to the internet as a learning resource that is rich in information and is updated.
  8. Providing a comfortable and conducive study space for students, such as spacious classrooms, complete learning facilities, and more. In this case, the teacher can pay attention to factors such as illumination, ventilation, and classroom temperature so that students feel comfortable while studying. In addition, teachers can also provide learning facilities such as computers, projectors, and others so that students can learn more interactively and have fun.
  9. Provide enough time for students to develop their interests and abilities. In this case, the teacher can provide sufficient time for students to complete the tasks given, as well as provide opportunities for students to practice and develop their abilities.
  10. Provide a transparent and fair evaluation system for students, so that students can find out the progress they have achieved and correct any deficiencies. In this case, the teacher can develop a clear and measurable evaluation system, as well as provide constructive feedback for students in evaluating their learning achievements.

In addition to these actions, in implementing KMB in 21st century learning, teachers can also do the following things (Brookhart, 2012):

Invite students to participate actively in the learning process. In this case, the teacher can invite students to ask questions, discuss with their classmates, or express their own opinions.

Facilitating students to learn independently. In this case, the teacher can give freedom to students to study independently by providing sufficient learning resources and providing appropriate guidance.

Develop students' skills in finding, processing, and presenting information. In this case, the teacher can provide tasks that challenge students to find, process, and present information obtained from various sources.

Develop students' ability to work together with others. In this case, the teacher can invite students to work together with their classmates in completing the assignments given, as well as provide the right support and guidance so that students can learn how to work together effectively with others.

Develop students' ability to think critically and creatively. In this case, the teacher can provide assignments that challenge students to think critically and creatively, as well as provide constructive feedback for students in developing these thinking skills.

Using innovative and fun learning methods for students. In this case, teachers can use fun learning methods such as game-based learning, structured learning, or project-based learning. In addition, teachers can also try using learning technologies such as learning applications, educational games, or simulations to facilitate the learning process. Fun learning methods will help students to be more engaged and motivated to learn. In addition, innovative learning methods can also help students better understand the material being taught." (David W. Johnson & Johnson, 2009).

Provide access to up-to-date and trusted learning resources. In this case, the teacher can provide access to the internet as a learning resource that is rich in information and is updated. In addition, teachers can also pay attention to the learning resources used, so that students can learn using reliable information.

Up-to-date and reliable learning resources are very important for students, because they will help students to obtain accurate and accountable information. In addition, updated learning resources can also help students to learn using the latest and most up-to-date information." (Dillenbourg, 1999). Develop students' skills in using information and communication technology (ICT). In this case, teachers can provide training to students about how to use information and communication technology, such as using the internet, using learning applications, or using computer software. In addition, teachers can also provide assignments that challenge students to use information and communication technology in completing the tasks given .

The ability to use information and communication technology is a very important skill for students in today's digital era. With these abilities, students can take advantage of information and communication technology to broaden their horizons and develop their potential." (D.W. Johnson, Johnson, & Smith, 2014).

## **Conclusion**

21st century learning is learning that contains elements of 21st century characteristics, contains approaches that are relevant to use in the current era, learning that prepares the 21st century generation with advances in information and communication technology very rapidly has an influence on various aspects of life, including the teaching and learning process. Learning in which teaching materials can be delivered with appropriate strategies, methods and models taking into account the characteristics of the material itself and the students who will receive the material. Implementation of the independent learning curriculum (KMB) in 21st century learning is one of the solutions to improve the quality of learning in schools. By implementing KMB, teachers can facilitate a more interactive, fun, and effective learning process for students. In addition, KMB can also help students to learn independently, work together with others, and develop critical and creative thinking skills. However, to be able to implement the KMB properly, teachers need to pay attention to several things such as providing varied and interesting learning resources, providing comfortable and conducive learning spaces, and providing a

transparent and fair evaluation system. The main competencies that must be possessed in 21st century learning are; 1) thinking literacy, 2) work skills which include communication skills, and collaboration. 3) life skills, namely having a strong civic spirit, mature religious character, and quality social character. 4), the ability to master tools to work includes the ability to master information and information and communication technology.

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