

# Transformative Education: Emphasizing 21<sup>st</sup> Century Skills And Competencies In The Independent Learning Curriculum

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## Abstract

This research aims to comprehensively investigate the implementation of the 21st-century independent learning curriculum, with a specific focus on critical thinking literacy, life skills, and mastery of tools for work. A qualitative research approach was employed, enabling in-depth description and elaboration of the implementation process and educational competencies associated with 21st-century learning. Data collection for this study was conducted through a thorough analysis of relevant literature sources, utilizing library research as the primary method. The research findings demonstrate that the implementation of the independent learning curriculum (KMB) within the context of 21st-century education represents a viable and promising approach to enhance the overall quality of learning in educational institutions. Through the strategic implementation of KMB, educators can effectively facilitate a more interactive, enjoyable, and efficient learning environment, thereby fostering meaningful educational experiences for students. Furthermore, KMB proves instrumental in nurturing students' ability to engage in autonomous learning, collaborative endeavors, and the cultivation of critical and creative thinking capacities.

**Keywords:** *21st Century Learning; Competencies; Curriculum; Independent Learning.*

## Introduction

In the pursuit of knowledge-based education, knowledge-based economic development, knowledge-based social empowerment, and knowledge-based industrial progress (Mukhadis, 2013), it becomes imperative to address the exigencies of a rapidly transforming economic and social milieu. Consequently, educational institutions are tasked with preparing students for occupations yet to be conceived, technologies yet to be unearthed, and challenges yet to be discerned, which may emerge in the forthcoming era (Wijaya, Sudjimat, & Nyoto, 2016).

The advent of 21st-century learning facilitates technology-oriented educational approaches that undergo swift and progressive evolution. Propelled by technological advancements, diverse developments and innovations, including assessment methodologies, are harnessed to meet the exigencies of contemporary challenges. While traditional assessments relied on conventional paper-based practices, modern assessment methods now harness technology to enrich evaluation processes. The essence of 21st-century learning lies in its distinct characteristics and singular attributes, accentuating the imperative for educational institutions to prioritize the cultivation of 21st-century skills (Rosnaeni, 2021).

Drawing from Abidin's scholarship (2018), the endeavor to enhance exceptional and proficient human resources requires the cultivation of four key competencies: First, critical thinking literacy. 21st-century education endeavors to nurture graduates equipped with adept problem-solving skills, metacognitive thinking, and creative acumen. Second, work skills encompass vital competencies such as effective communication and fruitful collaboration. Third, life skills encompass a multifaceted array of attributes, encompassing resolute citizenship, mature religiosity, and commendable social character. Fourth, mastery of tools for work, including the adeptness in mastering information and communication technology, accentuating adaptability and adeptness in a technology-driven milieu.

Amidst the mentioned four competencies, the augmentation of human resources necessitates concerted endeavors in cultivating critical consciousness in life, underpinned by both specific and universal cultural values. This notion finds resonance with Freire's perspective (as cited in Nuryani, Abidin, & Herlambang, 2019), which accentuates the perpetual dynamism of each era, characterized by the intricacies of problems, ideas, concepts, aspirations, and challenges, prompting dialectical interactions to forge resolutions.

Learning in the present era must be firmly rooted in these four competencies to attain the quintessential characteristics of 21st-century education. Consequently, educators are tasked with crafting pedagogical

approaches harmonized with the requisites of 21st-century learning. The development of a bespoke learning model tailored to the multifaceted demands of the contemporary age becomes pivotal in bestowing students with a transformative and enriching educational experience. Such a model should effectively engender heightened engagement among students throughout the learning process (Handayani & Wulandari, 2021). As the prevailing epoch heralds a shift away from teacher-centric paradigms to student-centered ones, as epitomized by the independent learning curriculum, teachers bear the onus of maximizing the implementation of innovative teaching methodologies in the classroom, thereby equipping themselves with the requisite proficiencies and expertise for fostering 21st-century education.

The independent learning curriculum forms an integral component of the novel policy established by the Ministry of Education and Culture of the Republic of Indonesia (Kemendikbud RI). Nadiem asserts that the curriculum policy pertaining to independent learning necessitates preliminary breakthroughs with educators before its dissemination and implementation with students. Furthermore, Nadiem underscores that irrespective of the level of teacher competence, the absence of meticulous translation from the extant fundamental competencies, in conjunction with curriculum alignment, may impede effective learning (GTK, 2020).

Numerous studies focusing on the implementation of the independent learning curriculum have assumed a pivotal role within the realm of independent learning programs in the era of 4.0, aimed at augmenting the quality of education. Evidently, the independent learning policy has been instrumental in providing schools, teachers, and students with the autonomy to innovate and pursue self-directed learning. Bolstered by the independent learning program and underpinned by the support for the four fundamental competencies requisite in the digital and globalized landscape, students are poised to flourish and evolve, prepared to confront the society 5.0 era and to emerge as more proficient and qualified human capital in the future (Hadiapurwa, Riani, Yulianti, & Yuningsih, 2021; Widiyono & Millati, 2021).

Marisa (2021) posits that the concept of independent learning has yet to delineate clear educational objectives in our nation. Nevertheless, the tenets of independent learning steer the trajectory towards effective contributions to economic advancement for students, fostering an environment of unencumbered learning. It is pertinent to note that our country's educational framework does not mandate a singular purpose but rather manifests in a fragmented structure, consequently perpetuating unresolved social issues within Indonesia. This can be attributed to education's preparedness in preempting a diverse array of societal challenges. The present article casts scrutiny upon the competencies required for 21st-century learning and the intricacies surrounding the implementation of the independent learning curriculum.

## Methods

This research employs a qualitative approach to gain an in-depth understanding of the competencies associated with 21st-century education as manifested in the Independent Learning Curriculum (Kurikulum Merdeka Belajar or KMB). The qualitative approach allows the researchers to delve into the intricacies and nuances of the subject matter, providing a comprehensive and detailed analysis of the competencies essential for the contemporary educational landscape. The data collection technique utilized in this study is library research, which involves an exhaustive search and analysis of relevant materials from authoritative sources such as books, peer-reviewed scientific journals, scholarly literature, and other reputable publications. This method ensures that the data used for the investigation is reliable, credible, and up-to-date, enhancing the rigor and credibility of the research findings.

The data description and elaboration in this study are accomplished through a meticulous examination and synthesis of viewpoints from various experts in the field. By incorporating perspectives from multiple scholars and researchers, the research aims to present a well-rounded and comprehensive analysis of the competencies required for 21st-century education and their implementation in the context of the Independent Learning Curriculum.

The researchers critically assess and interpret the data to provide meaningful insights into the implications and potential applications of these competencies in the current educational landscape. The research goes beyond mere description and delves into the underlying principles and theoretical foundations that inform the competencies and their relevance in the rapidly evolving world of education. Through this rigorous qualitative approach and extensive data analysis, the research seeks to contribute significantly to the existing body of knowledge on 21st-century education and its practical implementation in the Independent Learning Curriculum. The findings of this study have the potential to inform policy and practice, aiding educators and policymakers in developing effective strategies to equip learners with the necessary competencies to thrive in the dynamic and complex challenges of the 21st century.

## Results and Discussions

### Competencies of 21st-Century Learning

The Competencies of 21st-Century Learning refer to a set of essential skills and attributes that are considered crucial for students to thrive and succeed in the rapidly evolving world of the 21st century. These competencies encompass a wide range of abilities, including critical thinking, creativity, effective communication, collaboration, digital literacy, problem-solving, and social and emotional intelligence. The emphasis on these competencies stems from the recognition that traditional educational models must adapt to meet the demands of an increasingly interconnected and complex global landscape.

The Competencies of 21st-Century Learning represent a paramount collection of essential skills deemed crucial for students' preparedness to thrive in an ever-evolving world of the 21st century. These encompass critical thinking, effective communication, collaboration, information management, and self-directed learning. The current global demands on the education system necessitate equipping learners with these 21st-century competencies, enabling them to confront the escalating complexities of the contemporary and future challenges. The concept of 21st-century competencies encompasses multifaceted aspects, including knowledge, skills, and attributes, which together empower learners to realize their utmost potential (Mu'Minah & Aripin, 2019).

The Competencies of 21st-Century Learning embody an indispensable compilation of skills that stand as vital cornerstones for students to flourish in a dynamically evolving world of the 21st century. This comprehensive repertoire comprises critical thinking, effective communication, collaboration, information management, and self-directed learning (Kim, Raza, & Seidman, 2019). With the Competencies of 21st-Century Learning at the core of their education, students attain the prowess to emerge as effective contributors to the perpetually transforming society of the 21st century. This encompassing set of skills enables them to navigate critical domains of thinking, communicate with efficacy, cooperate synergistically with others, and embark on self-driven learning pursuits (Ataizi & Donmez, 2020).

The Competencies of 21st-Century Learning constitute an indispensable set of skills that empower students to face the challenges of an ever-changing world in the 21st century with astuteness and dexterity. These encompass critical thinking, effective communication, collaboration, information management, and self-directed learning (Syaripudin, 2019). By cultivating these proficiencies, learners become adept in navigating the dynamic landscape of contemporary existence and harnessing their potential for the future.

As the passage of time leads to transformative shifts, existing competencies undergo a historical evolution, notably in the realms of collaboration and communication. The 21st century has witnessed an upsurge in the demand for collaboration skills (Rosnaeni, 2021). This surge is elucidated by Priyanti's (2019) observation that beyond face-to-face collaboration with peers, students are now confronted with the imperative to cooperate with diverse individuals whom they have never encountered before. Such developments underscore the critical significance of integrating collaboration as a fundamental 21st-century competency, as it empowers learners to excel in interpersonal cooperation beyond the confines of prior eras.

The significance of emphasizing 21st-century skills among learners in the education system, as highlighted by Abidin (2018), lies in their ability to adapt to the changing times. This adaptation is intertwined with various factors, including: *first*: The transformation of the workforce from a production-based industrial model to technology-based industries, which are interconnected with global economic growth. This shift necessitates the acquisition of appropriate

competencies to navigate dynamic and unpredictable economic and social developments. *second*: The emergence of evidence supporting the optimization of learning through technological innovations, which have the potential to deepen and transform education. *Third*: The evolving expectations of learners, demanding a more complex and technology-driven education system that is relevant to their daily lives.

The identification of core competencies is based on their measurable impact on educational achievements, relationships, employability, and their universal applicability to all individuals (Nanzhao, 2004). These competencies are prominently featured in international frameworks that have demonstrated measurable benefits across various aspects of life, particularly pertaining to critical thinking, communication, collaboration, creativity, and innovation.

A noteworthy research initiative in this domain is the Assessment and Teaching of 21st Century Skills (ATC21S). This international collaboration involving academics, governments, and major technology companies aims to empower learners with the appropriate skills to thrive in 21st-century workplaces (ATC21S, 2013). Initially, the ATC21S project sought to develop a clear operational definition of 21st-century skills. To achieve this, the authors conducted a state-of-the-art literature review, meticulously analyzing the definitions put forth by eleven prominent organizations, such as the Partnership for 21st Century Skills (2013) in the United States and the Lisbon Council (2007) from the European Union. The culmination of this research led the ATC21S researchers to categorize 21st-century skills into four broad dimensions: (1) ways of thinking, (2) ways of working, (3) tools for working, and (4) skills for living in the world (Ankiewicz, 2016).

From another perspective, many 21st-century skills, such as creativity, problem-solving, decision-making, communication, collaboration, citizenship, and personal and social responsibility, are closely intertwined with emotional intelligence (EI), a set of behavioral dispositions and self-perceptions that enable individuals to recognize, process, and utilize emotionally rich information (Kaliská, 2015). EI is conceptualized as a facet of one's personality that remains malleable and continues to develop well into adulthood, distinct from non-verbal reasoning abilities (Suto, 2013). The 21st-century skills can be outlined as follows:

### ***Creativity and Innovation***

Extensive research underscores the significance of creativity for cultivating social competencies that empower individuals to thrive in the workforce and contribute to economic growth. The findings from PISA 2012 (OECD, 2014b) indicate a positive correlation between high academic achievement and proficiency in problem-solving and creativity. Creativity is often depicted as the pursuit of novel ideas, concepts, or products that address real-world needs. On the other hand, innovation encompasses creative elements and is characterized by the realization of fresh ideas to yield meaningful contributions in specific domains. Creativity also encompasses the notion of "entrepreneurship and

leadership for social and economic action" (Fullan, 2013).

### ***Critical Thinking, Problem-Solving, and Decision-Making***

21st-century critical thinking is described as the capacity to devise and oversee projects, resolve complex issues, and make effective decisions using diverse tools and resources (Evans, 2020). This underscores the challenges in providing educational experiences that address local and real-world problems where definitive solutions are not readily available. Critical thinking guides students in acquiring, processing, interpreting, rationalizing, and critically analyzing a wealth of often conflicting information to make well-timed decisions and take action (C21, 2012). The integration of digital tools and resources can bolster the critical thinking process, particularly when fostering authentic and relevant learning experiences that enable students to explore, create, and apply new knowledge (Fullan, 2013).

### ***Metacognition (Learning to Learn)***

Metacognition is a set of self-regulatory processes that individuals use to manage and control their own learning. It involves thinking about one's own cognitive processes and strategies while engaging in learning activities (Muhali, 2018). Metacognition is considered the ability to reflect on one's thinking and learning experiences (Evans, 2020; Flavell, 1976; Fullan, 2013). It goes beyond mere awareness of thinking processes and extends to the conscious monitoring and regulation of one's own knowledge, cognitive processes, and emotional states.

### ***Communication***

In the context of the 21st century, communication encompasses not only the ability to effectively convey information through oral and written means and the use of various digital tools but also the skill of active listening (Fullan, 2013). Many frameworks incorporate information and digital literacy as integral components of communication. For instance, the P21 (2011) framework includes distinct information, media, and technology skills within the broader concept of communication. Some educational jurisdictions, such as England and Norway, consider information and communication technology (ICT) skills as essential components of the core curriculum, alongside literacy and numeracy.

### ***Collaboration***

Collaboration in the 21st century requires the capacity to work effectively in teams, learn from others, contribute meaningfully to the learning process of others, employ social networking skills, and demonstrate empathy when working with individuals from diverse backgrounds (Fullan, 2013). Collaboration also entails the development of collective intelligence, where individuals actively participate as both content producers and consumers. Acquiring new skills and knowledge is crucial for effective digital collaboration, enabling team members to contribute to a shared knowledge base, whether collaborating remotely or in physical proximity. Collaborative intelligence emerges from the cooperative and competitive interactions among multiple

individuals, aiming to enrich the collective pool of knowledge (DiCerbo, 2014; Rosnaeni, 2021).

### ***Information Literacy***

Information literacy demands that learners move beyond passive reception of information to actively using and contributing to knowledge construction. It involves identifying, evaluating, and effectively utilizing information to expand ideas and advance knowledge and information resources (Suto, 2013). Information literacy comprises a diverse set of abilities necessary for individuals to recognize when information is needed, locate and assess relevant sources, and critically apply the acquired information in various contexts.

### **Implementation of the Independent Learning Curriculum**

The implementation of the Independent Learning Curriculum (Kurikulum Merdeka Belajar or KMB) signifies a transformative shift in the education system. The KMB policy grants greater autonomy to schools, teachers, and students, allowing them to innovate and pursue self-directed learning. Through this curriculum, students are empowered to take ownership of their educational journey, exploring areas of personal interest and learning at their own pace.

The implementation of KMB is driven by the need to equip learners with 21st-century competencies, preparing them to face the dynamic challenges of the modern world. By fostering critical thinking, creativity, adaptability, and other key skills, KMB aims to produce well-rounded individuals who are capable of contributing positively to society and thriving in diverse environments. This shift towards independent learning represents a paradigm shift in educational philosophy, emphasizing the importance of personalized learning experiences tailored to each student's unique strengths, interests, and goals. As the implementation of KMB continues to unfold, educators and policymakers must collaborate to ensure that its potential benefits are fully realized, fostering a generation of lifelong learners who are well-prepared to tackle the complexities of the 21st century.

As per the book "The New Education: How to Revolutionize the University to Prepare Students for a World in Flux" authored by Cathy N. Davidson and David Theo Goldberg, the implementation of the Independent Learning Curriculum (KMB) emerges as a highly significant and transformative approach in equipping students to confront the multifaceted challenges of the contemporary world. Davidson and Goldberg (2018) assert that the KMB framework centers on the liberation of students to exercise autonomy in selecting and cultivating their own areas of interest. By emphasizing direct experiential learning and discovery-based methodologies, KMB offers students ample opportunities to cultivate the essential proficiencies requisite for their future success.

The essence of the KMB approach lies in empowering students to take charge of their learning trajectory and determine the most effective and fitting modes of acquiring knowledge. This pedagogical freedom affords them the flexibility to cater their learning experiences to suit their individual needs and



passions. Furthermore, KMB's emphasis on experiential learning and discovery fosters a more engaging and gratifying educational journey, promoting a deeper understanding and retention of knowledge.

A salient aspect of KMB is its capability to nurture critical, creative, and collaborative thinking skills, which are paramount for navigating the complexities of the future. Through KMB, students are provided with a fertile ground to develop competencies that transcend conventional academic boundaries and are indispensable in a rapidly evolving world.

The KMB approach is credited with enhancing student motivation and active involvement in the learning process. A research conducted by Smith and MacGregor (2017) validates that students engaged in the KMB framework exhibit heightened enthusiasm and motivation compared to their counterparts in traditional curricula. The element of empowerment, wherein students are encouraged to explore subjects aligned with their interests, drives a sense of ownership and personal investment in their learning endeavors.

The Independent Learning Curriculum (KMB) as advocated by Davidson and Goldberg represents a transformative pedagogical paradigm that holds immense promise in preparing students to effectively meet the diverse challenges of the contemporary world. By granting students the freedom to shape their educational journey, emphasizing experiential learning, and fostering critical skills, KMB has the potential to revolutionize the educational landscape and empower learners for the demands of the modern era.

The implementation of the Independent Learning Curriculum (KMB) is crucial in preparing students for success in the rapidly changing world. The KMB approach empowers students by granting them the freedom to choose and develop their own interests, fostering a sense of ownership and motivation in their learning journey (Davidson & Goldberg, 2018). By emphasizing students' autonomy, KMB enables them to explore subjects that genuinely resonate with their passions, encouraging deeper engagement and investment in the learning process. To effectively implement KMB, it is imperative to consider the diverse needs and interests of students. A student-centered approach ensures that educational experiences are tailored to cater to individual preferences, facilitating a more personalized and meaningful learning journey (Coleman & Money, 2020). Moreover, offering a range of opportunities for skill development is essential to prepare students for the demands of the future job market. The KMB approach prioritizes the acquisition of essential competencies, such as critical thinking, problem-solving, collaboration, and adaptability, which are highly valued in the dynamic and unpredictable modern landscape (Luke et al., 2021).

A successful KMB implementation necessitates strong support from educators. Teachers play a crucial role in guiding and mentoring students on their learning path, helping them develop their interests and abilities to their full potential (Agustini, Wahyuni, Mertayasa, Wedhanti, & Sukrawarpala, 2021). By offering expert guidance and creating a supportive learning environment,

educators can foster students' confidence and enable them to tackle challenges with resilience and enthusiasm. Flexibility is a key aspect of the KMB approach. Providing students with diverse learning opportunities, including project-based learning, experiential learning, and collaborative activities, fosters creativity and a deeper understanding of the subject matter (Johnson et al., 2014). The integration of technology and digital resources can also enhance the learning experience, allowing students to explore new avenues for knowledge acquisition and application.

The implementation of the Independent Learning Curriculum (KMB) is a pivotal step in preparing students for the complexities and uncertainties of the modern world. By empowering students to take charge of their learning, focusing on essential competencies, and providing strong support from educators, KMB equips learners with the skills and mindset needed to thrive in an ever-changing global landscape. The implementation of the Independent Learning Curriculum (KMB) in 21st-century education is a crucial endeavor to empower students with the freedom to explore their individual interests and cultivate the essential skills needed for future success. A comprehensive approach can be adopted to ensure the effective integration of KMB principles into contemporary learning environments. The following strategies are paramount in this implementation:

**Providing Autonomy in Topic Selection:** Educators should grant students the liberty to select topics aligned with their passions and curiosities. This can be facilitated by offering a diverse array of topics for students to choose from or encouraging them to propose and develop their own ideas. By fostering an environment that values students' interests, their intrinsic motivation for learning can be enhanced.

**Cultivating Essential Competencies:** Emphasizing the development of critical, creative, and collaborative thinking is pivotal for equipping students with vital skills for future success. Teachers can design challenging assignments that require students to engage in analytical and imaginative thinking processes. Moreover, encouraging collaborative efforts among students in completing these tasks fosters teamwork and communication skills.

**Providing Guidance and Support:** To optimize students' growth in both interests and abilities, educators should offer personalized guidance and advice. Mentorship and constructive feedback from teachers can significantly impact students' academic and personal development, enhancing their self-awareness and confidence.

**Embracing Flexibility:** A flexible pedagogical approach is paramount to cater to diverse student needs and interests. By adapting learning methods and materials to suit individual preferences, educators can create a personalized learning experience that resonates with each student, enhancing their engagement and motivation.

**Utilizing Varied Learning Media and Technologies:** Leveraging a wide range of learning resources, such as books, videos, online platforms, and

educational technologies, enriches the learning experience. These resources not only facilitate access to information but also promote interactive and immersive learning opportunities.

The implementation of 21st-century learning principles, such as problem-based learning, structured learning, and collaborative learning, is crucial to foster students' cognitive development. In this context, teachers play a pivotal role in guiding students towards real-world problem-solving encounters or employing structured learning methods to deepen their comprehension of the subject matter. Furthermore, promoting collaborative work among students to tackle assigned tasks stimulates critical thinking, creativity, and effective communication skills.

Providing diverse and engaging learning resources is imperative to cater to individual learning preferences and styles. Hence, educators can curate an array of materials, encompassing books, videos, and other pertinent resources. Offering an assortment of options, such as textbooks, reference books, scholarly journals, or video tutorials, grants students flexibility and autonomy in their pursuit of knowledge. Additionally, facilitating internet access equips them with an extensive and contemporary pool of information.

An optimal learning environment is essential to optimize students' receptiveness to knowledge acquisition. Thus, creating comfortable and conducive classrooms equipped with comprehensive learning facilities is paramount. Attending to factors such as illumination, ventilation, and ambient classroom temperature fosters a positive atmosphere that enhances students' focus and cognitive engagement. Moreover, integrating technological resources, such as computers and projectors, complements traditional teaching approaches, rendering learning more interactive and enjoyable.

Adequate time allocation for students to develop their interests and abilities is pivotal to nurturing their talents and passions. Teachers should provide sufficient time for students to complete assigned tasks while ensuring ample opportunities for skill development and practice. This encourages students to explore various aspects of their interests and refine their abilities, thereby fostering personal growth and self-efficacy.

Establishing a transparent and equitable evaluation system is integral to monitor students' academic progress objectively. Teachers must design a coherent and measurable evaluation framework that aligns with learning objectives. By providing constructive feedback, students can identify areas for improvement, setting the foundation for a continuous learning process that instills resilience and fosters a growth mindset. A fair evaluation system bolsters students' motivation and commitment to excel in their academic journey.

By earnestly implementing KMB through these multifaceted strategies, students are likely to become active, enthusiastic learners who are better prepared to thrive in the rapidly evolving 21st-century landscape. Empowered with the freedom to explore their interests and supported by caring educators, students are poised to adapt and excel in the face of diverse challenges and

opportunities in the modern era. In the context of implementing the Independent Learning Curriculum (KMB) in 21st-century education, teachers can augment their efforts by undertaking the following measures, as supported by the work of Brookhart (2012):

Encouraging active student participation in the learning process by fostering a dynamic and inclusive classroom environment. Teachers should prompt students to pose questions, engage in meaningful discussions with peers, and confidently express their individual perspectives.

Facilitating students to become independent learners by affording them the autonomy to explore and learn on their own. This can be achieved through the provision of diverse and abundant learning resources, coupled with appropriate guidance and mentorship.

Developing students' proficiency in information acquisition, processing, and presentation through well-designed and challenging tasks. Teachers can assign assignments that necessitate students to search for, critically analyze, synthesize, and effectively present information obtained from diverse sources.

Enhancing students' collaborative aptitude by promoting teamwork and cooperation. Teachers should create opportunities for students to work collectively on assignments, thereby fostering interpersonal and collaborative skills. Providing proper support and guidance during group work is essential for fostering effective teamwork.

Cultivating students' critical and creative thinking abilities through thought-provoking assignments. Teachers can assign tasks that necessitate students to engage in analytical thinking, problem-solving, and creative expression. Constructive feedback from teachers is instrumental in nurturing the growth of these cognitive skills.

Employing innovative and enjoyable teaching methodologies that align with students' learning preferences. Teachers can incorporate game-based learning, structured learning, or project-based learning approaches, which are known to enhance student engagement and motivation. Additionally, integrating educational technology, such as learning applications, educational games, or simulations, can enhance the learning experience.

Providing students with access to current and reliable learning resources, thereby fostering a well-informed and enriched learning experience. The provision of internet access as a valuable and up-to-date source of information is crucial in today's digital age. Teachers should ensure that students utilize credible sources of information in their learning endeavors.

By diligently adopting these approaches, educators can proficiently implement the tenets of the Independent Learning Curriculum, thus ensuring that students are well-equipped to confront the dynamic challenges within the ever-evolving educational milieu. Updated and reliable learning resources assume paramount significance for students, as they serve as gateways to accessing accurate and verifiable information. Furthermore, contemporary learning resources foster students' education by providing access to the latest

and most current knowledge (Dillenbourg, 1999).

Nurturing students' competency in utilizing information and communication technology (ICT) is of utmost importance. In this regard, instructors can offer comprehensive training on how to effectively harness ICT, encompassing skills such as internet navigation, utilization of learning applications, and mastery of various computer software. Moreover, educators can design intricate assignments that encourage students to apply ICT in their coursework. Proficiency in utilizing information and communication technology is increasingly critical for students in the present digital epoch. Armed with this competence, students can harness the potential of ICT to broaden their intellectual horizons and cultivate their aptitudes (D.W. Johnson, Johnson, & Smith, 2014).

## **Conclusions**

In the context of the 21st century, learning practices must align with the characteristics and demands of the current era. This necessitates the adoption of approaches that adequately prepare the 21st-century generation to navigate the rapid advancements in information and communication technology, which significantly impact various aspects of life, including the realm of education. Effective learning should entail the adept delivery of instructional materials, employing suitable strategies, methods, and models that duly account for the inherent attributes of the subject matter and the diverse profiles of the learners. In response to the imperatives of modern education, the Independent Learning Curriculum (KMB) emerges as a viable solution to bolster the quality of teaching and learning within educational institutions. By integrating KMB into pedagogical practices, educators can foster an interactive, enjoyable, and efficient learning environment, conducive to the holistic growth of students. Central to KMB's implementation is the cultivation of students' autonomy in learning, promoting independent inquiry and collaboration with peers to engender a profound understanding of the subject matter and instill problem-solving skills.

Achieving successful KMB implementation hinges on educators' conscientious attention to pivotal aspects. Ensuring a rich and diverse array of learning resources is essential to stimulate student engagement and cater to individual learning preferences. Moreover, providing a nurturing and supportive learning environment, characterized by physical comfort and intellectual stimulation, fosters an optimal setting for effective knowledge acquisition and skill development. Additionally, a transparent and equitable evaluation system is imperative to provide students with constructive feedback on their progress and engender a sense of accountability in their learning journey.

Central to 21st-century learning are key competencies that must be nurtured and honed in students. These competencies encompass critical thinking literacy, empowering students to analyze and evaluate information critically and make informed decisions. Furthermore, the cultivation of employability skills,

including effective communication and collaborative capacities, prepares students to function productively in the contemporary workforce, wherein teamwork and communication are paramount. Moreover, life skills are vital to students' holistic development, comprising strong citizenship values, mature religious character, and commendable social attributes. Lastly, mastery of tools for work, particularly information and communication technology, is essential in empowering students to navigate the digital landscape adeptly, enabling them to access and utilize information efficiently. The realization of 21st-century learning requires the adoption of relevant approaches and the incorporation of KMB in educational practices. By adhering to these principles and nurturing key competencies in students, educators can fortify the educational landscape to effectively prepare the 21st-century generation for the challenges and opportunities of the contemporary world.

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