INTERNATIONAL JOURNAL OF EDUCATION, PSYCHOLOGY AND COUNSELLING (IJEPC)

ENGLISH LANGUAGE EDUCATORS' APPROACHES TO INTEGRATE TECHNOLOGY IN THE 21ST CENTURY EDUCATION PRACTICES

Tracy Joann Stanlee[1], Suyansah Swanto[2*], Wardatul Akmam Din[3], Eugenia Ida Edward[4]

[1]   Faculty of Psychology and Education, Universiti Malaysia Sabah, Malaysia
      Email: tracy_joann@yahoo.com
[2]   Faculty of Psychology and Education, Universiti Malaysia Sabah, Malaysia
      Email: suyansah@ums.edu.my
[3]   Faculty of Psychology and Education, Universiti Malaysia Sabah, Malaysia
      Email: wardadin@ums.edu.my
[4]   Centre for the Promotion of Knowledge and Language Learning
      Email: eugenia.ida@ums.edu.my
[*]   Corresponding Author

Article Info:

Abstract:

21st Century Education: a phase of a dynamic change whereby academicians are required to equip advanced 21st Century skills, for instance, adaptability, creativity, citizenship, problem-solving, and others, while living in an increasingly globalised environment, full of sophisticated technology applications and software, while still be able to effectively respond the continuous shift in society, as technology held one of the significant influences in the current Education 4.0 scene. Additionally, the Covid-19 pandemic situation that has notably hindered physical contact between humans has slowly subdued, Standard Health Procedure is still implemented in buildings including physical lecture rooms in universities. Yet, English language educators still have difficulties encouraging students to think critically and implementing creativity in learning and creating new things. Hence, previous studies suggested a few teaching approaches such as Blended Learning that integrate technology to implement 21st Century skills among students. This paper canvassed some of the teaching approaches to integrate technology to inculcate the elements of the 21st Century Learning Framework in their English language courses. This review paper was administered via appropriate secondary data from previous studies form conducted by various researchers in the English Language discipline. Findings revealed that some educators had incorporated several teaching approaches such as Flipped Classroom, Game-Based Learning, Project-Based Learning, and others, to assist students in

improving their learning achievement, concurrently enhancing English language educators' teaching quality in the Post-Pandemic era as well.

Introduction

21st Century Education is a phase of a dynamic change whereby academicians are required to equip advanced 21st Century skills, for instance, adaptability, creativity, citizenship, critical thinking, problem-solving, and others, while living in an increasingly globalised environment, full of sophisticated technology applications and software (Pena-Ayala, 2021). According to Azmi et al. (2018), the employers interviewed demand potential employees to have interpersonal skills such as teamwork, satisfactory communication skills including English language, as well as literate Information and Communication (ICT) skills. The adversity to demonstrate graduate skills including lack of English language proficiency has caused unemployment issues among graduates, which s a distressing phenomenon not only in Malaysia but globally; as it influences learners' lives, such as depression (Kadir et al., 2020; Abdullah, 2018; Garcia et al., 2022). Alas, the unforeseen circumstances of the minacious Covid-19 pandemic outbreaks have significantly hindered physical contact between humans; concurrently, propounding distinctive challenges to the education system including the tertiary institutions of how to continue facilitate teaching and learning amid the pandemic era (Mladenova et al., 2020). In due course, though the Covid-19 pandemic situation has slowly subdued, Standard Health Procedure is still implemented in buildings including physical classrooms in universities to keep academic and non-academic staff healthy and safe when they are in the institution (Widowati et al., 2021). Yet, English language educators still have difficulties encouraging students to think critically, providing arguments, implementing skills to evaluate, and solve a problem as well as inspiring creativity in learning and creating new things among students (Shabrina & Astuti, 2022).

Hence, previous studies recommended academicians employ several teaching strategies that incorporate technology such as Blended Learning and others, which have been seen as beneficial, for example improving students' learning standards including those who undertake English language courses (Stanlee et al., 2021). For example, a previous study done by Harahap et al. (2019) on the effect of the Blended Learning strategy on learning achievement and science process skills of students in plant tissue culture courses. The results showed that blended learning allowed learners to review the subject individually before discussing together with teachers in the classroom. Moreover, the incorporation of technology provided by educators on the website such as videos, animations, pictures, and games, as well as providing virtual assignments related to Science plant tissue courses have assisted students more to achieve their learning in the course. This paper canvassed some of the teaching approaches to integrate technology to inculcate the elements of the 21st Century Learning Framework in their English language courses. This review paper was administered via appropriate secondary data from previous studies form conducted by various researchers in the English Language discipline.
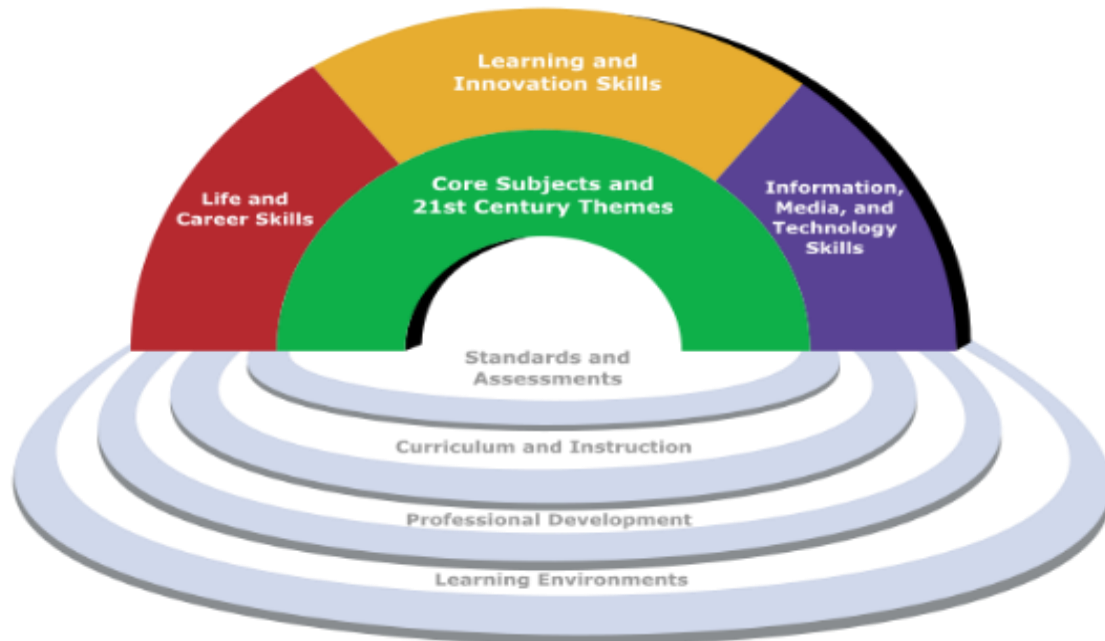
21st Century Learning Framework

Figure 1: 21st Century Learning Framework

Source: Battelle For Kids (2019)

21st Century Learning Framework (Figure 1) was designed by stakeholders such as educators and others as guidelines for developing students' vital skills such as collaboration, communication, creativity and others (Nilsook et al., 2021). Realising the need for transformation in the Malaysian education system, it becomes the educators' responsibility to firstly equip 21st Century knowledge; the fundamental of learning and living, 21st Century skills and digital ICT literacy, thus conveying and fostering these requirements among learners (Lazarov, 2018). Rebuilding objectives, curriculum, assessments, as well as digital infrastructure that could be employed by multiple platforms and point solutions within education systems, is necessary to anchor 21st Century learners in developing necessary skills, thus contributing to the workforce and later achieving an affluent lifestyle, especially during Post-Pandemic era (Lazarov, 2018; Singh & Tumanishvili, 2021). Some previous research revealed incorporating technology to assist some notable educational approaches for student-centred learning. For instance, Santhanasamy and Yunus (2022) investigated The Flipped Learning and Blendspace to Improve Pupils' Speaking Skills. This study revealed that the use of Blendspace in teaching speaking has improved students' speaking skills. Furthermore, students became motivated to practice speaking inside and outside of the classroom.

Table 1: Flipped Classroom Application

Study	Application
Santhanasamy and Yunus (2022)	Blendspace

Teaching Approaches to Integrate Technology to Inculcate 21st Century Learning Framework Elements

Previous studies have shown numerous English language educators' teaching approaches to integrate technology to inculcate the elements of the 21st Century Learning Framework. Some educators applied Blended Learning, Game-Based Learning, Flipped Classrooms and many

more; some of them incorporated these teaching resources and apply them as a model to develop their own online educational materials, to continue teaching and learning in the Post-Pandemic era (Reimers et al., 2020).

Flipped Classroom Strategy in English Language Courses

Fatriana (2021) conducted a study related to the Flipped Classroom approach to habituate learners to read online at home. The study revealed that by employing the strategies, students were able to gradually implement Bloom's LOTS in terms of remembering and understanding when they were reading online at home. Additionally, in a physical classroom, thorough discussion with the educators and between peers has induced Bloom's MOTS-HOTS; applying, analysing, evaluating, and creating, resulting in excellent grades in the reading literacy skill. This means that Flipped Classroom approaches not only nurture good understanding when reading prior to class sessions, but students are also able to develop critical thinking through analysing skills, speaking skills, thus assisting to inculcate the elements of the 21st Century Learning Framework (Santhanasamy & Yunus, 2022). This would also provide an opportunity for English language educators to alternate their modes of teaching and learning, should their pandemic zone turn to either orange, red or black in the future. In the meantime, Susana and Brahma (2021) administered experimental research on integrating Flipped Classroom strategy during the Pandemic to improve writing competency among tertiary education students. The quantitative results revealed that there is a huge impact on the Flipped Classroom learning application, whereby this strategy helped learners accomplished not only their writing ability, but also deeper learning, and promoted problem-solving skills while closely monitored by their lecturers. Susana and Brahma (2021) further added that this technique was suggested as an alternative methodology for learning English in tertiary institutions, particularly playing a role in the nonappearance of physical, face-to-face lecture sessions during Covid-19 pandemic.

Project-Based Learning Approach in English Language Courses

Febiyanti et al. (2021) conducted experimental research on the employment of the Project-Based Learning approach to improve students' listening skills in their English language lessons. The results presented that the group that incorporate this approach achieved a mean score of 75.75% in the pre-test. However, the post-test mean score has increased to 86.85%, higher than the pre-test mean score. The significant difference was attributed to some factors such as the video offered interactive scenes, colourful images, expressive videos, and stunning audio that attracted learners' attention, and indirectly promoted adaptability and problem-solving skills. This leads them to acquire a consistent focus on the learning materials throughout the video. Moreover, this teaching approach is appropriate to apply in an online learning environment without ignoring health procedures imposed by the government. Another study by Atuna and Pramono (2022) conducted a study of the learners' perceptions of the Project-Based Learning approach implemented by their English language educators. The study results showed that most learners enjoyed executing this approach in online classes, and they agreed that they felt encouraged to enhance their self-learning skills, as they were able to complete the projects at their own pace. Additionally, through the implementation of Project-Based Learning, students obtained many friends who are ready to help them solve and complete the task online, indirectly promoting better communication and collaboration skills among students, concurrently still maintaining physical contact to mitigate the Pandemic virus keep spreading (Paristiowati et al., 2022).

Game-Based Learning Approach in English Language Courses

Lastari et al. (2020) conducted action research to investigate the English language educators' integration of Game-Based Learning techniques through Quizizz application could stimulate young learners' engagement and active involvement in the learning process virtually. The results disclosed a major positive perception of the implementation of Quizizz as they found the application interesting, and enrich with various features such as the beautiful music background, colourful layout, power-up facility, and funny memes. Yet, there was a minor drawback where the learners showed disinterest in the application question editor was an open-ended one, stating that the question sometimes displayed inaccurate responses to the questions; they preferred multiple choice questions to open-ended questions. Moreover, another similar study made by Pavita and Nirmala (2021) also implemented Quizizz to improve students' vocabulary mastery. Before the implementation, the researchers found that students had difficulties remembering new words, while the English educators were still confused about how to teach vocabulary when the conventional teaching method was absent. However, there was some progress seen throughout the Quizizz implementation. For example, students' performance on focus, retention, understanding, and memorisation to remember vocabulary has increased. The results showed an overall positive achievement when students were asked to answer the meaning of the vocabulary in multiple choice questions, though there was a once the students faced difficulties when encountering new, difficult vocabulary. Additionally, employing a Game-Based educational application increased their collaboration skills as they could play and learn simultaneously with their teachers and peers online, while their progress was still monitored by their English language educators (Sjöberg & Brooks, 2022).

Table 2: Game-Based Learning Application

Study	Application
Lastari et al. (2020)	Quizizz
Pavita and Nirmala (2021)	Quizizz

Conclusion

The unpremeditated, startling circumstances of the Covid-19 global spread have coerced the entire education system to close the institutions and rapidly shift their teaching and learning into online mode. While social interaction and physical contact were limited for the congregation under Standard Health Procedure, educators including English language educators have to instantly make adjustments, quickly adapt to new situations and tailored flexibility to keep abreast with all possible, emerging new teaching trends. As educators begin to actively integrate technology during the pandemic era, several teaching strategies have been implemented to invigorate learners' involvement in the learning process online. Educators initiated a Game-Based Learning approach and employ Quizizz that introduces multiplayer activities to classrooms and made online classes more interactive and enjoyable, indirectly promoting collaboration, and better communication skills, especially during the lockdown. Thankfully, the pandemic is gradually subdued and some institutions allowed academicians to conduct face-to-face lessons, yet English language educators continue striving to better teaching quality throughout the 21st Century by implementing these teaching strategies during the Post-Pandemic era. For example, by incorporating Flipped Classroom approach, educators could spend less time introducing new topics as learners could watch the tutorial video that has colourful and attractive graphics, lovely music background, interactive features and others provided before coming to a physical classroom. Furthermore, when students and educators gain a more thorough explanation and discussion time, it indirectly inculcates 21st Century

Learning Framework elements; collaboration, communication, problem-solving, critical thinking, and other skills, at the same present the correct supervision and direction towards better 21st Century educators and learners, particularly during Post-Pandemic era.

References

Abdullah, Z. (2018). Exploring University Branding: Employers' Expectation on University Graduates On Competency (Meneroka Penjenamaan Universiti: Jangkaan Majikan Terhadap Kecekapan Para Graduan Universiti). *Jurnal Personalia Pelajar*, 21(1), 95-104.

Atuna, A. V. V., & Pramono, Y. H. (2022). Learners' Perceptions Towards Project-Based Learning Implementation in CALT Course in The Covid-19 Pandemic Situation. *Magister Scientiae*, 50(1), 38-49.

Azmi, A. N., Kamin, Y., Noordin, M. K., & Nasir, A. N. M. (2018). Towards industrial revolution 4.0: employers' expectations on fresh engineering graduates. *International Journal of Engineering & Technology,* 7(4.28), 267-272.

Battelle for Kids. (2019). Framework for 21st century learning. Retrieved from http://static.battelleforkids.org/documents/p21/P21_Framework_Brief.pdf.

Fatriana, N. (2021). Flip-Classroom English Material Design for Post Pandemic Practices to Provision Reading Literacy Skill. *English Journal Literacy Utama*, 6(1), 432-443.

Febiyanti, N. W., Nitiasih, P. K., Budiarta, L. G. R., & Adnyayanti, N. L. P. E. (2021). Significant Effect of Project Based Learning Video on Students' Listening Skill in Pandemic Situation. *International Journal of Elementary Education*, 5(3), 425-433.

Garcia, S. R., Felonia, J. P., Lim, W. C., Pascua, P. K., Quiwa, J. E., & Tus, J. (2022). Living in the Shadow of Unemployment: A Phenomenological Study Amidst the COVID-19 Pandemic. *International Journal of Psychology and Counseling*, 12(1), 32-58.

Harahap, F., Nasution, N. E. A., & Manurung, B. (2019). The Effect of Blended Learning on Student's Learning Achievement and Science Process Skills in Plant Tissue Culture Course. *International Journal of Instruction*, 12(1), 521-538.

Ibrahim, N., Adzra'ai, A., Sueb, R., & Dalim, S. F. (2019). Trainee teachers' readiness towards 21st Century teaching practices. *Asian Journal of University Education*, 15(1), 1-12.

Kadir, J. M. A., Naghavi, N., & Subramaniam, G. (2020). Unemployment among graduates-Is there a mismatch?. *International Journal of Asian Social Science*, 10(10), 583-592.

Lastari, D. S., Mustafa, S. M., & Nur'Aini, Y. (2020). Using Game-based Learning Tools to Engage Young Learners in the EFL Online Classrooms. In *iNELTAL Conference Proceeding (the International English Language Teachers and Lecturers Conference)* (pp. 26-33).

Lazarov, L. (2018). Education in the 21st Century-Pedagogical Approaches in Digital Environment. 'E-teacher' Information system. *Eastern Academic Journal*, 2(1), 13-25.

Mladenova, T., Kalmukov, Y., & Valova, I. (2020). Covid 19–A major cause of digital transformation in education or just an evaluation test. *TEM journal*, 9(3), 1163-1170.

Montaudon-Tomas, I.; Montaudon-Tomas, C. (2020). Learning to transform: The pillar that reshapes education. Editorial Universitat Politècnica de València. 1-259.

Nilsook, P., Chatwattana, P., & Seechaliao, T. (2021). The Project-Based Learning Management Process for Vocational and Technical Education. *Higher Education Studies*, 11(2), 20-29.

Paristiowati, M., Rahmawati, Y., Fitriani, E., Satrio, J. A., & Putri Hasibuan, N. A. (2022). Developing Preservice Chemistry Teachers' Engagement with Sustainability Education through an Online Project-Based Learning Summer Course Program. *Sustainability*, 14(3), 1-18.

Pavita, M. D. A., & Nirmala, D. N. (2021). Merdeka Belajar in Pandemic: Using Quizizz Game-Based Learning to Improve Students' Vocabulary Mastery. *Language Literacy: Journal of Linguistics, Literature, and Language Teaching*, 5(1), 221-227.

Peña-Ayala, A. (2021). A learning design cooperative framework to instill 21st Century education. *Telematics and Informatics*, 62(1), 1-16.

Reimers, F., Schleicher, A., Saavedra, J., & Tuominen, S. (2020). Supporting The Continuation of Teaching and Learning During The COVID-19 Pandemic. *OECD*, 1(1), 1-38.

Shabrina, A., & Astuti, U. P. (2022). The Integration of 6Cs of the 21st Century Education into English Skills: Teachers' Challenges and Solutions. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 7(1), 28-37.

Singh, P., & Tumanishvili, G. G. (2021). Education in Post-Pandemic Era An International Overview And Problematic Issues. *Education Sciences & Psychology*, 58(1), 12-30.

Sjöberg, J., & Brooks, E. (2022). Collaborative interactions in problem-solving activities: School children's orientations while developing digital game designs using smart mobile technology. *International Journal of Child-Computer Interaction*, 33(1), 1-13.

Stanlee, T. J., Din, W. A., Pudin, C. S. J., & Swanto, S. (2021). Blended Learning Integration at Sabah's Tertiary Institutions, Malaysia. *International Journal of Education, Psychology and Counseling,* 6(43), 309-319.

Santhanasamy, C., & Yunus, M. M. (2022). The Flipped Learning and Blendspace to Improve Pupils' Speaking Skills. *Frontiers in Psychology*, 13(1), 1-12.

Susana, K. Y. & Brahma, A. (2021). The Effectiveness of Flipped Learning During the Pandemic to Improve the Writing Competence of STMIK STIKOM Indonesia Students. *RETORIKA: Jurnal Ilmu Bahasa*, 7(1), 75-84.

Widowati, E., Koesyanto, H., Wahyuningsih, A. S., Mayasari, R. A. D., Pitaloka, F. R. D., Mambe, S., Agustiani, N. H., As-Syifa, A. F. S., & Permanahadi, A. (2021). Implementation of Covid-19 Health Standard at Elementary School in Yogyakarta. *KEMAS: Jurnal Kesehatan Masyarakat*, 17(2), 287-298.