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Impact of the Flipped and Blended Classroom on Secondary Students' English Performance, Confidence, and Perceptions in Malaysia

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Abstract
Producing students with high confidence in learning English who possess 21st-century skills—such as foundational literacies, competencies, and character qualities—requires a transformative shift in teaching strategies and methodologies. This study explores the effectiveness of the Flipped & Blended Classroom Program in enhancing English language performance, confidence, and perceptions among secondary school students. Utilizing a range of technological tools, diverse teaching strategies, and school resources, students were encouraged to actively engage, explore, and learn independently. A total of 400 secondary school students were randomly selected to participate in this study, completing questionnaires before and after their experience in the program. The findings reveal a significant improvement in both examination scores and classroom-based assessments, highlighting the program's impact on academic performance. Additionally, students reported feeling more confident in their English abilities, with many expressing a more positive attitude towards learning the language. These results demonstrate that integrating technology in a structured classroom setting benefits students by fostering a more dynamic, student-centered learning environment. For teachers, the program provided opportunities to adopt innovative practices and conduct activities that challenge students, ultimately enhancing teaching quality. This study underscores the value of incorporating blended learning models in educational contexts, especially in developing essential skills for the modern world.
Keywords: flipped & blended classroom, performance, confidence, perception

INTRODUCTION

Learning English as a second language can be challenging for students, often resulting in low confidence and negative attitudes towards the subject. These factors hinder their engagement and mastery of English, which is increasingly vital in a globalized world. Traditional teaching methods, relying heavily on rote learning and teacher-centered instruction, may improve assessment performance but often fail to foster essential 21st-century skills like critical thinking, creativity, and confidence[1,2]. This research explores the effectiveness of the Flipped and Blended Classroom Program, a modern, technology-based approach to English language instruction, in addressing these issues.

The 21st-century learning framework emphasizes skills such as foundational literacies, competencies, and character qualities, which are crucial for students' success in an evolving world. Foundational literacies like language and digital literacy, along with competencies in critical thinking, problem-solving, and collaboration, help students apply knowledge meaningfully. Character qualities, including resilience, confidence, and cultural awareness, are essential for navigating complex life situations. Developing these skills within English language learning requires a shift from conventional methods to those that promote active, self-directed learning[3,4]. In Malaysia, the Ministry of Education supports such a shift, aiming to cultivate students who are proficient and confident in English and prepared for diverse cultural and professional contexts.

Many students find traditional English classes disengaging, as these typically emphasize grammar drills and textbook exercises over interactive, real-world application, which can weaken motivation. Furthermore, fear of making mistakes can lead students to avoid participating, especially if they feel judged or unsupported. This approach does not cater well to diverse learning styles, as traditional instruction may not engage visual, auditory, or kinesthetic learners effectively[5,6].

Integrating technology into education offers solutions to these challenges, allowing for personalized, interactive, and flexible learning. The Flipped and Blended Classroom approach uses digital resources like videos, quizzes, and online activities to introduce concepts outside class, letting students build foundational knowledge at their own pace. In-class time is then dedicated to collaborative, hands-on activities that deepen understanding. This model fosters independent learning, enhancing student confidence and engagement, and aligns with constructivist learning theories, which promote active knowledge construction.[7,8] Blended learning also supports digital literacy, preparing students for real-world challenges by combining face-to-face and online experiences.

This study evaluates the impact of the Flipped and Blended Classroom Program on

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[1] Partnership for 21st Century Skills, *Beyond the Three Rs:Voter Attitudes toward 21st Century Skills* (Tucson, AZ, 2007), https://repositorio.ulisboa.pt/bitstream/10451/847/4/20103_ulsd_dep.17852_tm_anexo1c.pdf.pdf.

[2] Asmawati Suhid dan Fathiyah Mohd Fakhruddin, *Journal of Islamic and Arabic Education* 4, no. 2 (2012): 57–70.

[3] Beth A. Hennessey dan Teresa M. Amabile, "Creativity," *Annual Review of Psychology* 61, no. 1 (1 Januari 2010): 569–98, https://doi.org/10.1146/annurev.psych.093008.100416.

[4] Marc Fabian Buck, "Gamification of Learning and Teaching in Schools – A Critical Stance," *International Journal of Media, Technology and Lifelong Learning* 13, no. 1 (2017).

[5] Hennessey dan Amabile, "Creativity."

[6] Buck, "Gamification of Learning and Teaching in Schools – A Critical Stance."

[7] Rosnani Hashim, "Rethinking Islamic Education in Facing the Challenges of the Twenty-First Century," *American Journal of Islamic Social Sciences* Volume 22 Nomor 4 (2012): 133–47.

[8] P. W. Lednor, *How to be Innovative* (Singapore: World Scientific Publishing Co, 2019).

secondary school students' English performance, confidence, and perceptions. By incorporating technology and diverse methods, the program addresses low confidence and negative perceptions, creating a student-centered experience that encourages critical thinking and active participation. Additionally, this study examines how the program shifts teaching practices, moving from traditional, teacher-centered instruction to more interactive, flexible methods. Through this research, we contribute to a growing body of evidence supporting blended and flipped learning models in language education, especially in secondary schools where English proficiency is essential for future success[9,10].

This program aligns with the Malaysian Ministry of Education's objectives, where initiatives aim to improve English proficiency across schools. With 400 secondary students from diverse backgrounds participating, this study investigates not only improvements in assessment scores but also shifts in perceptions and confidence. These findings may inform policy decisions and curriculum development, promoting a more engaging, effective approach to English instruction in Malaysia.

In summary, this research demonstrates the potential of the Flipped and Blended Classroom Program to bridge traditional and modern teaching methods, addressing challenges in English learning by integrating technology meaningfully. This approach paves the way for a more dynamic language learning experience that can enhance both academic achievement and personal growth.

Teaching And Learning Reflection. When the teacher began working with this group of students, their English proficiency was generally at a satisfactory level, as shown by their exam and Classroom-Based Assessment (CBA) scores. Despite having ideas to share, students were often passive and lacked the confidence to express themselves. One student even failed the subject, highlighting the need for intervention to support both high and low-performing students. This experience challenged the perception that teaching high-achieving students is easy. While they may complete tasks with minimal guidance, these students also need more engaging, intellectually stimulating activities that go beyond language basics.[11,12]

This recognition led the teacher to reflect on existing methods, realizing that past lessons for lower-proficiency students relied on rote learning focused on memorizing structures to pass exams. While effective for exam preparation, this approach felt repetitive and uninspiring, doing little to build confidence or foster engagement.[13,14] For this group, a traditional, rote-based strategy was unlikely to succeed; they needed a more constructivist approach that would help them become confident, independent learners capable of actively constructing knowledge by integrating new content with previous experiences.

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[9] Siti Marlina Binti Sabran, *Higher Order Thinking Skills (HOTS) Form Five Students in Mathematical Solution* (Johor Baru: Universiti Teknologi Malaysia, 2013).

[10] Caroline @ Lorena David dan Abdul Said Ambotang, "Profesionalisme Guru Novis dalam Pengurusan Pengetahuan, Kesediaan Mengajar dan Kemahiran Berfikir Aras Tinggi (KBAT) Terhadap Pelaksanaan Pengajaran di Sekolah," 2014, https://www.ums.edu.my/fpp/images/download/proseding_skik2014/Caroline__lorena_david.pdf.

[11] A. Saavedra dan V. Opfer, "Learning 21st-century skills requires 21st-century teaching. Phi Delta Kappan" Volume 94 Nomor 2 (2012): 8–13.

[12] C. Dichev dan D. Dicheva, "Gamifying Education: What is Known, What is Believed and What Remains Uncertain: a Critical Review," *International Journal of Educational Technology in Higher Education* Volume 14 Nomor 9 (2017): 1–36.

[13] Hashim, "Rethinking Islamic Education in Facing the Challenges of the Twenty-First Century."

[14] Lednor, *How to be Innovative*.

The shift in methodology involved moving from teacher-centered instruction to a more student-centered, task-based model. Techniques such as project-based and cooperative learning were introduced, offering real-world applications of English. These strategies allowed students to engage with the language in a relevant, practical manner, building confidence and competence in real-life scenarios[15,16].

The introduction of the Flipped and Blended Classroom Program provided a structured way to implement this methodology. With flipped learning, students accessed core content outside of class, through videos or readings, allowing class time to focus on interactive, student-centered activities. Blended learning, which combines in-person instruction with digital tools, further supported differentiated learning, catering to diverse learning styles.

Throughout this process, the teacher also embraced technology's role in enriching teaching practices. Digital resources enabled a more dynamic learning experience, where students could explore language through multimedia, discussions, and collaborative projects. The program also encouraged professional growth through Continuous Professional Development (CPD) and Professional Learning Community (PLC) sessions, which helped refine instructional techniques and allowed the teacher to stay current on best practices[17,18].

Research Focus. The focus of this research was to tackle the a few issues for the target group - negative perception of the subject and low confidence among the students. Other that that, the focus is to change the current pedagogical methodology of the teacher. Thus, Flipped & Blended Classroom Program was planned to help the students to improve their performance in English and at the same time solve the issues stated above.

Objectives. This study was conducted based on the following objectives: 1. To improve students English performance in examinations and classroom based assessment**;** 2. To change students' perception and increase students' motivation of learning English

Research Objective. This study was conducted based on the following objectives: 1. How to improve student English performance in examinations and classroom based assessment**;** 2. How to change students' perception and increase students' motivation of learning English

Sample Of Research. The sample was the whole 400 students in the country. The students has different types of learning styles and based on the preliminary data collection, most of them are visual and kinesthetic learners, which means they learn better by the aid of graphic and images and they learn the best by doing.[19,20]

Preliminary Data Collection. There were three means of preliminary data collection at first, all students are assessed based on their form four final exam result. The result comprised of two skills - writing and reading. The second document that was analysis was the students' performance document. The third instrument of data collection was via interview with three students to determine and identify their issues in English learning. The data has led the teacher to do initial planning of the action research.

Theory and Implementation. This research adopts Kemmis and McTaggart's Model of Action Research (1988) as its foundational framework, emphasizing a cyclical process of planning,

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[15] Saavedra dan Opfer, "Learning 21st-century skills requires 21st-century teaching. Phi Delta Kappan."

[16] Dichev dan Dicheva, "Gamifying Education: What is Known, What is Believed and What Remains Uncertain: a Critical Review."

[17] Hennessey dan Amabile, "Creativity."

[18] Partnership for 21st Century Skills, *Beyond the Three Rs:Voter Attitudes toward 21st Century Skills*.

[19] R. V. Krejcic dan D. W. Morgan, *Determining Sample Saiz For Research Activities, Education And Psychogical Measurement*, 1970.

[20] J. Lawrence Manion Cohen dan Keith Marrison, *Research Method in Education* (London: Routledge, Francais and Taylor Group, t.t.).

acting, observing, and reflecting to implement meaningful changes in teaching and learning practices[21]. Figure 1 explains the Kemmis & McTaggart!s Model (1988).

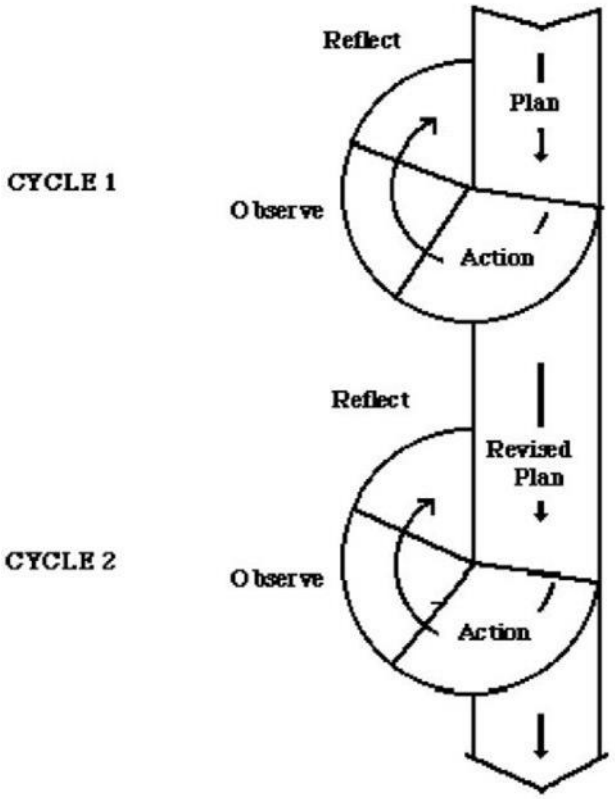

Figure 1. The Kemmis & McTaggart!s Model

Kemmis and McTaggart's model is particularly suitable for educational research as it allows for iterative reflection and continuous improvement, adapting to insights gained at each stage of implementation. This model not only encourages educators to reflect deeply on their practices but also facilitates a structured approach to experimenting with and refining teaching strategies. In this study, the model was used to assess the impact of a Flipped and Blended Classroom Program, designed to improve students' English performance, confidence, and perceptions of the subject.

The process began with the planning phase, where 400 students from diverse backgrounds and learning styles were identified as participants. Preliminary data was collected to determine existing perceptions and performance levels, indicating a need for interventions that enhance confidence, motivation, and academic achievement in English. The planning phase involved setting clear objectives for improvement in examination performance, classroom-based assessments, and the development of a more positive perception of English. Teachers prepared comprehensive lesson plans, selected appropriate digital tools, and gathered necessary resources to support the blended and flipped learning format[22]. The program was tailored to accommodate

[21] Education Policy Planning and Research Division, *Action Research Manual*, 3 ed. (Malaysian Education Ministry, 2008).

[22] Michael B. Horn dan Heather Staker, *Blended: Using Disruptive Innovation to Improve Schools* (San Francisco: CA: Jossey-Bass, 2014).

a variety of learning styles, particularly visual and kinesthetic learners, by incorporating multimedia, graphic aids, and interactive exercises.

In the acting phase, the Flipped and Blended Classroom Program was implemented over a four-week period. This stage included various preparatory steps, such as briefing students and parents on the program's objectives and expectations, obtaining consent, and ensuring that all participants had access to the necessary technological devices, including laptops, tablets, or smartphones. During the program, students were given pre-class tasks, such as watching instructional videos, completing online quizzes, or engaging with interactive content to build foundational knowledge before classroom sessions. This approach aimed to make in-class time more interactive and focused on higher-order thinking skills through activities such as group discussions, problem-solving tasks, and collaborative projects. Strategies like the Venn diagram, De Bono's Six Thinking Hats, and differentiated learning structures were incorporated to promote critical thinking and engagement.

Teachers took on a facilitative role in the classroom, guiding students through complex tasks and supporting individual learning needs. The technology allowed students to research, collaborate, and submit assignments electronically, fostering both digital literacy and independent learning skills. Evidence was collected throughout the program in the form of student assignments, observational notes, and ongoing assessment data, which provided insights into student progress and areas for improvement.

In the observing phase, data was gathered to assess the program's impact on student outcomes. This included post-program assessments such as examinations and classroom-based assessments, alongside feedback from students on their experiences with the program. The quantitative data was supported by qualitative insights from individual student interviews, providing a holistic understanding of both performance outcomes and shifts in perception and confidence levels.

The reflecting phase involved a thorough analysis of the collected data, where educators evaluated the effectiveness of the teaching strategies and made adjustments for future iterations of the program. Reflection sessions were conducted among educators involved in the program, fostering a professional learning community (PLC) where teachers could share insights, challenges, and successful strategies. The feedback from students indicated that the Flipped and Blended Classroom approach not only improved their academic performance but also made them feel more engaged and confident in learning English. Teachers found that the program encouraged them to shift from traditional rote-based instruction to a more constructivist, student-centered approach, aligning well with theories of active learning and self-directed knowledge construction[23,24].

In summary, Kemmis and McTaggart's model provided a structured yet flexible framework for implementing and refining the Flipped and Blended Classroom Program. The iterative cycles of planning, action, observation, and reflection allowed educators to continuously adapt and improve upon their strategies, leading to enhanced learning outcomes and increased student engagement. This action research approach underscores the value of reflective practice in education, highlighting how data-driven insights can lead to meaningful changes in teaching methodologies that benefit both teachers and students. Through this model, the Flipped and Blended Classroom Program demonstrates the potential for technology-infused, student-centered learning environments to foster greater academic success and motivation among secondary school students.

[23] Hashim, "Rethinking Islamic Education in Facing the Challenges of the Twenty-First Century."
[24] Lednor, *How to be Innovative*.

RESEARCH METHOD

The design of this study is a quantitative survey method. The finding is seen through the numbers and estimates that include a certain formula. According to the survey method is a specific way to gather information about a large group of the population[25]. The instrument or instruments used in this test is a set of questionnaires. This questionnaire is divided into two parts. At the top I found a few items regarding the background of the respondents. In part II is an instrument that consists of 30 questions related to the question of the application of PBL in teaching. All questionnaires are examined in advance to ascertain the respondents were in the right direction to provide the information as needed. After believes the items of the questionnaire, the researchers tested the respondents[26,27]. This questionnaire has been modified from i) an instrument of teaching based on HOTS developed by the MOE. ii) survey conducted in practice PHD thesis teaching by pastor Aderi Che Noh and Paharuddin Arbain. iii) HOTS assessment instrument developed by the Malaysian Examination Board[28,29].

The planning started with the teacher identifying the samples. The sample selected a 400 students from 5 at some state in Malaysia. The next planning stage was identifying the focus of the research. This research focused on improving the performance in English subject, both in examinations and classroom based assessment. Then, the teacher started preparing the paperwork. The paper work was proposed to the all principal of the school on 8 - 30 April 2021 and was endorsed on the same day. The process continued with the teacher giving briefing to the students, distributing the let-ters to the parents and ask them to sign the agreement of the program. Finally, teacher decided on the instruments that would be used for this research.

The program started on 8 - 30 April 2021. Before the session, students are given pre-task where they are supposed to search for information, answer questions, prepare for materials and so on. On the day of the program, students would bring their gadget (laptop/tablet/mobile phone) to school. Teacher would collect all the gadgets and store them all in a locked room. During class, gadgets were distributed and teachers would conduct the face-to-face class based on lesson plans. Gadgets are used to search for information, and as a medium to collect students' assignments. Among strategies used during the program was use of thinking tools such as Venn diagram and De Bono Hat, project and problem based learning, cooperative learning structures and differentiated learning. Throughout this phase, teacher collected the evidences while tracking students' progress based on classroom based assessment result. At the same time, teacher attended CPD and PLC to enhance knowledge on improving teaching practices.

The reliability of the questionnaire is at a high level, namely Alpha value recorded (0.82173). SPSS 20.0 was used to find the frequency, percentage and mean[30,31]. Table 2 shows the reliability of the components for planning teaching (0.7727), the teaching objective (0.8905) and Induction set (0.8020).

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[25] J. W. Creswell, *Educational Research: Planning, Conducting, And Evaluating Quanitative And Qualitative Research* (New Jersey: Pearson Education, 2009).

[26] Creswell.

[27] J. Pallant, *SPSS Survival Manual A Step by Step Guide to Data Analysis using SPSS for Windows, 4rd Edition, Crows West* (New South Wales: Crows West, 2010).

[28] Susan M. Brookhart, *How to Assess Higher-Order Thinking Skills in Your Classroom* (Alexandria: ASCD, 2010).

[29] Malaysia Education Ministry, *The Basic Elements Of Higher Order Thinking Skills (Curriculum).* (Putrajaya: Curriculum Development Division, 2014).

[30] Creswell, *Educational Research: Planning, Conducting, And Evaluating Quanitative And Qualitative Research*.

[31] Pallant, *SPSS Survival Manual A Step by Step Guide to Data Analysis using SPSS for Windows, 4rd Edition, Crows West*.

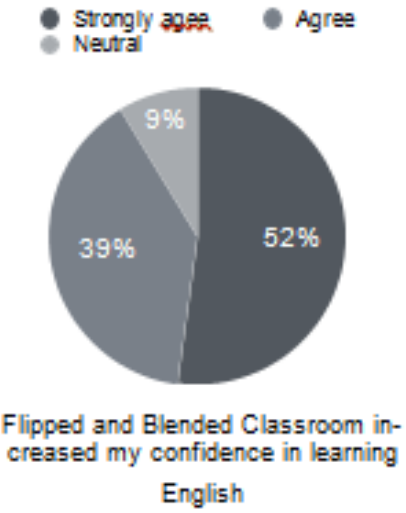
RESULT AND DISCUSSION

After the implementation of the program, it was found that there was increment in examination result of this class. Next, teacher conducted a questionnaire to collect feedback from students about the effects of the program towards their perception and motivation.

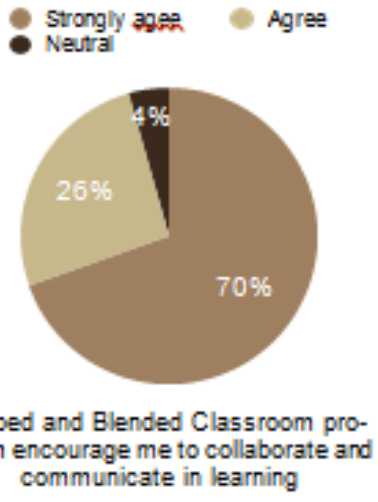
Table 1. Preliminary data 1 - Students' interview responses

	Sample A	**Sample B**	**Sample C**
What do you think of English subject	English is difficult I am not confident	I am worried about the subject	Difficult
Your opinion about the way English teachers teach the subject	Last time I love English was when I was form 2. After that, I lost confidence - I am scared of making mistakes	A lot of drilling to increase performance	Chalk and talk, use of text books it only helps in examinations.
How do you prefer to learn English?	Teacher gives real life activity	Sometimes teacher gives quiz, activities with a lot of interaction, group work	Presentation and group work activity, give us project that is challenging

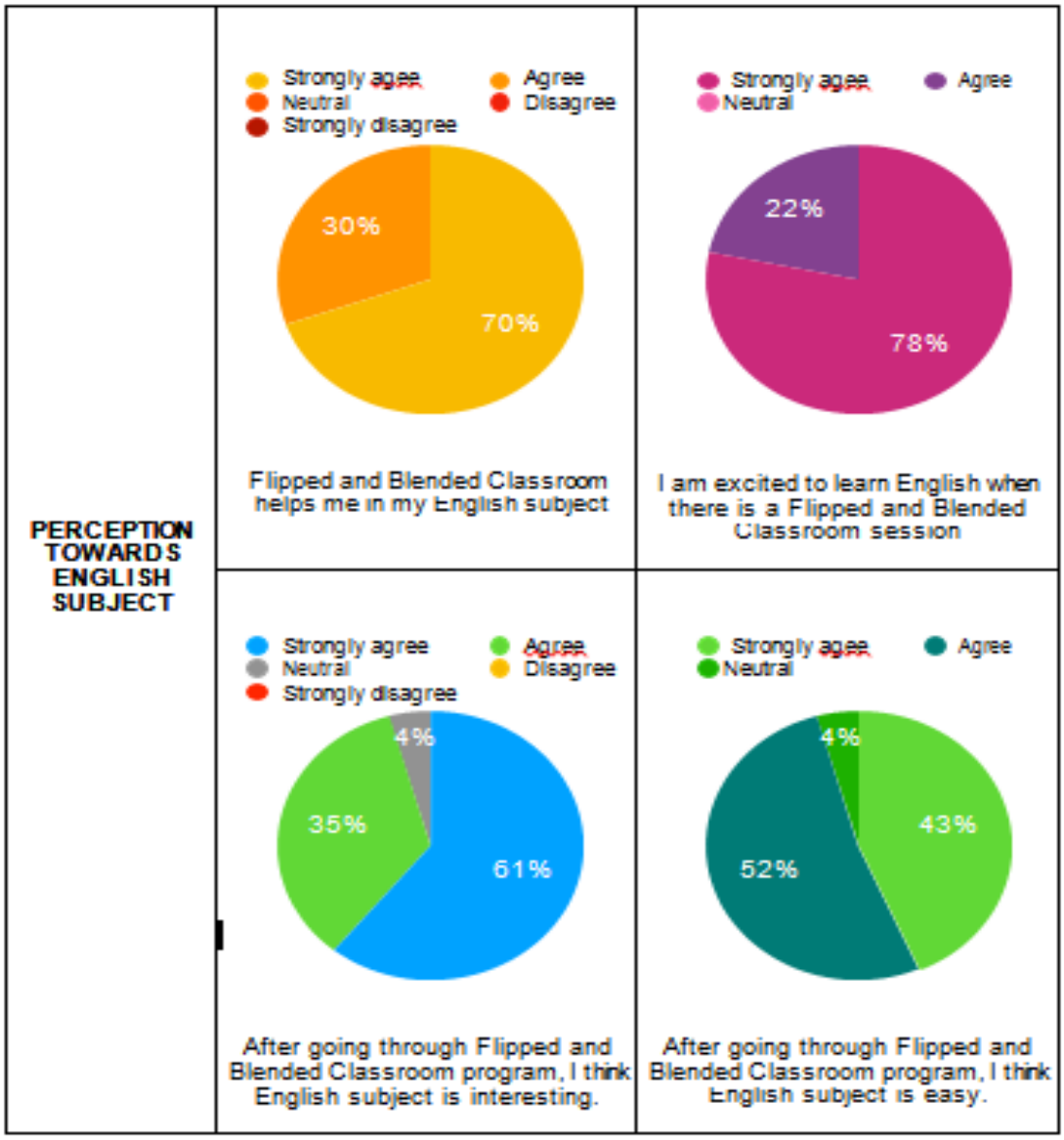
It was found that 91% of the students agreed that Flipped and Blended Classroom Program increased their confidence and learning English. The pie chart below describe the students' responses.



Flipped and Blended Classroom increased my confidence in learning English



Flipped and Blended Classroom program encourage me to collaborate and communicate in learning



Reflection

Implications on the research sample. Based on the result, it shows that the infusion of technology in teaching and learning does help students to increase their performance. This is because students would be able to learn and explore so many things by themselves using the technology rather than being spoon-fed by the teacher. It is also important to make the students feel confident in learning English because the learning would be meaningful is the students are engage in the lesson. Nowadays, students are advanced in terms of technology use, therefore it is great to expose them to variety of strategies in teaching and learning that is challenging to improve their skills and knowledge[32].

Implications of personal practice. This research shows that this program should be implemented as a regular basis in or- der to increase engagement of students in learning English.

[32] Hanna Sheikh Mokhtar, "Bring Your Own Device Transforms Teaching And Learning. Retrieved," 2019, https://www.nst.com.my/education/2019/03/467303/bring-your-own-device-transforms-teaching-and learning.

Teachers should explore more educational apps, websites and resources to help students with their learning. Besides it is also important to plan meaningful lessons with infusion of technology so that the students' motivation and performance could be increased. Finally it is very important for the teacher to upgrade the personal knowledge so that the teacher could plan and do better lessons for the students.

Implications on Curriculum. This program is similar like bring your own device (BYOD) program it is implemented in certain schools in Malaysia[33]. Things have been much easier and simpler for teachers and students if school could implement this concept. This will produce more creative teachers and students who are well-versed in using software programs and applications. Be-sides, education using advanced technology has made learning more interesting and effective. Therefore, the policymakers should develop and implement BYOD policy and prepare some budget allocation for schools' infrastructure.

CONCLUSION

In conclusion, the Flipped and Blended Classroom Program has proven to be an effective approach in enhancing students' performance, confidence, and perceptions towards learning English. Through integrating technology and engaging teaching methods, students demonstrated improved exam and classroom-based assessment scores, reflecting the success of this initiative in addressing long-standing challenges associated with traditional English instruction. Students not only became more proficient but also exhibited a greater sense of self-assurance in their ability to learn and use English, moving past the apprehensions and negative perceptions that previously hindered their progress.

The use of technology has opened doors to innovative, student-centered learning experiences that emphasize critical thinking, collaboration, and real-world application of knowledge. By allowing students to utilize gadgets and digital resources, they became active participants in their learning journey, fostering independence and a deeper engagement with the subject matter. Furthermore, this program aligns well with the Ministry of Education's objectives to cultivate a generation of students equipped with 21st-century skills, particularly in foundational literacies and digital competence. Teachers also benefited by adapting their teaching methodologies, shifting from rote learning to approaches that foster interactive, constructivist learning environments, further supporting students' intellectual and personal growth.

Despite its success, the program faced an unexpected interruption due to the COVID-19 pandemic, which halted its physical implementation. However, the foundation established by the program eased the transition to online learning, as both teachers and students were already familiar with using digital tools and resources in their academic activities. This experience highlights the importance of resilience and adaptability in educational practices, underscoring the value of digital literacy skills for both educators and learners in facing unforeseen challenges.

Moving forward, there is a significant potential for this program to become a regular feature in the Malaysian curriculum. To realize this vision, it is recommended that policymakers and educational leaders consider the implementation of a Bring Your Own Device (BYOD) policy across schools, which would not only foster digital competency but also encourage creativity and innovation. Adequate budget allocations for technological infrastructure in schools would ensure that all students have equal access to these learning opportunities, bridging any digital divide.

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[33] Zulaiha Ali Othman dkk., "BYOD Implementation Model In Malaysian Schools: The Perception And Readiness Of Parents, Schools, and Teachers," *International Journal of Advanced and Applied Sciences* Volume 7 Nomor 6 (2020): 57–66.

Ultimately, the Flipped and Blended Classroom Program has demonstrated that a thoughtful infusion of technology can transform traditional learning environments into dynamic spaces where students are motivated to learn and succeed. With continued support and adaptation, programs like these can reshape the educational landscape, making learning more relevant, inclusive, and empowering for future generations.

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