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Assessing Perceptions on the Effectiveness of Online Community Projects Encompassing 4C of 21st-Century Skills

Farhana Shukor[1]* , Boon Yih Mah[2] & Ahmad Zia Ul-Saufie[3]

[1] Centre of Foundation Studies, Universiti Teknologi MARA, Caawngan Selangor
[2] Academy of Language Studies, Universiti Teknologi MARA, Cawangan Pulau Pinang
[3] School of Mathematical Sciences, College of Computing, Informatics and Mathematics, Universiti Teknologi MARA

Corresponding Author: farhana.shukor@uitm.edu.my

Abstract

Online community projects assist advisees in developing their skills and raising the standard of living in their local communities. This study evaluated the efficacy of a paradigm for online community projects at higher education institutions that integrates the 4Cs of 21st-century skills in English classrooms. There were five phases of the flow of this research: Introduction, Project Confirmation, Video Preparation Process, Assessment, and Conclusion. This study is descriptive since it evaluated students' skills within learning using a questionnaire adapted from Kelley et al. (2019) on 21st-century skills. Using a 6-point Likert scale, respondents provided input on 18 items covering five elements of their perceptions of this study. The study's findings demonstrate that online community initiatives that incorporate the fourth competency—21st-century skills—into the teaching and learning process fall into the excellent category. The research's conclusions suggest that advisors should adjust to using digital communication practices in the classroom because the advisees find them to be sufficiently important. The advisees' work is distinctive after conferring with their advisor on the problem-based learning pedagogy applied in this project. Enhancement of the 4Cs of 21st-century skills of advisees while commencing in this online community project will improve advisees' employability after completing the assigned duties.

***Keywords**: advisees, online community projects, 4Cs, 21st Century Skills*

INTRODUCTION

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Providing quality education for all is fundamental to creating a peaceful and prosperous world. Good relationships between advisees and advisors result in favourable attitudes, accomplishments, motivation, and personal growth that are beneficial for recruiting and retention. Academic advising, as defined by Masengeni (2019), is the "continuous academic engagement between advisees and advisors" in which advisors reach out to advisees, build rapport, and offer guidance. One of the programmes that aid advisees in understanding their motivations for going to college and developing intellectually and personally in order to achieve their academic objectives, professional aspirations, and never-ending learning is academic advising (Tobi-David et al., 2018). Instilling advisees with a sense of commitment to plans and responsibility for their decisions is the cornerstone of academic work.

Advisees will be able to adjust to the new learning mode and acquire the skills and competencies of the learning aids with technological breakthroughs in the right direction from academic advisors. It is vital because, in this endemic phase, advisees interact more online with advisors, peers, and community members, marking a significant shift in learning toward online learning (Rapanta et al., 2020). This results in a few abilities that advisees must possess to succeed in today's society: critical thinking, problem-solving, cooperation, and teamwork. Advisees with these abilities will excel in the twenty-first century, able to work together, solve problems, encourage curiosity, become technologically literate, participate in interdisciplinary learning, and instill a sense of agency in education and flexibility that are meaningful and relevant. Thus, it is vital to create awareness among advisees to master 4C skills in 21st-century learning.

Upskilling advisees with relevant skills and competencies are a must to excel in their fields like nursing, business administration, accounting, or even engineering. Courses with community service learning offered in Higher Education Institutions are now mostly part of the assessments. Advisees are required to have various skills to complete such learning. It includes knowledge of how to utilise in the context of volunteering as some helpful online platforms and applications provide distant volunteer possibilities that effectively meet social needs. Participants in community service learning will progressively enhance their core social and civic competencies, as well as their emotional expressiveness, comprehension of local issues, and leadership abilities. Online community projects help advisees improve their abilities while enhancing the quality of life in their communities.

LITERATURE REVIEW

21st Century Skills

To help advisees apply knowledge successfully in the real world, advisors must incorporate suitable skills and competencies for efficient learning techniques. At their future workplace, advisees must learn to use new technology, communicate clearly, work in teams, and solve issues imaginatively while managing a deluge of information. Hence, to land prospective jobs after graduation, 21st-century skills are needed. The four skills of the twenty-first century are critical thinking, creativity, teamwork, and communication.

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Communication

For this skill, advisees must learn about digital media to develop modern communication skills, as the 21st century has many technical innovations. Bourke et al. (2021) emphasised that communication is the priority skill in training advisees not limited to sectors like medicine and nursing but also engineering. The ability to interact effectively with people of different personalities and to clear up confusion is a must in communication. Concise and accurate writing, discussion, and negotiation are all made possible by communicative abilities. Regardless of whether it is as a team, department, or client, it is a step toward career advancement. Thus, communication is vital to enable conversation and engagement with others.

Collaboration

Besides that, Putri et al. (2020) stressed that language teaching collaboration helps advisees develop their skills for working together to complete tasks, exhibiting group leadership, adapting to new roles and becoming versatile, working well with others, being receptive in their position, and respecting opposing viewpoints. This skill exhibits the ability to collaborate effectively and with persons from different backgrounds. If advisees demonstrate these tips, 21st-century collaboration happens. Practicing collaboration and teamwork helps advisees understand how to address a problem, pitch solutions, and decide the best course of action. As a result, advisees who can collaborate well in completing online community projects will learn the most.

Critical Thinking

The ability to evaluate the epistemic quality of the knowledge that is currently available and resulting in calibrating confidence is known as critical thinking (Pasquinelli et al., 2021). In achieving an educational objective, critical thinking is a much-needed competency in a practical programme. Advisees must plan how to acquire the skills, dispositions, and information necessary to think critically. Hence, having such skills while participating in online community projects will allow advisees to become democratic citizens who seek reasoned procedures, talents, and attitudes.

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Creativity

Advisees can develop their creativity by finding solutions to issues, developing new methods, or attempting novel creations. In addition, advisees develop responsibility and improve their decision-making ability, making them open-minded and motivated to share that creativity while creating an innovative solution to a problem to inspire others to try something similar. Sitorus et al. (2020) found that innovation gives advisees equal opportunity to creatively produce work because these engaged activities enhance their ability to think imaginatively and apply their skills at the workplace. Consequently, participating actively in online community projects will allow advisees to polish their creativity skills.

In boosting 21st-century skills while commencing in online community projects, advisees can prioritise the skill to develop. According to Imamyartha et al.'s (2019) findings from research in higher education, the 4Cs in reading instruction with instructors designing appropriate 21st-century environments fosters metacognition and the acquisition of necessary information. In consequence, advisors need to support the learning of advisees in the 21st century while commencing online community projects via technological aids to give constructive feedback.

Significance of Community Projects

Increased Sense of Empathy

Such community service learning projects that they encompass while enrolled as students at Higher Education institutions are in sympathy with others who need support, better known as "empathy". Emphasise others leads advisees to feel intrinsically obliged to participate and communicate with them, solve problems, and provide support and assistance whenever possible (Jung & Lee, 2018). Humanity and commitment towards community developed from the need which fabricates contemporary behaviour as advisees learn to help the community in the early years of their lives before continuing to serve others voluntarily when they are at their future workplace. Consequently, online community projects assist advisees in developing social skills through building qualities of 21st-century skills to become more responsible citizens.

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Rise of Digital Platforms and Applications

As in this endemic phase, it is more common to have more online classes as advisors and advisees worldwide are more prone to choose several technological aids to teach and learn at Higher Education institutions. It is evident as commencing online community projects acknowledge that digital platforms influence community members' views and manage social problems (Kolk & Ciulli, 2020). Online platforms and applications integrate core services and interfaces for creative value among community members. Positive network effects allow for many beneficial interactions between two or more sides (Parker et al., 2016). Enhancing the user experience and optimising mutual collaboration on the platform can be achieved by relevant mechanisms such as an intuitive interface, simple tools for sharing and collaborating, and engagement rules. In summary, it facilitates social interactions in an online community by allowing information exchange, teamwork, and group action.

Engaged More in Online Learning

Engagement in online community projects is a factor in achieving learning outcomes to solve community problems and issues. Engaged advisees will be academically successful and satisfied with their learning experience. Advisees' engagement comprises three components: cognitive, emotional, and behavioural engagement (Fredericks et al., 2004). Supportive advisors will combine the classroom environment and technology because commencing online community projects will inherently utilises technology. Access to technology, help in comprehending and making use of technology, usability, design, choice of technology, the feeling of community, and kinds of assessment measures are the salient features of these two components. It provides advisees with online engagement support and equalizes learning chances for underrepresented groups. Advisees solve problems, identify ideas, and construct the fundamentals of effectively managing difficulties. These skills can be developed through meaningful learning experiences, resulting in new knowledge.

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Problem-Based Learning

Across many disciplines, problem-based learning is a popular and well-respected teaching paradigm (Crichton et al., 2022). There are four characteristics of Problem-Based Learning: (1) a focus on complex, real-world problems with various solutions, (2) advisees work in groups, (3) advisees gain new information through self-directed learning, and (4) lecturers act as advisors (Thorndahl & Stentoft, 2020). Thus, in this study, the framework of Problem-Based Learning proposed by Instructional Design Australia (2020) is the base of this study for problem-based learning. It has four components: authentic, non-linear, personalised, and guide and scaffold. Below is the diagram of the problem-based learning framework:

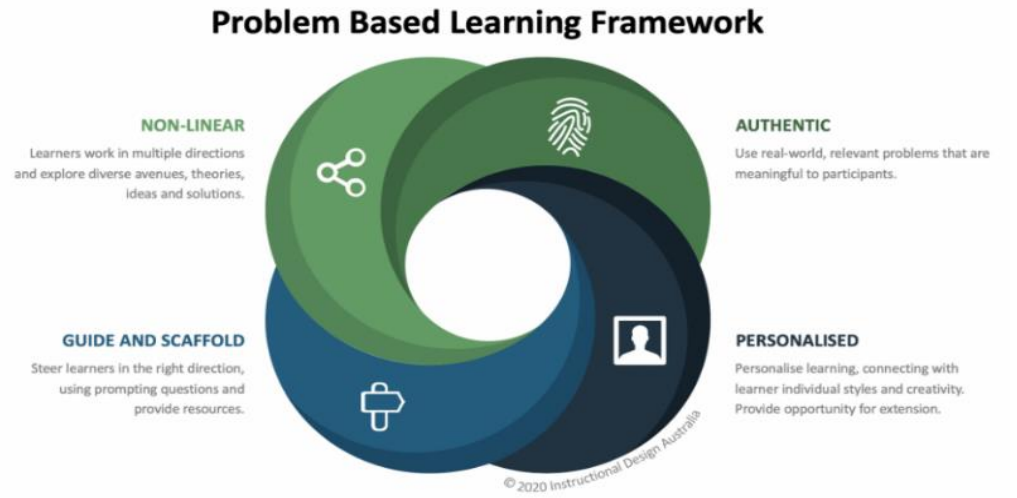

Figure 1: Framework of Problem Based Learning

Sources: Instructional Design Australia (2020) from Barrows & Tamblyn (1980)

As Barrows & Tamblyn (1980) highlighted, problem-based learning focuses on three components of knowledge: knowledge acquisition, knowledge application, and extension. It is also essential for advisees to be able to extend their learning for lifetime learning and apply it to other circumstances. By starting online community projects, advisees can improve their critical thinking and problem-solving abilities, as well as

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their communication skills and feelings of accountability in collaborative learning. Consequently, teaching and learning with problem-based learning pedagogy has improved course delivery and student engagement, especially in the engineering faculty.

Practical Engagement with Community Problems

As advisees start to plan to select social problems that occur in the community that they need to solve, they become engaged with the community to solve problems while working as a team. It is most likely what Dewey (1938) stressed on learning is the process by which knowledge objects make meaning through application in a real-world setting, mediated by contextual aspects of that engagement. Knowledge is the outcome of engaging practically with problems that are never fixed but continue to be part of experience and reflection. He continued that to make learning reflective as group reasoning aids in examining the presumptions and biases that various individuals bring to bear when approaching a topic. Education is crucial to creating a democratic society in the learning and instruction of democratic discourse. It is reflective learning in which learning objects become related in a relationship of mutual dependence with acts of learning to help advisees participate actively in such online community projects. Thus, advisees engaged with their online community projects will be selective on what to report and present in the video creation.

'Engineer-client' Framework

Engineers engage in projects a lot with communities and corporate and public clients on engineering projects. In preparing engineering graduates who are competent with all the 4C skills, they need to be exposed to such community projects to apply their knowledge of study. They learned how to initiate interaction in engineering community services with their clients within this context. Once they have decided on the projects to solve community problems, they would be able to identify the requirement of that project and their objectives. A streamlined project life cycle structure consists of five stages as outlined in this Mulligan et al. (2011) framework: project definition, project design, project implementation, operation and maintenance, and evaluation. It is evident in the diagram below.

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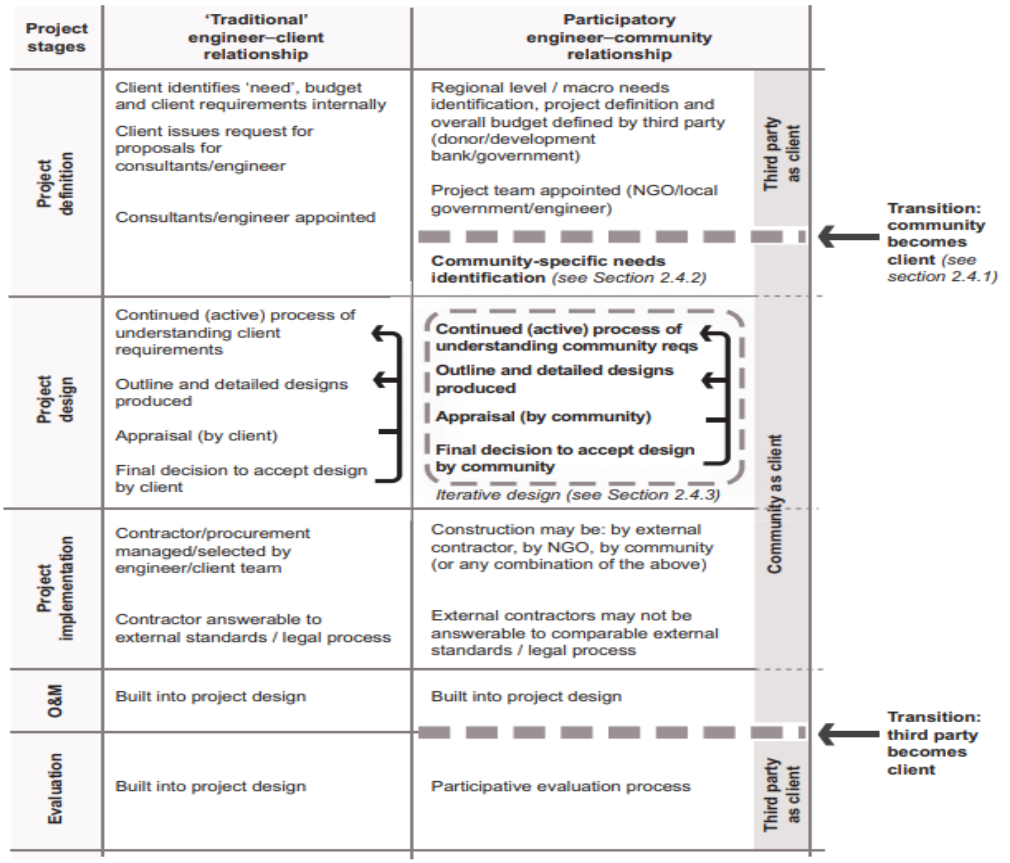

Figure 2: 'Engineer-client' framework by Mulligan et al. (2011)

The first step in this participatory project is to define the project's goals before directly including the community in the online community projects that need additional clarification based on the requirements and preferences of the community. Stage two comes next, during which the design process—which is inherently iterative—presents design proposals with progressively higher degrees of detail that are subsequently modified to meet the client's needs. To guarantee its quality and transparency, tighter involvement in the construction and execution of a more technical and administrative component is in stage two. Once the project has commenced, recommended designs align with the community's capacity to fulfill operation and maintenance obligations

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with expertise, time, and resources, making the design solution to the community's acceptance of those obligations. Finally, it will be the stage of getting feedback from the community/beneficiaries to improve future project design.

RESEARCH OBJECTIVES

In the background of the available literature and to determine the efficacy of a paradigm that integrates the four Cs of 21st-century skills in English classrooms for online community projects at higher education institutions, this study answers the following question: What is the advisees' opinion of the efficacy of a paradigm that integrates the four 21st-century skills into English classroom instruction for online community projects?

CONCEPTUAL FRAMEWORK

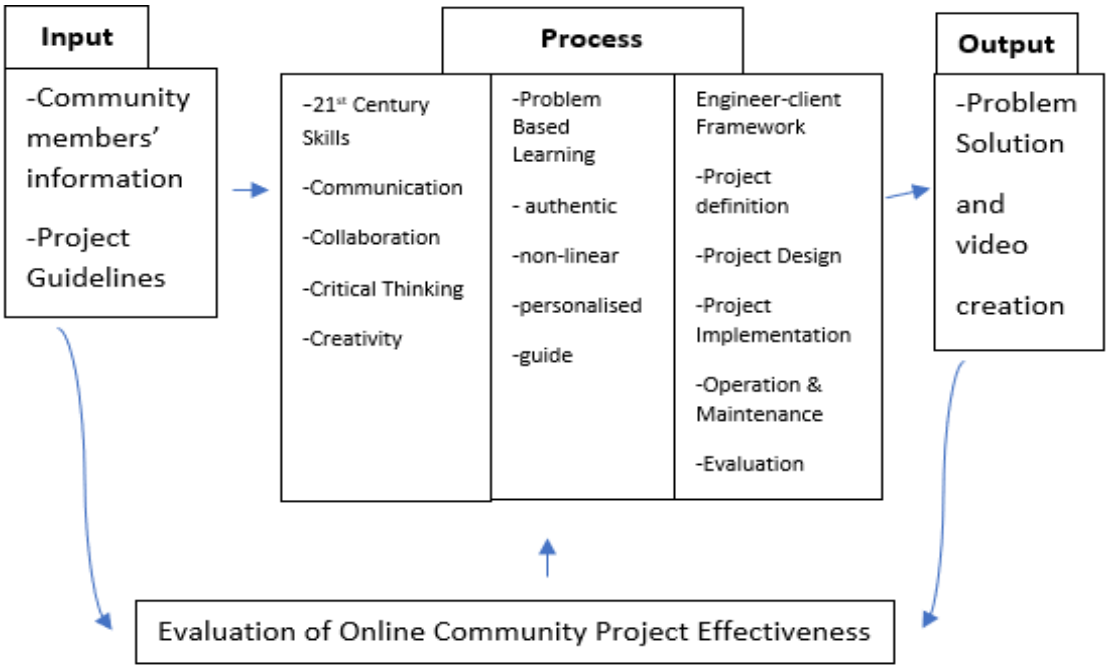

Figure 3: Conceptual Framework of Online Community Projects

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The conceptual framework acts as the basis for evaluating online community project effectiveness. It is a guideline for advisors to assess work by understanding better the processes involved in commencing online community projects. Figure 3 shows the conceptual framework indicating three phases involved: input, process, and output. The first stage is collecting input, such as information on the community and briefing by advisors on project guidelines. Next is the process stage, based on three concepts of the 4Cs of 21st-century skills, Problem-Based Learning pedagogy, and 'Engineer-client' Framework. Finally, it is the stage of solving community problems and creating videos.

METHODOLOGY

Survey Development

The 4Cs framework described is to improve the learning experience of the advisees in online community projects. This research used an adapted questionnaire for the investigation by Kelley et al. (2019) on a 21st-century skills survey instrument to assess their skills within learning. The authors worked together to create it on the Google Forms software platform. The researchers circulated a survey to learn more about the perceptions of the 4Cs of 21st-century skills with engineering students. In this adapted questionnaire, respondents gave feedback on 18 items from five dimensions. A 6-point Likert scale was used for their response, with 1 denoting strongly disagree, 2 mostly disagree, 3 slightly agree, 4 moderately agree, 5 mostly agree, and 6 denoting strongly agree.

Target Audience

The respondents of the present study are former foundation studies engineering advisees who have undergone the English for Foundation Studies II. In total, there were 102 graduates of the course cooperated to fill out the questionnaire, which made the study benefit from quantitative data. The chosen respondents for this study came from the purposive sample method based on three primary criteria: 1) they have participated in at least one cycle of community projects at the university level; 2) they have included the community projects pedagogical approach into their courses; and 3) they have used the Canva software to make their community projects films. The advisor's proposal that the advisees participate actively in their online community initiatives served as the basis for selection.

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Research Design

The flow of this research has been formulated into stages as shown below:

Stage 1: Introduction

Advisees were grouped into six to prepare materials for their community projects. They had also undergone a briefing session on the evaluation procedures.

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Stage 2: Confirmation of their projects

Advisees consulted with their advisor regarding their projects, and advisor gave some inputs and insights.

↓

Stage 3: Process of preparing videos

Advisees used applications like Canva to prepare videos for submission purposes.

↓

Stage 4: Evaluation

Evaluation of tasks taking place and feedback on the learning and instruction that took place were collected.

↓

Stage 5: Conclusion

Perceptions of the integration of 4Cs in commencing online community projects allows for more learning opportunities.

Figure 4: Five phases of online community project execution

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Learning environment

The advisor provided a briefing on community initiatives and instructions on brainstorming their ideas on online community projects using Google Meet. In addition, advisors utilised a Google Classroom to help advisees finish the project by following the instructions. Every phase included multiple activities that provided scaffolding for advisees to complete each step successfully. Engagement theory by Kearsley & Shneiderman (1998) is modified for advisees involved and immersed intellectually, socially, and behaviorally to support advisees' learning while immersed in the online learning environment. Engaged learning involves active cognitive processes, such as generating, problem-solving, thinking, decision-making, and evaluation.

Table 1: *Online community Projects*

	Community Project 1 (EcoBricks)	***Community Project 2 (Anti-Drowning Floating Belt)***	***Community Project 3 (Smart Trash Can)***	***Community Project 4 (De-Help)***
Problems faced by students in commencing online community projects	Eco bricks are not the best material for outdoor projects as too much exposure to the sun or other harsh weather will make it not a long-lasting invention.	It is hard to find materials to make belts that are stretchable and resistant to mechanical damage for this innovation project.	The arrangement requires more trash cans to separate waste collection.	It requires promotional action to be known to others to gain more users, as there are more readily accessible applications that are also free of charge.
Suggested solutions by advisor for students' community projects	A workable waste management is a more suitable option for modest indoor projects.	The findings of this prototype might only be suitable for right-handed wearers, but advisees could invent more future projects with left-handed wearer belts.	Target to implement this project at the selected area, like one faculty at the higher education institution, before collecting trash at other faculties.	Conduct more information-sharing sessions about this innovative project using social media like Instagram, Facebook, and TikTok.

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FINDINGS OF THE STUDY

A survey was conducted with the respondents to investigate perceptions on the effectiveness of the 4Cs if integrated into community project-based learning of the importance of 4Cs of 21st Century Skills in language learning. Four dimensions that concerned the researchers were communication, collaboration, critical thinking, and creativity. The following tables explain the results in mean and standard deviation (SD):

Table 2: *Feedback on Advisees' Perceptions on Communication*

Items	***Mean***	***SD***
Present all information clearly, concisely and logically	5.00	0.94
Track our progress in suitable cultural and intercultural contexts toward goals and deadlines	5.64	0.54
Use time and run meetings efficiently using technological aids	5.57	0.83

Table 2 above illustrates three items about advisees' perceptions of communication. Advisees responded that all these items: present all information clearly, concisely and logically (mean score: 5.00, SD: 0.94), track our progress in suitable cultural and intercultural contexts toward goals and deadlines (mean score: 5.64. SD: 0.54), and use time and run meetings efficiently using technological aids (mean score: 5.57, SD: 0.83) indicates that respondents' perceptions are from effective to very effective highly supports the advisor goal of teaching using various activities will attract advisees to participate more in classroom and communicate within cultural and intercultural contexts. As advisors utilise platforms like Google Classroom, Google Meet, and Canva to offer guidance to complete online community projects, advisees can present their work effectively. Conclusively, the first 4C element of 21st Century Skills, communication, is crucial in enabling advisees to complete the assigned tasks, especially in teamwork.

Table 3: *Feedback on Advisees' Perceptions on Collaboration*

Items	***Mean***	***SD***
Offer assistance using technology to others in their work when needed	5.54	0.73
Follow simplified and systematic rules for team decision-making	5.67	0.67
Acknowledge and respect other perspectives using various learning options for tasks completion	5.17	0.85
Improve work when given feedback	5.00	0.94

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As for Table 3, there are four items about advisees' perceptions of collaboration. Responses collected are that for all these items, offer assistance using technology to others in their work when needed (mean score: 5.54, SD: 0.73), follow simplified and systematic rules for team decision-making (mean score: 5.67, SD: 0.67), acknowledge and respect other perspectives using various learning options for tasks completion (mean score: 5.17, SD: 0.85), and improve work when given feedback (mean score: 5.00, SD: 0.94) indicates that respondents' perception as effective to very effective highly supports the advisor goal of teaching by having simplified and systematic teaching instructions, offering several delivery methods, especially using technological aids to enhance collaboration among advisees. It is pertinent for advisors to ensure advisees deliver procedural steps in completing the assigned tasks. This is because advisees would have to collaborate online, and failure to have proper planning to conduct participative collaboration might dishearten the advisees. Thus, in this case, advisors need to be able to identify problems faced by each group and assist advisees.

Table 4: *Feedback on Advisees' Perceptions on Critical Thinking*

Items	***Mean***	***SD***
Identify in detail what solutions needed to solve community problems	5.67	0.47
Gather relevant and sufficient information from different sources using technological aids available	5.57	0.83
Develop follow-up questions to gain understanding of the wants and needs of community	5.00	0.94
Evaluate reasoning and evidence that support problem solving strategies	5.00	0.94

For the third dimension, respondents evaluated critical thinking skills as one of the 21st Century Skills. Responses collected are that all these items: identity in detail what solutions are needed to solve community problems (mean score: 5.67, SD: 0.47), gather relevant and sufficient information from different sources using technological aids available (mean score: 5.57, SD: 0.83), develop follow-up questions to gain an understanding of the wants and needs of the community (mean score: 5.00, SD: 0.94), and evaluate reasoning and evidence that support problem-solving strategies (mean score: 5.00, SD: 0.94) indicates that perception is: from effective to very effective highly supports the advisor goal of teaching. Two items have the same mean score and standard deviation value (SD), which are developing follow-up questions on the wants and needs of the community and evaluating reasoning and evidence that support problem-solving strategies. Higher values in the mean score and standard deviation stipulate better exposure and guidance from the advisor. Advisors who have undergone

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training would implicitly result in more integration of activities to intensify critical thinking in advisees. Thus, advisees will be capable of solving problems in the community and compiling their record of online community projects to be assessed by the advisor.

Table 5: *Feedback on Advisees' Perceptions on Creativity*

Items	***Mean***	***SD***
Adapt a communication style appropriate with the technological platforms and applications for the purpose, task, or audience	4.99	0.94
Find sources of information and inspiration when others do not	5.44	0.68
Understand how knowledge or insights might transfer to other situations or contexts	5.19	0.79

Meanwhile, Table 5 above illustrates three items about advisees' perceptions of creativity. Advisees responded that adapting to a communication style appropriate with the technological platforms and applications for the purpose, task, or audience with the perception of moderately effective (mean score: 4.99, SD: 0.94), understand how knowledge or insights might transfer to other situations or contexts (mean score: 5.19, SD: 0.79) and find sources of information and inspiration when others do not, as effective (mean score: 5.44. SD: 0.68), which designates that respondents' perception as to support the advisor goal of teaching. Advisors need to conduct innovative activities that will reinforce creative skills within advisees. Many advisees agreed that the integration of the 4Cs, especially creativity skills, should be instilled and made them aware that it is possible to gather from different sources and can be applied in different contexts while communicating with others. It is indisputable that one of the 4C elements of 21st Century Skills, creativity, is crucial in enabling advisees to complete the assigned tasks, especially in online mode.

Table 6: *Feedback on Students' Perceptions on Overall Perceptions*

Items	***Mean***	***SD***
Advisor ought to look into ways to develop both their own talents and those of their advisees.	4.97	0.96
Include language learning's macro skills in the classes.	5.57	0.68
A classroom should be furnished with cutting-edge educational resources and tasks that are appropriate for the twenty-first century.	5.64	0.54
Create effective written advising plans for subjects that use resources from the twenty-first century.	5.00	0.94

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The final dimension of the survey covers the overall perceptions of advisees on all the 4Cs of 21st-century skills. The statement that advisors ought to look into ways to develop both their talents and those of their advisees was recorded as moderately effective (mean score: 4.97, SD: 0.96), signifying the need for advisors to also have critical thinking in developing both talents of advisor and advisees to enhance learning in online classrooms. Having such an advisor would encourage advisees to be supported to solve problems that occur and get tasks completed. Positive responses reveal the importance of including language learning macro skills in the classes as very effective, with a mean score of 5.57 and SD of 0.68. Creative moves made by the advisor to embed such skills in classrooms would assist advisees to nourish better ideas and make intelligent moves in any situation that they are in. Besides, advisees collaborate well in teamwork, resulting in a classroom with cutting-edge educational resources and tasks appropriate for the twenty-first century. It is very effective, with high values in mean scores of 5.64 and SD of 0.54, proposing that collaboration skills are ideal for successful learning in online classrooms. For communication skills, advisors need to create written advising plans for subjects that use resources from the twenty-first century, perceived to be effective, with a mean score = 5.00 and SD = 0.94. Advisees must be empowered with such skills, writing effectively, as this is one of the skills needed at their future workplace.

DISCUSSIONS

Based on the "Engineer-client" framework proposed by Mulligan et al. (2011) applied by advisees when commencing online community projects. It started with "project definition" with advisees communicating that they needed to plan and use time wisely within the stipulated time. They track their progress and present information gathered clearly in their video creation. Application problem-based learning pedagogy in completing this task ensures their work is authentic and personalised after being guided by their advisor. The advisor should integrate receptive and productive skills in a single or sequence of sessions to demonstrate skills integration before providing a briefing on the assignment requirements (Erdoğan, 2019). To help their advisees communicate successfully, advisors should use a variety of ELT methodologies in task- and content-based language instruction. Before confirming their projects with their advisor, advisees have been brainstorming some ideas for possible community projects.

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It is evident in stage 2 of the "Engineer-client" framework by Mulligan et al. (2011), the project design stage, with critical thinking skills needed for project fulfillment. They critically thought about the pros and cons of each topic. Once they have finalised with team members which project is the best to be shown and get approval from their advisor. At this phase, 'Engagement theory' by Kearsley & Shneiderman (1998) was evident. They made their initiatives about when to discuss in online meetings to produce, list any possible solutions to problems, give reasonings, and evaluate each possibility before making any decision. There were four approved community projects by the advisor after much thought and consultation with the advisor: EcoBricks, Anti-Drowning Floating Belt, Smart Trash Can, and De-Help. The advisor suggested some solutions for problems faced by students for each approved community project.

As for stage 3 of the "Engineer-client" framework by Mulligan et al. (2011), the project implementation with the collaborative skill of the advisees is pertinent. Putri et al. (2020) stressed that collaboration in language teaching helps advisees develop their skills for working together to complete tasks. It is relevant to acquire such skills when an advisor can discuss lessons in cultural contexts and backgrounds. It was proven when respondents gave positive feedback about aiding others in their work by using technology when needed, following simplified and systematic rules for team decision-making, acknowledging and respecting other perspectives about various learning options for task completion, and improving their work when given feedback. Thus, advisors must ensure advisees are collaborative in delivering procedural steps to complete the assigned tasks.

Meanwhile, creativity skills are applied for stage 4 of the framework by Mulligan et al. (2011) of operation and maintenance. Advisees responded that they adopted a communication style appropriate for them to complete video creation of online community projects. It is evident when most of them used Canva, a free graphic design platform that allows advisees to edit photos and create videos, besides some other free applications and platforms. It agrees with Sohaya's (2020) claim that creative individuals benefit the most from technological instruments and materials. It leads to their agreement that after being satisfied with learning and applying these technologies in this course, they claimed they managed to gain knowledge in other contexts. With such ease of using available technological aids, they could find sources of information

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and inspiration. Many advisees agreed that the integration of the 4Cs, especially creativity skills, should be evident in every possible situation.

Findings from this study reveal some important points we should consider and rethink in structuring the syllabus and implementing it in online classes. It is vital to create active learning situations among the advisees as this will assist them in applying the skills that they have learned. Active learning is the key to success, and we should continue to blend the most recent applications as it is effective for online lessons. Advisor adapt to classroom communication with digital communication practice as it is significant enough for the advisees. The focus point of educating advisees is to have them reproduce the language and ensure active learning. Hence, advisors must seek methods of incorporating the assignments and activities that will help advisees polish their skills, proving integration of the Canva application and Google platforms to be one of the effective ways to create online community projects.

Advisees engaged with their online community projects will be selective on what to report and present in the video creation. It is most likely what Dewey (1984) stressed on learning is the process by which knowledge objects make meaning through application in a real-world setting, mediated by contextual aspects of that engagement. Knowledge is applying practical solutions to problems that are never fully solved but remain a part of experience and contemplation. Actively involved advisees will succeed academically and feel content with their education. There are three elements of student engagement: behavioural engagement, emotional engagement, and cognitive engagement (Frederick, 2004). Supportive advisors will combine the classroom environment and technology because commencing online community projects will inherently utilises technology.

To guarantee that advisees will participate in and finish online community projects involving the creation of videos, advisors should expand their expertise through professional development, which can include online or in-person lectures. Pardede (2020) emphasized that advisors should educate themselves before instructing others, mastering the teaching and assessment of 4C skills. Advisors who assist advisees in starting online community projects should also use alternative English language teaching strategies like task-based and content-based language teaching since advisees gain knowledge from reflective and active learning experiences. According to Erdoğan (2019), advisors should integrate receptive and productive abilities in lectures and

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discussions. Conclusively, advisors manage online classes effectively before assessing via skills integration and other English Language Teaching methodologies.

CONCLUSION

The Problem-Based Learning pedagogy for advisees commencing their online community projects influenced the success and effectiveness of classroom learning. The implication of this study is to provide an understanding of awareness of 4C skills encompassed in the online community projects by implementing the Problem-Based Learning pedagogy. In evaluating the effectiveness of online community projects, advisors and advisees need to understand that it all starts with the input about project guidelines as well as the information from the community members, followed by the process of conducting online community projects by encompassing 4C of 21st Century skill, using problem-based learning pedagogy, and adapting to the "Engineer-client" framework. Finally, as for the output stage, advisees can solve community problems and create videos.

All advisees who participated in online community projects will enhance their 4C skills of 21st-century learning. Advisors need to ensure advisees have the opportunity to engage in all elements of the pedagogy. Depending on the learning objectives, different teaching approaches may be combined in different ways by the advisors to ensure advisees achieve success in completing assigned tasks. In this way, they recognise and address all aspects required by providing additional support to scaffold developing skills within the 21st-century paradigm.

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