Harnessing Empowerment Paradigms for Development of Student Leadership (Memanfaatkan Paradigma Pemerkasaan untuk Pembangunan Kepimpinan Pelajar)

## AZRIQ RASHID HUSSIN, MAZLIFENDIRIZAN MD REJAB & AIDA SHUHAIDA MUSTAFA

#### **ABSTRACT**

Leadership skills among students must be cultivated among themselves since they are a fundamental component of education that allows them to make good decisions, instill diligence and dedication, and distinguish between what is adequate and inappropriate. Furthermore, students are prone to develop valuable learning processes and abilities, building a deeper sense of maturity while in an academic setting. In the Engineering Campus of Universiti Sains Malaysia (USM), students' representatives such as the Student Representative Council or Residential Student Council play a crucial role in ensuring the well-being of students in the campus and the residential hall, respectively. It is crucial for them to develop strong leadership skills to make better decisions while fulfilling their responsibilities. This study aims to explore the empowerment paradigms that could contribute to the development of leadership skills among the students. The empowerment approaches encompass Project-Based Learning, Service Learning, and Collaborative Group Work. The research involved 40 members of the Residential Student Council of Jaya Lembaran Utama College or known as Majlis Penghuni Desasiswa Jaya Lembaran Utama (MPDJLU) to complete the online survey questionnaire. Besides, literature from articles on related topics is also one of the methods used in this research. The study results indicate that Project-Based Learning, Service Learning, and Collaborative Group Work are the best empowerment paradigms that could be harnessed to foster leadership among the students. Integrating these empowerment paradigms enhances student leadership and equips USM students to navigate and lead in complex, dynamic real-world situations, thereby fostering the development of capable future leaders.

Keywords: Leadership; Empowerment; Project-Based Learning; Service Learning; Collaborative Group Work

## **ABSTRAK**

Kemahiran kepimpinan hendaklah dipupuk dalam kalangan pelajar kerana ia merupakan komponen asas pendidikan yang membolehkan mereka membuat keputusan yang baik, menyemai ketekunan dan dedikasi, dan membezakan antara yang memadai dan tidak sesuai. Tambahan pula, pelajar cenderung untuk membangunkan proses dan kebolehan pembelajaran yang berharga, membina rasa kematangan yang lebih mendalam semasa berada dalam persekitaran akademik. Di Kampus Kejuruteraan Universiti Sains Malaysia (USM), wakil pelajar seperti Majlis Perwakilan Pelajar atau Majlis Penghuni Desasiswa memainkan peranan penting dalam memastikan kesejahteraan pelajar di kampus dan kolej kediaman masing-masing. Adalah penting bagi mereka untuk membangunkan kemahiran kepimpinan yang kukuh bagi membuat keputusan yang lebih baik sambil memenuhi tanggungjawab mereka. Kajian ini bertujuan untuk meneroka paradigma pemerkasaan yang boleh menyumbang kepada pembangunan kemahiran kepimpinan dalam kalangan pelajar. Pendekatan pemerkasaan merangkumi Pembelajaran Berasaskan Projek, Pembelajaran Perkhidmatan dan Kerja Kumpulan Kolaboratif. Penyelidikan itu melibatkan 40 ahli Majlis Pelajar Kediaman Kolej Jaya Lembaran Utama atau dikenali sebagai Majlis Penghuni Desasiswa Jaya Lembaran Utama (MPDJLU) untuk melengkapkan borang soal selidik dalam talian. Selain itu, kajian literatur artikel mengenai topik berkaitan juga merupakan salah satu kaedah yang digunakan dalam penyelidikan ini. Hasil kajian menunjukkan bahawa Pembelajaran Berasaskan Projek, Pembelajaran Berasaskan Perkhidmatan dan Kerja Kumpulan Kolaboratif adalah paradigma pemerkasaan terbaik yang boleh dimanfaatkan untuk memupuk kepimpinan dalam kalangan pelajar. Mengintegrasikan paradigma pemerkasaan ini meningkatkan kepimpinan pelajar dan melengkapkan diri pelajar USM untuk mengendalikan dan memimpin dalam situasi dunia sebenar yang kompleks dan dinamik, sekaligus memupuk pembangunan pemimpin masa depan yang berkebolehan.

Kata kunci: Kepimpinan; Pemerkasaan; Pembelajaran Berasaskan Projek; Pembelajaran Berasaskan Perkhidmatan; Kerja Kumpulan Kolaboratif

## **INTRODUCTION**

Effective leadership is a crucial element for the success of any organisation. Effective leadership is characterised by the accomplishment of objectives with the guidance of human helpers. Prentice (1961) defined a good leader as someone who can comprehend the motives of others. We have observed that, in a world that is changing quickly, there are frequent shifts in the ways that we communicate and receive information, necessitating critical and creative thinking as well as problem-solving skills. It takes confidence, flexibility, and persistence to navigate such fast changes. Therefore, it's critical that youths are ready for what lies ahead for them in the future. The fundamental leadership abilities needed in an organization, such as decision-making, problem solving, work ethic, and communication skills, must be taught to the students. Supporting the development of these leadership abilities is likely to increase a person's ability to act in the world and their readiness to lend a hand to others as they acquire the self-assurance to interact with others. Additionally, they often become more self-aware and arrange their lives in a structured way. In addition, when they gain a deeper sense of development, they will use the abilities they have acquired in practical settings.

In Universiti Sains Malaysia (USM), empowering students is a widely embraced concept and a well-established practice as it helps to prepare these students after they are graduating. When the students feel empowered, they tend to become very engaged in what they are doing and take full responsibility for their self-growth and development to become better. For a leader, it allows one to approach the problem with curiosity and resilience, propose a technique to solve the problem, and learn from mistakes and failures for their growth.

One of the student empowerment approaches in USM is the Student Consultative Council or otherwise known as Dewan Perundingan Pelajar (DPP), where it functions to discuss student welfare issues from all campuses in USM. Various aspects are discussed during these consultations, such as accommodation, health, safety, counseling, social facilities, and many others. The Student Consultative Council (DPP) has become a medium for voicing all matters related to student affairs, current welfare issues both on and off campus, university regulations, and additional issues such as ethics and academics. DPP also serves to provide a platform that integrates the voices of students, uniting student leadership from the Main Campus, Engineering Campus, Health Campus, and the USM-KLE Coastal

Campus. Furthermore, it plays a role in representing student voices at the highest levels. Additionally, DPP cultivates intellectual discourse among students, nurturing quality and critical-thinking students, and serves as a platform to articulate views diplomatically to governmental and non-governmental organizations (NGOs).

In the Engineering Campus of USM, the Student Representative Council or known as Majlis Perwakilan Pelajar (MPP) is responsible for safeguarding the welfare and sustainability of USM. Meanwhile, the Residential Student Council of Jaya Lembaran Utama College, also known as Majlis Penghuni Desasiswa Jaya Lembaran Utama (MPDJLU) plays a crucial role in ensuring the well-being of the students within the residential hall and organises beneficial programmes for the residents.

The MPDJLU's initiatives and programs have significantly aided in the members' development of leadership abilities. MPDJLU's programs enable a thorough understanding of leadership principles and their practical implementations by fusing theoretical frameworks with real-world applications. To improve their leadership methods and styles, participants are introduced to advanced concepts in interpersonal communication, ethical decision-making, and strategic management. These programs' emphasis on reflective practice and group problem solving improves participants' capacity to handle challenging situations and promote organisational success.

Consequently, MPDJLU members become more skilled leaders who possess the essential abilities needed to motivate and inspire others in a variety of academic and professional contexts. This paper will focus on three key empowerment paradigms: Project-Based Learning, Service Learning and Collaborative Group Work. These empowerment paradigms play a pivotal role in cultivating comprehensive leadership competencies among students. Project-Based Learning facilitates the development of initiative, strategic and collaborative execution, thereby reinforcing critical thinking and decision-making abilities. Service Learning fosters civic consciousness, empathy, and a sense of social accountability by linking academic knowledge with community engagement. Concurrently, Collaborative Group Work enhances interpersonal communication, conflict resolution, and shared leadership, which are essential for functioning effectively within diverse team settings. Collectively, these approaches provide a structured and experiential framework that supports the formation of capable, reflective, and socially responsible student leaders.

Table 1 shows the list of programs that have been conducted by MPDJLU with the respective paradigms. The programs conducted by MPDJLU for the 2023/2024 academic session reflect impactful outcomes across three educational paradigms. Through Project-Based Learning initiatives such as Anugerah Sanjungan Desasiswa (ASD), Sukan Antara Desasiswa (SUKAD), Sukan Rakyat Sarong (SRS), JLU4U, and Temasya Olahraga Tahunan (TOT), students gain practical experiences in planning and executing complex projects, which fosters critical thinking, leadership, and problem-solving skills. These experiences also cultivate time management, teamwork, and organizational capabilities. Meanwhile, Service Learning programs like Help Other People Everywhere (H.O.P.E), Recycle Day 2.0, and Le'Mari @ Kejut emphasize community engagement, empathy, and civic responsibility by connecting academic concepts to real-world social and environmental issues. Such efforts encourage students to become more socially aware and committed to contributing positively to their communities. Lastly, the integration of Collaborative Group Work across all programs ensures the development of interpersonal communication, shared leadership, and effective group dynamics, reinforcing teamwork and mutual accountability. Altogether, these programs provide a holistic platform in the advancement of student leadership, as these strategies offer the resources and chances required to cultivate proficient leadership abilities and tackle practical issues.

TABLE 1. Programs of MPDJLU 23/24 Academic Session

Paradigms	Programs		
Project-Based Learning	Anugerah Sanjungan Desasiswa (ASD)		
	Sukan Antara Desasiswa (SUKAD) Fasa I, II, III		
	Sukan Rakyat Sarong (SRS)		
	JLU4U		
	Temasya Olahraga Tahunan (TOT)		
Service Learning	Help Other People Everywhere (H.O.P.E)		
	Mahasiswa Turun Sekolah (MTS)		
	Sukan Rakyat Sarong (SRS)		
	Recycle Day 2.0		
	Le'Mari @ Kejut		
ollaborative Group Work	All programs conducted by MPDJLU		

The objectives of this study are to explore empowerment paradigms in student leadership through a comprehensive review of academic literature and online databases. Besides, to assess the alignment between students' experiences of empowerment strategies and existing research findings through an online survey. Lastly, to evaluate the effectiveness of Project-Based Learning, Service Learning, and Collaborative Group Work in enhancing leadership

qualities among student leaders at USM.

## **METHODOLOGY**

To deepen more understanding of the topic, two distinct methods were employed, which are:

- i. Literature Review
- ii. Online Survey

## LITERATURE REVIEW

Leadership. Leadership can be defined as the ability of an individual or a group of people to influence and guide followers or members of an organization, society or team. They articulate a clear vision, establish achievable goals and provide their followers with the knowledge and tools necessary to achieve those goals (Barney & Pratt, 2023). According to Dr. Myles Munroe, leadership is the capacity to influence others through inspiration motivated by a passion, generated by a vision, produced by a conviction, and ignited by a purpose.

Project-Based Learning. Project-Based Learning (PBL) is the application of theory to projects. where it promotes the demonstration and retention of knowledge. It also offers improved team and leadership skills development. Many qualities of one's leadership can be improved such as teamwork skills, communication skills, the ability to set goals and make decisions, and problem-solving and critical thinking skills (Cain & Cocco, 2013). PBL is able to create effective learning opportunities where students can work collaboratively to solve problems or overcome to reach the outcomes of the project (Hasanah et al., 2023). Moreover, it is also stated that PBL could increase students' ability to understand different perspectives, manage conflicts, cooperate and lead small groups, and increase self-awareness. PBL, thus, develops cooperation, communication, problemsolving skills, and the capacity to negotiate group dynamics, all of which help students become more proficient at managing and leading in a collaborative setting.

Service Learning. Service Learning (SL) can help the students to acquire and improve necessary leadership skills required for the preparation of their future. Students work with the community members to understand their problems or needs. Through SL, the students gain the opportunity to develop their leadership skills, discover talents and gain meaningful insight into what they are capable of. They also learn to work collaboratively with the community and eventually develop leadership skills (Ejiwale, 2013). Moreover, SL could provide students with greater understanding of the world as they work with diverse people. SL also helps to promote their personal growth. The rationale for SL is that students could learn by investigating the needs of the community, planning and preparing for action, acting in a variety of ways, and reflecting on the experience and learning. By implementing these aspects, students can develop skills such as communication and decision-making, work on developing respect and empathy towards others, increase creativity and innovation to help solve global and local issues, prioritise energy to assist the community, and overall increase in community awareness of relevant social issues (Barton, 2021). It can be suggested that SL gives students invaluable opportunities to develop their leadership abilities, encourage personal development, and broaden their awareness of various communities, ultimately equipping them to deal with social issues with compassion, originality, and a strong sense of civic duty.

Collaborative Group Work. Collaborative Group Work are groups of people working together on a project or task. It is particularly helpful as most individuals often have narrow understanding towards certain areas of expertise. It can increase a group's ability to solve problems as it brings together a range of different perspectives (What Are Collaborative Work Groups? | Wrike Collaborative Work Guide, n.d.). Collaborative Group Work or also known as collaborative leadership is an approach that hinges on teamwork, cooperation and shared responsibility. It is about leading by involving everyone, valuing each team member's input, and working together toward common goals. It means inviting and respecting everyone's opinions and expertise on projects and initiatives where different perspectives, ideas, and strengths are used to create new solutions (Kitch, 2024). Having taken a close look at it, Collaborative Group Work collaborative leadership is beneficial because it improves problem-solving skills by including various viewpoints, encouraging unity among team members and building common responsibility for innovative solutions, which leads to collective success.

## Online Survey

This study uses an online survey via Google Forms to collect data on how students' leadership skills are developing. The goal is to gather evidence on how different empowerment paradigms can foster leadership growth among students. Forty members of the Jaya Lembaran Utama Students Residential Council (MPDJLU) are participating by completing the survey, which was open for responses over five days. In addition, a systematic review of existing literature is being conducted to summarize current research and identify gaps in knowledge related to empowerment paradigms and student leadership development.

The respondents are aged between 19-25 years. This age group are the members of MPDJLU, who are undergraduate students at the Engineering Campus, USM. Both males and female members of MPDJLU are

involved in this online survey, where there are 32.5% males and 67.5% females. As for years of study, 65% of second year, 15% of third year, 12.5% of first year and 7.5% of fourth year took their part in this survey. As for leader analysis, about 85% of the respondents

had experience being a leader and the remaining had no experience or being unclear about what qualifies them to have an experience as a leader. The data are shown in Figure 1.

# Have you ever had experience being a leader? 40 responses

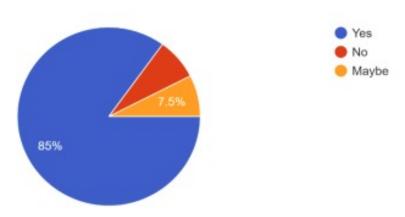


FIGURE 1. Students' experience of being a leader

## RESULTS AND DISCUSSION

According to the survey, a total of 40 respondents were members of the MPDJLU. The survey aimed to explore the positive impacts of the empowerment paradigms on leadership development among the members. The respondents were required to evaluate the benefits they experienced in relation to each paradigm. The survey highlighted four key benefits that corresponded to each

paradigm. We will gain deeper insight into the specific advantages gained by the members, emphasizing the role of these paradigms in shaping their leadership qualities. The data obtained from the survey are shown below:

*Project-Based Learning*. Table 2 shows the data of Project-Based Learning effects for the development of student leadership.

TABLE 2. The effects of Project-Based Learning (PBL) on development of students' leadership

PBL effects	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
PBL promotes the development of critical	0	0	3	13	24
thinking skills					
PBL fosters creativity	0	0	4	16	20
PBL enhances problem-solving abilities	0	0	2	15	23
PBL broadens understanding of diverse	0	0	2	15	23
perspectives					

Based on Table 2, the data indicates that more than 20 respondents *Strongly Agree* that PBL promotes the development of critical thinking skills, with 13 respondents *Agree*. The *Neutral* respondents are minimal, and no significant disagreement is observed. As many members of the MPDJLU have held many programs for the residential hall, most of them had experience being the director of the programs conducted. During their engagement with the projects, students can encounter problems that need to be constructed for them to reach the objectives of the projects. They might be faced with a challenging task that requires them to negotiate uncertainty, consider all their options, and defend their decisions to come to the best conclusion.

From Table 2, 20 respondents Strongly Agree that PBL fosters creativity, with 16 respondents Agree. The small number of Neutral responses suggests that the participants have a clear positive stance on this effect of PBL. Creativity in leadership may refer to the ability to develop actionable and innovative ideas (Indeed Editorial Team, 2024). It may help leaders to make more effective decisions for the teams through engaging strategies. Creatively delivering instructions will allow leaders to create a remarkable environment where members may express their creativity. The members will be more encouraged to be creative throughout the task and are given the opportunity to think creatively. Through PBL, they may develop their creativity, which is essential in today's fast-paced world.

As for PBL enhancing problem-solving abilities, 23 respondents *Strongly Agree*, and 15 respondents *Agree* on this effect of PBL. Minimal *Neutral* and no disagreement are observed from the data. There are a lot of issues that will come up when getting ready for the projects. As they collaborate to find solutions, students become familiarized with problem-solving techniques and may even come up with new ones. Eventually, this will prepare them for the future as the 21st-century workplace will be more challenging. PBL also encourages the students to find solutions for complex issues and enhances themselves to be active and solve problems effectively (Gryshuk, n.d.).

23 respondents *Strongly Agree* that PBL could also broaden understanding of students from different perspectives, while 15 respondents *Agree* on this statement. The low number of *Neutral* respondents and no significant disagreement highlight the support for this outcome of PBL. As students have more exposure to diverse opinions and viewpoints, they will understand critical evaluation from different perspectives as PBL often involves debating and discussing different ideas and solutions. They will gain the ability to assess multiple points of view critically, evaluating the advantages and disadvantages of each, which will ultimately help them comprehend the strengths and weaknesses of many opinions.

*Service Learning*. Table 3 shows the data of Service Learning effects for the development of student leadership

TABLE 3. The effects of Service Learning	(SL) on devel	opment of students'	leadership
--	---------------	---------------------	------------

SL effects	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
SL provides opportunities for meaningful	0	0	3	14	23
involvement with the local community					
SL enhances one's civic responsibility	0	0	3	16	21
SLbroadens one's understanding of diverse	0	0	2	14	24
cultures and communities					
Participation in SL improves one's	0	0	4	15	21
leadership qualities					

From Table 3, it is shown 23 respondents Strongly Agree and 14 respondents Agree that Service Learning provides opportunities for meaningful involvement with the local community. Meanwhile, Neutral responses are minimal, and no significant disagreement is obtained indicating that the respondents have strong consensus on this effect. Service Learning immerses students directly in local communities, enabling them to work on projects that address realissues. The hands-on experience promotes students to understand the complexities and needs of the community, thereby fostering empathy and social responsibility. The students who act as leaders will learn to lead the team, communicate with diverse groups, and refine their leadership skills in a practical, real-world context.

Moreover, there are 21 respondents *Strongly Agree* that Service Learning enhances one's civic responsibility as they are exposed to real-world problems, with 16 respondents *Agreeing with* this statement. The minimal number of *Neutral* responses and no disagreement are also obtained from the data. Engaging with communities with a focus on poverty, education, healthcare, and environmental challenges is crucial because it fosters a deeper knowledge of these issues among students. It is more likely that the students will take the lead and organise initiatives to

deal with these problems.

From the table, it is observed that 24 respondents *Strongly Agree*, and 14 respondents *Agree* that Service Learning could broaden one's understanding of diverse cultures and communities. There is a minimal number of responses for *Neutral* and no significant disagreement is obtained from the survey. The ability of leaders to work across differences with people from different backgrounds will enable varied teams to function well while appreciating the individual contributions of each member. Regardless of background, everyone will feel more appreciated and empowered to participate.

21 respondents *Strongly Agree* that participation in Service Learning improves one's leadership qualities, with 15 respondents *Agreeing with* this statement. The small number of *Neutral* responses and negligible disagreement also suggest that the respondents find value in this effect. As they have hands-on experience, they will apply the leadership theories in real situations as Service Learning projects often require students to take on leadership roles, which will enhance their ability to lead effectively. Their confidence will be built up as it is crucial for students to prepare themselves to take on more significant leadership roles.

Collaborative Group Work. Table 4 shows the data of Collaborative Group Work effects on the development of student leadership.

CGW effects	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
CGW exposes students to diverse	0	0	2	16	22
perspectives					
CGW promotes social interactions	0	0	1	15	24
CGW fosters sense of commitment	0	0	2	15	23

TABLE 4. The effects of Collaborative Group Work (CGW) on development of student leadership

From Table 4, 22 respondents *Strongly Agree* that Collaborative Group Work strengthens communication skills, which is crucial for one to be a good leader, with 16 respondents *Agree with* this statement. The minimal *Neutral* response and the absence of significant disagreement indicate that the respondents have strong belief in this effect of Collaborative Group Work. Leaders must effectively convey their vision, goals, and feedback. Collaborative

Group Work offers students a valuable opportunity to practice and refine these essential communication skills. Engaging in such teamwork not only enhances their ability to articulate ideas clearly but also prepares them for leadership roles where effective communication is crucial for success.

Next, 22 respondents also *Strongly Agree* that Collaborative Group Work exposes students to diverse perspectives, with 16 respondents *Agree with* 

this statement. There are minimal *Neutral* responses and a lack of disagreement. The variety of viewpoints encourages students to look at problems from different perspectives and recognize the level of complexity ones may encounter. Leaders who can comprehend and integrate different points of view will be more equipped to come up with creative ideas and make well-informed choices.

As Collaborative Group Work promotes social interactions, majority respondents *Strongly Agree with* this statement with a total of 24 respondents and a total of 15 respondents *Agree*. Only 1 respondent gives a *Neutral* response and there is no disagreement towards this effect. Students will learn about each other's strengths, shortcomings, and working methods through their frequent social encounters. Strong relationship-building skills enable leaders to motivate and guide others to establish a cohesive and encouraging work environment.

Other than that, 23 respondents *Strongly Agree* that Collaborative Group Work fosters a sense of commitment among students, while 15 respondents *Agree with* this statement. There are minimal *Neutral* responses and negligible responses obtained from this survey. Students frequently assist one another with assignments and offer encouragement to one another, which suggests that Collaborative Group Work fosters mutual support among themselves. Teams will be more committed and cooperative when their leaders foster a culture of mutual support. In the end, the encouraging atmosphere will aid in conquering obstacles and fulfilling the team's objectives under any circumstance.

## **CONCLUSION**

Based on a comprehensive evaluation of the responses regarding leadership at the Engineering Campus, Universiti Sains Malaysia (USM), it is evident that the strategic implementation of empowerment paradigms has successfully supported the development of student leadership. Project-Based Learning has achieved its objective by enabling students to engage in handson experiences that foster critical thinking, stimulate creativity, enhance problem solving abilities, and broaden their understanding of diverse perspectives. This paradigm has empowered students to take ownership of projects, make informed decisions, and lead with confidence. Simultaneously, Service Learning has fulfilled its goal by providing students with meaningful opportunities to engage with the community, thereby cultivating civic responsibility, promoting crosscultural awareness, and strengthening their capacity to lead in socially impactful ways. It has helped students apply academic knowledge in real-world contexts, deepening their empathy and reinforcing their role as agents of positive change. Additionally, Collaborative Group Work has effectively met its objective by improving communication skills, promoting teamwork, exposing students to varied viewpoints, and instilling a sense of commitment and shared responsibility. This approach has nurtured students' ability to work constructively in diverse groups, preparing them for collaborative leadership roles. Overall, students have demonstrated a high level of engagement in leading projects, serving communities, and working in teams by highlighting their recognition of these activities as valuable avenues for leadership development. By systematically applying these three paradigms, the institution has established a robust and integrated framework that not only enhances students' leadership capacities but also prepares them to lead with integrity, adaptability, and a strong sense of purpose in complex, dynamic environments.

## **ACKNOWLEDGEMENTS**

The author would like to express deepest gratitude to the management of Desasiswa Jaya Lembaran Utama for their financial support, which was instrumental in the successful completion of this research. Sincerely thankful also to Mr. Mazlifendirizan Md Rejab and Mrs. Aida Shuhaida Mustafa for their invaluable guidance and encouragement throughout the preparation of this work. A heartfelt thank you goes out to the members of MPDJLU 2022/2023 and 2023/2024 Academic Session for their unwavering support and collaboration. Lastly, appreciation to family and friends, whose continuous encouragement and support.

## REFERENCES

Barney, N., & Pratt, M. K. (2023, March 22). *leadership*. CIO. Retrieved from https://www.techtarget.com/searchcio/definition/leadership

Barton, T. (2021, March 25). Developing student leadership through service learning - Serve Learn. Serve Learn. Retrieved from https://servelearn.co/blog/developing-student leadership-through-service-learning/

Cain, K., & Cocco, S. (2013). Leadership development through project based learning. *Proceedings of the Canadian Engineering Education Association (CEEA)*.

- Ejiwale, J. A. (2013). Leadership skills development through service learning. *Journal of Education and Learning (EduLearn)*, 7(3), 187-192.
- Gryshuk, B. R. (n.d.). *Project-Based learning: top examples, benefits & ideas*. Retrieved from https://www.educate-me.co/blog/project-basedlearning#:~:text=Promotes%20life%20 learning%3A%20Project%2Dbased,creatively%2 C%20and%20solve%20problems%20effectively.
- Gutterman, A. S. (2023). Definitions and Conceptions of Leadership. *Available at SSRN 4465181*.
- Hasanah, E., Al Ghazy, M. I., Al Badar, M. I., & Fauzia, F. (2023). Enhancing student leadership skills through project-based learning in the postgraduate research experience. *The Qualitative Report*, 28(5), 1406-1428.
- Huda, M., Mat Teh, K. S., Nor Muhamad, N. H., & Mohd Nasir, B. (2018). Transmitting leadership based civic responsibility: insights from service learning. *International Journal of Ethics and Systems*, 34(1), 20-31.
- Indeed Editorial Team. (2024, June 28). Creativity in leadership (with importance and strategies) | Indeed.com canada. indeed Career Guide. Retrieved from https://ca.indeed.com/career advice/career-development/creativity-in-leadership
- Kitch, B. (2024, January 23). Collaborative leadership:

- What it is and why it works so well for distributed teams. *Mural*. Retrieved from https://www.mural.co/blog/collaborative leadership
- Mládková, L. (2013). Leadership and storytelling. *Procedia Social and Behavioral Sciences*, *75*, 83–90. Retrieved from https://doi.org/10.1016/j. sbspro.2013.04.010
- The importance of leadership qualities in students. Blog. (2021, April 16). Retrieved from https://blog.oeg.edu.au/the-importance-of-leadership-qualities-in-students
- *Understanding leadership*. Harvard Business Review. (2024, February 16). Retrieved from https://hbr. org/2004/01/understanding-leadership
- University, C. M. (n.d.). What are the benefits of group work? eberly center carnegie Mellon University. What are the benefits of group work? Eberly Center Carnegie Mellon University. Retrieved from https://www.cmu.edu/teaching/designteach/design/instructionalstrategies/groupprojects/benefits.html
- What are collaborative work groups? | Wrike Collaborative Work Guide. (n.d.). Retrieved from https://www.wrike.com/collaborative-work-guide/faq/what-are-collaborative-work groups/#:~:text=Collaborative%20work%20 groups%20are%20groups,for%20a%20numb er%20of%20reasons

Azriq Rashid Hussin\*, Mazlifendirizan Md Rejab & Aida Shuhaida Mustafa Engineering Campus, Universiti Sains Malaysia, 14300 Nibong Tebal, Pulau Pinang, Malaysia.

<sup>\*</sup>Corresponding author: azrigrashidd@gmail.com