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Research Article

Steel Steady: Community-Based Learning in TVET to Promote Civic Engagement

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ABSTRACT

This project was intended to educate, enable and empower Keningau youth from both technical and vocational education and training (TVET) and mainstream backgrounds to contribute to the community through a building repair and upgrade project. Repair and maintenance in any manmade structure are always necessary but there are many variables which include regularly scheduled maintenance, lack of skilled manpower and limited funding can hinder such routine. Hence, this community project known as Steel Steady mobilized youth volunteers who were essentially students from Keningau Vocational College as well as other schools in Keningau, Sabah, to learn the basics of welding and take part in a building repair and upgrade at a chosen location. The volunteers were required to answer community-based learning (CBL) and civic engagement instruments upon completing the project to determine their overall perception on their experience as volunteers in the community project and to determine the level of influence that each dimension had on their civic engagement. The results from descriptive statistics and multiple regression analysis on their responses suggest that the respondents had positive experience from the project based on the four dimensions of CBL; teamwork, participation, reflection and leadership. These four dimensions strongly influenced their sense of civic engagement. This implies that CBL is a highly plausible approach in cultivating a sense of awareness, empathy and responsibility of youths towards their community's needs.

Keywords*: Community-Based Learning, Civic Engagement, TVET*

Introduction

1.0 Vocational College Education in Malaysia

According to the Ministry of Education (2026), Malaysian vocational colleges provide career-oriented education through a vocational stream that balances theory-based education and practical learning experience. The goal of this education is to train the students to be

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skilled employees in various workplace fields upon graduation. The graduates are also eligible to apply for tertiary education after earning their diploma. Vocational college education in this country consists of two years in pre-diploma known as Malaysian Vocational Certificate (SVM) followed by two years of Malaysian Diploma Certificate (DVM) which mandates another six months of internship known as On-The-Job Training (OJT). Alternatively, students are also able to earn Malaysian Skill Certificate (SKM) throughout their study at these colleges. The comprehensiveness and rigor in vocational college education that trains students in specific trade of their choice from the age of 16 when they enroll at their respective vocational programmes until their completion of the education at the age of 19 upon fulfilling their internship denote how competent and capable vocational college students are in the fields that they choose to receive training in. There is a wide range of vocational programmes such as culinary arts, cosmetology, construction, automotive technology, welding, electrical technology, business management, fashion and early childhood education and there are approximately 90 vocational colleges in the country that offer vocational choices to secondary school students. As reported by Sinar Harian (Noor Ainon Mohamed, 2021), vocational college aims to produce 70% graduates who will enter workforce as skilled employees while 20% of them further their study in tertiary educational institutions. It is expected that 10% of them will become entrepreneurs.

Community Service and Vocational College Education

According to Pertubuhan Berita Nasional Malaysia (2024), Ministry of Education has spearheaded a nationwide community-based programme known as Kolej Vokasional (KV) Insani Masyarakat Madani which was presided by the education minister, Fadhlina Sidek, who explained how this programme galvanized the vocational college students to carry out community services such as home repair and air conditioning maintenance at houses of worships around Penang. Corroborating her statement was the director of technical and vocational education and training (TVET) division of the ministry which is a division that directly oversees vocational colleges, Zulkernai Fauzi who elaborated how vocational college students have been running community services in the indigenous (Orang Asli) settlements, elder care homes and orphanages. He further added that this program is aligned with the concept of Karamah Insaniah which can translate as human dignity that has been introduced by the ministry to nurture students to be virtuous, courteous and ethical. Therefore, this Steel Steady initiative clearly supports the call by our national education system for value-based education that must be integrated into our students' growth through community service.

2.0 Steel Steady

Steel Steady is an initiative launched by the Welding Technology programme of Keningau Vocational College, Sabah, to provide community services in restoring and repairing handrails, fences, gates, drainage grates, and other steel-made building fixtures to improve safety, comfort and aesthetic appeal. This community project is considered an indirect service since they physically perform the repair and restoration work at buildings that have already been assessed and selected for improvement without direct interaction with the beneficiaries. Although this project may revolve around replacing and restoring metalwork, other types of repairs are also done during the project such as maintenance of sockets, light bulbs and fans as well as replacing damaged wooden floors and building concrete slabs. In addition to the direct service of repairing homes and buildings, this project also educates youth volunteers on the basics of welding through a short course with demonstrative teaching and hands-on activities that allow volunteers to use certain equipment and machinery with the guidance of trained mentors.

In 2025, this project was one of the 10 projects selected for Akademi Rakan Muda Fund by Impact Malaysia which is an agency under the Ministry of Youth and Sports that seeks to empower youth-led community-based projects each year across the country by providing a grant worth MYR 15,000.00 to every selected project. The agency provided mentorship to the leaders of this project including two in-person

workshops in Selangor and Negeri Sembilan respectively and three representatives from Impact Malaysia did a field visit to the location of this project during the two-phase implementation stage, a workshop followed by a direct repair service at the selected buildings. In 2024, the project was awarded with a gold award in the SULAM Innovate Showcase & Symposium organized by Malaysia University of Kelantan (UMK) in the community project category. The recognition given to this project which includes scaleup grant showed how project had a great potential to be expanded and sustained that it successfully gained the confidence and interest of relevant agencies.

3.0 Problem Statement

A major problem often faced by communities is the deterioration of manmade structures such as school buildings or community halls that serve as the heart of these communities. This may be attributed to the absence of regularly scheduled inspection and maintenance which could prevent critical damage in the long run as well as lack of skilled manpower needed to carry out basic repair and maintenance in public buildings. Some of these community-based properties are not directly under the federal or even state government but rather collectively owned by the community with support from several independent parties. Sometimes, the funding for maintenance is available but lack of technical expertise, coupled with unsystematic repair and maintenance procedure which starts with preliminary analysis of the necessary repair, also dampens restoration effort for durable and long-lasting end results. Hence, enlisting help from vocational students who are studying in an institution located in the same areas as where these communities are is a feasible solution to address this issue. In terms of the logistics of the operation, these students can easily mobilize themselves into a coordinated team who can easily harness their familiarity with the community to mobilize their resources to realize this repair work. In the long run, it is more viable for the students or the institutions they are enrolling at to form reciprocal collaboration with the surrounding communities to enable regular site inspection and maintenance conducted by these students together with their instructors or supervisors.

Furthermore, there has been always a gap between vocational education that is confined to students, along with the supervisors and educators despite the institutional practical learning with the actual experience of providing service to the community outside the institution. It is imperative to link school learning especially vocational education with the community to provide a more comprehensive growth opportunity for our students and at the same time, establishing vocational colleges as a hub of skilled manpower and hands-on education that is open for the community to access and seek assistance from. This creates a strong relationship between vocational colleges and the surrounding communities that result in a relevant, beneficent and community-oriented education stream that serves as the heartbeat of the society.

In addition, there is always a need to promote vocational college education among parents, school teachers and mostly, secondary school students since vocational college education is open to applicants who have completed lower secondary school and these are the main target group. Secondary school graduates who have completed Malaysian Certificate Education (SPM) can also apply for vocational college although the spots for these applicants are limited. The most convincing mean to promote vocational college is through active participation of prospective students in vocational college activities and community service can be a great platform for this experiential learning through volunteering. Hence, this initiative has galvanized youths from secondary schools around the district participate in this community-oriented programme.

4.0 Research Questions

1 What are students' perceptions on community-based learning (CBL) through the four dimensions and civic engagement?
2 Which community-based learning (CBL) dimension (participation, teamwork, leadership, reflection) most strongly influences civic engagement?

5.0 Community-Based Learning

Community-based learning (CBL) is an educational approach that integrates student learning with meaningful community engagement. It promotes active engagement, collaboration, and practical application of knowledge which fosters a deeper understanding of academic concepts and cultivating civic responsibility among learners (Brackmann, 2024). According to Centre for Social Justice Research, Teaching and Service (2008), the course objectives and student community work are fundamentally integrated which results in primarily two-fold tenets. The first one is that students' experiences in community-based work will heighten their engagement with the academic content that they are learning from the course it is based on. Similarly, the academic course content will enhance students' ability to reflect in deep and constructive ways on their experiences working in the community.

Watermark Insights (2023) categorizes community-based learning into four distinct types: direct, indirect, research-based and advocacy. Community project is considered direct when students work on projects that directly impact certain beneficiaries and it is indirect when it benefits the community as a whole. When it involves gathering information on some areas of interest that are relevant to a community, it is deemed as research-based. Raising awareness on certain issues that are crucial for a local community to know and possibly take action in falls under the fourth category, advocacy.

Steel Steady is an indirect community service since it did not involve direct interaction with identified individuals but rather it improved the safety and features of school buildings at Kampung Keningau Primary School which would impact the building users namely the children, the teachers and any visitors. It is a project that harnesses students' vocational skills in line with their specialties namely welding technology for tasks pertaining to replacing and restoring metal barriers as well as repair and maintenance that relate to electrical technology such as replacing and fixing sockets, fans and light bulbs and construction technology which includes making improvements on wooden floors and windows and building concrete pavements.

6.0 Effects of Community Repair Work on Youth Personal Growth

A research project conducted by Kalantidou and Brennan (2025) in addressing at-risk male youth in Maryborough, Queensland, Australia through creative repair practices revealed the positive effects of this approach. There were 10 youths and 11 facilitators who participated in extensive workshops and creative repair production and they were all interviewed while visual and quantitative data from their active involvement were used to be triangulated with the qualitative interview data. The findings revealed that the participants felt empowered by gaining more skills which they actively put into use, they were able to socialize and process their emotions which contributed to their improved mental health and they had greater confidence in their future employment prospect in which they sought to further upskill themselves. The impact of this project could be corroborated by the return of over 50% participants to this project and the increased number of apprenticeships they secured after every cycle of this project. This suggests that such project can ignite community-led behavioural change through the network formed within the community that is underpinned by place-based and lived experience approach rather than a top-down style. It also forged a path for this method to be a social enterprise and this approach can be replicate in other regions to tackle similar concerns.

Therefore, Steel Steady was conceived and subsequently launched in the bid of providing an enriching and an enlightening field learning experience where the students could understand community's need first-hand and put their skills into practice by helping to directly address this need with their active participation in building repair, restoration and refurbishing work. It is likely that seeing how the results of their effort can benefit specific segments of our community can improve their sense of ownership, belonging, accomplishment and ultimately, self-actualization. In the long run, this enhances their socioemotional

wellbeing as well as their perspective on their future outlook.

Methodology

There was an open call for volunteers for youths in Keningau to take part in the project and posters and letters were issued to secondary schools in the district with the approval of the district education department. The project was split into two major phases in two days. The participants were expected to take part in both phases which was the workshop on basic welding on the first day and the repair work at the chosen location on the next day. Although there were 150 participants of the workshop on the first day, only 40 took part in the community service on the second day. The participants received two individual certificates for their participation in both phases of the project respectively, the workshop and the service. However, those who chose not to participate in the follow-up service did not receive a certificate for the field work and were only given a workshop certificate.

The 40 students who took part in the community work following the workshop were given two instruments to answer after completing the community project: the Community-Based Learning Scale (adapted from Eyler & Giles, 1999; Moely et al., 2002) and the Civic Engagement Scale (adapted from Doolittle & Faul, 2013; Moely et al., 2002). The former was intended to gauge students' experiences in the community project through four dimensions and these are participation, teamwork, leadership and reflection while the latter was designed to assess civic engagement mainly awareness, empathy and sense of responsibility towards a community. These instruments were administered to elicit the participants' perceptions and experiences in order to identify their level of civic engagement upon participating in the project and determine the influence of the dimensions in this engagement.

7.1 Preliminary Site Visits

The first visit was made on 31st July 2025 to discuss with the headmaster and the staff of the school and decide on types of repairs and upgrade that could be done. The second visit which was the preliminary inspection was conducted on 27th August 2025. These two visits were done by a team of students from welding technology with the teachers of the said programme as supervisors.

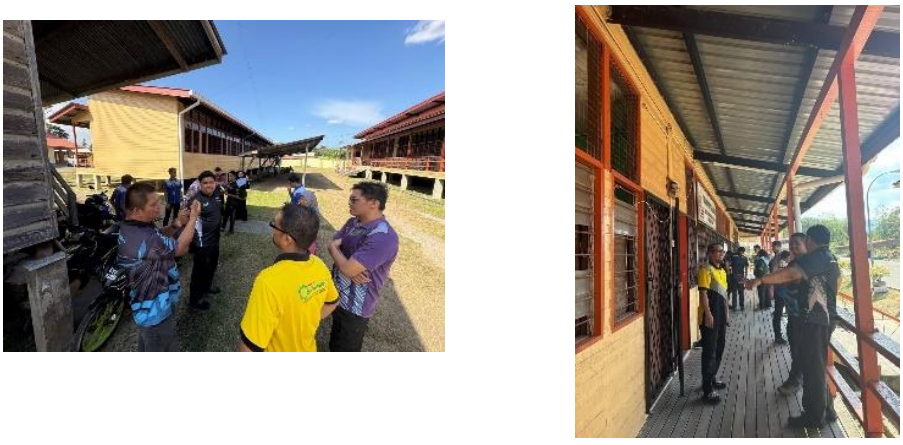

Figure 1. The representatives of the project and the selected school convened to discuss and decide on possible repairs and upgrades

The first visit was made by the representatives of the project to formally inform the headmaster as well as the staff of the school on the planned project and once their approval was obtained, the discussion immediately shifted to deciding types of repairs that could be done and upgrades and improvement that the school might need.

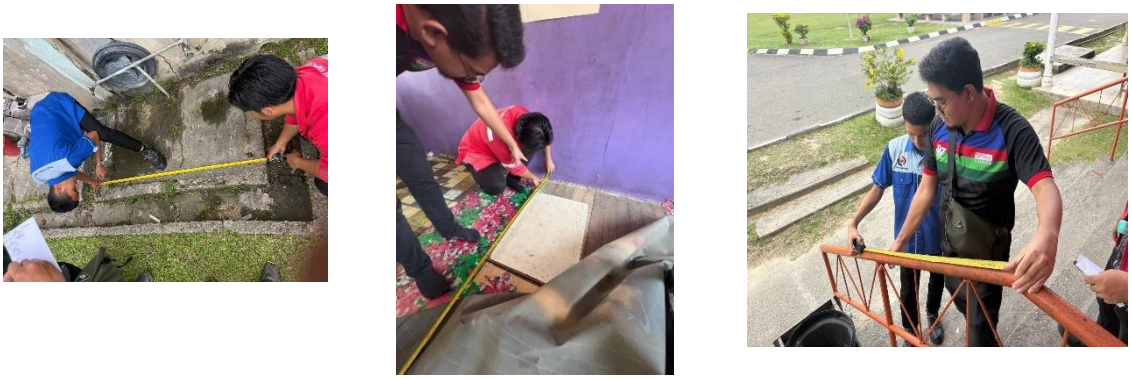

Figure 2. Site Inspection and Information Gathering

The second visit was done by a group of instructors along with Keningau Vocational College students who had been appointed to lead the project. The team brought necessary tools and equipment to determine materials needed for the intended repairs and upgrades and conduct detailed measurements at the designated site to identify the quantities of materials and labour needed for cost estimation.

7.2 First Phase: Workshop On Basic Welding

The first phase was the training of the volunteers who came from different institutions including Keningau Vocational College students at the said institution. The other volunteers were students from Apin-Apin Secondary School, Bingkor Secondary School, Saint Francis Xavier Secondary School and Geomatika College. They were given a module containing quizzes and exercises which they were required to answer during the lecturer. This was followed by a visit to the Welding Technology workshop. The workshop for approximately 150 volunteers was held at the hall of Keningau Vocational College on 24th October 2025 through half a day course led by two accredited trainers of welding technology.

Figure 3. The Volunteers Attending the Basic Welding Technology Workshop Conducted by Two Certified Instructors

Figure 4. The Volunteers Visited the Welding Technology Workshops and Observed the Demonstration of How Certain Equipment Was Used.

7.3 Second Phase: Repair And Maintenance Work

The second phase of the project was the repair and maintenance project at Kampung Keningau Primary School in the second day. The volunteers were assigned into different teams where the teams rotated among the different tasks in order to gain first-hand experience of the different types of repair work. A preliminary analysis on the necessary repair and improvement was done weeks prior to this community project in order to formulate a proper plan on the materials, equipment and skills required to perform successful restoration works.

This was followed by the repair and upgrade project at Kampung Keningau Primary School on 25th October 2025 which took nearly an entire day to complete and 40 volunteers turned out. These volunteers were participants of the course that was held the day before. Prior to this two-day event, there were two visits made to Kampung Keningau Primary School for the confirmation on this project with the building proprietor as well as an initial site assessment to help determine the necessary repair and upgrade.

Figure 5. Guiding Non-TVET Volunteers in Using Welding Machinery

The welding technology students assisted and monitored students from other institutions on how to use certain equipment and tools to weld and solder metalwork namely gates, barriers and drainage grates.

Figure 6. Volunteers from Other Schools Assisting the Concrete Mixture Process

The construction technology students led the construction of a concrete slab as a pavement for water spigots and they were assisted by students from other schools and colleges in carrying sand and aggregate with wheelbarrows for the concrete mixture.

Figure 7. Volunteers Replacing Planks on Wooden Floor

Construction technology students repaired the damaged wooden floors by replacing the decaying wooden planks with new ones. The procedure required them to first remove all furniture and floor mat of the room.

Figure 8. Volunteers Fixing Electrical Outlets and Appliances

Electrical Technology students ensured that every socket and fan in each classroom could function properly by performing standard repair and maintenance procedure. They also guided other non-TVET students to experience performing the tasks related to this expertise.

Figure 9. Volunteers Welding and Installing Staircase Gate

The Welding Technology students together with students of non-TVET background that they monitored in performing basic soldering procedure on a metal gate that was then installed at a staircase.

Figure 10. Erecting Handrails to Improve Safety of the Stairway

Volunteers of all vocational specialties as well as those of non-TVET backgrounds worked together in welding and subsequently erecting the metal frames that became handrails for the stairway in order to ensure safety for the building users.

Figure 11. Fitting the Grates into the Edges of the Drains

The volunteers, led by the welding technology students, welded the metal frames and rods to fit a drainage grating where a pavement for water spigots is accessed from.

Figure 12. Fixing Mosquito Nets Around Window Panels

The construction technology students oversaw the fitting of mosquito nets on the upper part of the classroom windows which have no glass slats to prevent small birds and large insects from entering the room through the gaps.

7.4 Follow-Up Moniitoring and Maintenance

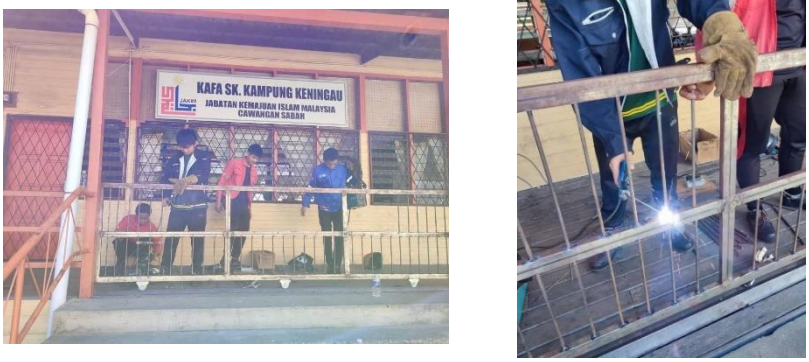

Figure 13. Examining the Functionality of the Barrier Gate After a Month Being Installed

On 2nd December 2025 which was approximately a month after the service, a follow-up monitoring was conducted by the team to inspect the condition of some repaired fixtures and installations that were completed during the community service. The metal barrier gate and handrails were painted and further polished to improve their durability and aesthetic appeal.

Findings and Discussion

The data from both instruments were analyzed through descriptive statistics and the results implied that the volunteers had overall positive perceptions on their experiences taking part in community-based learning.

Table 1: Descriptive Statistics by Dimension

Dimension	Mean	Std. Deviation	Minimum	Maximum
Teamwork	4.25	0.90	1	5
Participation	4.03	1.02	1	5
Reflection	3.98	0.88	2	5
Leadership	3.96	0.93	2	5
Civic Engagement	4.12	0.87	1	5

The respondents rated teamwork as the domain with the highest rating which indicated that they communicated and collaborated with each other effectively. Leadership was rated lower than the rest and this could be attributed to the lack of opportunities for them to do decision-making and take lead of a certain tasks since most of the decisions involving the repair tasks were done in advance and each job scope was assigned with an experienced team leader who oversaw the process. Overall, the students rated their civic engagement higher which signifies their awareness and empathy of the community's needs and their sense of responsible and willingness to participate in efforts that offer help to address these needs.

The findings revealed how the participants of the building repair and maintenance had positive responses towards all four dimensions of their involvement in the project; they worked with great efficacy as a team, they actively took part in the task assigned to them, they were able to reflect on themselves based on this experience and they felt that they had the chance to demonstrate leadership. All of these made them feel that they could assist the community in addressing their need and concern. These findings underscored the possibility for community-led behavioral improvement among participants when they immerse themselves in services performed in a specific location of a target community which then enables them to obtain firsthand experience and knowledge as posited by Kalantidou and Brennan (2025).

Table 2: Means of Each Dimension by Institution

Institution	Participation	Teamwork	Leadership	Reflection	Civic Engagement
Keningau Vocational College	4.14	4.46	4.11	4.07	4.24
SFX	4.39	4.56	4.28	4.22	4.39
Apin Apin	3.60	4.27	3.87	3.83	3.95
Geomatika	3.67	3.93	3.73	3.80	3.88

The average total scores in each dimension from each institution implied that the students generally displayed great level of participation, teamwork, leadership and reflection which all led to their civic engagement. Students from SFX recorded the highest means across all dimensions in comparison with students from the other institutions.

The findings denoted the positive responses of students from all four institutions including two non-TVET secondary schools, SFX and Apin-Apin secondary schools as the participants rated themselves high on all dimensions of community-based learning as well as their perception on their civic engagement. This was consistent with the national initiative taken by TVET division of Malaysia's Ministry of Education, KV Insani Masyarakat Madani, which sought to tap into the skills and manpower of vocational college students to conduct social services at various communities in order to help them develop virtues, courtesy and integrity as stipulated in the educational concept known as Karamah Insaniah that had been introduced the aforementioned ministry (pertubuhan Berita Nasional Malaysia, 2024). Through an open call for volunteers that targeted secondary school students, Steel Steady has successfully extended the practice of this concept further by encouraging students from non-TVET background to take part in community services coordinated by vocational colleges.

A multiple regression was conducted on the data to determine how the dimensions of the community-based learning may have influenced the respondents' civic engagement. The results were shown in the following statistics.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.803	0.645	0.611	0.496

Table 4: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	7.980	4	1.995	8.108	0.000
Residual	4.380	35	0.125		
Total	12.360	39			

Table 5: Coefficients

Predictor	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	T	Sig. (p)
(Constant)	0.841	0.261	—	3.22	0.003
Participation	0.181	0.085	0.232	2.13	0.040
Teamwork	0.412	0.096	0.518	4.29	0.000
Leadership	0.157	0.078	0.194	2.01	0.052
Reflection	0.228	0.088	0.265	2.59	0.014

The results showed that the regression equation was significant, $F(4, 35) = 8.108$, $p < .001$. This denoted that the combination of the four dimensions of community-based learning as the four predictors (participation, teamwork, leadership and reflection) strongly influences civic engagement. Three predictors were considered as significant contributors; the first predictor teamwork ($\beta = .52$, $p < .001$) followed by the second predictor reflection ($\beta = .27$, $p = .014$), and finally participation as the third predictor ($\beta = .23$, $p = .040$). The fourth predictor leadership ($\beta = .19$, $p = .052$) was marginally significant. These results demonstrated that students' ability to work in a team, to actively participate as well as to reflect critically in their experience significantly enhances their sense of civic engagement while they still needed leadership opportunities in order for this dimension to be more significant in enhancing their proclivity in civic engagement.

Since the participants rated leadership as a weaker variable in influencing their civic engagement. There is a need to encourage individual participants to assume leadership roles in order to help them attain a better mean in engaging with the target community or participate in a project that benefits particular groups of a community. This can be done by granting them decision-making power especially in determining critical repairs and way to restore them as well as other aspects related to this. They can also be assigned with different but equally significant positions of being in charge of a specific duty. Nevertheless, it is of paramount importance to ensure that the participants understand what leadership means as it is not restricted to simply being an appointed leader of a particular group or committee.

The participants' perception on how these dimensions influenced their civic engagement showed that they became more aware of the content of the course that they were learning and compared it with the actual experience that they had in performing the practical component of the theories that they learnt via this service. This was aligned with the twofold objectives of community-based learning that illustrated the cyclical nature of theory-based education and practical learning experience and how these two empower, enhance and enrich students' mastery of both components of a course, content and practice, which complement each other (Centre for Social Justice Research, Teaching and Service (2008).

Recommendations

Future research can widen the samples from the community project in order to identify different variables including the dimensions of CBL and sense of civic engagement experienced and developed by the volunteers based on their education background namely vocational and non-vocational streams. Since the instruments delved into their teamwork, participation, reflection, leadership and their civic engagement, there is a potential to examine their future plans in playing their role as community-engaged youths and this can be a follow-up study that keeps track of their personal growth from this project.

Steel Steady was categorized as an indirect service as the participants repaired parts of buildings that were meant for school students and staff without any direct contact with these beneficiaries. The potential of CBL can be further explored by conducting research on the other types of community services namely direct service, advocacy and research-based service.

Since vocational college targets 10% graduates to become entrepreneurs upon completion of their diploma study, there is a potential in delving into the viability of community projects as a platform for students to develop entrepreneurial mindset particularly in pioneering social enterprises that benefit the community, help conserve the planet while being profitable to at least sustain the effort.

Implications

This study provides a feasible framework for CBL to be incorporated into vocational college as a way to harness the technical skills and experience gained by students of vocational specialties to contribute to the community. Vocational college students are learning academic content through theory-based approach as well as practical application of what they learn through vocational training. This can be further strengthened by extending their practical education to include community services as in

direct services, indirect services, advocacy campaigns and research-based services.

The framework of this project can be a comprehensive example on how community services are ideally conducted. The recruitment for youth volunteers from surrounding educational institutions is a commendable method to empower students through civic engagement and volunteerism. The selection of the building that was to be repaired and upgraded was based on a visit cum meeting with the superintendent and staff of the school who expressed their approval on this project. The site inspection done prior to the implementation of the project was a proactive step that was deemed necessary. The splitting of the project into two phases which comprised a training workshop and the subsequent service was a well-thought approach to train and prepare the participants especially those who were not from TVET backgrounds before they embarked on the repair and maintenance work in the selected location. The follow-up monitoring and maintenance activities showed that this project attempted to sustain its impact and retaining its link with the community that can forge a solid path for future collaborative activities. The stages of this project should be framed into a replicable reference as how community-based service should be ideally planned and carried out.

The integration of CBL into vocational college education can help realize our national aspiration of nurturing students who are virtuous, courteous and ethical by nature as introduced through the concept of Karamah Insaniah (human dignity). This can be done through continuous experiential learning that enables them to connect, empathize and assist the community while building strong healthy relationship among themselves. This eventually leads them to become reflective in their own growth as a student and ultimately, as a human-being.

Vocational college education can be the cornerstone of youth volunteering involving teenagers and young adults which may include secondary school students by opening its door to encourage them to participate in community services coordinated by vocational colleges. Prior to the implementation of the services, youth volunteers can be first given basic exposure, trained in specific skillset and briefed on specific tasks of an intended community service. This training or workshop will be conducted by experienced TVET trainees and instructors.

Conclusion

Steel Steady was a success story of an educational approach developed according to the concept of CBL which enabled vocational education students to put their skills into practice through community projects while empowering other students from other institutions to acquire hands-on experiential learning that enable them to gain first-hand exposure to vocational education and how it can be practically used to assist the community. Overall, Steel Steady has helped solidified CBL approach as an educational practice that should be integrated into vocational college education and our educational institutions in general.

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Appendix A: External Support and Recognition

The leaders of Steel Steady attending the two in-person workshops on community project held in Negeri Sembilan on July 25-27, 2025 and Selangor on August 8-10, 2025, respectively. These workshops were hosted by Impact Malaysia of the Youth and Sports Ministry for the leaders of the 10 youth-led community projects selected for Akademi Rakan Muda fund.

A recognition poster by Sabah-based news outlet on the gold award given to this project in SULAM Innovate Showcase & Symposium hosted by Malaysia University of Kelantan (UMK) on July 2, 2024, in community project category.

Appendix B: Questionnaire: Community-Based Learning in TVET to Promote Civic Engagement

This questionnaire aims to evaluate students' experiences in community-based learning and its contribution to civic engagement. Please indicate your level of agreement with each statement by ticking (✓) the appropriate box.
Scale: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Section A: Community-Based Learning

A1. Participation

Item Statement	1	2	3	4	5
I actively participated in the community-based learning project.					
I carried out my assigned tasks responsibly.					
I was involved in planning and decision-making during the project.					

A2. Teamwork

Item Statement	1	2	3	4	5
I collaborated effectively with my group members.					
My team communicated well to complete our tasks.					
We solved problems together during the project.					

A3. Leadership

Item Statement	1	2	3	4	5
I took initiative to guide or assist others during the project.					
I helped maintain order and productivity within the team.					
I made decisions or suggestions that improved our group's work.					

A4. Reflection

Item Statement	1	2	3	4	5
I reflected on what I learned from this project.					
I discussed the meaning of our work with classmates or instructors.					
I realized how my technical skills can benefit the community.					

Section B: Civic Engagement

B1. Civic Engagement Items

Item Statement	1	2	3	4	5
I am aware of the needs and challenges in my community.					
I understand how community issues affect people's daily lives.					
I feel compassion for people who face hardship.					
I care about improving others' living conditions.					
I intend to participate in more community service projects.					
I am willing to volunteer for future community improvement efforts.					
I feel responsible for contributing to the wellbeing of my community.					
I believe my actions can make a positive difference.					