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Student engagement and fostering ownership of learning

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Abstract

This research was undertaken to find pedagogical solutions that help teachers design engaging learning activities and assessments. These solutions aim to increase student engagement, encourage them to take responsibility for their learning in practical training and education settings and effect positive classroom change. An action research methodology was utilised for the researchers to learn through action, increase student engagement, and develop professionally and personally. Action research is a family of research methodologies that pursue action (or change) and research (or understanding) simultaneously using a cyclic or spiral process that alternates between action and critical reflection. This methodology involved action, evaluation, and reflection to gather evidence to implement classroom change. The research found that adopting student-centred teaching practices, such as project-based learning and collaborative activities, has substantially improved student involvement with the learning process. The students who participated in the activities showed increased interest, motivation, and active participation in their educational experiences.

Introduction

This research was conducted to generate knowledge on increasing student engagement, ensuring they take ownership of their learning, and improving the educational process. The action research methodology systematically approached changing teaching and learning environments to affect classroom change positively. Action research generates knowledge about educational theory and practices and has been a powerful tool for improving learning and teaching. It has assisted in understanding which teaching and pedagogical strategies best increase student engagement and encourage them to take ownership of their learning (Alpert et al., 2022).

Education professionals review their instructional strategies and explore tactics that increase student engagement. A positive correlation exists between increased student engagement and student achievement (Pudjiarti et al., 2023). It is acknowledged that student engagement is a significant factor in academic performance (Wheaton, 2021). The in-class lecture continues as the predominant instructional strategy in most classrooms. Most teachers still rely on this time-honoured method of delivering information to their students. However, many researchers believe that classroom lectures are an inefficient method of helping students acquire the necessary knowledge and skills, and they criticise it for this reason (Gilboy et al., 2015). Research into disengaged students identified that this transmission model of instruction induced passivity and boredom in the students (Liu et al., 2023; Marks, 2000). In contrast, student-centred learning is where teachers function more as coaches than lecturers, allowing students a say in their education and personalising instruction so they can learn at their own pace (Kamali, 2023). As a student's educational journey advances, the teacher's role should transform from being a mere provider of knowledge to assuming the responsibilities of a facilitator and mentor.

When lectures are the only mode of instruction for a class, this form of passive learning steals valuable classroom time that could be better spent stimulating students' thinking, directing them towards finding solutions to real-world problems, and encouraging the direct application of concepts through active learning while the teacher is present (Abdullah et al., 2019). Individuals are responsible for their knowledge construction and reconstruction, which involves making sense of the latest information in light of what they may already be familiar with. Utilising active learning strategies is the most effective method for facilitating students' participation in knowledge construction and reconstruction. In academic literature, student engagement has been referred to as 'student experience,' 'academic engagement,' 'academic integration,' or 'student involvement' (Bowden et al., 2021). Student engagement can be defined as "A student's positive social, cognitive, emotional, and behavioural investments made when interacting with their tertiary institution and its focal agents (such as peers, employees and the institution itself)" (Bowden et al., 2021, p. 5).

Deep learning proponents believe that teachers are needed to boost student engagement. They state:

"High-quality teaching implies recognising that students must be engaged with the content of learning tasks in a way that is likely to enable them to reach understanding ... Sharp engagement, imaginative inquiry and the finding of a suitable level and style are all more likely to occur if teaching methods that necessitate student energy, problem-solving and cooperative learning are employed" (Ramsden, 2003, p. 97).

This study sought to explore Ramsden's claims by using action research to investigate and trial improvements in pedagogical strategies to enhance student engagement and ownership of their learning. Action research makes learning more responsive, relevant, and engaging for students by using personalised strategies, building stronger relationships, encouraging active learning, and giving teachers and students more power. With this method, the classroom is turned into a community of learners who work together to ensure that teaching and learning are constantly changing to meet the needs and potentials of all students (Yosief et al., 2024).

Literature review

Student engagement in teaching and learning

Motivation is viewed as both a required component, a prerequisite for student learning engagement, and a necessary element for student engagement in learning. Afzal and Crawford (2022) state that engagement and motivation are needed to improve student learning outcomes. An essential goal of education is to get students excited about learning so that they become motivated to do well and achieve their full potential. Active learning necessitates student participation and interest in the classroom, and students must be encouraged to do so (Tas, 2016). Highly motivated students exert a deliberate effort to engage in classroom activities. Therefore, it is crucial to ascertain students' motivation levels to promote active engagement in class. Students who exhibit higher levels of engagement, possess a stronger sense of ownership and demonstrate a more significant investment in their academic achievements are more inclined to monitor their progress and learning actively. Student engagement in learning is not only an end in itself but also a means to the end of students achieving good academic outcomes (Gao et al., 2022). This is important because authentic engagement may lead to higher academic achievement throughout student life.

Involving students in their learning is an effective way to guarantee that it is meaningful and stimulating. It requires collaboration between the student and the teacher to develop learning and a love of learning. Various issues may impede students' motivation, including mediocre teachers, a flawed curriculum, dislike of a subject, family issues, and instability. "Thoughtful teaching is done by and with students, and not just to them, and students become powerful advocates for their improvement" (Berger et al., 2014, p. 72).

Phrases like student participation, involvement, and engagement are frequently used interchangeably as factors that increase academic performance. Students who are actively involved are an excellent sign of various elementary classroom cultural characteristics, and there is often a significant increase in learning for them. When teacher success is measured as a consequence of student performance, teachers wanting to stay in control may hesitate to focus on improving student ownership of the learning process (Hackett et al., 2021).

Self-monitoring and goal-setting are effective methods for encouraging student ownership because they reduce teachers' time to monitor and evaluate students' progress (Beasy et al., 2022). Teachers would like to focus their efforts on improving student engagement and motivation. Self-assessment allows students to develop transferrable skills that can be used in other areas of learning, such as group projects, teamwork, critical thinking, problem-solving, and leadership roles in the teaching and learning process (Yan & Brown, 2017). It is an effective method for developing standards of knowledge by comparing what they know to the learning objectives and allowing students to improve their work. Students' motivation and engagement often translate into their energy and drive to learn and work well. When the students realise their full potential in school, it significantly influences how much they enjoy and like school (Wang et al., 2022). When students and teachers recognise the importance of the engagement concept and believe that assessments and class activities incorporating this concept are more engaging, it is most probable that students will be motivated to maximise their knowledge and skills. This is what this study attempts to accomplish.

Students can enhance teaching practices and contribute to teachers' professional development. According to the literature (Bartkowiak-Théron et al., 2020), a two-way and multifaceted context helps students feel less alienated and allows for more in-depth learning. Increasing student engagement is frequently viewed as a one-way street, with academics exerting considerable effort to engage students (Clynes, 2009). However, Hood (2012) it argues that when students engage with the subject, the academic's teaching and learning strategies can be drawn from a broader range, improving the learning environment (Hood, 2012).

Action research

Action research approaches are frequently used to improve higher education institutions' curriculum and assessment development strategies. The goal is to ensure that student engagement is a catalyst for learning, emphasising that students must create their understanding rather than having it transmitted to them by teachers (Walton, 2011). According to current knowledge, an assessment can contribute to student involvement (Weaver & Esposto, 2012). It can increase students' participation if they believe the evaluation is fair and appropriate for the subject, especially in group work (Benning, 2022). Utilising the action research methodology to examine students' engagement when there is a change in assessment and class activities will reveal whether the shift has been adequate. Also, the lack of resources and

operational issues are barriers to involving students in their learning (Crabtree et al., 2021). This suggests that service departments and academics must collaborate to ensure that students have access to the resources that will enable them to be more engaged in their studies.

Action research is a problem-solving strategy that entails an iterative data collection, analysis, and reflection process (McTaggart, 1994; Pino-James, 2018). Kurt Lewin coined the term "action research" in 1944 to describe the process of enquiry and investigation that occurs when action is taken to solve a problem. Currently, the term describes a contemplative investigation process carried out to enhance comprehension and application. "Action" pertains to implementing change, while "research" pertains to acquiring enhanced knowledge about learning. In action research, participants examine their educational practice systematically and make informed decisions that can motivate students to become more involved in their education, as done in the case of this research. There are numerous advantages to using action research to investigate teaching and learning. The cyclical nature of action research, which includes planning, action, observation, and reflection, encourages critical review and provides a framework for engagement and improvement (Hodgson et al., 2013).

Educational practitioners and professionals frequently use action research to examine and enhance their pedagogy and practice (Embury et al., 2020). Action research involves the active participation of all stakeholders, bridges the gap between theory and practice, and contributes to generating practical knowledge and implementable results. Using reflective and critical analysis, action research offers a systematic approach to enhancing education and deep learning by placing the practitioner-researcher at the centre (Pennisi et al., 2023).

Authentic assessments and quality of engagement

Teachers can use assessments and class activities to encourage students to take responsibility for their learning (Shepard et al., 2018). Providing students with opportunities to validate their understanding and knowledge while maintaining control over learning objectives through assessment and class activities planning will help foster a culture of student engagement. Furthermore, the types of assessments and learning activities the teachers conduct determine the engaging learning environments for students (Pino-James, 2018). Effective teachers use formative assessments and class activities to fine-tune their responses to individual students' learning needs, identify the sources of student misunderstandings, and determine when students are ready to learn the next step. Authentic assessments use real-world scenarios to engage students in their learning. They make connections, form relationships, and have prior knowledge and skills that allow for multiple solutions due to diverse viewpoints (Moon et al., 2005). Formative assessments lead to various positive outcomes as students take ownership of their learning and see the classroom as a collaboration between themselves and the teachers. Teachers can ensure student engagement and lessen the challenges in evaluation planning by using formal and

informal assessments and in-class activities, student input, and teacher-team collaboration (Gono & de Moraes, 2023). Teachers' assessment practices must change if assessments and classroom activities are to be used to increase student engagement. Teachers should supplement their assessments and class activities with pedagogical alternatives that present novel concepts and skills while engaging students in novel and appropriate learning experiences (Black & Wiliam, 2018). Assessments that elicit higher-order thinking skills from students, such as performance-oriented tasks, increase student engagement in learning and, as a result, help to improve student development.

Teachers are fundamental in creating educational settings that encourage student involvement. Their methods can benefit the quality of engagement and learning.

“Learning environment and individual learning processes cannot be treated as if they exist separately. They both influence one another in a continuous interplay. The influence of instruction will never be direct because of the complexity of mediating variables. In between learning and instruction stand the learner's perceptions of teaching, assessment, course content and structure” (Vermetten et al., 2002, p. 264).

Academics and policymakers have all been interested in improving student learning. Any effort to enhance student engagement must acknowledge the student's uniqueness, and the challenge for educators is determining how this may be accomplished within a group education system. The word “engagement” is often used by educators and others engaged in the scholarship of teaching. “Student engagement represents the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities” (Kuh, 2009, p. 683).

Examining the polar opposite of engagement—alienation—is one way to put the notion of engagement into stark perspective. Students' involvement cannot be increased if the teacher focuses only on learning methods (whether deep or superficial) (Mann, 2001). Alienation and disengagement in the student have significant implications beyond just poor learning results; they can result in student withdrawal from the subject and failure to finish the course (Morinaj et al., 2019). An overseas student or a student entering higher education after high school may meet a culture in which the values and views of the participants are likely to be significantly different from their prior experience, posing difficulties for the teachers. Aside from the stress of conforming to academic rigour set by their teachers, students have joined an altogether new and foreign social grouping of similar students, resulting in even more potential for alienation from their classmates.

Establishing more robust connections between the students and lecturers may help increase student involvement (Mann, 2001). It should be stressed that creating a community in the classroom environment may significantly increase student involvement. Some students can achieve high levels of engagement and thought independence with little

assistance. For the others in the cohort, engagement stems from a keen sense of community and acknowledgement. For subjects that require a lot of interaction, such as practical subjects, integration into the class community is highly desirable to encourage students to have a sense of belonging and engagement, resulting in a more fulfilling and enjoyable process than for those without much affiliation (Kember et al., 2001). Some students' primary motivation for tertiary education is to earn a suitable qualification that leads to a decent career after graduation (Bryson & Hand, 2007). For these students, assessments have become the most crucial aspect of learning. However, other students demonstrated genuine enthusiasm for studying on their initiative.

Cultivating robust connections with students is imperative for enhancing student engagement in their educational pursuits (Bartkowiak-Théron et al., 2020). This may present difficulties for some teachers, as their ability to facilitate engagement may be lacking. According to some researchers, encouraging their students to take ownership of their learning may result in less control over the scope and delivery of course material. Empirical research consistently demonstrates that engaging teachers requires facilitation skills and more adaptable lesson plans, which some teachers may lack (Mayeaux & Olivier, 2022; Shea et al., 2015).

This research was undertaken to find pedagogical solutions, as the preceding discussion states that the advantages of engagement outweigh the disadvantages because it helps students develop analytical, evaluation, and collaborative skills. Engagement also promotes creativity and innovation because mindfulness and interaction engage students and empower them to shape their learning experiences. The ultimate goal of engagement is to empower learners to direct their education (Sun & Yang, 2023). As long as a rich learning environment and a strong motivation to learn are present, students will assume the most responsibility for their learning, with the teacher as a facilitator. Students who view a task as meaningful, enjoyable, and challenging become engaged and believe the study is worthwhile. The students' primary concern is that they get it right. They can acquire knowledge at an elevated level, apply it in other contexts, and retain it.

Methodology

Because action research is characterised by its emphasis on practical consequences and reflective nature, it is well-suited for circumstances in which teachers propose and evaluate instructional innovations. For these reasons, action research was selected for the current study. Action research consists of five phases of inquiry: identification of problem areas, collection and organisation of data, interpretation of data, action based on data, and reflection (Alpert et al., 2022).

Three researchers engaged in action research to explore how they could improve student engagement in one subject of the Bachelor of Culinary Management degree (Kitchen Production and Operations subject – taught by Teacher 1) and two subjects of the Bachelor of Hospitality Management degree (Restaurant Service subject – taught by Teacher 2 and Food and Beverage Knowledge subject – taught by Teacher

3). The three subjects were selected as they are practical-oriented subjects, and this project aimed to improve student engagement, encourage them to take responsibility for their learning in practical training and education settings and effect positive classroom change. Each teacher focused on one subject that they typically teach. Ethics approval for this project was obtained from the institute's Ethics Committee to ensure that ethical and legal research requirements were met. The setting for this research was a renowned institute for hospitality and culinary management in Australia. The research was conducted in the regularly scheduled Bachelor of Culinary Management and Bachelor of Hospitality Management classes over two semesters (12 weeks per semester) with the typically enrolled students and without any specific selection of students or modifications to the regular class situation. This research was carried out in weekly classes of the three practical-oriented subjects over 12 weeks of classes in Semester One. The class length for two subjects was six hours each, and the length of the third subject was four hours. The data was collected by observing the students in the regular practical classes and the quality of the assessments submitted by the students before and after the action research project.

The Kitchen Production and Operations class had nine students, the Restaurant Service class had six students, and the Food and Beverage Knowledge class had 16 students in the first semester. After observing students in the classes of these subjects for the first four weeks of Semester 1, new modified assessments and activities for the three subjects involved were planned as part of the cyclical nature of this action research. The class activities and the assessments were modified by the three teachers consulting together and ensuring that the new class activities and assessments met and adhered to the Intended Learning Outcomes prescribed for each subject. The activities that follow - implementing new activities and assessments for the next eight weeks of the semester, collecting data through ongoing observation of student engagement in the practical classrooms, evaluating the results of the revised assessments and activities, and reflecting on the outcomes by critical review, assisted in establishing a framework for repeating the Semester One process in Semester Two. The information collected for this process was noted in a tabular form with the following headings: the subject's name, activities and assessments prior to action research, modified activities and assessments, outcomes post-action research, and evidence (see Table 1 below). The above process was repeated for another 12 weeks in the next semester with a new batch of enrolled students in the three subjects. Kitchen Production and Operations had 14 students, Restaurant Service had ten students, and Food and Beverage Knowledge had 32 students in the second iteration.

The teachers observed student engagement in practical classes, modified the class activities and assessments, and then re-observed the impact of these changes, implementing a structured approach to data coding and interpretation, ensuring the reliability and validity of the observations. To achieve consistency across observations, all teachers utilised the same criteria for student engagement. This included specific behaviours such as taking the initiative in the classroom, collaborating with other students, possessing

curiosity and inquiry, asking questions, actively participating in class discussions, demonstrating enthusiasm for practical tasks, and contributing to discussion during the class discussions and the de-brief sessions. To maintain a high level of consistency and objectivity in observations, teachers went to each other's classes as observers and moderated assessments of each other's subjects. These checks involved multiple observers (the teachers, in this case) independently coding the same observed events or behaviours according to the predetermined criteria and then comparing their coding to assess agreement. Discrepancies in coding were discussed among the teachers to clarify misunderstandings and refine the application of the coding criteria. This process ensured that all teachers were aligned in their understanding and application of the observation criteria, thereby enhancing the reliability of the observations across different classes and subjects. Such a systematic approach to observing and analysing student engagement allowed for a more objective assessment of the effectiveness of changes to teaching strategies and classroom activities, providing valuable insights into how best to foster an engaging learning environment.

During this research process, iterative steps were employed. The commencement of the enquiry involved the development of an enquiry question: What strategies can be utilised to increase students' level of engagement? The subsequent stage of the research design involved modifying the assessment and activities in three subjects and noting the change in student engagement pre- and post-changes. Throughout the process of data collection, the conduct, social exchanges, and engagement of students within the classroom setting were subject to observation. Furthermore, data collection also includes teachers' discussions with students and their feedback. The process of reflection led to additional modifications in the activities and assessments, incorporating techniques and altered activities and assessments that encouraged heightened engagement. Evaluating and assessing the efficacy of these modifications and interventions required repeated observations of student involvement to verify the sustained increase in engagement. Implementing these changes leads to an enhancement in the overall quality of the learning experience.

The American educational philosopher John Dewey (1997) said: "We do not learn from experience...we learn from reflecting on experience". See Figure 1 below for the conceptual framework.

Findings and discussion

Subject 1

Before action research for the Kitchen Production and Operations class took place, the teacher usually compiled the menu and recipes for the dishes and ordered the ingredients for the class. This activity was modified, and students were asked to design the menus for production and service in the training restaurant, including writing the recipes and ordering the ingredients for the class. The modified activity significantly increased their collaboration and teamwork abilities. They demonstrated initiative and took charge of

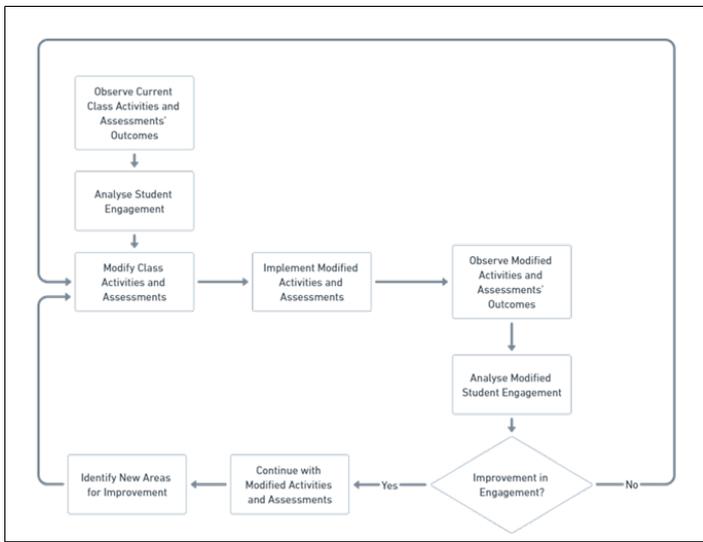


Figure 1: Conceptual framework for action research.

their education when they overcame obstacles or discovered solutions independently, with the teacher as a guide. The programme encouraged and inspired students to assume greater personal responsibility for their Kitchen Production and Operations education. Students could research, try new dishes, and develop original menu concepts (See Table 1 below).

The Kitchen Production and Operations class (Teacher One) monitored the student's progress and helped those who required assistance. After modifying the activity, students were significantly more motivated, interested, and responsible. During after-meal service de-briefing sessions, students were more interested in discussing the positive and negative aspects of the service, and they offered suggestions and comments for improvement. Overall, the student's learning experience was enhanced due to their increased engagement and sense of ownership in their education (Gilmore, 2023). Customers admired the students' efforts, as reflected on the dining customer feedback cards. This suggests that the modified activity improved customer service and learning. In addition, the activity produced a variety of positive outcomes, including increased accountability and responsibility among students, enhanced teamwork and collaboration, observable improvements in motivation, engagement, and self-direction, and positive customer feedback. These results suggest that subject modifications to Kitchen Production and Operations enhanced student learning.

Table 1: Activities and assessments for action research methodology and their outcomes.

Item No.	Name of Subject	Activity/Assessment prior to Action Research	Modified Activity/Assessment	Outcomes Post-Action Research	Evidence
1	Kitchen Production and Operations (Teacher 1)	<p>The teacher compiled the entire menu and the recipes for the menu items for the Kitchen Production and Operations class. The teacher also ordered the ingredients needed for the classes (12 classes in the semester) based on the recipes to be cooked in the class by the students.</p> <p>The students followed the recipes, prepared them, and served them to the training restaurant guests. There seemed to be a lack of collaboration, exchange of ideas, and discussion between the students in the class on improving the dishes cooked during the day. The students lacked initiative. The teacher conducted the post-</p>	<p>Students were asked to design the menus and write the recipes for the items on the menu to be produced in the kitchen and served in the training restaurant. The students had to order the ingredients needed for the class based on the recipes to be cooked in the class.</p> <p>This allowed the students to display their creativity, introduce ethnic dishes, create a community, and develop teamwork and ownership. After producing and serving their recipes, the students were asked to evaluate the menus they created and identify potential issues in the menu design.</p>	<p>The changed approach in the classroom encouraged/motivated students to take more responsibility for their learning.</p> <p>Students were autonomous and allowed to explore, experiment and formulate menu ideas – while the teacher observed their learning and guided them.</p> <p>Students took the initiative in groups to develop menus and recipes and order the ingredients for the recipes for every class. In turns, every student acted as the head chef (prior to action research, the teacher was the head chef)</p>	<p>Teamwork and collaboration improved substantially.</p> <p>It was noticed that the students actively took a role in leading their learning.</p> <p>There were noticeable improvements in motivation, engagement and self-direction. The student head chef conducted a post-production/service de-brief. Students were more involved in discussing positive and negative aspects of the service and suggested ideas/comments for improvement. The students took the initiative to create a head chef report to be filled collectively (after de-</p>
				<p>Students took the initiative in groups to develop a plan to solve a task or problem in multiple ways, especially when there was absenteeism in class.</p>	<p>briefing) and given to the teacher at the end of the class.</p> <p>Positive customer feedback through the customer comment cards increased.</p> <p>This change in approach for this subject received some good and positive responses from students.</p>
2	Restaurant Service (Teacher 2)	<p>The teacher will plan and manage individual lunch or dinner service at the on-campus Training Restaurant.</p> <p>This included the teacher allocating three students into a group to act as "Managers" or the Management group for a meal period (one member of the group functioned as the manager and the other two as assistant managers; one assistant manager was responsible for bar and cashiering, and the second was in charge with floor service).</p> <p>The teacher decided on these duties for the meal period service managers and also assigned duties to the other students or non-managerial students.</p>	<p>With the modification to the approach, the three managers had to decide how to allocate the supervisory duties for restaurant meal period service among themselves. They were responsible for planning a restaurant service and, via a pre-service briefing, advising all staff (other students) on the various duties they had to perform before, during and after the meal service.</p> <p>The student managers were evaluated and marked collectively on developing and implementing the service plan, providing appropriate feedback, and conducting a de-brief at the end of the service.</p> <p>Student management teams were assessed on the service management of their assigned meal service. This practical assessment has three (3) components:</p> <ul style="list-style-type: none"> • Pre-Service coordination, 	<p>Both the management team and the students worked hard to accomplish the mission of providing high-quality service. The management team endeavoured to achieve this objective with the assistance and collaboration of every student, and the instructor standing by to provide direction and advice.</p> <p>It was observed that students/staff worked with the student managers and were able to come up with restaurant service that was both more creative and flexible. Everyone on the team did what they could to improve the customer experience.</p> <p>The de-briefing document created a structure for students. Holistically, it gives parameters for others in class to contribute</p>	<p>Reflection and evaluation of the meal period service were more analytical.</p> <p>More in-depth post-briefing feedback.</p> <p>Student feedback on the Management Group's role was more constructive, without fear or favour and driven by the students.</p> <p>The de-briefing document created a structure for students. They are more motivated to collaborate, communicate, and take the initiative in the de-briefing. This de-briefing document assisted students with fulfilling the requirements of one of the assessments.</p>
		<p>It was noticed that the students would come to the class, wait for the teacher to allocate duties for the meal service, and take no initiative in planning and delivering the food and beverage service.</p> <p>At the end of the meal service, the teacher conducted a post-meal service de-brief session on how the meal period transpired and what areas needed improvement.</p>	<ul style="list-style-type: none"> • Post-service coordination and • Peer and customer feedback <p>The student managers for the meal period were asked to lead the post-service meal (this was made part of an assessment, and managers were graded for this), conduct de-brief with the students, and the teacher was present to guide the group. The students introduced a de-briefing document containing topics for the management team to discuss and reflect upon. The students also created this de-briefing document emphasising more excellent reflection and areas where improvements were necessary. (Previously, students utilised the de-brief document template provided by the instructor for practice and evaluation.)</p>	<p>feedback: Debriefings are held to critique, provide feedback, and communicate where improvements must be made to the restaurant's service. They also allow the next group of managers to learn from the previous group's experience.</p> <p>Previously, de-briefings were rushed and ad hoc in the past due to a lack of specific guidelines. The student-created de-briefing document became a scaffold for the conclusion of service and an excellent tool for assessment and assessment grading.</p>	<p>The assessment became richer in content and reflected an honest perspective regarding their progress in creating a restaurant service experience for the guests.</p>

Item No.	Name of Subject	Activity/Assessment prior to Action Research	Modified Activity/Assessment	Outcomes Research	Post-Action Research	Evidence
3	Food and Beverage Knowledge (Teacher 3)	Food and wines are served in this class. As an assessment, the students wrote reflections for every food and wine-tasting session. This formed an assessment in itself. Based on the food and wine tasted in the tutorial, students must write a concise, highly relevant and detailed understanding of the theoretical concepts related to the sensory evaluation of food and beverage commodities and matching principles. Appropriate and consistent tasting terminology/vocabulary is to be used in writing this reflection.	The teacher invited a peer to the class to observe the teacher-student interaction. The peer advised Teacher 3 that to increase student participation, the teacher should consider dividing the class into small groups, providing more time, and waiting longer for student responses/discussion to food and wine pairing questions. Previously, the questions asked by the teacher were rapid-fire. Allowing students to process their thoughts on the wines and food in pairs or putting students in small groups would help them participate more fully in discussions and answer questions in class as a team.	Taking the comments of the peer partner into consideration, students were divided into smaller groups (groups of four students each) and asked to discuss the pairing of food and beverage within their groups; each group then presented their pairing perspectives—this increased student participation in their discussion. The primary objective was for students to independently initiate and sustain an academic debate. Multiple iterations of student-led discussions effectively boost student engagement, intellectual investment, and participation in academic discussions. Our lesson plans and evaluations must support our primary objective, which is for these discussions to lead to increased autonomy in		The changes in approach to class participation resulted in improved written output for the assessment based on the tutorial discussion on food and wine pairing. Students were more confident in their ability to pair food and wine, more engaged in class discussion, and had a deeper understanding of the topic. The quality of the written reflection also improved. After the change, the reflection was more evident, concise, highly relevant, and detailed in its understanding of the theoretical concepts related to the sensory evaluation of food and beverage commodities and matching principles.
		It was noticed that only a few students participated in food and wine pairing discussions in the tutorial, and most students were not confident, as evidenced by their unwillingness to answer the questions or participate in class discussions and the quality of the written reflection assessment on tasting.		sustaining classroom conversations as part of daily practice so that students can use these skills and dispositions to become actively engaged, productive participants and take ownership of their learning.		There was an appropriate and consistent use of food and wine/beverage terminology/vocabulary throughout.

Subject 2

In the Restaurant Service class (Teacher 2), groups of three students acting as 'Managers' or the Management group ran meal period service in the training restaurant (one assumed the manager and the other two as assistant managers). One assistant manager was responsible for bar and cashing, and the second was for floor service. The teacher in the earlier semesters decided on these duties for the three managers of the meal period service. With the modification to the approach, the three managers had to determine how to allocate the responsibilities for restaurant meal period service among themselves. They were responsible for planning a restaurant service and appropriately communicating via verbal and written instruction to all other students acting as staff in the training restaurant. The three managers allocated duties to students acting as staff to do the necessary mise-en-place, conduct a briefing before service delivery, and provide feedback at the end of the meal service period. The teacher evaluated and marked the student managers collectively in developing and implementing the service plan, providing appropriate feedback to the students acting as staff in the training restaurant, and conducting a debrief at the end of the service.

Both the management team and the students worked hard to accomplish the mission of providing high-quality service. The student managers or the management group team endeavoured to achieve this objective with the assistance and collaboration of every student/staff member, with the teacher standing by to provide direction and advice. It was observed that students/staff worked with the student managers and were able to come up with restaurant service that was both more creative and flexible. Everyone on the team did what they could to improve the customer experience (see Table 1 above).

Subject 3

In the subject of Food and Beverage Knowledge class (Teacher 3), students were provided food and wines. It was noticed that only a few students participated in food and wine pairing discussions, and most students were not confident, as evidenced by their unwillingness to answer the questions or participate in class discussions on food and wine pairing. The teacher invited a peer to the class to observe the teacher-student interaction (Johnston et al., 2022). The peer advised the teacher to increase student participation by providing more time and waiting longer for student responses/discussion to food and wine pairing questions. Taking the comments of the peer partner into consideration, students were divided into smaller groups (groups of four students each) and asked to discuss the pairing of food and beverage within their groups; each group then presented their pairing perspectives. All these changes increased student participation in their discussion.

The primary objective was for students to independently initiate and sustain an academic debate. Multiple iterations of student-led discussions effectively boosted student engagement, intellectual investment, and participation in academic discussions. The revised lesson plans and evaluations must support the primary objective, which is for these discussions to lead to increased autonomy in sustaining classroom conversations as part of daily practice so that students can use these skills and dispositions to become actively engaged, productive participants and take ownership of their learning. Allowing students to process their thoughts on the wines and food in pairs or putting students in small groups would help them participate more fully in discussions and answer questions in class as a team. Students independently investigated and evaluated the food and beverage pairing through peer-led discussions. As a result, the students exhibited an enhanced capacity to comprehend the basic principles of sensory evaluation and matching. Providing increased autonomy in the classroom enabled students to take charge of their learning. Implementing the modified tutorial activity yielded a noteworthy enhancement in the overall calibre of the written reflections on food and wine pairing. The students clearly and concisely understood the subject matter directly applicable to the task. The responses provided exhibited a comprehensive understanding of the concepts, as evidenced by the consistent and precise application of tasting terms and related vocabulary. The revised evaluation and activity facilitated the process of composing reflective essays for students on food and wine pairing, enriched their comprehension of the subject matter, and bolstered their engagement, ultimately leading to better academic achievements. Based on the available evidence, the instructional style and material alterations positively impacted the students' understanding and engagement with food and wine tasting (see Table 1 above).

Further discussion

The three examples above highlight that in assisting students to take ownership of their learning, teachers can help them achieve academic and behavioural goals. On

the other hand, empowering students to take ownership of their education can help them complete their education more quickly, teach them essential skills such as setting and attaining goals, and help them develop their independence. To take control of their own learning experiences, students must clearly understand the intended learning objectives (Macfarlane & Tomlinson, 2017). Student ownership is based on specific learning objectives since learning objectives inform students about what is expected of them regarding performance. Clearly defined learning objectives, class activities and assessments are powerful tools for increasing student ownership of learning (Reeve et al., 2020).

John Dewey, the father of reflection, defined reflection as "Active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends" (Dewey, 1997, p. 118).

In the case of this research, reflective practice enabled teachers to change class activities and assessments to improve their teaching and better meet their students' learning needs. This improvement occurs as the reflective practice enhances teaching, learning, and comprehension, an essential component of teachers' professional development (Pineda et al., 2022). When a teacher conducts rigorous self-examination, they better understand themselves, their practices, and their students. The authors incorporated reflective practice into their action research to increase awareness of their underlying beliefs and assumptions about learning and teaching and modify their lesson delivery.

Assessments and activities were modified to make them challenging for the entire population of students being evaluated. They are precise regarding what is expected of students and related to the learning objectives or specific learning outcomes. Teachers provided students with various classroom participation opportunities because they understood the importance of meeting each student's diverse needs and learning requirements (Beasy et al., 2022). The significance of the new activities motivated and engaged the students, who appeared engaged and believed the modified learning activity worthwhile.

Most assessment activities and modifications led to collaborative learning, a potent engagement booster for learning activities. When students collaborate to create performance on the assessment and class activities, they better understand the standards taught and the assessed performance outcomes (Qureshi et al., 2023). Students who collaborated effectively during this research paid more attention, primarily because they felt more connected to their peers during activities. Teachers promoted motivation and cooperative learning by avoiding homogeneous groups, grouping students based on their abilities, encouraging individual accountability through the distribution of various roles, and evaluating individual and group performance.

Teachers must address increasing student achievement while modifying instruction, classroom assessments and activities, and curriculum assessments. Encouraging students to take responsibility for their learning as a fundamental component of formative teaching techniques is one strategy

for increasing student achievement. By taking an active role in the process, students can be taught how to make decisions about their learning. When students become personally invested in their education, they understand their learning objectives, gather and document evidence of their learning, and assess and set new learning objectives, assisting them in achieving the ultimate goal of increasing their academic success (Beasy et al., 2022). Because they are overburdened with other responsibilities, teachers may overlook opportunities to increase student ownership of learning. When teachers assist their students in taking an active role in their education by providing opportunities for them to do so, they contribute to the student achievement goals.

Activity and assessment modifications challenged students and made them work harder. The difficulty stimulated higher-order thinking, which requires students to delve deeper into problems and ideas. Examples of higher-order thinking included making judgments about information, manipulating data on assessments and activities to reveal deeper meanings, analysing various facets of an idea, combining data from multiple sources to produce new interpretations, and applying concepts and theories to novel situations.

By creating engaging, open-ended tasks and assessments that focus on real-world skills and allow students to choose how to measure and reflect on their progress, students can be empowered to take ownership of their learning. Researchers must figure out what motivates and engages students. Many advocates and researchers advocate for educational institutions to include students in educational decision-making to increase student engagement and investment in themselves and their education (Kurtz et al., 2019). Minimise subject barriers by promoting students' integration of their existing knowledge from other subjects with the new information they acquire in their current subject. Educational technology, such as Moodle (Learning Management System), can help students develop skills to participate in 21st-century learning. Active learning strategies such as discussion, debate, group work, and team projects require students to deepen their understanding of the content.

The implementation of student-centred strategies has yielded numerous favourable consequences. At the outset, there has been a notable augmentation in the array of prospects for pedagogy and acquisition. Educators can enhance student engagement, comprehension, and retention by tailoring instructional approaches to accommodate individual students' unique needs and interests. The second aspect of development pertains to the heightened involvement of students in the decision-making process. This allows students to actively participate in voicing their opinions regarding matters that directly impact their educational experiences. When students engage in activities that cultivate a sense of ownership and responsibility, they are empowered to take control of their educational trajectory.

Furthermore, the active engagement of students has facilitated enhanced communication and collaboration among their peers. Engagement in collaborative endeavours

and undertakings fosters cooperation, facilitates the exchange of ideas, and cultivates essential interpersonal skills among students. Students' increasing autonomy and intrinsic motivation have facilitated heightened activity in their educational pursuits. When students possess a heightened sense of ownership and autonomy in their educational endeavours, they tend to be more inclined towards actively pursuing knowledge, establishing academic objectives, and demonstrating perseverance. Implementing these improvements has resulted in a more efficient and inclusive educational setting.

Conclusion

Action research is a systematic enquiry approach that seeks to produce novel knowledge with practical applications, enhance current methodologies, and enhance students' teaching and learning experiences. Together with motivation, engagement is viewed in the literature as very important for enhanced learning outcomes for all students (Raza et al., 2020). Through action research, teachers can continue to improve their teaching methods and students' learning outcomes. Additionally, they can contribute to educational knowledge. It encourages educators to make decisions with more deliberation and evidence. This allows them to tailor their instructional strategies to the needs of their students.

This action research study aimed to determine how to engage students more in their education and give them a sense of ownership over their education. This research shed light on strategies for engaging students in learning and giving them greater control over their education. Enhancing student engagement within the classroom has positively improved motivation, engagement, and comprehension levels.

Implementing student-centred teaching strategies, such as project-based learning and collaborative activities, has significantly increased student learning engagement. Participating students displayed tremendous enthusiasm, motivation, and active engagement in their learning experiences.

The findings also demonstrated the importance of fostering a supportive learning environment in the classroom that values students' ideas and encourages them to act independently. When students chose what they would learn, established goals, and evaluated what they had learned, they felt greater responsibility and ownership over their work. Students had a stronger sense of agency and were more invested in learning when their opinions were considered during lesson planning and grading.

The findings of this action research study increased our understanding of engaging students in their learning and empowering them to take ownership of their educational experiences. Employing student-centred practices, creating a welcoming classroom environment, and valuing student voice and choice enable educators to equip students with the skills necessary to be active participants in their learning. This study provides teachers and researchers with vital information they can use to assist all students in learning in

a meaningful and long-lasting way.

The action research process has assisted the researchers/teachers in understanding what is going on in the classroom and identifying changes that will improve teaching and learning. Action research is a valuable tool for answering how to enhance the effectiveness of educational strategies and student performance. This action research has generated qualitative data that can be used to improve the subject matter being taught and the instructional methods used in the curriculum. Teachers can make informed decisions with the help of action research.

Implications for research and practice

Employing action research to evaluate tactics for increasing student engagement is vital for creating a more effective learning environment (Gibbs et al., 2004). Teachers can enhance student engagement and foster student ownership of learning by implementing the action research methodology in their classrooms through collaborative strategies, reflective practice, individual interventions, and continuous improvement. Both teachers and students can use action research to create engaging and meaningful learning experiences.

Students and teachers who participate in action research acquire research skills through their participation in research. The abilities acquired include critical thinking, problem-solving, data collection, reflection, and analysis. These skills are transferable and can be applied in different contexts. In addition, students learn self-directed learning, self-evaluation and self-regulation. With the help of action research, educators can continue enhancing the content of their lessons and the knowledge their students acquire.

Action research encourages educators to critically evaluate their teaching practices and make modifications based on added information. Teachers can find effective ways to engage students in learning and encourage them to assume responsibility for their education by participating in the research process. The study's findings have demonstrated that the implementation of student-centred teaching strategies, such as project-based learning and group activities, has resulted in a significant increase in students' level of interest in learning. This study has confirmed a positive correlation between increased student engagement and student achievement and that student engagement is a significant factor in academic performance.

With action research, educators can tailor their interventions to each student's needs and circumstances. If they continuously plan, act, observe, and reflect on their actions, teachers can determine what is most effective for their students. Then, based on their research findings, they can adjust their interventions.

Limitations and future research

Typically, the researcher for action research is the teacher or practitioner. Data collection and analysis can become subjective and biased. Measuring student ownership of their learning and engagement is challenging, as these concepts are subjective actions and perceptions. The three teachers attended each other's classes as observers and used the same student engagement criteria to overcome subjectivity and bias and ensure consistency across observations. These checks involved the three teachers coding the same events or behaviours independently according to predetermined criteria and then comparing their coding to assess agreement. Teachers discussed coding discrepancies to clarify and improve coding criteria. This process aligned teachers' understanding and application of observation criteria, improving observation reliability across classes and subjects. A systematic approach to observing and analysing student engagement allowed for a more objective assessment of teaching strategy and classroom activity changes, revealing how to create an engaging learning environment.

Nonetheless, it is essential to comprehend students' perspectives, and these developments bode well for future research in the field. Future research can examine grades from assessments (such as exams, activities, and projects) from previous years when the course was taught in the conventional format to compare grades before and after the changes. Action research usually requires a substantial investment of resources and time. The process includes planning, executing, collecting data, analysing, and evaluating the results. Finding a balance between regular teaching duties and action research participation may be demanding for teachers. Stakeholders such as students and co-workers may oppose implementing changes based on action research. Resistance can be caused by numerous factors, such as a lack of understanding of the new strategy, a reluctance to change routines or a lack of confidence in the efficacy of action research. To overcome opposition, teachers must effectively collaborate and communicate with others.

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References

Abdullah, J., Mohd-Isa, W. N., & Samsudin, M. A. (2019). Virtual reality to improve group work skill and self-directed learning in problem-based learning narratives. *Virtual Reality*, 23(4), 461-471. <https://doi.org/10.1007/s10055-019-00381-1>

Afzal, F., & Crawford, L. (2022). Students' perception of engagement in online project management education and its impact on performance: The mediating role of self-motivation. *Project Leadership and Society*, 3, 100057. <https://doi.org/10.1007/s10055-022-00057-1>

[doi.org/https://doi.org/10.1016/j.plas.2022.100057](https://doi.org/10.1016/j.plas.2022.100057)

Alpert, S., Dean, M., & Ewell, W. (2022). Preparing educational leaders through action research. *Action Research*, 21(1), 124-143. <https://doi.org/10.1177/14767503221143872>

Bartkowiak-Théron, I., McShane, A. L. J., & Knight, M. G. (2020). Departing from anonymous and quantitative student feedback: Fostering learning and teaching development through student evaluations. *Journal of Applied Learning and Teaching*, 3(Sp. Iss. 1), 118-128. <https://doi.org/10.37074/jalt.2020.3.s1.16>

Beasy, K., Morrison, R., Coleman, B., & Mainsbridge, C. (2022). Reflections of a student engagement program designed and delivered by academics. *Journal of Applied Learning & Teaching*, 5(1), 40-51. <https://doi.org/10.37074/jalt.2022.5.1.7>

Benning, T. M. (2022). Reducing free-riding in group projects in line with students' preferences: Does it matter if there is more at stake? *Active Learning in Higher Education*, 14697874221118864. <https://doi.org/10.1177/14697874221118864>

Berger, R., Rugen, L., & Woodfin, L. (2014). *Leaders of their own learning: Transforming schools through student-engaged assessment*. San Francisco, CA: John Wiley and Sons Inc.

Black, P., & William, D. (2018). Classroom assessment and pedagogy. *Assessment in Education: Principles, Policy & Practice*, 25(6), 551-575. <https://doi.org/10.1080/0969594X.2018.1441807>

Bryson, C., & Hand, L. (2007). The role of engagement in inspiring teaching and learning. *Innovations in Education and Teaching International*, 44(4), 349-362. <https://doi.org/10.1080/14703290701602748>

Chan, P. E., Graham-Day, K. J., Ressa, V. A., Peters, M. T., & Konrad, M. (2014). Beyond involvement: Promoting student ownership of learning in classrooms. *Intervention in School and Clinic*, 50(2), 105-113. <https://doi.org/10.1177/1053451214536039>

Clynes, M. P. (2009). A novice teacher's reflections on lecturing as a teaching strategy: Covering the content or uncovering the meaning. *Nurse Education in Practice*, 9(1), 22-27. <https://doi.org/10.1016/j.nepr.2008.03.007>

Crabtree, R. M., Briggs, P., & Woratschek, H. (2021). Student engagement and barriers to implementation: The view of professional and academic staff. *Perspectives: Policy and Practice in Higher Education*, 25(4), 144-150. <https://doi.org/10.1080/13603108.2021.1946446>

Dewey, J. (1997). *How we think*. Dover Publications. <https://archive.org/details/howwethinkrestat00dewerich>

Embury, D. C., Parenti, M., & Childers-McKee, C. (2020). A charge to educational action researchers. *Action Research*, 18(2), 127-135. <https://doi.org/10.1177/1476750320919189>

- Gao, X., Guo, F., & Coates, H. (2022). Contributions to the field of student engagement and success. *Higher Education Research & Development*, 41(1), 62-74. <https://doi.org/10.1080/07294360.2021.2008326>
- Gibbs, P., Angelides, P., & Michaelides, P. (2004). Preliminary thoughts on a praxis of higher education teaching. *Teaching in Higher Education*, 9(2), 183-194. <https://doi.org/10.1080/1356251042000195367>
- Gilboy, M. B., Heinerichs, S., & Pazzaglia, G. (2015). Enhancing student engagement using the flipped classroom. *Journal of Nutrition Education and Behavior*, 47(1), 109-114. <https://doi.org/https://doi.org/10.1016/j.jneb.2014.08.008>
- Gilmore, H. (2023). The (academic) road less travelled: From dropout to recovery. *Journal of Applied Learning and Teaching*, 6(2), 402-413. <https://doi.org/10.37074/jalt.2023.6.2.14>
- Gono, S., & de Moraes, A. J. (2023). Student appraisals of collaborative team teaching: A quest for student engagement. *Journal of Applied Learning and Teaching*, 6(1), 222-233. <https://doi.org/10.37074/jalt.2023.6.1.26>
- Hackett, J., Kruzich, J., Goulter, A., & Battista, M. (2021). Tearing down the invisible walls: Designing, implementing, and theorizing psychologically safer co-teaching for inclusion. *Journal of Educational Change*, 22(1), 103-130. <https://doi.org/10.1007/s10833-020-09401-3>
- Hodgson, Y., Benson, R., & Brack, C. (2013). Using action research to improve student engagement in a peer-assisted learning programme. *Educational Action Research*, 21(3), 359-375. <https://doi.org/10.1080/09650792.2013.813399>
- Hood, A. (2012). Whose responsibility is it? Encouraging student engagement in the learning process. *Music Education Research*, 14(4), 457-478. <https://doi.org/10.1080/14613808.2012.703174>
- Johnston, A. L., Baik, C., & Chester, A. (2022). Peer review of teaching in Australian higher education: A systematic review. *Higher Education Research & Development*, 41(2), 390-404. <https://doi.org/10.1080/07294360.2020.1845124>
- Kamali, J. (2023). Metamorphosis of a teacher educator: A journey towards a more critical self. *Journal of Applied Learning & Teaching*, 6(2), 252-259. <https://doi.org/10.37074/jalt.2023.6.2.8>
- Kember, D., Lee, K., & Li, N. (2001). Cultivating a sense of belonging in part-time students. *International Journal of Lifelong Education*, 20(4), 326-341. <https://doi.org/10.1080/02601370117754>
- Kuh, G. D. (2009). The national survey of student engagement: Conceptual and empirical foundations. *New Directions for Institutional Research*, 2009(141). <https://doi.org/10.1002/ir.283>
- Kurtz, J. B., Lourie, M. A., Holman, E. E., Grob, K. L., & Monrad, S. U. (2019). Creating assessments as an active learning strategy: What are students' perceptions? A mixed methods study. *Medical Education Online*, 24(1), 1630239. <https://doi.org/10.1080/10872981.2019.1630239>
- Liu, F., Wang, X., & Izadpanah, S. (2023). The comparison of the efficiency of the lecture method and flipped classroom instruction method on EFL students' academic passion and responsibility. *SAGE Open*, 13(2), 21582440231174355. <https://doi.org/10.1177/21582440231174355>
- Macfarlane, B., & Tomlinson, M. (2017). Critiques of student engagement. *Higher Education Policy*, 30(1), 5-21. <https://doi.org/10.1057/s41307-016-0027-3>
- Mann, S. J. (2001). Alternative perspectives on the student experience: Alienation and engagement. *Studies in Higher Education*, 26(1), 7-19. <https://doi.org/10.1080/03075070020030689>
- Marks, H. M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal*, 37(1), 153-184. <https://doi.org/10.3102/00028312037001153>
- Mayeaux, A. S., & Olivier, D. F. (2022). Professional kinship using social media tools: Bridging and bonding to develop teacher expertise. *Journal of Applied Learning and Teaching*, 5(Sp. Iss. 1), 27-34. <https://doi.org/10.37074/jalt.2022.5.s1.3>
- McTaggart, R. (1994). Participatory action research: Issues in theory and practice. *Educational Action Research*, 2(3), 313-337. <https://doi.org/10.1080/0965079940020302>
- Moon, T. R., Brighton, C. M., Callahan, C. M., & Robinson, A. (2005). Development of authentic assessments for the middle school classroom. *Journal of Secondary Gifted Education*, 16(2-3), 119-133. <https://doi.org/10.4219/jsge-2005-477>
- Morinajpaj, J., Marcin, K., & Hascher, T. (2019). School alienation and its association with student learning and social behavior in challenging times. In E. N. Gonisa, & M. S. Lemos (Eds.), *Motivation in education at a time of global change* (Volume 20, pp. 205-224). Emerald Publishing Limited. <https://doi.org/10.1108/S0749-742320190000020010>
- Pennisi, S., Lathrop, A., & Pilato, K. A. (2023). How can practitioner action research support the design, implementation, and evaluation of on-campus mental health and addiction services? *Educational Action Research*, 1-19. <https://doi.org/10.1080/09650792.2023.2229402>
- Pineda, J. L. d. L., Villanueva, R. L. d. D., & Tolentino, J. A. M. (2022). Virtual focus group discussions: The new normal way to promote reflective practice. *Reflective Practice*, 23(2), 190-202. <https://doi.org/10.1080/14623943.2021.2001322>
- Pino-James, N. (2018). Evaluation of a pedagogical model for student engagement in learning activities. *Educational Action Research*, 26(3), 456-479. <https://doi.org/10.1080/09650792.2017.1354771>
- Pudjiarti, E. S., Rini, W., & Wae, D. (2023). Cooperative

- Learning: An effective approach for improving student engagement and achievement. *Educational Administration: Theory and Practice*, 29(2). <https://doi.org/10.17762/kuey.v29i2.685>
- Qureshi, M. A., Khaskheli, A., Qureshi, J. A., Raza, S. A., & Yousufi, S. Q. (2023). Factors affecting students' learning performance through collaborative learning and engagement. *Interactive Learning Environments*, 31(4), 2371-2391. <https://doi.org/10.1080/10494820.2021.1884886>
- Ramsden, P. (2003). *Learning to teach in higher education*. Routledge. <https://doi.org/10.4324/9780203507711>
- Raza, S. A., Qazi, W., & Umer, B. (2020). Examining the impact of case-based learning on student engagement, learning motivation and learning performance among university students. *Journal of Applied Research in Higher Education*, 12(3), 517-533. <https://doi.org/10.1108/JARHE-05-2019-0105>
- Reeve, J., Cheon, S. H., & Jang, H. (2020). How and why students make academic progress: Reconceptualizing the student engagement construct to increase its explanatory power. *Contemporary Educational Psychology*, 62, 101899. <https://doi.org/https://doi.org/10.1016/j.cedpsych.2020.101899>
- Shea, J., Joaquin, M. E., & Gorzycki, M. (2015). Hybrid course design: Promoting student engagement and success. *Journal of Public Affairs Education*, 21(4), 539-556. <https://doi.org/10.1080/15236803.2015.12002219>
- Shepard, L. A., Penuel, W. R., & Pellegrino, J. W. (2018). Using learning and motivation theories to coherently link formative assessment, grading practices, and large-scale assessment. *Educational Measurement: Issues and Practice*, 37(1), 21-34. <https://doi.org/https://doi.org/10.1111/emip.12189>
- Sun, Z., & Yang, Y. (2023). The mediating role of learner empowerment in the relationship between the community of inquiry and online learning outcomes. *The Internet and Higher Education*, 58, 100911. <https://doi.org/https://doi.org/10.1016/j.iheduc.2023.100911>
- Tas, Y. (2016). The contribution of perceived classroom learning environment and motivation to student engagement in science. *European Journal of Psychology of Education*, 31(4), 557-577. <https://doi.org/10.1007/s10212-016-0303-z>
- Vermetten, Y. J., Vermunt, J. D., & Lodewijks, H. G. (2002). Powerful learning environments? How university students differ in their response to instructional measures. *Learning and Instruction*, 12(3), 263-284. [https://doi.org/https://doi.org/10.1016/S0959-4752\(01\)00013-5](https://doi.org/https://doi.org/10.1016/S0959-4752(01)00013-5)
- Walton, J. (2011). A living theory approach to teaching in higher education. *Educational Action Research*, 19(4), 567-578. <https://doi.org/10.1080/09650792.2011.625718>
- Wang, J., Tigelaar, D. E. H., Luo, J., & Admiraal, W. (2022). Teacher beliefs, classroom process quality, and student engagement in the smart classroom learning environment: A multilevel analysis. *Computers & Education*, 183, 104501. <https://doi.org/https://doi.org/10.1016/j.compedu.2022.104501>
- Weaver, D., & Esposto, A. (2012). Peer assessment as a method of improving student engagement. *Assessment & Evaluation in Higher Education*, 37(7), 805-816. <https://doi.org/10.1080/02602938.2011.576309>
- Wheaton, M. (2021). Why student engagement in the accounting classroom matters. *Journal of Applied Learning and Teaching*, 4(1), 72-81. <https://doi.org/10.37074/jalt.2021.4.1.3>
- Yan, Z., & Brown, G. T. L. (2017). A cyclical self-assessment process: Towards a model of how students engage in self-assessment. *Assessment & Evaluation in Higher Education*, 42(8), 1247-1262. <https://doi.org/10.1080/02602938.2016.1260091>
- Yosief, A., Sulieman, M.-S., & Biede, T. (2024). Improving the practices of teacher educators through collaborative action research: Challenges and hopes. *Educational Action Research*, 32(2), 204-221. <https://doi.org/10.1080/09650792.2022.2066147>