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From Theory to Practice of Promoting Student Engagement in Business and Law-Related Disciplines: The Case of Undergraduate Economics Education

Rabindra Nepal * and Ann M. Rogerson

Faculty of Business and Law, School of Accounting, Economics and Finance, University of Wollongong, Northfields Ave Wollongong, NSW 2522, Australia; annr@uow.edu.au

* Correspondence: rnepal@uow.edu.au

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Abstract: Higher education is experiencing a paradigm shift from passive learning towards active learning. The COVID-19 pandemic has further presented an opportunity for education providers to enhance teaching that includes non-campus modes. However, concerns regarding student engagement lie at the heart of the transition to active learning environments in the context of the increased demand for online education. Therefore, promoting student engagement has become an educational priority since greater student engagement translates into valued student experiences, higher academic performance, and increased retention rates. This paper semi-systematically reviews the literature on student engagement in undergraduate economics education. Close emphasis is also paid to the relationships between the direct measures of disengagement such as absenteeism on student performance in economics. The student engagement framework developed by Frederiks, Blumenfeld, and Paris (2004) is used to classify the dimensions of student engagement and the factors that influence the different dimensions of engagement. The literature reviewed is predominately occupied with behavioral aspects of engagement with little attention towards capturing the cognitive and emotional aspects of student engagement. Three key recommendations are noted from the study in order for business school educators and higher education policy makers to promote student engagement in economics education. Future research on student engagement in undergraduate business education should focus more on capturing the cognitive and emotional aspects of student engagement to inform policymaking in promoting student engagement.

Keywords: engagement; online education; active learning; educational technology; economics education

1. Introduction

The complexity of content, involvement of mathematical concepts, and the necessity to improve subject understanding by linking economic theories to economic realities have meant that effective learning and teaching of economics is inherently challenging. Many students find economics difficult and undergraduate economics courses often record high failure rates, leading to concerns about the quality of students' learning [1]. Undergraduate students can become easily discouraged to attend lectures and tutorials across both online and face-to-face settings whereby lack of student engagement and absence from face-to-face lectures and tutorials can translate into poor academic performance [2–4]. Coincidentally, there has been a growing demand and supply (and hence the market) for alternative delivery options of economics education, i.e., 2011 in Australia. Higher education institutions are also relying on alternate delivery methods such as online offerings to enroll more students and increase access to higher education, ensure student learning, and improve graduation rates [5]. The advent of a

pandemic in the form of COVID-19 has hastened the transition to and adoption of technology-enhanced learning methods for online or remote delivery.

One of the underlying assumptions is that the use of education technology positively influences student engagement, a vital characteristic of high-quality teaching and learning in higher education, and the outcome of learning [6]. The use of educational technologies such as multimedia have strong pedagogical advantages in stimulating greater student engagement [6]. This has also been demonstrated in studies involving economics education and social media activities such as blogs [7], podcasts [8], and Facebook [9]. In the context of online learning, student engagement rather than the course content is the root solution to the problems of learner isolation, dropout, retention, and graduation rate [5]. Against this backdrop, the broader question that emerges in line with the capability of a semi-systematic review to answer is as follows: 'What are the existing empirical evidences and related existing knowledge on promoting student engagement in undergraduate economics education'? In particular, what are the different active learning intervention strategies that are used for increasing student engagement in economics education based on the existing empirical findings? A semi-systematic literature review allowed us to address these research questions with a power that no single study has by integrating findings and perspectives from many empirical findings [10]. Furthermore, consideration of prior relevant literature in student engagement is essential for all business- and law-related disciplines, including undergraduate economic education.

We answered the above raised questions by reviewing the existing literature and findings on the importance of the student engagement in economics learning across both face-to-face and online settings. A semi-systematic literature review as a research methodology helps to provide an overview of areas where the research is disparate and interdisciplinary, such as student engagement [10]. The selection of the literature used in this review was based on keyword searches, which included terms such as 'student engagement', 'technology', and 'economics'. A keyword search to identify the relevant literature is important to gather evidence to answer the research questions [11,12]. The literature reviewed primarily consisted of research papers, academic texts, and review articles. A semi-systematic literature review may or may not follow a systematic search strategy relying on research articles as the primary sample [10]. Our search guided us to research articles from field journals like '*International Review of Economics Education*', '*Journal of Economic Education*', and '*Education Economics*', as well as general education journals like the '*Studies in Higher Education*', '*Assessment and Evaluation in Higher Education*', and '*Active Learning in Higher Education*', amongst others.

The findings reported here are significant because the importance of student engagement towards student learning and experience is promoted as a desirable education priority by governments around the world. For example, the 2011 UK Higher Education White Paper emphasized that student engagement is a key element of the development of learning communities in higher education [13]. In Australia, the Grattan Institute report called on teachers to create appropriate learning environments to facilitate student engagement, given that as many as 40% are unproductive in a given year and many students are consistently disengaged in class [14].

This study makes a systematic classification of the factors affecting student engagement and dimensions of student engagement as proposed by Fredericks, Blumenfeld, and Paris [15]. The objective is to provide an understanding of the scholarly work on the role and relationships between student engagement and economics learning, the lessons learned, and key issues and challenges that exist for future researchers to address. We propose three key recommendations to shape higher education practice towards student engagement in economics. The paper concludes with a research agenda for future studies in student engagement and online economics education.

The remainder of the paper is structured as follows. Section 2 lays out the theoretical foundation of this study by linking student engagement with the use of technology in an active learning environment. Section 3 reviews the literature around student engagement in economics across three broader headings of absenteeism, use of technology and active learning strategies. Most of the literature is recent, considering that student engagement in the context of increasing demand for online education is an

emerging phenomenon. The different factors influencing student engagement are discussed under Section 4 where three key recommendations are also proposed. Section 5 concludes the paper also highlighting areas of future research.

2. Student Engagement: Concepts and Frameworks

Student engagement is globally recognized as an important influence on achievement and learning in higher education. Therefore, student engagement is being widely theorized and researched [16]. Student engagement is desirable because students learn more when they are engaged in class and therefore crucial to student learning and satisfaction. The value of student engagement and its impact on student achievement is no longer questioned [17].

Student engagement has been defined and is understood in many ways [18]. Fredericks, Blumenfeld, and Paris (FBP hereafter) [15] identified three elements of student engagement: behavioral, emotional, and cognitive, which are shaped by a multitude of factors related to teachers, institutions, students, families, and communities, as well as curriculum and resources. Kahu [16] extended the Fredericks, Blumenfeld, and Paris [15] concept to incorporate both its antecedents (structural and psychosocial) and consequences (proximate and distal) while clearly distinguishing the state of engagement. Thus, student engagement is always challenging to define and is also not the objective of this paper, as it is a complex construct influenced by multiple factors.

Table 1 summarizes the three dimensions of student engagement and the five factors that influence engagement [15]. Several recent empirical analyses that study various aspects of student engagement has emerged as an extension such as Kahu [16] and to overcome the limitations of the FBP [15] framework (see, for example, [19–21]).

In the context of online learning, student engagement is challenging because online learners seem to have fewer opportunities to be engaged with the institution, signaling the absence of university factors. Additional barriers for student engagement in online course delivery that are typically not present in face-to-face courses are curriculum and resources factors, such as the need to design and develop courses before the actual delivery of the material [22].

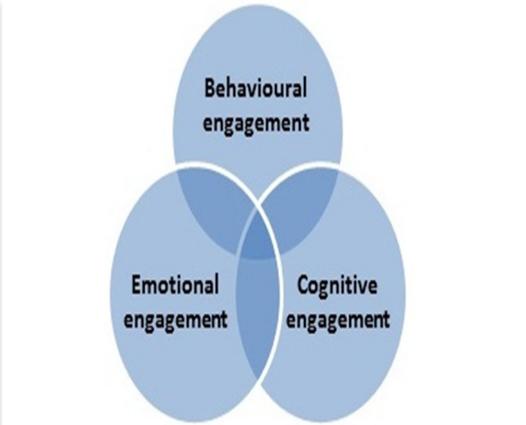
However, the use of technology fosters engagement strategies based on active learning opportunities, such as participating in collaborative group work, facilitating students' presentations and discussions, sharing resources actively, creating course assignments with hands-on components, and integrating case studies and reflections [23]. In fact, a significant amount of research demonstrates that educational technology can usefully support the engagement of online learners [6]. The pedagogical benefits of using multimedia technologies when teaching economics, especially at the undergraduate level, is strong [24]. It has been shown that students learn better from computer-based instruction containing words and graphics rather than words alone in academic learning [25].

The integration of active learning into course material facilitates student engagement regardless of the learning environment (face-to-face or online). Active learning is broadly defined as "learning activities involving students doing things and thinking about what they are doing" [26]. Students "seek new information, organize it in a way that is meaningful, and have the chance to explain to others" [27]. Thus, active learning neatly encompasses the behavioral, emotional, and cognitive aspects of student engagement as described by FBP [15]. However, designing active learning environments based on active learning pedagogies is difficult even under the five category classification of active learning pedagogies [28]: project-based; problem-based; inquiry-based; case-based; and discovery-based. Learner-centeredness is a primary goal of all these active learning pedagogies [29], where learners construct their own personal and social goals based on certain level of self-directedness, as emphasized by the theory of constructivism and constructivist learning environments [30,31].

Learning models like Bloom's Taxonomy [32] is core to the development of active learning strategies and is closely aligned with the FBP framework. Bloom's Taxonomy also defines three domains of educational activities and expertise: cognition, affective, and psychomotor, which can be measured via knowledge-based goals, emotional goals, and skills-based goals [32]. However,

neither emotions nor the affective aspects of learning rarely appear in research on teaching and learning, nor in the design of economics pedagogy and curricula [1].

Table 1. Dimensions of and factors that influence student engagement.

Dimensions of Engagement	Factors Influencing Engagement
Behavioral engagement: students’ participation in education, including the academic, social, and extracurricular activities of the university	Teacher factors: teacher interaction style (enjoyment and shared focus, support, responsiveness, directiveness, verbal praise), behavioral and academic expectations held
Emotional engagement: students’ emotional reactions in the classroom and in the university (a sense of belonging or connectedness to the university)	University factors: includes physical setting factors (physical layout and arrangement of classroom, sensory factors/noise levels, lighting, etc.), and consistent and structured approaches to the provision of student support and disciplinary measures
Cognitive engagement: students’ investment in their learning (motivation and self-regulation)	Student factors: a student’s physical, emotional, cognitive and behavioral state, including health issues and disability, peer relationships
	Family and community factors: a student’s residential circumstances, family support for/involvement in education, and relationships with their family
	Curriculum and resources factors: availability and type of learning resources including technology, dimensions of the learning tasks (level of difficulty, interest, meaningfulness to learner), task design, learning goals and objectives, and assessment approaches.

Source: Based after FBP [15].

3. Existing Studies

The research on educational process and student achievement in economics dates to an original study by William E. Becker [33], which was motivated by the concerns over falling college enrolment in economics and falling academic quality. By 1997, the focus had already moved towards non lecture teaching methods as prevalent in other disciplines to address the declining enrolment in economics. Academic economists were called upon to give more considerations to how they teach [34]. Nearly four decades after Becker’s study, economics teaching is predominantly concerned with the added challenge of promoting and improving student learning engagement. In fact, improving students’ engagement appears to be a paramount objective in the literature on learning and teaching in economics [35]. However, the scholarship on student engagement in economics has yet to fully investigate emotional aspects of economics learning despite the emotional connotations of difficulty and challenge frequently associated with economics [1]. A recent study is the first study to examine the relationship between mindfulness and performance in economics with the results showing a positive association between mindfulness and overall performance in introductory economics classes [36].

3.1. Absenteeism

Absenteeism is a direct dimension of behavioral disengagement and has been discussed extensively in the context of undergraduate economics education. The literature on the reasons for student

absenteeism is well-established in the context of face-to-face delivery [37] and can be attributed to specific student, teacher, institutional, community, and curriculum factors [38–40]. Hence, we focus on the literature on the relationship between students' absenteeism and academic performance. This strand of literature starts as early as in 1983 and originated from the United States. The reviewed studies directly examine behavioral engagement (i.e., being physically present or absent) and control for a cognitive engagement (motivational aspects such as self-reported study hours and perceived value of the course).

A notable previous study on student time allocation revealed a positive correlation between time spent in lectures and discussion sessions and exam performance for a principles of macroeconomics course [41]. Another study showed an inverse relationship between the students' course grades and their attendance in a single instructor's money and banking course over a four-year period [42]. Attendance in intermediate macroeconomics classes contributed to a positive correlation between attendance and course performance was observed [3]. Attendance was also higher when the perceived quality of instruction was greater. Investigating the link between attendance and student learning for several principles of economics classes over three semesters led to a conclusion that excessive absenteeism was found to create a deleterious impact on course performance, but low levels of absenteeism had insignificant effects on results [1]. The mean exam score was significantly affected by absenteeism when investigating the pure relationship between students' absenteeism during a principles of microeconomics course and their subsequent performance on exams [6]. An enforced mandatory attendance policy was found to significantly reduce absenteeism and improve exam performance for a principles of macroeconomics course [43]. There are good reasons to support mandatory class attendance in a principles of economics course. Mandatory class attendance resulted in improved performance, fostered good work habits, taught responsibly, and improved social skills [44]. Attending class was reported to have a positive and significant effect on exam performance for a consumer decision making course in the US [45].

Following on the US literature, a study in the Portuguese context [37], found that absenteeism considerably lowered students' final grade in macroeconomics units when controlling for potential endogenous factors associated with attendance and academic performance. Attendance in Italian classrooms has a statistically significant and quantitatively relevant effect on student learning after controlling for unobservable student characteristics for an introductory microeconomics course [4]. The data analysis from students enrolled in an introductory macroeconomics course taught at a public university in Italy also found a positive and significant effect of attendance on student outcomes [46]. An inverse relationship between student absenteeism and course performance in agricultural economics classes was evidenced in South Africa [40]. While existing evidence clearly suggests a positive relationship between classroom attendance and academic performance in face-to-face settings, such evidence is scarce in the context of online or off-campus economics instruction.

3.2. Use of Technology

The use of technology to increase student engagement amid the growing demand for online education and non-traditional lecture methods is gaining popularity in economics learning. Over the past decade, there appears to be a shift in faculty reluctance towards incorporating social media in their economics courses [47]. The use of classroom response systems (CRS), such as clickers, were found to be an effective way to promote student engagement in a large enrolment principles of economics course [48]. As an alternative to CRS, bring-your-own-device (BYOD) systems allows students to use devices they already own and were found to be an effective way to turn these potential distractions into a pedagogical tool that can enhance learning of a principles of economics course instead of hindering it [49]. Consistent with a communal constructivist pedagogy, student performance is positively associated with the quality of their blog participation after controlling for student ability in a small introductory economics course [7]. The use of a free teaching application improved exam performance by an average of over 8%, compared to a control section of traditional lecture and discussion in

principles classes, thereby, supporting the hypothesis that teaching methods blended with traditional lectures may result in better student outcomes [50].

Student-generated podcasts brought in consistent student engagement. Enjoyment podcasts were integrated as an instructional component for varied economic topics [8]. A large majority of undergraduate microeconomics students found podcasts helpful in understanding economic concepts and asserted the relevance of economics in the world [51]. The use of social media channels like Twitter and Facebook as pedagogical tools in economics is receiving increasing interest but evidence suggests mixed results. Undergraduate students enrolled in principles of microeconomics and macroeconomics courses utilized social media tools like Instagram, Facebook, Twitter, and YouTube, respectively, to engage both inside and outside the economics classroom [52]. The results suggested a positive impact on success in the course. The use of Twitter led to increased student participation and engagement for economics business case discussions, even for larger classes [53]. A later study contradicted the results of their 2015 study [47], with finding showing no evidence that the use of Twitter improved students' learning in principles of economics courses across three different institutions [54]. Also contrary to the widely held view that social media use promotes student engagement, Facebook usage was found to be associated with declining student engagement and a reduction in semester course grade [9].

Advancement in educational technologies coincides with growing experimentation around the effectiveness of flipped classrooms in economics [55]. There exists clear qualitative and pedagogical benefits from flipping the economics classroom, especially in introductory courses [56,57]. Flipped classroom formats such as a partial flip [58–64], full flip [57,65–68], and blended flip [69] have been applied in the context of principles of economics and intermediate economics courses. These studies suggest that the flipped classroom format is associated with greater student engagement and higher academic performance. A recent study applied Bloom's taxonomy framework to find the positive effects of a flipped classroom in an international economics course, such as increasing learning productivity through the channels of greater student engagement [70]. As such, students did lower levels of cognitive work (such as remembering and understanding economics concepts) outside of class and focus on higher levels (applying, analyzing and evaluating concepts) inside the class through instruction.

3.3. Active Learning Strategies

Active learning strategies enhance student engagement, student retention, and student experience, and are of greater interest in the teaching and learning of economics. Nonetheless, economics education lags the larger academic community in two key high-impact pedagogical areas: embedding active-learning techniques in economics curricula and lack of meaningful research opportunities for undergraduates [71,72]. Class flipping, as discussed earlier, is gaining popularity. However, active learning is more than just allocating tasks across group and individual learning spaces as under flipped learning, but also largely about encouraging students to think effectively based on peer instruction, cooperative learning, team-based learning, and problem-based learning [73,74]. These studies found that peer instruction can be an effective, scalable, and easily adaptable active learning pedagogy for an introductory macroeconomics course.

A survey study captures the impact of switching the method of instruction from traditional lecture to team-based learning (TBL) on student engagement in principles of macroeconomics [75]. The results from the survey supported the hypothesis that TBL is correlated with positive outcomes for students in a principles of economics course, a view supported by [76], who recommends TBL for introductory levels of economics education. TBL requires students to work in a team throughout the subject being taught, working on application focused team assessment tasks and individual readiness assessments [77]. While designed to be delivered in a face-to-face classroom environment, TBL transitioned well to an online environment [78].

The impacts of student-owned experiments towards student engagement were examined in a study testing the hypothesis that experiential learning activities are conducive for greater student engagement

and learning [79]. The findings of this study supported the pedagogical approach of incorporating student constructed experiments to foster student engagement in an undergraduate behavioral economics course. Likewise, the importance of service learning—i.e., volunteerism, class field trips, and field experiments—is an effective teaching pedagogy for increasing student engagement. Learning outcomes were also evident in the context of applied development economics classes [80]. Data-based active learning activities in a principles of macroeconomics course also fostered student engagement across diverse groups of students at the introductory macroeconomics level [81].

The importance of research-led teaching to motivate deep engagement by making community interaction and concrete economic analysis central elements of economics courses also necessitates incorporating such experiences into economics curricula across both small and large undergraduate economics courses [82,83]. The importance of team-based formative assessment design has also been reported. This includes elements such as the continuous team assessment, which consists of a series of tests and a major project to improve attendance and low student motivation for an intermediate microeconomics unit (managerial economics and strategy) [75]. The impact of peer assessment within the continuous assessment design on student attendance and engagement for a third-year economics unit found positive impacts of student engagement [84]. However, there is no evidence for how active learning strategies like work integrated learning (WIL) impact student engagement in workplace learning and achievement in economics.

4. Discussion and Implications for Policies and Guidelines

A semi-systematic literature review allows researchers to provide an overview of the research area and track development over time while the analysis and evaluation can be either qualitative or quantitative [10]. Our semi-systematic review of the existing evidences on the impact of technology use and active learning strategies clearly articulates the positive effect generated by these pedagogical approaches towards student engagement in economics learning. However, most of the existing studies explicitly focus on behavioral engagement such as absenteeism as a measure of behavioral disengagement. The empirical evidences clearly suggest that behavioral disengagement such as absenteeism has a negative impact on student experience and consequently academic performance in economics. There is little evidence that captures the cognitive and emotional aspects of emotional engagement as outlined by FBP [15], largely because these engagement dimensions are hard to capture. The majority of the existing evidences are drawn from the principles and intermediate level courses where students are enabled to achieve a long-term understanding of usefulness and applications of economics in the real world. There are no studies that solely study student engagement in online courses in economics. Almost every existing study focuses on traditional classroom settings and blended learning environments where students learn economics via the use of technology as well as traditional face-to-face teaching. Based on the papers reviewed, the factors influencing student engagement as per the FBP framework are discussed in the following points.

4.1. Student Factors

The paradigm shift from passive learning to active learning in higher education has placed student-centered learning at the core of active learning, where student engagement is crucial for its efficacy. However, we find that directly measuring student behavioral engagement (i.e., attendance and physical ability) competes with other uses of students' time in economics education. The emotional and cognitive dimensions of student engagement stem from the emotional and cognitive ability of a student, such as mindfulness, which indicates a positive impact on academic performance. Unobservable characteristics such as family factors and peer relationships can also affect absenteeism even though prior studies have controlled for their effects in establishing the relationships between academic performance and absenteeism.

4.2. Teacher Factors

The shift towards active learning has necessitated that the role of the teacher is changing towards a 'guide on the side' from that of a 'sage in the stage' in economics education [85]. The findings from our review confirm that teacher interaction style, instruction quality, and teaching philosophy are important factors for inducing student engagement. Embracing experiential and research-centered teaching philosophies are also favorable for engagement.

4.3. Curriculum and Resources Factors

Technological advancements facilitate the changing roles of students and teachers in higher education. The switch to an active learning environment has given rise to new pedagogical tools such as the use of social media channels and newer pedagogical approaches such as classroom flipping. New design-centered approaches assess the use of technology, such as blog participation and student generated podcasts, as effective methods for increasing student engagement in undergraduate economics education.

4.4. University Factors

It is clear from our analysis that there is an increasing reliance by universities on the online mode of education delivery in economics as a possible channel to improve student experience, engagement, and performance. Active learning strategies as pedagogical approaches to enhance student engagement are clearly useful in the context of an economics education. University factors, such as the promotion of active learning strategies and environments coupled with consistent and structured approaches to the provision of student support, are conducive for greater student engagement.

We propose the following three key recommendations for business school economics educators and higher education policy makers to promote student engagement in economics education based on the evidence presented here. These findings are based on the contributions of a semi-systematic literature review and discuss the state of knowledge of student engagement in undergraduate economics education. Further, this review identifies themes in the literature and provides a historical overview to set-up a research agenda under a sound theoretical framework [10].

The existing empirical evidences favor the use of education technology to positively influence student engagement. However, there is no discussion in the literature on what makes students use technology in the first place. Current emphasis on technology use in higher education assumes that learners always engage as soon as new technologies become available. This is a problematic assumption without understanding the motivations behind its use and the types of technology available to or owned by students. Irrespective of the underlying motivations, the use of technology and adoption of non-conventional teaching tools should be encouraged in economics classrooms to facilitate student engagement as suggested by the existing evidences. However, we found considerable evidence that the traditional model of classroom education is not going to wither in the foreseeable future.

Classroom participation (i.e., attendance) is conducive for better student performance in undergraduate economics education. Therefore, mandatory classroom participation requirements should be specifically laid out for introductory economics courses across both the undergraduate and postgraduate settings in both traditional classroom as well as online settings.

There is a clear reliance on technology to deliver student engagement in an active learning environment in economics education. Therefore, higher education should keep pace with technological progress by making timely investments that supports new technology adoption and existing technology upgrades.

5. Conclusions and Future Research

This study reviews the existing evidence regarding technology use and active learning strategies for the improvement of student engagement. Moreover, we also examined the impact of student

disengagement (i.e., absenteeism) on academic performance across both the online and traditional settings. Herein, we applied the student engagement dimensions framework and factors influencing student engagement framework developed by Fredericks, Blumenfeld, and Paris (2004) [15] to undertake a literature review, which adopted a semi-systematic approach, as discussed in Snyder (2019) [10].

Economics is a technically demanding and an analytical discipline with the likelihood of attracting students of different behavioral characteristics and other social sciences disciplines. Therefore, many undergraduate students find economics difficult to understand and are prone to be less engaged. At the same time, the demand for online economics education is increasing. This is partly because universities are cutting back on physical infrastructure investments and substituting them by relying on virtual learning environments. Other reasons include expanding the education customer base and market share by reaching out to distance and remote student cohorts. The lure of unlimited educational participation and open access via the web have catapulted the rise in online courses such as a massive online open course (MOOC). Further, the revised and alternate methods of content delivery used to replace on-campus teaching and necessitated by the COVID-19 pandemic have progressed technology based online delivery of economics education at a rapid pace. The success and effectiveness of these changes is yet to be fully documented and evaluated.

We find that class attendance and participation certainly improve academic performance in economics alongside developing good work habits. The use of technology certainly enables online economics education to create greater student engagement. At the same time, not keeping pace with technological progress can generate obstacles with regard to fostering student engagement. The extensive use of social media, emphasis on research-led teaching, and implementing wide varieties of experiential learning models are popular active learning intervention strategies that can effectively increase student engagement in economics education. Student engagement can also be improved by harmonizing the teaching style of instructors and the learning style of students. As such, higher education providers should emphasize and invest in research-led and experiential learning approaches, such as service learning, team-based learning, role playing, and cooperative learning, although the costs and benefits still need to be analyzed.

Future research should focus purely on online classrooms, such as MOOCs and the comparative effectiveness of hybrid forms of subject delivery. There is also a vast dearth of studies focusing on the cognitive and emotional dimensions of student engagement and the factors influencing these dimensions in economics education. A literature review based on meta-analysis should also be carried out as the literature on student engagement in economics education advances. The possibilities for undertaking further systematic and integrative literature reviews also needs to be considered.

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