

Utilisation of High-Impact Educational Practises (HIPS) to Engage Undergraduates: A Preliminary Case Study

Subashini K. Rajanthran¹, Walton Wider^{2,*}, Ling Shing Wong³, Choon Kit Chan⁴ & Siti Sarah Maidin⁵

¹Teaching and Learning, INTI International University, Nilai, Negeri Sembilan, Malaysia

²Faculty of Business and Communications, INTI International University, Nilai, Negeri Sembilan, Malaysia

³Faculty of Health and Life Sciences, INTI International University, Nilai, Negeri Sembilan, Malaysia

⁴Mechanical Engineering Department, Faculty of Engineering and Quantity Surveying, INTI International University, Nilai, Negeri Sembilan, Malaysia

⁵Faculty of Data Science and Information Technology, INTI International University, Nilai, Negeri Sembilan, Malaysia

*Correspondence: INTI International University, Nilai, Negeri Sembilan, Malaysia. E-mail: walton.wider@newinti.edu.my

Received: August 27, 2022

Accepted: November 20, 2022

Online Published: December 30, 2022

doi:10.5430/jct.v12n1p27

URL: <https://doi.org/10.5430/jct.v12n1p27>

Abstract

The purpose of this preliminary study is, firstly, to identify the most preferred high-impact educational practises (HIPs) among undergraduates and, secondly, to recommend best practises and strategies for implementing HIPs in higher education. This study included 61 undergraduates from a variety of degree programmes that implemented HIPs in one general studies course. Descriptive statistics and frequency were used to analyse the data. The findings revealed that the most popular HIP among undergraduates is service/community-based learning (SBL), and the least preferred HIP among undergraduates is Intensive Academic Writing (IAW). This study's findings are critical for preliminary understanding of the importance of learning styles in order to be effective and sensitive in teaching and learning, to have flexible and diverse instructional planning, and to diversify teaching methods. This was a preliminary case study that emphasised the significance of HIPs in the higher education curriculum and their implementation for a positive academic learning experience among undergraduates.

Keywords: High-impact Practices, academic learning experience, teaching and learning practices, learning styles

1. Introduction

The Malaysian Education Blueprint (MEB) 2015–2025, launched by the Ministry of Education (MOE) on April 7, 2015, is aimed primarily toward the development of holistic, entrepreneurial, and balanced graduates. In Malaysian higher education, a circular was distributed to all universities emphasising HIPs practises (JPT-BPPA, 15th January 2015). As a result, there is an increased need for higher education institutions to provide excellent practises that provide students with total learning experiences in order for them to be successful in the future. With this in mind, the Ministry of Higher Education (MOHE) recommended that the Association of American Colleges and Universities (AAC&U, 2013) High-Impact Educational Practices (HIPS) be promoted and implemented in our academic programmes. HIPs are teaching and learning practises that have been widely tested and proven to benefit college students from a variety of backgrounds (AAC&U, 2013). High-Impact Educational Practices (HIPs) are teaching and learning techniques and designs that have been shown to benefit student engagement and successful learning among students from diverse backgrounds. Through programme design and advanced pedagogy, these practises can help students learn better and close achievement gaps (CADE, 2017; Riehle & Weiner, 2013).

Educational practises are tools that boost students' learning outcomes; hence, Wall and Leckie (2017) recommends that they need to be well integrated in order to effectively help students internalise the subject contents. An integrated curriculum implies learning that is synthesised across traditional subject areas and learning experiences that are designed to be mutually reinforcing (Drake & Reid, 2018; Wall & Leckie, 2017). This approach develops the

students' ability to transfer their learning to other settings. On the other hand, Kaya and Ok (2020) offers characteristics and competencies of teachers and the organisation and structure of educational units as part of important curriculum antecedents. In general, educational practises are critical in the design and implementation processes of a curriculum because they create an enabling environment for teaching and learning. The theoretical orientation of a curriculum developer or educational planner influences the educational practises the student adopts (Stabback, 2016). In this instance, educational practises refer to a variety of activities that foster education, which include interventions intended to improve education as well as cultural innovations to address a broad range of educational issues either by government or communities. These educational practises may range from low-impact to high-impact. For the purposes of this study, educational practises are defined as activities carried out by various stakeholders in education in order to improve students' learning outcomes. Educational practises may also include but not be limited to preparing an education agenda, curriculum development, teaching and learning activities, as well as policy initiation and implementation. The current research aims to identify the appropriate educational practises or HIPs that undergraduates could apply and easily acquire the desired learning outcomes. Darling-Hammond et al. (2020) argues that this is consistent with established educational learning theories like social learning theories, where educators and senior professionals act as sources and motivators of learning. HIPs are very much in line with Bandura's (1977) social learning theory. One of the central missions of higher education institutions is to retain students and advance them toward successful graduation. Thus, in order to achieve this mission, it is vital to identify and understand factors related to student engagement, retention, and success. Owing to these and in line with fostering student engagement, the objectives of this study are (i) to identify the most preferred HIPs among undergraduates in the degree programme and currently enrolled in the general studies courses; and (ii) to recommend best practises and strategies when implementing HIPs in the classroom.

2. Literature Review

2.1 High-Impact Educational Practices (HIPs)

Kuh (2008) presented a list of ten "high-impact practices", commonly known as "HIPs". Dr. George Kuh (Chancellor's Professor Emeritus of Higher Education at Indiana University Center for Postsecondary Research) is considered the founding father of high-impact practises (HIPs). These were educational practises that seemed to account for the regular high scores that some institutions received when they used the survey of student engagement (Kuh, 2008). According to Kuh (2008), what really matters in higher education is student engagement, and the level of that engagement is optimised when academic, interpersonal, and extracurricular involvement are mutually reinforcing. Hatch (2017) acknowledges that high-impact educational practises (HIPs) are techniques and designs that shape teaching and learning towards student engagement and successful learning. Through programme design and pedagogy, these practises are said to enhance student learning and narrow achievement gaps among students. Kuh and O'Donnell (2013) specified eight characteristics of HIPs, which when incorporated into different academic practises can engage students and have a high impact on their learning. These characteristics include: positively affecting students' educational outcomes; widely tested; can take different forms depending on the school and type of learner; based on educational research; increases student retention; improves student engagement; helps students from a variety of different socioeconomic and educational backgrounds; and finally provides lifelong learning strategies.

To be a high-impact practice, the experience must satisfy the definition established by Kuh (2008) and his colleagues at the Association of American Colleges and Universities (AAC&U): achievement of deep learning, significant engagement gains, and positive differential impact on historically underserved student populations. Below is the summary of HIPs as provided in the Liberal Education and America's Promise (LEAP) (AAC&U, 2011). Furthermore, the Malaysian Ministry of Higher Education issued a circular to all universities emphasising HIPs practises (Halim et al., 2020). Currently, these HIPs, also known as HIEPs, have been adapted by MOHE for the implementation of educational practises for general studies courses in all Malaysian higher educational institutions. With a clearer understanding of the pathway from practise to results, these guiding principles became the framework for HIP development, scalable delivery, and evaluation as well as the foundation for scholarly interrogation of these practises (Brownell & Swaner, 2010; Keup & Young, 2018; Kuh & O'Donnell, 2013).

2.2 Significance of HIPs in the Higher Educational Institution

High-impact educational practises (HIPs) are educational practises that research has shown to increase rates of student retention, student engagement, and persistence to graduation for all students across diverse backgrounds. As claimed by Kuh and O'Donnell (2013), HIPs cultivate attributes that are essential for success during and after college,

such as interpersonal, intrapersonal, and neuro-cognitive capabilities, applied and hands-on skills, deep integrative thinking, and increased persistence. The significance of HIPs can be viewed from the following perspectives:

2.2.1 Educators' Perspective

Educational practises are critical in the design and implementation of a curriculum because they create an enabling environment for teaching and learning (Alsubaie, 2016). Educational practises refer to a variety of activities carried out in the interest of fostering education and are intended to improve education as well as cultural innovations to address a broad range of educational issues.

As affirmed by Darling-Hammond et al. (2020), educational practises are pivotal in boosting students' learning outcomes and recommend that they need to be well integrated in order to effectively help students internalise the subject contents. Moving forward, other studies (Sullivan & Riel, 2013; Kim et al., 2019) also show how application of different educational practises enhances learning outcomes and understanding of students. In view of this, there is a need for educators to create suitable learning environments so that students become successful learners. The educators' roles include providing active and engaged learning, which will produce the desired outcomes in higher education (Gikandi et al., 2011). Hence, educators could use the findings of this research in their classrooms to enhance student engagement. This will not only facilitate students' engagement but can also increase their chances of retention (Kuh & O'Donnell, 2013). Caruth (2018) claimed that student engagement will improve student retention and success rates, and this concurs with Glomo-Narzoles and Glomo-Palermo (2021), who suggested that one of the reasons students drop out of college is due to a lack of student engagement via educational practices. Thus, one of the methods to reduce attrition is student engagement, and this can be achieved through the implementation of HIPs in the undergraduate classroom. When faculties engage students in learning activities using the students' preferred choice of HIPs, there will be more meaningful teaching and learning as well as lasting understanding of the soft skills taught and practiced. Furthermore, when educators create HIPs and incorporate HIP elements into their courses, such as collaborative group assignments and projects, students will feel more included because these were their preferred HIPs.

2.2.2 Higher Education Administrators' Perspective

Researchers at all levels of higher education institutions have been investigating factors related to students' retention rates and their timely graduation (Tinto, 2007). Student success is one of the major topics discussed, as university education is seen as the key to a country's economic advancement in the world. One of the important missions of any university is to produce employable, well-rounded graduates who are professionally competent and socially confident. One of the underlying factors that leads to untimely graduation is the inability of students to cope with the academic demands. Connecting students with opportunities for involvement and leadership roles outside of the classroom helps make learning relevant and enriches the student experience overall. Boredom and a lack of engagement are two common reasons for a student to disengage, stop attending class, or even drop out of school (Chandra, 2021). The implementation of HIPs could provide students with a much-needed connection and involvement beyond the curriculum. The present study seeks to evaluate the effectiveness of these educational practises at the administrator's level. By embracing HIPs as part of our educational practice, we will advance deeper understanding, better student engagement in academic and non-academic programmes, and achieve higher learning outcomes related to grades, retention, and timely graduation. Additionally, administrators must acknowledge that educators may need to attend training workshops to familiarise themselves with HIPs. Administrators should now encourage and support educators to conduct more students' preferred HIPs by providing training workshops on these pedagogies. HIPs-driven classroom activities should be put into place as part of the curriculum and an important interest of administrators in order to enhance student success and job-readiness.

2.2.3 Curriculum Designers

As this study aims to identify the most preferred choice of HIPs among students undergoing the general studies courses, the findings of this study will be significant in recommending a suitable framework for the development of teaching methods for undergraduates. The findings also aim to recommend best practices, guidelines, and strategies for practical implementation of HIPs as teaching methodologies in general studies courses at the university. The result of the findings provides the basis for designing the curriculum with regards to the most appropriate educational practices or HIPs to be included.

2.3 Student Engagement and HIPs

The educational practises embedded in the course structure are related to student engagement (Hatch, 2017). Thus, HIPs are particularly relevant when it comes to engaging students in the classroom. Kuh (2008) defines student

engagement as the term usually used to represent the quality of effort and involvement in productive learning activities. Zhao (2004) further supports the idea that student engagement and HIPS can be understood through student retention. In research by Pike (2011), findings showed that participation of students in educational practises resulted in higher engagement. However, Weisman (2003) inferred that more detailed information about programme features is required. HIPS are educationally purposeful and effective practises that increase student engagement and learning and lead to college student success. In research on "High-Impact Educational Practices" to promote student learning, Kuh (2008) identified educational practices, as discussed in the previous section, to promote student engagement. These activities foster students' academic performance and social integration as well as interaction with peers and faculty, which is able to produce positive college learning outcomes. The goal of student engagement is to promote a shared learning experience as well as academic and social cohesion (MacGregor, 2004). Hence, through the practice of HIPs, students make connections with other peers, faculty, and staff in the same learning community, which advances collaborative learning.

Further to this, student engagement is also a key concept as one of the strategies for student retention in higher education institutions. As argued by Jennings and Greenberg (2009), engagement develops relationships with others and promotes connectedness, which helps to improve student retention rates. The National Study of Student Engagement (NSSE, 2017) in the U.S, on the other hand, contains an especially interesting analysis of student engagement. It defines student engagement as a representation of two critical features of collegiate quality. The first is the amount of time and effort students put into their studies and other educationally purposeful activities. The second is how the institution deploys its resources and organises the curriculum and other learning opportunities to get students to participate in activities that decades of research studies show are linked to student learning. From this perspective, HIPs can be seen as a crucial teaching technique that promotes student engagement and is capable of enhancing retention. Student engagement in relation to student retention attests to the importance of student engagement. He further stressed that teaching and learning can be made more interactive and social. This may be achieved by using more group work and by creating group study areas where students can work in collaboration with others. In addition, peer teaching and support can also promote engagement and thus improve retention. Hence, an important aspect of HIPs is that they create positive student engagement that leads to student retention. As developed by Kuh (2008), high-impact educational practices, or HIPs, as described in the previous section, suggest increased rates of student retention and student engagement.

3. Method

3.1 Population and Sample

The target population for this study consists of undergraduates from various degree programmes from a higher educational institution. The participants consist of 61 undergraduates enrolled in the general studies courses in their second and third years of their degree programme. Participants in this study were exposed to HIP components through at least one of their undergraduate courses and implemented high-impact practises in their courses by incorporating HIPs into their course assignments.

3.2 Measurement and Data Collection

The data was collected through a questionnaire, which was administered at the end of the semester and after the completion of the assignments in a general studies course selected by the first author. As HIPs are teaching methods that were newly introduced in general studies courses, the participants were first given an overview of HIPs, their elements, and requirements. Subsequently, over a period of one semester in April 2020 semester, the participants conducted their course-related tasks that required them to practise the different HIPs techniques. At the end of the semester, the participants were asked to complete a questionnaire. There was only one question, and that was: "After completing the given task, what are your preferred HIPs in your course?" In brief, participants were required to rank their preferred choice of HIPs based on the assessments given in the general studies class. This research employed a rank-order scale that was used to determine the preferred HIPs as selected by the undergraduates. The rank-order used was a simple ordinal structure, whereby A is higher than B.

3.3 Data Analysis

We utilised Statistical Packages for the Social Sciences (SPSS) version 26.0 to analyse the data. The data were subjected to descriptive analyses to determine the frequency distribution of the respondents' backgrounds and preferred HIPs.

4. Results

A total of 61 responses were analysed to identify the rank-order of the given HIPs. In order to determine the responses to the question, "What are your preferred HIPs in your course?", frequencies and percentages for each of the preferred choices were calculated. Participants were required to rank their preferred HIPs from 1 to 9, and the HIP choices presented to the participants are the HIPs suggested in the curriculum for higher education (MOHE and CADe, 2016). The percentages and frequencies were then ranked in order to represent the most preferred to the least preferred. Table 1 provides the results of frequency and percentage of the preferred HIPs according to the undergraduates.

Table 1. The Preferred High-impact Educational Practices (HIPs) Among Undergraduates

High-Impact Educational Practices (Hips)	Frequency (N)	Percentage (%)
Service/Community Based Learning	47	77.0%
Diversity/Global Based Learning	41	67.2%
Collaborative Assignment and Project (CAS)	40	65.6%
1 st Year Seminar Experience	38	62.2%
Interdisciplinary Approach to Assessment	37	60.7%
Capstone Project	35	57.3%
Internship	34	55.7%
Empirical Research	32	52.5%
Intensive Academic Writing	31	50.8%

The top five ranked choices of HIPs by the participants include: Service or Community Based Learning (n = 47, 77.0%), Diversity/Global Based Learning (n = 41, 67.2%), Collaborative Assignment and Project (n = 40, 65.6%), 1st Year Seminar Experience (n = 38, 62.2%), and Interdisciplinary Approach to Assessment (n = 37, 60.7%). On the other hand, the four ranked as the least preferred HIPs were: Capstone Project (n = 35, 57.3%), Internship (n = 34, 55.7%), Empirical Research (n = 32, 52.5%), and Intensive Academic Writing (n = 31, 50.8%).

5. Discussion

The results showed that service-based learning was the first choice for 77% of the people who took part in the HIPs. Service/Community-Based Learning is a type of field-based 'experiential learning' that gives students hands-on experience with the issues they are studying in the curriculum and allows them to analyse and solve community problems. The key element of this HIP is that it provides the opportunity for students to apply what they have learnt in a real-world setting (CADe, 2016). Besides, these programmes also add value to the undergraduates as well as the surrounding community. Service/Community-Based Learning is based upon the idea that giving something back to the community is an important learning outcome and good preparation for citizenship, work, and life (AAC&U, 2008).

Many studies have been done to assess the impact of community-based learning and its benefits to students, faculty, colleges and universities, and the community (AAC&U, 2008; Guo-Brennan et al., 2020). Guo-Brennan et al. (2020) emphasised that youth who participate in high-quality community-based service-learning are likely to benefit in a number of ways, such as enhanced academic achievement and interest in furthering their education; enhanced problem-solving skills; the ability to work in teams; and planning abilities; and enhanced civic engagement attitudes, skills, and behaviors. Among the responses, one of the reasons service/community-based learning was ranked first may be due to the nature of the HIPs, which were based on joint programmes and cooperation between the undergraduates and the community outside the university. This definitely appeals to the undergraduates as such activities take them outside the campus. Fieldtrips tend to be more appealing than lessons in a classroom. Hatch (2017) and Darling-Hammond et al. (2020) acknowledge that student success is premised on the notion that students stand to benefit from explicit instruction in how to develop skills, knowledge, and support networks. These skills and knowledge are particularly salient for students, and one of the ways they are developed is through service-community-based learning (SBL).

On the other hand, the results also revealed that 50.8% of the participants ranked intensive academic writing the lowest. It is common for students in today's educational system to dislike or even avoid the writing process. Many

students feel that writing takes too long, and for some, writing is a very laborious task (Richards, 1999). This may be the main reason intensive academic writing is not a popular HIP choice. In addition, there are several other reasons why writing does not appeal to students. Apart from feeling overwhelmed by all the writing tasks, other reasons why Intensive Academic Writing (IAW) ranked the lowest can be attributed to the student’s poor proficiency in the English language, lecturers who fail to explain the different writing styles or techniques, and students who are unsure of topics to write about or fail to read the writing assignments. Nevertheless, academic writing is crucial. Moreover, with the recent growth of academic resources on the Internet, there is no excuse for students not to take full advantage of the opportunity to write. Hence, although unpopular, this particular HIP should still be encouraged.

5.1 Practical Implementation

The importance of HIPs is that they help students engage in "deep approaches" to learning, which is crucial since "students who use these approaches tend to earn higher grades and retain, integrate, and transfer information at higher rates" (Kuh, 2008). These practises can assist students in developing skills such as communication, problem solving, and critical thinking that are important in the workplace. The key to the implementation of HIPs in the curriculum is to address three questions: what to teach? When to teach? and how to teach? (JPT, 2020). This implementation framework, shown in Diagram 1, could be used to group how HIPs are put into place.

The findings of this study prove that HIPs have a positive impact on students' academics. HIPs should be continued and it is highly recommended that curriculum designers or lecturers for higher education curricula be knowledgeable about HIPs and include HIPs in their taught courses. By using the practical implementation suggestions (JPT, 2020) as presented in Figure 1, students' involvement and engagement with their communities, as well as a focus on interdisciplinary approaches, can lead to student success and retention. It is recommended that higher education lecturers broaden their awareness of these methods and incorporate appropriate HIPs into their courses. Today's lecturers should adopt HIPs and redesign their learners' immersive experiences as a result (JPT, 2020). On the other hand, undergraduates are also recommended to participate in high-impact practices. By participating, undergraduates will be involved in integrative learning that enhances their learning experience.

HIPS IMPLEMENTATION: The key towards implementation is to address 3 KEY Questions:

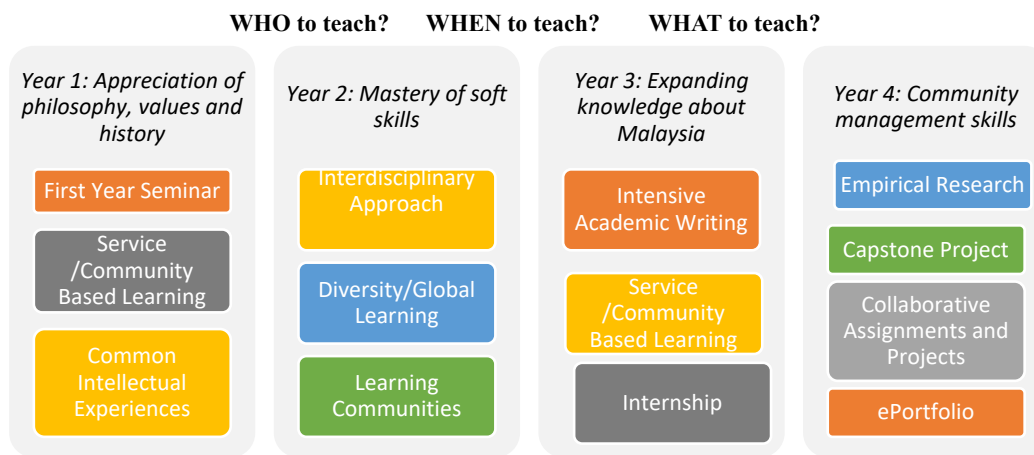


Figure 1. Practical Implementation of HIPs

5.2 Limitations and Recommendations for Future Research

This study has several limitations. First, the study was limited by a small sample size. The case study was conducted in a general studies course class in a private higher educational institution, so the sample size is limited to the participants in the course. Findings from the study are closely tied to the context and may not be transferable to other research or institutional contexts. For future research, it is recommended that the study aims to use a larger sample size of undergraduates from different programmes or diverse disciplines to improve the reliability and transferability of findings and analysis. Second, there was only one survey question specifically developed and designed for this study. Prior studies related to HIPs are limited, and there was no pre-existing tool to measure undergraduates' experience or perception of HIPs. The research protocol developed for this study reflects the researcher’s background as a lecturer of general studies courses; therefore, some critical issues and aspects related to HIPs theories and practises might not be fully reflected in the measurement developed in this study. It is recommended that future

research examine undergraduates' experiences in HIPS. In addition, as the most preferred choice is service/community-based learning, a study can also be undertaken on international undergraduates and how these particular HIPs influence their learning experience in Malaysia. Third, the findings and discussion in this article are limited by the scope of the study as well as the duration of the study. As the data was collected from participants from one class, the lack of voices and perspectives of students who did not participate may result in an incomplete depiction of the challenges and barriers in offering HIPs to undergraduate students. It is recommended that future studies adopt a random selection of undergraduates as participants and include the perspectives of community partners to strengthen the validity of findings and implications.

6. Conclusion

This study addresses the preferred high-impact educational practises (HIPs) among undergraduates with regard to student engagement and student success. The results confirm that Service-Community-Based Learning is the most preferred choice of HIPs among undergraduates, whereas Intensive Academic Writing was identified as the least preferred choice of HIPs. Previous research shows that the limited impact of participation and student engagement results in low student success (Robbins et al., 2006). Introducing HIPs can prove to be beneficial for student engagement and successful learning among students. By intentionally focusing on the top three preferred choices of HIPs in this study, student learning can be enhanced and further improved. The findings in this study go beyond merely showing the most preferred and least preferred choices of HIPs among undergraduates. It also suggests how specific features in general studies courses may have a greater or lesser relative impact on the programme of study. In particular, the recommendation is for curriculum designers to consider the undergraduates' preferred choices of HIPs when designing the curriculum. Student engagement rises, which leads to student success, and the higher education institution may benefit from student retention.

References

- Alsubaie, M. A. (2016). Curriculum development: Teacher involvement in curriculum development. *Journal of Education and Practice*, 7(9), 106-107.
- Association of American Colleges & Universities (2013). High-Impact Practices. Retrieved from <https://www.aacu.org/leap/hips>
- Association of American Colleges and Universities. (2011). The LEAP vision for learning: Outcomes, practices, impact, and employers' views. *Peer Rev.*, 13(2), 34-34.
- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Prentice Hall: Englewood cliffs.
- Biesta, G. (2007). Why "what works" won't work: Evidence-based practice and the democratic deficit in educational research. *Educational theory*, 57(1), 1-22. <https://doi.org/10.1111/j.1741-5446.2006.00241.x>
- Brownell, J. E., & Swaner, L. E. (2010). *Five high-impact practices: Research on learning outcomes, completion and quality*. Association of American Colleges and Universities.
- CADe (2016). *Guidelines for the implementation of HIPs in the curriculum*. Malaysian Higher Educational Teaching Council.
- Caruth, G. D. (2018). Student engagement, retention, and motivation: Assessing academic success in today's college students. *Participatory Educational Research*, 5(1), 17-30. <https://doi.org/10.17275/per.18.4.5.1>
- Chandra, S. (June 15, 2021). *12 Key strategies to improve student retention*. Campus Groups. Retrieved from <https://blog.campusgroups.com/campusgroups/2021/5/25/strategies-to-improve-student-retention>
- Cotton, K. (2000). *The schooling practices that matter most*. Alexandria, VA: Association.
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied developmental science*, 24(2), 97-140. <https://doi.org/10.1080/10888691.2018.1537791>
- Drake, S. M., & Reid, J. L. (2018). Integrated curriculum as an effective way to teach 21st century capabilities. *Asia Pacific Journal of Educational Research*, 1(1), 31-50. <https://doi.org/10.30777/APJER.2018.1.1.03>
- Gikandi, J. W., Morrow, D., & Davis, N. E. (2011). Online formative assessment in higher education: A review of the literature. *Computers & education*, 57(4), 2333-2351. <https://doi.org/10.1016/j.compedu.2011.06.004>
- Glomo-Narzoles, D. T., & Glomo-Palermo, D. (2021). Examining the academic and non-academic correlates of

- student retention. *International Journal of Publication and Social Studies*, 6(1), 34-41. <https://doi.org/10.18488/journal.135.2021.61.34.41>
- Gray, J. A., & DiLoreto, M. (2016). The effects of student engagement, student satisfaction, and perceived learning in online learning environments. *International Journal of Educational Leadership Preparation*, 11(1), n1.
- Guo-Brennan, L., VanLeeuwen, C., MacPhee, M. M., & Guo-Brennan, M. (2020). Community-based learning for international graduate students: Impact and implications. *Michigan Journal of Community Service Learning*, 26(2), 39-69. <https://doi.org/10.3998/mjcsloa.3239521.0026.203>
- Halim, A. A., Othman, N., Yusof, A. N. M., Majid, A. A., & Azri, N. (2020). Keberkesanan MOOC TITAS dalam pembentukan sikap mahasiswa universiti awam (The effects of MOOC TITAS toward the inculcation of values among public university students). *Jurnal Dunia Pendidikan*, 2(1), 40-48.
- Hatch, D. K. (2017). The structure of student engagement in community college student success programs: A quantitative activity systems analysis. *AERA Open*, 3(4), 2332858417732744. <https://doi.org/10.1177/2332858417732744>
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of educational research*, 79(1), 491-525. <https://doi.org/10.3102/0034654308325693>
- Kaya, S., & Ok, A. (2020). The Antecedents Influencing the Implementation and Success of the Middle School English Language Curriculum. *International Journal of Contemporary Educational Research*, 7(1), 201-214. <https://doi.org/10.33200/ijcer.660386>
- Keup, J. R., & Young, D. G. (2018). Investigating the First-Year Seminar as a High-Impact Practice. In R. Feldman (Ed.), *The First Year of College: Research, Theory, and Practice on Improving the Student Experience and Increasing Retention* (pp. 93-125). Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781316811764.005>
- Kim, S., Raza, M., & Seidman, E. (2019). Improving 21st-century teaching skills: The key to effective 21st-century learners. *Research in Comparative and International Education*, 14(1), 99-117. <https://doi.org/10.1177/1745499919829214>
- Kuh, G. D. (2008). *High impact practices. What are they, who has access to them and why they matter*. Washington: Association of American Colleges and Universities.
- Kuh, G. D., & O'Donnell, K. (2013). Ensuring quality and taking high-impact practices to scale. *Peer Review*, 15(2), 32-33.
- Ministry of Education Malaysia (2015). Malaysian Education Blueprint 2015-2025 (Higher Education). Retrieved from https://www.kooperation-international.de/uploads/media/3._Malaysia_Education_Blueprint_2015-2025_Higher_Education_.pdf
- National Study of Student Engagement (2017). NSSE 2017 overview. Retrieved from <https://nsse.indiana.edu/nsse/reports-data/nsse-overview-2017.html>
- Pike, G. R., Hansen, M. J., & Lin, C. H. (2011). Using instrumental variables to account for selection effects in research on first-year programs. *Research in Higher Education*, 52(2), 194-214. <https://doi.org/10.1007/s11162-010-9188-x>
- Richards, R. G. (1999). *Understanding why students avoid writing*. Educational Therapist.
- Riehle, C. F., & Weiner, S. A. (2013). High-impact educational practices: An exploration of the role of information literacy. *College & Undergraduate Libraries*, 20(2), 127-143. <https://doi.org/10.1080/10691316.2013.789658>
- Robbins, S. B., Allen, J., Casillas, A., Peterson, C. H., & Le, H. (2006). Unraveling the differential effects of motivational and skills, social, and self-management measures from traditional predictors of college outcomes. *Journal of educational psychology*, 98(3), 598-616. <https://doi.org/10.1037/0022-0663.98.3.598>
- Roehlkepartain, E. C. (2007). *Service-learning with disadvantaged youth*. Learn and Serve America's National Service-Learning Clearinghouse.
- Schunk, D. H. (2012). *Learning theories an educational perspective sixth edition*. Pearson.
- Stabback, P. (2016). *What makes a quality curriculum? Series. Current and critical issues in curriculum and*

learning. Paris (FR): UNESCO International Bureau of Education.

Sullivan, P., & Riel, N. V. (2013). Building confidence and fostering engagement in Aboriginal learners. In *Pedagogies to enhance learning for Indigenous students* (pp. 139-153). Springer, Singapore. https://doi.org/10.1007/978-981-4021-84-5_9

Suryadi, D., & Kudwadi, B. (2010, November). Application of evaluation model countenance in the secondary education curriculum and vocational technology. *Proceedings of the 1st UPI International Conference on Technical and Vocational Education and Training*, 10(11), 197-202.

Tinto, V. (2006). Research and practice of student retention: What next? *Journal of college student retention: Research, Theory & Practice*, 8(1), 1-19. <https://doi.org/10.2190/4YNU-4TMB-22DJ-AN4W>

Wall, A., & Leckie, A. (2017). Curriculum integration: an overview. *Current Issues in Middle Level Education*, 22(1), 36-40.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).