



Exploring Global Trends of Students' Engagement at Higher Education

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Abstract:

Engaging students in university settings is crucial for enhancing their learning experiences, fostering deeper understanding, critical thinking and academic success. Universities worldwide implement various strategies to enhance student engagement, focusing on both in-class and out-of-class experiences to foster a holistic educational environment. Student engagement is often measured through surveys such as NSSE, FSSE, AUSSE, SASSE, and UKES. Despite the emphasis on student engagement as a critical determinant of academic success, there is a significant gap in understanding how engagement strategies vary across these global surveys. This lack of comparative research limits educational institutions' ability to adopt best practices from diverse contexts and hinders the development of globally effective students' engagement strategies. This qualitative research, therefore, explores global student engagement strategies using a comparative thematic analysis of NSSE, FSSE, AUSSE, SASSE, and UKES. The study involved analyzing publicly available documents from these surveys used in universities across six countries. Thematic and cross-case analyses were employed to identify commonalities and differences in engagement practices. Findings revealed common themes across the five surveys include: academic challenge, learning with peers, experiences with faculty/staff, and campus environment.

Keywords: Student engagement, comparative analysis, global trends, surveys, critical thinking, higher education

INTRODUCTION

Engaging students in university settings is crucial for enhancing their learning experiences, as it fosters deeper understanding, critical thinking, and academic success. Active engagement not only improves grades and satisfaction but also supports personal and professional development,

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contributing to higher rates of degree completion and better preparation for future challenges. Recent research studies indicate that student engagement is positively correlated with grades and satisfaction (Webber et al., 2013), critical thinking skills (Nelson Laird et al., 2014), and degree completion (Flynn, 2014). Additionally, student engagement has been the subject of extensive scholarly research. Likewise, student engagement also plays a vital role in enhancing academic success and overall student development (Kuh, 2009). Research consistently shows that engaged students are more likely to achieve higher grades, persist in their studies, and also exhibit greater satisfaction with their educational experience (Carini et al., 2006; Kuh et al., 2008). Moreover, engaging students in meaningful learning activities, such as collaborative projects, research projects with faculty, and community service, contributes to the development of critical thinking skills, effective communication, and other essential competencies (Kuh, 2006; Kuh et al., 2007; Pascarella & Terenzini, 2005).

Beyond individual benefits, student engagement is also critical for institutional effectiveness and accountability. Institutions that prioritize and measure student engagement can identify areas for improvement in teaching practices, curriculum design, and student support services (Harper & Quaye, 2009). Likewise, Tinto (2012) asserted that engaged students are more likely to feel a sense of belonging and connection to their institution, which can enhance retention rates and reduce dropout rates. Fostering student engagement is, therefore, essential not only for student success but also for the continuous improvement and accountability of educational institutions. Research further indicates that higher levels of student engagement are associated with improved academic performance, greater student satisfaction, and higher retention rates (Carini et al., 2006; Gayles & Ampaw, 2014; Kim & Sax, 2014; Trowler, 2010). Moreover, engagement is not only affected by students' individual characteristics but also by institutional practices and the quality of teaching and learning environments (Krause & Coates, 2008; Pace, 1984; Seifert et al., 2014). These findings underscore the importance of fostering a supportive academic environment to enhance student engagement.

Student engagement is a multifaceted concept that has garnered significant attention in higher education research due to its strong relationship with positive academic outcomes for students and their development. Defined broadly, student engagement refers to the extent of students' participation in academically purposeful activities that are more likely to promote learning and personal development (Kuh, 2009). This involvement encompasses both behavioral aspects, such as participation in class and extracurricular activities, and the psychological components, including students' investment in their learning and sense of belonging in academic community (Fredricks et al., 2004; Skinner et al., 2008). Likewise, Kuh (2009) defined student engagement as the time and effort students invest in educational activities, and that are empirically linked to their desired learning outcomes. Considering the importance of student engagement, this area has been the key focus of universities around the globe.

Universities around the world implement a variety of strategies to enhance student engagement, focusing on both in-class and out-of-class activities and experiences for their students to foster a holistic educational environment. Active learning techniques, such as collaborative projects, problem-based learning, and peer-led discussions, have been shown to significantly increase student engagement by making their learning more interactive and participatory (Freeman et al.,

2014; Prince, 2004). Likewise, faculty-student interactions also play a crucial role; frequent and meaningful interactions between students and faculty members enhance students' academic motivation, sense of belonging, and overall satisfaction with their educational experience (Kuh & Hu, 2001; Pascarella & Terenzini, 2005). Moreover, integrating technology in teaching, such as using online discussion forums, interactive simulations, and digital collaboration tools, can provide flexible and engaging learning opportunities that cater to diverse student needs and learning styles (Chen et al., 2010; Rocconi et al., 2015).

Beyond classroom strategies, institutions also focus on creating more supportive environments at campus that promote engagement. This includes providing opportunities for involvement in extracurricular activities, such as student organizations, community service, and the leadership programs, which have been linked to higher levels of engagement and personal development (Astin, 1999; Tinto, 2012). Mentorship programs and academic advising are additional critical components, offering personalized support and guidance that help students navigate their academic and personal challenges (Campbell & Nutt, 2008; Kuh et al., 2007). Furthermore, fostering a culture of inclusivity and diversity on campus is essential, as students who feel valued and respected are more likely to engage actively in their learning (Harper & Quaye, 2009). By implementing these comprehensive strategies, universities can create environments that not only engage students academically but also support their overall growth and success.

Student engagement is generally measured through student engagement surveys in universities. These surveys provide valuable insights into the quality, value, and effectiveness of educational experiences. Surveys such as the National Survey of Student Engagement (NSSE) in the USA and Canada, the Faculty Survey of Student Engagement (FSSE), the Australasian Survey of Student Engagement (AUSSE), the South African Survey of Student Engagement (SASSE), and the UK Engagement Survey (UKES) are designed to capture various dimensions of student engagement, including academic challenge, active and collaborative learning, student-faculty interaction and supportive campus environments (Kuh, 2009; Coates, 2010). These instruments assess both the quantity and quality of students' involvement in educational practices that are linked to high levels of students' learning and development (Pascarella & Terenzini, 2005). By systematically collecting and analyzing data on student engagement, institutions can identify strengths and weaknesses in their educational practices and therefore make informed decisions to enhance student outcomes (Carini et al., 2006).

The effectiveness of these surveys also lies in their ability to provide comparative data that can benchmark institutional performance against national and international standards. For instance, the NSSE and AUSSE offer insights not only into how students spend their time but also how they perceive their learning environments and the support they receive from institution (Kuh et al., 2007; Coates, 2010). Furthermore, this comparative approach also enables institutions to understand contextual differences and similarities across various educational settings, fostering a global perspective on best practices in student engagement. Furthermore, longitudinal data from these surveys can track changes over time, helping institutions to evaluate the impact of interventions and policy changes on student engagement (Kuh, 2009; Zepke, Leach, & Butler, 2011). Similarly, engagement surveys provide valuable data that help institutions benchmark their performance and implement evidence-based solid strategies to foster student engagement (Coates,

2010; Zepke et al., 2011). Student engagement surveys are, therefore, vital tools for driving continuous improvement and promoting a culture of evidence-based decision-making in higher education.

Student engagement surveys, such as the NSSE, FSSE, AUSSE, SASSE, and UKES, measure a variety of components that are indicative of student engagement, providing comprehensive insights into the student experience. One of the primary components of engagement surveys is academic challenge, which includes the extent to which coursework focuses critical thinking, problem-solving and the application of theoretical concepts (Kuh, 2009). Another key indicator is active and collaborative learning, which involves students' participation in activities such as group projects, class discussions, and collaborative research (Carini et al., 2006). Another key component of these surveys is student-faculty interaction which focuses on the quality and frequency of students' interactions with faculty members both inside and outside the classroom (Pascarella & Terenzini, 2005). Supportive campus environments constitute another indicator, encompassing the provision of resources and support services (Tinto, 2012). Finally, enriching educational experiences, such as participation in internships programs and community service, are integral components of engagement surveys (Kuh, 2009). These components offer a holistic view of student engagement, helping institutions identify strengths and areas for improvement in their educational practices.

Students' engagement surveys though share some common indicators that reflect multifaceted nature of student engagement, yet they also exhibit distinct differences tailored to their specific educational contexts. For instance, one of the prominent similarity across these surveys is the emphasis on *academic challenge* and *active learning*. These surveys assess the extent to which students are intellectually challenged and engaged in activities that require critical thinking, problem-solving, and collaborative learning (Kuh, 2009; Coates, 2010). Other shared indicator among these surveys is *student-faculty interaction*, which evaluates the quality and frequency of interactions between students and faculty members (Pascarella & Terenzini, 2005; Kuh & Hu, 2001). However, there are notable differences in the emphasis and contextual adaptation of these indicators across surveys. For example, SASSE in South Africa places a unique focus on *socio-economic challenges and diversity issues* specific to South African higher education context, reflecting the need for inclusive and supportive campus environments (Strydom & Mentz, 2010). Similarly, the UKES highlights *reflective and integrative learning* as a distinct category, stressing the importance of integrating learning experiences across varied contexts and promoting reflective practices among students (Buckley, 2013).

Despite the increasing emphasis on student engagement as a critical determinant of academic success and institutional effectiveness, there remains a significant gap in understanding how engagement strategies vary across different national contexts. Existing literature predominantly focuses on individual surveys or regional studies, leaving a paucity of comprehensive, cross-national and cross-cultural analyses that could reveal broader patterns and contextual nuances in student engagement practices, as reflected in global student engagement surveys across the counties. This lack of comparative research limits the ability of educational institutions to adopt best practices from the diverse contexts and hinders the development of universally effective engagement strategies. Likewise, the similarities and differences in the indicators of various global

student engagement surveys may guide both the universities of developed world and of the developing countries.

The present study addresses this gap by conducting a qualitative comparative thematic analysis of five prominent student engagement surveys: The National Survey of Student Engagement (NSSE), Faculty Survey of Student Engagement (FSSE), Australasian Survey of Student Engagement (AUSSE), South African Survey of Student Engagement (SASSE), and the United Kingdom Engagement Survey (UKES). By examining engagement strategies and indicators within these surveys across universities in USA, Canada, Australia, New Zealand, South Africa and UK, this research aims to uncover both commonalities and differences in engagement practices. This cross-national analysis seeks to provide a more nuanced understanding of how student engagement can be effectively fostered in more diverse educational contexts, ultimately contributing to enhancement of students' learning experiences globally.

The purpose of this qualitative research is to explore global student engagement strategies by using comparative thematic analysis of NSSE, FSSE, AUSSE, SASSE, and UKES, within each survey. This cross-national study of the five university surveys is focused on unveiling student engagement strategies in the USA, Canada, Australia, New Zealand, South Africa, and the UK. Specifically, the objectives of the study are as follows:

Conduct in-depth thematic analyses of each of the five prominent student engagement surveys (NSSE, FSSE, AUSSE, SASSE, UKES) to identify and classify distinct student engagement strategies within each survey.

Compare and contrast the student engagement strategies and their constituent indicators across universities in the USA, Canada, Australia, New Zealand, South Africa, and the UK to explore cross-national similarities and the differences.

PROCEDURE OF THE STUDY

Data Collection

The data for this qualitative research study were collected from publicly available documents, specifically international student engagement surveys used in universities across six countries. The five selected surveys were: The National Survey of Student Engagement (NSSE) for the USA and Canada; the Faculty Survey of Student Engagement (FSSE) for the USA and Canada; the Australasian Survey of Student Engagement (AUSSE) for Australia and New Zealand; the South African Survey of Student Engagement (SASSE) for South Africa; and finally, the UK Engagement Survey (UKES) for the UK. These surveys were sourced either from the webpages dedicated to these surveys or from official websites of the respective universities.

Data Analysis

To achieve the objectives of this research, thematic analysis and cross-case analysis were used. In response to first objective, the process of thematic analysis, supported by cross-case analysis, was guided by Creswell (2015), comprising six steps. In first step, survey documents (NSSE, FSSE, AUSSE, SASSE, and UKES) were organized for analysis. In second step, we thoroughly read each survey to gain a comprehensive understanding, and made notes and memos to capture initial impressions and emerging thoughts about student engagement strategies. In third step, we

segmented the text into meaningful units by highlighting significant words, phrases, or sections related to student engagement, followed by assigning of descriptive labels or codes to these segments. Fourth, similar codes were grouped together to form sub-themes. Then, related sub-themes combined into broader major themes to encapsulate distinct student engagement strategies. Fifth, each of the themes were refined and named to ensure they accurately represent the data and capture the essence of engagement strategies. The final step of thematic analysis involved detailed descriptions and interpretations of each theme.

In response to the second objective, the process of analysis was initially based on the results of thematic analysis as revealed in the form of major themes and sub-themes while addressing the first objective, comprising three steps. In the first step, we listed the key themes and sub-themes as identified from the thematic analysis of each survey in response to first objective. In second step, we systematically compared the major themes, sub-themes and their constituent indicators across the five surveys. In this process, we identified and analysed cross-national similarities and differences in student engagement strategies. Finally, we highlighted patterns, trends, and unique practices in engagement strategies across different regions. We further drew insights on commonalities and distinctions in student engagement across the five surveys.

RESULTS

This section presents results of thematic analysis aimed at exploring global student engagement strategies by using comparative analysis of NSSE, FSSE, AUSSE, SASSE, and UKES, within each survey. This cross-national analysis of the five university surveys is focused on unveiling student engagement strategies in the USA, Canada, Australia, New Zealand, South Africa, and the UK. The data source used for this study include the five international students' engagement surveys, namely, NSSE, FSSE, AUSSE, SASSE and UKES. The results of thematic and cross case analysis have been presented into two sections, in response to objectives of the study. The first section presents results regarding the in-depth thematic analyses of each of five prominent student engagement surveys to identify and classify distinct student engagement strategies within each survey. The second section presents results regarding comparing and contrasting student engagement strategies and their constituent indicators across universities in the USA, Canada, Australia, New Zealand, South Africa and the UK to explore cross-national similarities and the differences.

Identification and Classification of Distinct Students' Engagement Strategies within Each Survey

This section presents results of in-depth thematic analyses of each of the five prominent student engagement surveys (NSSE, FSSE, AUSSE, SASSE, UKES) to identify and classify distinct student engagement strategies within each survey.

Identification and Classification of Distinct Students' Engagement Strategies Within NSSE

We initiated the process of thematic analysis with identification and classification of students' engagement strategies as reflected in the *National Survey of Student Engagement [NSSE]*. The NSSE is designed to gauge students' level of engagement with their university experiences for enhancing their learning. Thematic analysis of the NSSE identified five major themes and their corresponding twelve associated minor or sub-themes as key indicators of student engagement in universities

across USA and Canada. These five major themes led to identification of five students' engagement strategies in universities across USA and Canada, and include: academic challenge; learning with peers; experiences with faculty; campus environment; and active learning and community engagement.

Major Theme 1: Academic Challenge

The first theme emerged from thematic analysis of NSSE was academic challenge as a tool for engaging students. Analysis revealed that the use of academic challenges emerged as a critical component of student engagement, encompassing five associated minor sub-themes, namely, higher-order learning; reflective and integrative learning; deep learning strategies; quantitative reasoning; and rigorous curriculum and intellectual development. Equally, academic challenge theme also emphasizes the importance of rigorous academic experiences that promote critical thinking, reflection, analytical thinking, cognitive skills, and application of quantitative skills. Students value such courses that push them intellectually and foster deep learning and problem-solving abilities. For instance, an item from NSSE reflects that: "I integrated ideas or concepts from various sources into my assignments."

Analysis further revealed that academic challenge theme reflects students' engagement with rigorous and intellectually stimulating coursework. It emphasizes the development of critical thinking, application of learning to practical scenarios, adoption of effective study methods, and proficiency in quantitative analysis within academic contexts. These aspects of academic challenges reflect that the focus of students' engagement surveys is on higher-order learning; reflective and integrative learning; learning strategies; and quantitative reasoning. For example, the focus on the higher-order learning as an indicator of academic challenge is evident from a quote of the NSSE which states: "I had opportunities to apply theories to practical problems in my field of study". In the same way, another quote states that "My coursework emphasized synthesizing information and ideas from multiple sources".

The sub-theme of reflective and integrative learning as an indicator of academic challenge was evident from this quote of NSSE: "I reflected on my own learning and growth throughout the semester." Another quote related to this sub-theme states: "I connected concepts from different courses to deepen my understanding." Next, the focus of the NSSE on learning strategies as a sub-theme of academic challenge is reflected from the statement: "I used effective strategies to master course content." In the same vein, an emphasis of the NSSE on engaging students in quantitative reasoning as an indicator of academic challenge is evident from a quote: "I applied mathematical or statistical concepts to solve problems in my courses." Another quote from the NSSE commend the focus on quantitative reasoning as: "I used statistical tools to analyze data in my research projects." Finally, the importance of the rigorous curriculum and intellectual development was also evident from this statement of the NSSE: "The courses I took were intellectually stimulating, pushing me to think critically and develop new perspectives." This highlights the value of rigorous curriculum and intellectual growth as fundamental aspects of engagement.

Major Theme 2: Learning with Peers

The second theme emerged from thematic analysis of NSSE was *learning with peers* as a tool for engaging students. Thematic analysis revealed that the use of learning with peers emerged as a key

component of student engagement, encompassing two associated minor sub-themes, namely, collaborative learning and discussions with diverse others. Thematic analysis further revealed that learning with peers also highlights the significance of collaborative and inclusive learning environment. Likewise, interacting with diverse peers and engaging in group activities enriches students' learning experiences by broadening perspectives and enhancing teamwork skills. For example, focus on collaborative learning is evident from a quote of the NSSE which states: "I learned from my peers through group discussions and activities."

An emphasis on *discussions with diverse others* as an indicator of *learning with peers* as a tool for engaging students is evident from a quote of the NSSE which states: "Interacting with peers from different disciplines broadened my understanding of course topics." Similarly, another quote from the NSSE highlights the focus on *discussions with diverse others* in these words: "I engaged in discussions with classmates from diverse cultural backgrounds. Thematic analysis revealed that *learning alongside peers* fosters engagement through collaborative experiences and exposure to diverse perspectives, as evident from this quote: "I engaged in discussions with classmates who had different backgrounds or opinions."

Thematic analysis revealed that *learning with peers* emphasizes the importance of collaborative interactions and diverse discussions in fostering meaningful learning experiences. Moreover, engagement with peers enhances teamwork skills, exposure to diverse perspectives, encourages knowledge-sharing, and promotes cultural awareness among students. Likewise, collaborative projects and discussions with diverse classmates contribute to a holistic understanding of the course material and promote exchange of ideas and perspectives, enriching students' learning experiences. In summary, thematic analysis revealed that a supportive environment contributes significantly to student engagement.

Major Theme 3: Experiences with Faculty

The third theme emerged from thematic analysis of the NSSE was *experiences with faculty* as a tool for engaging students. Thematic analysis revealed that focusing on enriching *experiences with faculty* emerged as a key component of student engagement, encompassing two associated sub-themes, i.e., *student-faculty interaction* and *effective teaching practices*. Analysis further revealed that *experiences with faculty* highlight the role of supportive and engaging interactions between students and faculty in fostering academic engagement. It was further emerged that positive relationships with professors and effective teaching methods contribute significantly to students' learning outcomes and overall satisfaction. For example, focus on *student-faculty interaction* is evident from a quote of NSSE which states: "Faculty members provided helpful guidance and feedback outside of class." Another quote emphasizes the same in these words: "I felt comfortable approaching faculty with questions or concerns." These quotes underscore the significance of positive interactions with faculty in fostering engagement.

An emphasis on *effective teaching practices* as a sub-theme of *experience with faculty* was also evident from a quote of the NSSE which states: "I found lectures and course materials engaging and well-organized." Another quote highlights the same in these words: "Faculty encouraged active participation and critical thinking during lectures." These extracts from the NSSE show that *experiences with faculty* underscore the impact of engaging teaching methods, supportive

environment and effective teaching practices on students' engagement and their academic success. Likewise, analysis further revealed that accessible and engaging faculty members who encourage participation in class and critical thinking positively impact students' engagement and academic success, fostering a conducive learning environment.

Major Theme 4: Campus Environment

The fourth major theme emerged from thematic analysis of NSSE was *campus environment* as a tool for engaging students. Analysis revealed that focusing on nurturing *campus environment* emerged as an important component of engagement, encompassing two associated minor sub-themes, namely, *quality of interactions* and *supportive environment*. This theme emphasizes the importance of supportive and inclusive campus community. Analysis further revealed that quality interactions with staff and faculty, coupled with nurturing atmosphere that promotes well-being and a sense of belonging, are very essential for fostering student engagement. For example, focus on *quality of interactions* is evident from this quote of NSSE: "The university provided a welcoming environment that encouraged open communication." Likewise, another quote also emphasizes the same in these words: "I felt valued and respected by staff and faculty members on campus."

An emphasis on *supportive environment* as a sub-theme of *campus environment* was evident from a quote of NSSE which states: "I received academic and emotional support from campus resources." Another quote also signifies the same in these words: "The campus environment contributed positively to my overall well-being and sense of belonging." Analysis further revealed that *overall campus environment* plays a crucial role in nurturing student engagement and well-being as evident in: "I had meaningful interactions with peers and faculty outside of the classroom." It was further found that positive interactions and supportive atmosphere foster student engagement and well-being, creating an environment where students feel valued, respected, and motivated to succeed.

Major Theme 5: Active Learning and Community Engagement

The final major theme emerged from analysis of the NSSE was *active learning and community engagement* as a tool for engaging students. Analysis revealed that *active learning* experiences play a crucial role in student engagement. For example, a focus on *active learning* is evident from this quote: "Group projects and hands-on activities enriched my learning experience, making concepts more tangible." This quote demonstrates how experiential and collaborative learning methods enhance student engagement and comprehension. Likewise, it was emerged from analysis that students' engagement extends beyond academics. For instance, an extract from NSSE states: "Participating in clubs and volunteering in community initiatives broadened my perspective and enriched my university life." This validates how community engagement contribute to holistic student engagement.

In conclusion, thematic analysis of NSSE underscores the importance of academic challenge, peer collaboration, faculty engagement, campus support, and an active learning and community engagement in shaping students' engagement strategies within higher education. These themes and sub-themes also provide valuable insights into factors that contribute to meaningful and effective student experiences. These results provide valuable insights into factors that influence students' engagement within higher education institutions in the USA and Canada. Likewise, these results can guide universities in developing and implementing strategies to enhance their students'

engagement, academic success, and overall well-being. Moreover, the multifaceted nature of students' engagement strategies highlights importance of comprehensive approaches that encompass not only academic rigor but also social, experiential, and community-oriented aspects to foster meaningful engagement among university students.

Identification and Classification of Distinct Students' Engagement Strategies within FSSE

This section presents the results of thematic analysis of *Faculty Survey of Student Engagement (FSSE)*. The FSSE is designed to gauge perceptions of instructional staff (faculty, instructors) about how often students engage in different educational practices and learning activities in the universities of USA and Canada. The FSSE was primarily designed to complement NSSE and, therefore, key indicators of students' engagement are same. The purpose of thematic analysis was to identify and classify students' engagement strategies as reflected in FSSE. Aligned with the results of NSSE, analysis of FSSE also identified five major themes and their corresponding twelve associated minor or sub-themes as key indicators of students' engagement. These five major themes led to identification of five students' engagement strategies in universities across USA and Canada, and these include: academic challenge; learning with peers; experiences with faculty; campus environment; and active learning and community engagement. These themes and sub-themes, encapsulating various dimensions of student engagement, have been discussed in the earlier section of thematic analysis.

In summary, thematic analysis of the FSSE provided valuable insights into instructional staff's effective teaching practices and strategies aimed at enhancing students' engagement. Themes emerged from analysis of FSSE underscore the importance of creating diverse and interactive learning environments where students are challenged intellectually, encouraged to engage with peers, benefit from positive faculty interactions, and flourish in supportive campus community. Quotations extracted from survey items, as discussed in preceding section, affirm the presence and impact of engagement strategies on students' learning experiences and academic growth within higher education institutions in the USA and Canada. Furthermore, the findings suggest that faculty members play pivotal role through meaningful interactions and innovative teaching practices, contributing to a supportive and interactive campus environment that fosters holistic student development.

Identification and Classification of Distinct Students' Engagement Strategies Within AUSSE

This section presents results of thematic analysis of *Australasian Survey of Student Engagement (AUSSE)*. The AUSSE is designed to gauge students' level of engagement in university study, and is used by universities in Australia and New Zealand. Furthermore, the AUSSE provides such information to the institutions that they can use for monitoring and enhancing the quality of education. Thematic analysis was aimed at identifying and classifying students' engagement strategies as reflected in AUSSE. Analysis identified six major themes and their corresponding twelve associated sub-themes as indicators of student engagement in universities. These major themes led to identification of six engagement strategies in universities across Australia and New Zealand, and include: academic challenge; active learning; student and staff interactions; enriching educational experiences; supportive learning environment; and work integrated learning.

Major Theme 1: Academic Challenge

The first theme emerged from thematic analysis of AUSSE was *academic challenge* as a tool for engaging students. Analysis revealed that the use of *academic challenges* emerged as a key component of student engagement, encompassing two associated minor themes, namely, *rigor of assessments* and *depth of learning*. The sub-theme of *rigor of assessments* as an indicator of academic challenge was evident from this quote of AUSSE: "The assessments in my courses required me to think critically and apply knowledge." Likewise, an emphasis of the AUSSE on *depth of learning* is evident from a quote of this survey: "The learning activities promoted deep understanding rather than rote memorization." Another quote further commends the focus on *depth of learning* as: "I was encouraged to explore complex topics and theories in my field of study." In summary, academic challenge in AUSSE reflects students' perceptions of the rigor and depth of their learning experiences. It encompasses assessments that encourage critical thinking and a curriculum that promotes deep understanding and skill development.

Major Theme 2: Active Learning

The second theme emerged from thematic analysis of AUSSE was *active learning* as a tool for engaging students. Thematic analysis revealed that use of *active learning strategies* emerged as a key component of student engagement, encompassing two associated minor sub-themes, namely, *engaging classroom activities* and *independent learning*. The sub-theme of *engaging classroom activities* was evident from following quote of AUSSE: "I participated actively in discussions and problem-solving activities during classes." Another quote further extends focus on *engaging classroom activities* as: "The learning activities required me to apply concepts in practical scenarios." Likewise, an emphasis on *independent learning* is evident from this quote: "I took initiative in seeking out additional resources and exploring topics independently." Other quote further confirm focus on *independent learning* as: "The coursework encouraged self-directed learning and problem-solving." In conclusion, thematic analysis revealed that *active learning* captures students' engagement in dynamic and participatory learning experiences, including interactive classroom activities, independent learning and application of knowledge.

Major Theme 3: Student and Staff Interactions

The third theme emerged from thematic analysis of AUSSE was *student and staff interactions* as a tool for engaging students. Analysis discovered that *student and staff interactions* emerged as a key component of student engagement, encompassing two associated minor sub-themes, namely, *supportive faculty interaction* and *peer collaboration*. Sub-theme of *supportive faculty interaction* as an indicator of *student and staff interactions* was evident from this quote of the AUSSE: "I had regular and meaningful interactions with my professors." Another quote further commend focus on *engaging classroom activities* as: "Faculty members were approachable and responsive to student needs." Likewise, an emphasis on *peer collaboration* is evident from a quote of AUSSE as: "I collaborated with classmates on projects and assignments." Other quote also confirms the focus on *peer collaboration* in these words: "Interactions with peers enriched my learning experience." In summary, analysis revealed that *student and staff interactions* strongly highlight importance of positive relationships between students and faculty and peer-to-peer collaboration in fostering engagement and support within university.

Major Theme 4: Enriching Educational Experiences

The fourth theme emerged from analysis of the AUSSE was *enriching educational experiences* of students to engage them. Analysis revealed that *enriching educational experiences* emerged as a key component of student engagement, encompassing two key minor sub-themes, namely, *participation in extracurricular activities* and *broadening perspectives*. Moreover, sub-theme of *participation in extracurricular activities* was evident from a quote of survey: "I participated in co-curricular activities that complemented my academic studies." Another quote confirms the focus on *participation in extracurricular activities* in these words: "The university offered opportunities for cultural and intellectual enrichment beyond the classroom."

Similarly, an emphasis of the AUSSE on *broadening perspectives* as an indicator of *enriching educational experiences* is evident from a quote of the AUSSE as: "I engaged in activities that exposed me to diverse viewpoints and experiences." Another quote also confirms this focus on *broadening perspectives* in following words: "Enriching experiences outside of coursework contributed to my personal and professional development." In summary, analysis revealed that *enriching educational experiences* encompass a wide range of activities that broaden students' perspectives, insight and their overall educational journey, promoting holistic development beyond academic learning.

Major Theme 5: Supportive Learning Environment

The fifth theme emerged from analysis of AUSSE was *supportive learning environment* as a tool for engaging students. Analysis discovered that *supportive learning environment* emerged as a key component of student engagement, encompassing two associated minor sub-themes, namely, *sense of belonging* and *access to support services*. Furthermore, sub-theme of *sense of belonging* was evident from following quote: "The university provided resources and services that supported my academic and personal well-being." Another quote also confirms this focus on *sense of belonging* as: "I felt like a valued member of the university community."

Likewise, an emphasis of AUSSE on *access to support services* as an indicator of *supportive learning environment* is evident from following quote of AUSSE: "I had access to counseling, tutoring, and other support services when needed." Another quote also reiterates the focus of AUSSE on *access to support services* as stated: "The university demonstrated a commitment to student success and well-being." In summary, thematic analysis also revealed that *supportive learning environment* reflects students' perceptions of university's commitment to their success and well-being, encompassing feelings of belonging, access to support services, and supportive campus culture.

Major Theme 6: Work Integrated Learning

The final theme emerged from thematic analysis of AUSSE was *work integrated learning* as a tool for engaging students. Analysis revealed that *work integrated learning* emerged as a key component of student engagement, encompassing two associated minor sub-themes, namely, *integration of practical experience* and *relevance to career development*. Moreover, sub-theme of *integration of practical experience* as an indicator of *work integrated learning* was evident from a quote of AUSSE: "Work-integrated learning opportunities enhanced my understanding of academic concepts."

Another quote from AUSSE further supports this focus on *integration of practical experience* as: "I participated in internships or work placements related to my field of study."

Similarly, an emphasis of the AUSSE on the relevance of courses to career development as an indicator of work integrated learning is evident from ensuing quote of AUSSE: "The university provided opportunities to gain practical skills applicable to my future career." Another quote also confirms this focus on *relevance to career development* as: "Work experiences during my studies helped me build professional networks." In conclusion, thematic analysis revealed that *work integrated learning* focuses on students' engagement in employment-focused experiences integrated into their academic studies, and emphasizing relevance of practical skills and career development within the university curriculum.

In conclusion, these findings offer insights into the diverse dimensions of student engagement, comprising six key areas, within universities in Australia and New Zealand. Addressing these themes can inform institutional efforts to enhance student engagement, learning outcomes, and overall satisfaction in higher education settings.

Identification and Classification of Distinct Students' Engagement Strategies Within SASSE

This section presents results of the analysis of *The South African Survey of Student Engagement (SASSE)*. The SASSE is designed to gather comprehensive data from students relating to their high-impact experiences, behaviors and their engagement with learning in universities of South Africa. Likewise, one of the primary applications of student engagement data is improving the quality of teaching and learning in higher-education institutions. The main purpose of thematic analysis was to identify and classify students' engagement strategies as reflected in the SASSE. Analysis of SASSE identified four major themes and their corresponding ten minor sub-themes as indicators of student engagement in universities. These major themes led to identification of four students' engagement strategies in South African universities, and these include: *academic challenge*; *learning with peers*; *experiences with staff*; and *campus environment*.

Major Theme 1: Academic Challenge

The first theme emerged from thematic analysis of SASSE was *academic challenge* as a tool for engaging students. Analysis revealed that the use of *academic challenges* emerged as a key component of student engagement, encompassing four minor sub-themes, namely, *numerical analysis and application*, *effective learning strategies*, *reflective and integrative learning*, and *higher-order learning approaches*. The first sub-theme of numerical analysis and application as an indicator of *academic challenge* was evident from an extract of SASSE as: "I frequently analyze and apply numerical information in my coursework." Another quote further commends focus on *numerical analysis and application* in these words: "Engaging with quantitative data has improved my problem-solving skills."

The sub-theme of the use of effective learning strategies as an indicator of academic challenge was evident from following quote of SASSE: "I employ various strategies like summarizing and self-testing to enhance my learning." Another quote further commends the focus on the *use of effective learning strategies* as: "Using effective learning strategies has helped me achieve academic success." Third sub-theme of *reflective and integrative learning* was evident from the following quote: "I

reflect on how course content relates to real-world situations." Another quote from survey further commends this focus as: "Integrating concepts from different courses has deepened my understanding."

The final sub-theme of the *use of higher-order learning approaches* as an indicator of *academic challenge* is evident from this quote of the survey: "I engage in critical thinking and evaluation of complex ideas." Another quote from the SASSE further commend the focus on *higher-order learning approaches* in these words: "Applying higher-order learning approaches has expanded my intellectual abilities." In conclusion, *academic challenge* in SASSE emphasizes students' engagement in intellectually demanding activities and effective learning strategies that promote critical thinking, integration of knowledge, and the application of higher-order cognitive skills in their academic pursuits.

Major Theme 2: Learning with Peers

The second theme emerged from thematic analysis of SASSE was learning with peers as a tool for engaging students. Analysis revealed that *learning with peers* emerged as a key component of student engagement, encompassing two associated minor sub-themes, namely, *collaborative learning* and *discussions with diverse others*. The sub-theme of *collaborative learning* as an indicator of *learning with peers* was evident from following quote of the SASSE: "I frequently collaborate with peers on group assignments and projects." Another quote further confirms the focus on *collaborative learning*: "Studying with other students has enhanced my understanding of course materials."

Likewise, an emphasis of SASSE on *discussions with diverse others* as an indicator of *learning with peers* is evident from a quote of the SASSE that states: "I engage in discussions with peers from diverse backgrounds and viewpoints." Another quote from SASSE further confirms this focus in this way: "Interacting with students of different ethnicities and beliefs has broadened my perspectives." Analysis further revealed that learning with peers underscores significance of collaborative learning experiences and interactions with diverse peers in enriching students' educational journey. Likewise, collaborative activities and discussions with peers contribute to deeper learning and understanding of course content.

Major Theme 3: Experiences with Staff

The third theme emerged from analysis of SASSE was *interactive experiences of students with staff* for enhancing their engagement. Analysis revealed that *interactive experiences with staff* emerged as a key component of student engagement, encompassing two sub-themes, namely, *interaction with teaching staff* and *prompt assessment feedback*. The sub-theme of *interaction with teaching staff* as an indicator of *experiences with staff* was evident from following quote of SASSE: "I discuss my academic progress and future plans with teaching staff." Another quote from SASSE also commends the focus on the same in these words: "Working with staff members outside of class has enhanced my learning experience."

Similarly, the focus of SASSE on provision of *prompt assessment feedback* as an indicator of *experiences with staff* is evident from this quote of SASSE: "I receive timely and constructive feedback on my assessments." Another quote also confirms the same in these words: "Prompt

assessment feedback helps me improve and stay motivated in studies." In summary, analysis revealed that *interactive experiences of students with staff* highlight importance of interactions with teaching staff in fostering learning and professional development. Meaningful interactions and prompt feedback contribute to students' academic growth and engagement.

Major Theme 4: Campus Environment

The final theme emerged from thematic analysis of SASSE was *campus environment* as a tool for engaging students. Analysis revealed that *campus environment* emerged as key component of student engagement, encompassing two corresponding minor sub-themes, namely, *quality of relationships* and *emphasis on engagement practices*. *Quality of relationships* as an indicator of *campus environment* was evident from this quote of SASSE: "I feel supported and valued by academic and administrative staff." Another quote further supports the focus on the same in these words: "The campus environment promotes positive relationships and collaboration."

Similarly, an emphasis of SASSE *on engagement practices* as indicator of *campus environment* is evident from a quote of the SASSE as: "The institution emphasizes both academic and non-academic engagement." Another quote also confirms the same in these words: "The campus culture encourages involvement in various learning and extracurricular activities." Analysis further revealed that *campus environment* reflects students' perceptions of university's culture and community. Likewise, positive relationships with staff and an emphasis on engagement practices contribute to a supportive and inclusive campus environment that enhances student engagement and overall satisfaction.

Overall, these findings provide valuable insights into students' engagement strategies in South African universities. Focusing these themes can inform institutional efforts to enhance students' engagement, learning outcomes, and overall their success in higher education. The findings, therefore, have a number of implications for universities across the world.

Identification and Classification of Distinct Students' Engagement Strategies within UKES

This section presents results of thematic analysis of *The UK Engagement Survey (UKES)*. The UKES is a nationwide undergraduate survey conducted in the UK universities, with a focus on student engagement. The UKES is designed to examine how students engage with learning in UK universities. The aim of thematic analysis was to identify and classify students' engagement strategies as reflected in UKES. Analysis identified four major themes and their corresponding eight related minor sub-themes as indicators of student engagement in UK universities. These major themes led to identification of four students' engagement strategies in UK universities, and these include: *course challenge*; *critical thinking*; *reflecting and connecting*; and *learning with others*.

Thematic analysis of UKES provided a comprehensive understanding of student engagement across various dimensions within UK universities. The UKES comprises seven key categories, each comprising several individual questions aimed at assessing different aspects of student engagement. These categories were further divided into four major themes with corresponding eight minor or sub-themes.

Major Theme 1: Course Challenge

The first theme emerged from thematic analysis of UKES was *course challenge* as a tool for engaging students. Analysis revealed that the use of *course challenge activities* emerged as a key component of student engagement, comprising two associated minor sub-themes, namely, *rigorous curriculum* and *depth of learning*. The first sub-theme of *rigorous curriculum* as an indicator of *course challenge* places emphasis on challenging coursework and academic rigor and it is evident from a quote of UKES which states: "The course challenges me to do my best work." Likewise, second sub-theme, *depth of learning*, focuses on deep learning experiences and intellectual growth. The focus on *depth of learning* is evident from a quote of the survey: "I am encouraged to explore ideas in depth."

Major Theme 2: Critical Thinking

The second theme emerged from thematic analysis of UKES was *critical thinking* as a tool for engaging students. Analysis revealed that use of *critical thinking* emerged as a key component of student engagement, encompassing two associated minor sub-themes, namely, *analytical skills* and *application of knowledge*. First sub-theme, *analytical skills*, focuses on development of analytical thinking and problem-solving abilities among students. The focus on *analytical skills* was evident from a quote of the UKES which states: "I am encouraged to think critically about course material." Likewise, second sub-themes, i.e., *application of knowledge*, focuses on providing opportunities to apply theoretical knowledge in practical scenarios. The focus on *application of knowledge* is evident from following quote of UKES: "I am able to apply what I have learned to new situations."

Major Theme 3: Reflecting and Connecting

Third theme emerged from thematic analysis of UKES was the use of *reflecting and connecting* strategies as a tool for enhancing students' engagement. Analysis revealed that use of *reflecting and connecting* strategies emerged as a key component of student engagement, encompassing two minor sub-themes, namely, *reflective practice* and *integration of ideas*. First sub-theme of *reflective practice activities*, as an indicator of *reflecting and connecting* strategies, focuses on encouraging self-reflection and making connections between ideas. This sub-theme is evident from a quote of UKES which states: "The course encourages me to reflect on my own learning." Similarly, second sub-theme of *integration of ideas* mainly focuses on promoting integration of diverse concepts and perspectives. This theme is evident from a quote of UKES E as: "The course helps me connect ideas from different subjects."

Major Theme 4: Learning with Others

The final theme emerged from thematic analysis of UKES was *learning with others* as a tool for engaging students. Analysis revealed that *learning with others* emerged as a key component of student engagement, encompassing two associated minor sub-themes, namely, *collaborative learning* and *peer interaction*. First sub-theme of *collaborative learning* focuses on engaging students in group work and cooperative learning activities. This sub-theme was evident from a quote of UKES which states: "I often work with other students on projects or assignments." Similarly, *peer interaction* focuses on providing opportunities for students for more meaningful interactions with fellow students. An emphasis of UKES on the *peer interaction* is evident from a quote of UKES as: "I discuss course topics with peers outside of class."

In conclusion, thematic analysis highlights the multifaceted nature of student engagement as captured by UKES. Students' experiences are shaped by challenging courses that foster deep learning and critical thinking skills. Furthermore, UKES survey underscores the importance of reflective practices and connections between ideas to enhance students' intellectual growth and holistic understanding. Likewise, focus on collaborative learning and peer interactions suggests that student engagement extends beyond individual efforts, promoting a learning environment characterized by teamwork and shared learning experiences. The quotations extracted from UKES items serve as compelling evidence of these engagement strategies and their impact on students' academic experiences within the diverse landscape of UK universities.

Similarities and Differences in Students' Engagement Strategies as Depicted in the Engagement Surveys

This section presents results of comparing and contrasting student engagement strategies and their constituent indicators across universities in USA, Canada, Australia, New Zealand, South Africa and UK to explore cross-national similarities and differences. To explore the similarities and differences in students' engagement strategies across five selected students' engagement surveys (i.e., NSSE, FSSE, AUSSE, SASSE, and UKES), cross-case analysis was conducted, focusing on key themes and indicators from each survey. The commonalities and distinctions in students' engagement strategies, as identified from cross-case analysis, are being presented:

Common Themes across Surveys

The first common theme emerged from cross-case analysis across five surveys was academic challenge. The corresponding four minor sub-themes of academic challenge, as reflected in the NSSE, FSSE, AUSSE, and SASSE include: higher-order learning, reflective and integrative learning, learning strategies, and quantitative reasoning. The corresponding three minor sub-themes of academic challenge, as reflected in the UKES include: the course challenge, critical thinking, and research and inquiry. Although, these three sub-themes contain slightly different titles but they reflect the same five minor sub-themes as reflected in NSSE, FSSE, AUSSE and SASSE. An example indicator of NSSE states: "Extent to which coursework emphasizes application of learning to real-world problems." Likewise, an example indicator of UKES states: "My course encourages me to think critically about the subject matter."

The second common theme emerged from cross-case analysis across all surveys was learning with peers. The corresponding two minor sub-themes of learning with peers, as reflected in the NSSE, FSSE, AUSSE and SASSE include: collaborative learning and discussions with diverse others. The corresponding minor sub-theme of learning with peers, as reflected in the UKES include: learning with others. Although, the sub-theme of learning with others contain slightly different title but it reflects the same minor sub-themes as reflected in the NSSE, FSSE, AUSSE and SASSE. An example indicator of FSSE states: "Worked with other students on projects during class." Likewise, an example indicator of AUSSE also states: "Participated in group activities in my course."

The third common theme emerged from cross-case analysis across all surveys was experiences with faculty/staff. The corresponding two minor sub-themes of experiences with faculty/staff, as reflected in NSSE, FSSE, and SASSE include: student-faculty interaction, effective teaching practices. Likewise, the corresponding one minor sub-theme of experiences with faculty/staff, as reflected in

AUSSE includes student and staff interactions. Similarly, the corresponding two minor sub-theme of experiences with faculty/staff, as reflected in UKES include: staff-student partnerships and interacting with staff. Although, these sub-theme of experiences with faculty/ staff contain slightly different titles across surveys but they reflect the same focus in all five surveys. An example indicator of the NSSE states that: "Discussed career plans with a faculty member or advisor." Likewise, an example indicator of UKES also states: Staff are enthusiastic about what they are teaching."

The fourth common theme emerged from the cross-case analysis across all surveys was campus environment. The corresponding two minor sub-themes of campus environment, as reflected in the NSSE, FSSE, and SASSE include: quality of interactions and supportive environment. The corresponding minor sub-theme of the campus environment, as reflected in the AUSSE include: supportive learning environment. Although, the sub-theme of supportive learning environment contains slightly different title but it reflects the same minor sub-theme as in NSSE, FSSE, and SASSE. An indicator of FSSE states: "Feelings of belonging to the institution." Likewise, an indicator of AUSSE also states: Feel part of a community of learners at this institution."

Differences and Distinct Themes across Surveys

Cross-case analysis revealed two important differences and distinct themes across five students' engagement surveys. First key difference was the specific focus of UKES. The UKES includes unique categories such as *reflecting and connecting* and *research and inquiry*, which are not explicitly measured in other surveys. An example indicator of UKES states that students are "Encouraged to critically evaluate information and arguments." Likewise, another indicator of UKES further states: "Opportunities to apply what I have learned to different contexts." Second key difference was AUSSE's emphasis on active learning and enriching experiences. Analysis revealed that AUSSE measures active learning and enriching students' educational experiences, which highlight hands-on learning and broader educational engagement. An example indicator of the UKES states "Course activities emphasized applying theories or concepts to practical problems or new situations."

Cross-case analysis reveals both commonalities and distinct features in students' engagement strategies across the surveyed universities. The common themes such as *academic challenge*, *learning with peers*, and *experiences with faculty/staff* underscore the fundamental aspects of student engagement universally recognized across these surveys. On the other hand, the unique categories in UKES and specific emphasis on *active learning* and *enriching experiences* in the AUSSE mainly highlight the nuanced approaches to measuring student engagement in different contexts, UK and Australasian universities, respectively. These findings also suggest that while there are core dimensions of student engagement shared across international surveys, variations exist based on regional priorities and educational frameworks, reflecting diverse perspectives on fostering meaningful student experiences in higher education.

In summary, cross-case analysis was employed to identify the convergence and divergence of students' engagement strategies, as reflected in the five selected students' engagement surveys. This comparative exploration contributes to a deeper understanding of how universities assess and promote student engagement, offering insights into global trends and contextual nuances in higher education practices.

CONCLUSION

Based on results of thematic analysis and cross-case analysis aimed at exploring global student engagement strategies by using comparative analysis of NSSE, FSSE, AUSSE, SASSE and UKES within each survey and at exploring cross-national similarities and differences in student engagement strategies in the USA, Canada, Australia, New Zealand, South Africa and UK, the following six conclusions were drawn from this research:

The first conclusion was that major themes emerged from thematic analysis of NSSE and FSSE (in USA and Canada) highlight the importance of holistic approaches that include academic rigor, social interaction, faculty engagement, and community involvement for enhancing student learning and satisfaction.

Second, the major themes emerged from thematic analysis of AUSSE (in Australia and New Zealand) emphasize the significance of diverse dimensions including work-integrated learning and enriched educational experiences in student engagement.

Third, the major themes emerged from thematic analysis of SASSE (South Africa) focus on high-impact experiences and behaviours related to academic and social aspects to enhance teaching quality and learning outcomes.

Fourth conclusion was that major themes emerged from thematic analysis of UKES (United Kingdom) stress the importance of critical thinking, reflective practices, and collaborative learning for student intellectual growth and holistic development.

Fifth, this study concluded that the commonalities emerged from cross-case analysis of five student engagement surveys include: academic challenge; learning with peers; experiences with faculty/staff; and campus environment.

The final conclusion was that two differences emerged from cross-case analysis of five student engagement surveys in terms of specific focus of UKES and AUSSE. The specific focus of UKES is on unique categories like reflecting and connecting, and research and inquiry not explicitly measured in other surveys. Likewise, an emphasis of AUSSE is on highlighting active learning and enriching educational experiences more prominently compared to other surveys.

Recommendations

Based on the results of cross-case analysis, the following six recommendations are being made for enhancing students' engagement in universities.

First, it is recommended to integrate academic rigor and social interaction by developing programs and curricula that balance challenging academic content with opportunities for meaningful social interaction among students.

Second, it is recommended to enhance faculty engagement by encouraging faculty to actively engage with students both inside and outside the classroom through mentorship programs, office hours, and collaborative research projects.

Thirds, it is recommended to focus on work-integrated learning for students by expanding opportunities for internships, co-op programs, and other forms of work-integrated learning to connect academic theory with practical application.

Fourth, it is recommended to enrich educational experiences of students by offering them a wide range of extracurricular activities, study abroad programs, and interdisciplinary courses to broaden their educational experiences and perspectives.

Fifth, it is recommended to integrate critical thinking across curriculum by designing courses and assessments that require students to engage in critical analysis, problem-solving, and reflective thinking.

Finally, it is recommended to enhance campus infrastructure by ensuring that the campus environment is conducive to learning by providing adequate study spaces, technological resources, and wellness facilities.

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