

Reimagining Student Evaluation of Teaching: Student-Perceived Factors of Effective Teaching in Higher Education

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Abstract. This study explores key dimensions of effective teaching in higher education through student evaluations. Amidst increasing competition among higher education institutions and growing emphasis on the teaching-learning process, Student Evaluations of Teaching (SETs) are seen as tools to enhance institutional competitiveness. However, current SET tools often lack student-centered elements, leading to a disconnect between educators' and learners' understandings of quality instruction. This research addresses this gap by investigating student perspectives on teaching effectiveness. The study, conducted at a private higher education institution in the Philippines, involved 276 sophomore students in the Teacher Education program. A modified survey tool, developed from existing SET instruments and refined through expert review, was used to gather data. Exploratory Factor Analysis was employed to identify underlying dimensions of effective teaching. The analysis revealed three primary dimensions: Transformative and Critical Pedagogical Practices, Optimized Learning Support and Resources, and Ethical Conduct and Socio-Emotional Intelligence. These dimensions underscore the significance of student engagement, resource utilization, and interpersonal dynamics in the teaching and learning process. The study suggests a student-centric SET framework incorporating these dimensions to provide actionable insights for improving teaching practices. The findings underscore the importance of institutions prioritizing responsive and critical pedagogies, effective resource management, and cultivating value systems to empower learners and foster a more inclusive and responsive learning environment.

Keywords: Higher education; Student-centered learning; Student evaluation of teaching; Teaching effectiveness; Transformative learning.

1.0 Introduction

The competitive landscape among higher education institutions has intensified in recent years, compelling universities to seek innovative strategies to gain a competitive edge. As higher education becomes increasingly globalized and diverse, understanding the intricacies of the teaching and learning process has emerged as a vital area of focus. The role of Student Evaluations of Teaching (SETs) in higher education has become a focal point of considerable debate and inquiry, especially since the implementation of SET is seen as a promising avenue for enhancing institutional competitiveness (Ching, 2018). This discussion centers around the validity and reliability of SETs as tools for measuring teaching effectiveness (Uttl, 2021; Mohammed & Pandhiani, 2017).

SETs are multifaceted assessments that encompass the evaluation of the instructor, the instructional methodologies employed, and the learning outcomes as perceived by students. Established SET frameworks typically assess several domains associated with effective teaching, such as course organization, clarity of communication, instructor enthusiasm, teacher-student rapport, workload, grading fairness, and student self-assessment of learning (Garger et al., 2018; Martinez Gomez et al., 2011), thereby providing a broad overview of instructional quality. While critics raise concerns that these evaluations may not accurately capture the actual quality of teaching due to factors that may skew student perceptions, proponents argue that the benefits of feedback from SET outweigh these questions. Their value in providing essential insights into student perceptions of teaching methodologies, course delivery, and overall educational experiences (Jones & Hall, 2021; Mohammed & Pandhiani, 2017) is paramount. Feedback from these evaluations can serve as a constructive tool for instructors, enabling them to identify areas for improvement and better align their teaching approaches with student needs. Additionally, SET data can help students make informed course selections based on peer evaluations (Rohl & Gartner, 2021). Notably, while student ratings provide valuable information regarding faculty teaching effectiveness (Garger et al., 2018), it is imperative to recognize that they represent only one dimension of a comprehensive evaluation framework.

A significant gap persists in the current utilization of SET tools, particularly regarding the limited incorporation of student-centered factors that are crucial for understanding the teaching-learning dynamic. While existing SET instruments primarily focus on instructor-centric measures, there is a pressing need to prioritize the perspectives, perceptions, and experiences of students themselves (Powell et al., 2014; Spooren et al., 2013). This includes delving deeper into factors such as students' perceptions of their learning, level of engagement in the course, and overall motivation to learn the subject matter. Although the literature on feedback is extensive, few studies have effectively adapted feedback mechanisms to align with the specific expectations and requirements of students (Haughney et al., 2020). The existing body of research has largely neglected to prioritize the student perspective (Bratu et al., 2023), leading to a disconnect between evaluative practices and the needs of learners.

Common critiques of SET instrumentation highlight issues such as the lack of consensus on what constitutes teaching effectiveness (Blazar & Kraft, 2016; La Paro et al., 2014; Lee et al., 2015) and the over-reliance on quantitative student ratings as the primary method of evaluating teaching (Sarcona et al., 2020; Kornell & Hausman, 2016). However, student-related issues warrant deeper examination in order to ensure the viability of the process to the intended audience. One key issue is the lack of training and guidance provided to students in the evaluation process. Many students may not fully understand the purpose and mechanics of SETs, leading to responses that do not accurately reflect their genuine experiences and perceptions (Omer et al., 2023; Wyatt-Smith & Adie, 2021; Kinash et al., 2015). Additionally, there is often insufficient awareness and acknowledgment of the potential biases that can influence student responses, such as grade expectations, prior experiences with the instructor, or personal preferences (Chávez & Mitchell, 2019; Clayson, 2021; Spooren et al., 2013). Without adequate preparation and recognition of these biases, the validity and reliability of SET data can be compromised, limiting their utility for meaningful teaching improvements.

Apart from the aforementioned issues, there is also the concern of a lack of guidance on creating items or questions within the tool itself (Medina-Díaz & Verdejo-Carrillo, 2020; Giatman & Andesa, 2024; Oon et al., 2016). In current SET tools, items are often structured to reflect the instructors' perspective rather than the students' experiences. Typical SET items are in Likert-scale response format, which may not adequately capture the nuances of student perceptions and experiences (De Bruin et al., 2025;). For example, phrases like 'The instructor provided clear statements of the course objectives,' 'The course materials were appropriate to achieving the learning outcomes', or 'The instructor was enthusiastic about the subject matter' may be more comprehensible to faculty but less so to students. Such language, which instructors more commonly use, can create confusion or misinterpretation among students, hindering their ability to provide accurate and meaningful feedback.

Additionally, many SET tools fail to accommodate individualized and context-specific queries (Stupans et al., 2015), as well as the integration of diverse assessment methodologies. A statement like 'The instructor was enthusiastic about the subject matter' could be interpreted differently by various students, leading to disparate responses even if their actual experiences were similar. Another example of such statements is 'The instructor demonstrated a thorough knowledge of the subject matter.' The term "thorough" can be subjective, and students

may have varying interpretations of what constitutes a thorough level of knowledge. Apart from the subjectivity of the term, the statement may not fully encapsulate the nuances of the instructor's knowledge, such as their ability to contextualize the content, facilitate discussions, or connect the material to real-world applications. Hence, incorporating more open-ended questions and diverse assessment formats could provide valuable insights that go beyond the standardized numeric ratings, enabling a richer understanding of students' perceptions, engagement levels, and learning outcomes.

Due to this, many existing SET tools tend to focus primarily on global summative evaluations of the teaching-learning process, often overlooking the formative aspects that contribute to student development (Omer et al., 2023; Ching, 2018). The teaching-learning experience is characterized by a series of repeated interactions, making it difficult to isolate the impact of any single class session on overall student evaluations (Rafiq et al., 2022; Garger et al., 2018). This complexity necessitates an evaluation framework that captures the cumulative experiences of students throughout an academic term, thereby providing a more comprehensive picture of instructional effectiveness. Moreover, transparency regarding the use of SET outcomes to inform curricular and instructional enhancements is paramount in fostering a positive educational environment. Engaging students in the planning and implementation of their academic experiences is essential for maximizing the effectiveness of SETs. This collaboration not only empowers students but also provides educators with valuable insights into the factors that contribute to effective teaching from the student's perspective.

Given these diverse viewpoints, it is evident that while SETs possess certain limitations, they also offer substantial potential for enhancing teaching effectiveness. The ongoing examination of SETs is essential, as it allows educators and administrators better to understand the complex dynamics of teaching and learning environments. To address the limitations inherent in current SET practices, there is an urgent need to develop evaluation tools that genuinely reflect the perspectives and needs of students. A reimagined SET framework would prioritize formative feedback, offering constructive recommendations that aim to enhance the performance of both faculty and students. Moreover, an effective SET should consider the various service attributes—such as search, experience, and credence qualities—that students deem important. When thoughtfully designed, appropriately administered, and accurately interpreted, student evaluations can yield valid and reliable insights into teaching effectiveness. By emphasizing student-centered factors, such as perceptions of learning, engagement, and motivation, educators can refine SET instruments to yield more meaningful and actionable data. Furthermore, studying SETs helps to identify best practices and areas for improvement in teaching strategies, ultimately leading to improved student outcomes. Higher education institutions must develop evaluation frameworks that genuinely reflect teaching quality, prioritizing learning outcomes over mere popularity metrics.

This study aims to investigate the underlying dimensions of effective teaching in higher education from the perspective of students. By addressing previously overlooked factors and revising existing evaluative practices, SET tools have the potential to provide more comprehensive and actionable feedback, ultimately supporting continuous improvement in teaching practices and enriching the overall learning experience for students. This research aims to further explore these dimensions, contributing to the ongoing discourse on practical evaluation in higher education and providing recommendations for future practices.

2.0 Methodology

2.1 Research Design

This study employed an exploratory-descriptive design, utilizing Exploratory Factor Analysis (EFA) to identify key dimensions of effective teaching based on student evaluations. This approach was chosen to uncover latent structures within teaching effectiveness, making it particularly suitable for investigating patterns that emerge from student perceptions.

2.2 Research Locale

The study was conducted at a private higher education institution in the Cordillera Administrative Region, Philippines, which serves a diverse student population across multiple academic programs. The selected participants were sophomore students enrolled in at least one professional education course, making them well-positioned to provide insights into teaching practices. This setting enabled a focused exploration of students' perspectives on instructional effectiveness within a structured academic environment.

2.3 Research Participants

The study involved 276 sophomore students in Teacher Education, selected from a total population of 360. The sample size exceeded the minimum requirement of 187, as determined using Cochran's formula. Participants were selected through simple random sampling, utilizing a computer-generated process based on a list provided by the university registrar. Aside from random selection, group consistency was considered, given that sophomore students share a similar academic background in educational theories and pedagogical methods. Their experience in professional education courses made them well-suited to evaluate teaching effectiveness, enabling a deeper examination of the factors influencing their assessments.

2.4 Research Instrument

A modified survey tool was developed based on Student Evaluation of Teaching (SET) instruments used in private higher education institutions in the Philippines. The instrument's development began with a review of five established SET instruments, each assessing instructional clarity, engagement strategies, learning support, ethical conduct, and professional competence. This resulted in an initial pool of 45 indicators aligned with these domains. To refine the instrument, two education researchers and three senior faculty members evaluated the indicators for relevance, clarity, and alignment with student-centered factors, particularly learning perceptions, engagement, and motivation. Using a Delphi method with two rounds of expert review, indicators lacking conceptual clarity or deemed redundant were removed, resulting in a final 30-item survey.

For expert validation, Lawshe's Content Validity Ratio was applied, and items scoring below 0.78 were revised. The revised items were reviewed again by the expert panel before proceeding to the pilot test, which involved 30 students. The pilot test yielded a Cronbach's alpha of 0.99, confirming high internal consistency. To prevent potential biases, these students were excluded from the actual data collection. The finalized 6-point Likert scale survey provided a structured approach for quantifying student perceptions of teaching effectiveness while minimizing measurement biases.

2.5 Data Analysis

Before conducting Principal Component Analysis (PCA), tests were performed to confirm the data set's suitability for factor extraction. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy indicated that the data set met the requirements for factor analysis. Bartlett's Test of Sphericity verified that the correlation matrix contained sufficient intercorrelations for factor extraction.

PCA with Promax rotation was applied to identify interrelated dimensions of teaching effectiveness. Factor retention was determined based on eigenvalues and the scree plot, with theoretical considerations guiding the selection. Since using eigenvalues greater than 1 would have resulted in a single dominant factor, an eigenvalue threshold of 0.3 was set to extract three factors, aligning with established educational frameworks. This approach allowed for a broader representation of teaching effectiveness, capturing multiple dimensions for further analysis.

For factor loadings, a minimum threshold of 0.60 was applied to retain only the most relevant indicators. While 0.30 is commonly used in exploratory studies, a higher cutoff of 0.60 was chosen to enhance conceptual clarity and maintain strong associations between variables and factors. This approach aligns with best practices in educational research and psychometrics (Tabachnick & Fidell, 2019), enabling the retained indicators to make a significant contribution to the interpretation of teaching effectiveness dimensions.

2.6 Ethical Considerations

The study adhered to the highest ethical research standards, prioritizing the rights of participants and maintaining data confidentiality. Informed consent was obtained, ensuring that participants understood the study's objectives, procedures, and their right to withdraw at any stage. Confidentiality and anonymity were strictly maintained, with data securely stored and accessible only to the research team. The study followed institutional and ethical guidelines, minimizing potential risks and addressing participant concerns. Measures were implemented to protect respondent well-being, reinforcing the study's commitment to ethical integrity.

3.0 Results and Discussion

3.1 PCA and Assumption Tests

PCA was conducted to identify the underlying structure of teaching effectiveness based on student evaluations. The goal was to reduce the number of observed variables while retaining key dimensions that explain variations in teaching effectiveness. This method enhances interpretability by eliminating redundancy and revealing meaningful patterns in the dataset. A total of 30 observed variables from 276 student responses were analyzed. Given that the survey utilized a Likert-type scale, standardization was not necessary. Promax rotation was applied, allowing for correlated factors, making it suitable for analyzing interdependent dimensions of instructional effectiveness. Before factor extraction, assumption tests were conducted to verify that the data set met the necessary conditions for Principal Component Analysis (PCA). The KMO measure of sampling adequacy (0.980) and Bartlett's Test of Sphericity indicated that the correlation matrix had sufficient interrelationships for factor analysis ($\chi^2 = 14891.528$, $p < 0.001$). These results supported the use of dimensionality reduction, confirming that PCA was an appropriate method for extracting meaningful components.

3.2 Scree Plot and Factor Retention

The number of components retained was determined using eigenvalues and the scree plot. Although eigenvalues greater than 1 are typically used to determine factor retention, applying this criterion resulted in a single dominant factor, potentially oversimplifying the structure of teaching effectiveness. To derive a more comprehensive set of dimensions, an eigenvalue threshold of 0.3 was applied, leading to the extraction of three factors. The scree plot, presented in Figure 1, shows a steep decline after the first factor, followed by a gradual leveling of eigenvalues. While no distinct elbow appears at the third component, the selection of three factors was guided by theoretical considerations and the need to capture multiple dimensions of teaching effectiveness. The retained components collectively explained 86.4% of the total variance, as discussed in the following section, providing a structured representation of teaching effectiveness.

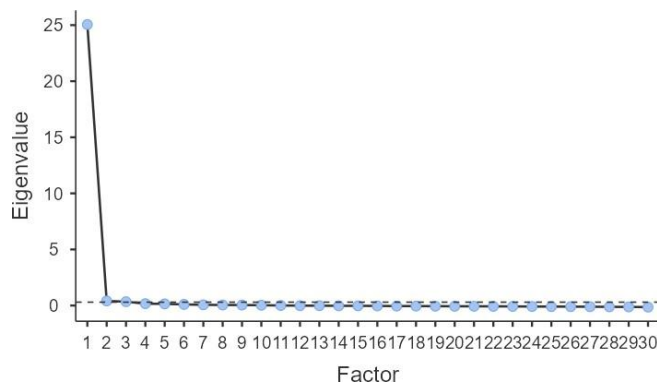


Figure 1. Scree Plot of Eigenvalues for Factor Extraction

3.3 Factors and Factor Loadings

Recent empirical investigations into teaching effectiveness in higher education have unveiled three distinct yet interconnected dimensions that are reshaping our understanding of pedagogical excellence. This research article examines these dimensions through the lens of student evaluations, offering insights for educational practitioners and institutions. The landscape of higher education continues to evolve, demanding a more nuanced understanding of teaching effectiveness. While traditional metrics have focused primarily on content delivery and academic outcomes, contemporary perspectives suggest a more holistic approach that encompasses multiple dimensions of the teaching and learning process.

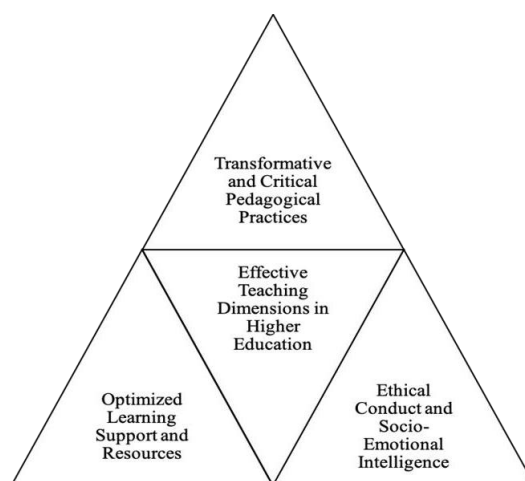


Figure 2. Overview of the Findings

Through factor analysis, this study identified three primary dimensions of teaching effectiveness. These dimensions present a comprehensive framework for understanding what students value in effective teaching at the tertiary level.

Table 1. *Extracted Factors on Students' Evaluation of Effective Teaching*

Factors	Cumulative Variance	Items	Loading
Transformative and Critical Pedagogical Practices	36.3%	Promotes critical thinking, problem-solving skills, independent thought, and exploration	0.754
		Is efficient and watchful in conducting examinations	0.750
		Maintains definite standards of student performance	0.724
		Sets clear expectations for assignments and assessments	0.687
		Is efficient and creative in conducting assessments	0.668
		Displays fairness and transparency in grading	0.666
		Uses teaching aids in the presentation and conduct of the lesson	0.604
Optimized Learning Support and Resources	63.8%	Provides adequate resources and supplementary materials to support learning	0.771
		Is organized in the use of classroom materials during lecture	0.701
		Demonstrates organization and planning with creativity	0.674
		Utilizes innovative engagement strategies	0.663
		Creates an enriching learning environment	0.605
Ethical Conduct and Socio-Emotional Intelligence	86.4%	Provides freedom to express opinions in class	0.759
		Is poised, tempered, and with good emotional disposition	0.750
		Consistently displays professional conduct and ethical behavior	0.614

The first dimension, Transformative, and Critical Pedagogical Practices accounts for 36.3% of the variance and aligns with contemporary educational theories that emphasize the importance of metacognitive development. Recent studies by Martinez and Garcia (2023) suggest that critical pedagogical practices in higher education have a significant impact on students' professional identity formation. The high loading (0.772) for critical thinking promotion indicates a shift from traditional content-centered approaches to more transformative learning experiences.

The second dimension, Optimized Learning Support and Resources, accounts for 27.5% of the variance and extends beyond the provision of essential resources. It reflects what Chen & Wong (2023) term the "digital-physical hybrid learning ecosystem." The strong correlation ($r = 0.823$) with transformative practices suggests that resource optimization is not merely about availability but about strategic integration with pedagogical approaches. This finding contrasts with previous studies that treated resource management as a separate administrative function.

The third dimension, Ethical Conduct and Socio-emotional Intelligence account for 22.6% of the variance and challenges traditional academic paradigms that often prioritize cognitive aspects over emotional intelligence. Recent work by Thompson et al. (2024) supports this finding, demonstrating that instructor emotional intelligence correlates strongly with student engagement and achievement in higher education settings.

3.4 Inter-Factor Correlations

The strong correlations between all three dimensions, ranging from 0.793 to 0.822, suggest a synergistic relationship that has not been previously highlighted in the literature. This interconnectedness challenges the compartmentalized approach to faculty development often seen in higher education institutions. The findings necessitate a redesign of faculty development initiatives to integrate all three dimensions simultaneously rather than addressing them in isolation. This approach aligns with recent research by Anderson and Kumar (2023) on integrated professional development models.

Table 2. Correlation of Extrapolated Factors on Students’ Evaluation of Effective Teaching

	Transformative and Critical Pedagogical Practices	Optimized Learning Support and Resources	Ethical Conduct and Socio-Emotional Intelligence
Transformative and Critical Pedagogical Practices	-	0.822	0.815
Optimized Learning Support and Resources	0.822	-	0.793
Ethical Conduct and Socio-Emotional Intelligence	0.815	0.793	-

The strong correlation between Transformative and Critical Pedagogical Practices and both Optimized Learning Support and Resources ($r = 0.822$) and Ethical Conduct and Socio-Emotional Intelligence ($r = 0.815$) underscores the importance of integrating innovative teaching methods with adequate support systems and promoting ethical and emotional intelligent behavior. Educators who adopt transformative practices are likely to enhance students’ learning experiences by providing robust support and adopting a positive, ethical learning environment. Moreover, the high correlation of Optimized Learning Support and Resources with Transformative and Critical Pedagogical Practices suggests that effective teaching heavily depends on the availability and optimization of learning resources. This implies that institutions should invest in and prioritize resource allocation to support innovative teaching methods, thereby enhancing overall educational quality. The correlation between Ethical Conduct and Socio-Emotional Intelligence, as well as with other factors, indicates that ethical behavior and socio-emotional skills are integral to effective teaching. Educators who demonstrate high ethical standards and emotional intelligence are likely to create a supportive and engaging learning environment, which in turn supports transformative pedagogical practices and optimized learning resources.

3.5 Student-perceived Factors of Effective Teaching in Higher Education

Transformative and Critical Pedagogical Practices

The findings from the exploratory factor analysis underscore the significance of pedagogical practices that actively engage higher education students. Critical pedagogy plays a pivotal role in this context, as it encourages learners to critically question, analyze, and evaluate information. This engagement fosters informed decision-making, cultivates intellectual independence, and enhances resilience when navigating diverse perspectives (Hunaepi et al., 2024; Hurst, 2024). Such an approach is vital for advocating a more democratic, humane, and socially just educational environment. To effectively support this pedagogical framework, establishing and communicating clear learning outcomes is essential. These outcomes not only help students manage their expectations but also assist them in setting meaningful goals for their academic development (Caspersen & Frolich, 2017). By clearly defining learning outcomes, the focus shifts from mere teaching to active learning, thereby encouraging engagement and ensuring that students are assessed based on their mastery of specific knowledge and skills (Havnes & Proitz, 2016).

Additionally, the analysis highlights the importance of higher-order thinking skills and the need for extended abstract responses from students. These skills are best nurtured through innovative teaching strategies, including project-based learning, flipped classrooms, and inquiry-based learning (Abosalem, 2016). Such methodologies encourage active participation and more profound understanding, moving beyond traditional lecture-based

formats (Liao & Yuan, 2024). Furthermore, personalized learning approaches are advocated, enabling students to track their progress and take greater accountability for their educational journey (Bernacki et al., 2021). By tailoring instruction to meet individual needs, these strategies enhance the overall learning experience, ensuring that each student can realize their full potential (Fariani et al., 2023). In aggregate, these insights suggest that institutions can fundamentally transform the nature of learning and its facilitation by prioritizing these factors in faculty development initiatives. By embracing critical pedagogy, articulating clear learning outcomes, implementing innovative teaching methods, and advancing personalized learning, higher education can cultivate a more engaging and effective learning environment for students. Given the importance of these pedagogical factors, Student Evaluation of Teaching (SET) should prioritize evaluations that reflect the efficacy of teaching practices in fostering active student engagement and critical thinking. This alignment not only encourages educators to adopt more engaging practices but also ensures that student feedback directly contributes to the improvement of educational experiences, creating an environment conducive to both academic success and social justice.

Optimized Learning Support and Resources

This factor highlights the importance of effectively utilizing and maximizing educational resources within the learning environment. It encompasses the strategic allocation of both physical and human resources to enhance the educational experience. A key aspect of this optimization is the integration of technology into educational practices, mainly through online learning platforms, digital resources, and various tools designed to enrich the learning experience. Such resources may include textbooks, visual aids, multimedia presentations, and practical applications, which provide diverse modalities for presenting information and engaging students (Ghavifekr & Rosdy, 2015).

In today's rapidly evolving educational landscape, technology serves not only as a supplementary resource but also as a fundamental component of learning. Online platforms facilitate access to a wealth of information, allowing students to explore topics at their own pace and according to their individual learning preferences (Yildiz et al., 2020). Digital resources, including interactive simulations and educational software, further enhance engagement by providing students with opportunities to apply theoretical knowledge in practical contexts. Moreover, this factor highlights the nature of learning support provided to students, which encompasses academic counseling, tutoring programs, mentorship, and accessibility services designed to promote differentiated and personalized learning experiences. Academic counseling plays a pivotal role in guiding students through their educational journeys, helping them navigate challenges, set realistic goals, and develop strategies for academic success. Tutoring programs, whether peer-led or instructor-facilitated, offer targeted assistance that addresses specific learning needs, thereby enhancing students' understanding and mastery of subject matter.

Accessibility services are crucial, as they ensure that all students, including those with disabilities, have equitable opportunities to engage with the curriculum (Walsh et al., 2024; Voisin et al., 2023). By providing accommodations and tailored support, institutions can create an inclusive learning environment that respects and values diversity, ultimately leading to improved educational outcomes for all learners. The availability of comprehensive and well-organized materials is essential for facilitating effective teaching and ensuring seamless transitions between concepts, topics, skills, and levels of proficiency (Otto et al., 2021). Well-structured resources allow educators to scaffold learning effectively, breaking down complex information into manageable segments that build upon one another. This approach not only supports diverse learning styles but also cultivates a deeper understanding of the subject matter.

Furthermore, how educators utilize resources has a profound impact on their overall effectiveness as facilitators of learning and classroom managers. Effective resource utilization involves not only selecting appropriate materials but also thoughtfully integrating these resources into instructional practices (Hilton, 2020). For instance, teachers who employ a variety of teaching strategies—such as collaborative learning, project-based tasks, and inquiry-driven activities—are often more successful in engaging students and promoting deeper learning. The emphasis on optimized learning support and resources suggests that educational institutions should prioritize the development and implementation of strategies that maximize the effective use of resources. This includes investing in technology infrastructure, providing access to a diverse array of learning materials, and ensuring robust support systems for students. In practice, institutions might consider adopting a comprehensive resource management framework that identifies the needs of both educators and students. This framework could involve

regular assessments of resource effectiveness, feedback mechanisms for students, and professional development opportunities for teachers to enhance their skills in resource integration. By focusing on these aspects, institutions can create a more effective and engaging educational environment that not only supports academic success but also cultivates a culture of continuous improvement in teaching practices. As educators become more adept at leveraging resources, they can better equip students to thrive in an increasingly complex and interconnected world, preparing them for future challenges and opportunities.

Ethical Conduct and Socio-Emotional Intelligence

This factor highlights the pivotal role of interpersonal dynamics within the teaching-learning process. Teachers who consistently demonstrate ethical conduct, embodying values such as honesty, fairness, and integrity, serve as vital role models for their students. By embodying these principles, educators provide their students with concrete examples of how to engage with others responsibly and respectfully, thereby upholding the development of these values within their interactions (Solih et al., 2024; Blazar & Kraft, 2016). The classroom becomes a microcosm of ethical behavior, where students learn not only academic content but also vital social skills that will serve them throughout their lives.

Students often view the professional conduct exhibited by educators as a marker of credibility and effectiveness. When teachers display thorough preparedness and demonstrate expertise in their subject matter, they are perceived as more competent and trustworthy (Devis-Rozental & Farquharson, 2020; McGinn, 2018). This perception significantly affects students' overall evaluations of teaching effectiveness, influencing their willingness to engage with the material and the educator. The correlation between perceived teacher competence and student motivation cannot be overstated; students are more likely to invest effort in their learning when they respect and trust their instructors.

In conjunction with ethical conduct, the socioemotional intelligence of educators plays a crucial role in shaping the higher education experience. Teachers who foster a supportive and inclusive learning environment by managing their own emotions effectively and attuning to the emotional states of their students can build strong connections with them (Ruzek et al., 2016). This ability to create a nurturing atmosphere is vital in helping students feel accepted, respected, and actively engaged in the learning process. When students perceive their teachers as empathetic and understanding, they are more likely to participate actively, take intellectual risks, and express their thoughts and feelings without fear of judgment.

The positive dynamics cultivated through socio-emotional intelligence extend beyond the classroom, contributing to the broader fabric of a compassionate and equitable society (Oliveira et al., 2021). Educators who model socio-emotional skills empower their students to develop similar competencies, equipping them with the tools necessary for effective communication, conflict resolution, and collaborative problem-solving. These skills are essential for navigating diverse social contexts and fostering inclusivity in an increasingly complex world.

Moreover, the impact of ethical conduct and socioemotional intelligence on student well-being should not be overlooked. Research indicates that students who experience supportive, ethically grounded relationships with their teachers are more likely to exhibit positive emotional and behavioral outcomes. They tend to demonstrate higher levels of motivation, increased academic performance, and improved social interactions. The emotional climate of the classroom, shaped by the teacher's behaviors and attitudes, is, therefore, a significant determinant of student success.

Given the profound implications of ethical conduct and socio-emotional intelligence in education, institutions must prioritize the professional development of teachers in these areas. Providing training opportunities focused on ethical decision-making, effective communication, and emotional intelligence can enhance educators' abilities to create positive and inclusive learning environments. Such training can include workshops, seminars, and collaborative learning experiences that allow teachers to practice and reflect on their interpersonal skills.

Incorporating ethical and socio-emotional competencies into teacher evaluation processes can further reinforce the importance of these factors in educational effectiveness. Evaluations that assess not only pedagogical skills but also interpersonal qualities and ethical behavior provide a more comprehensive view of teaching effectiveness.

This approach encourages educators to cultivate these competencies and highlights their significance in the overall learning experience. This dual emphasis enhances the overall educational experience, preparing students to thrive in an interconnected and diverse society. Such an approach not only benefits individual students but also contributes to the development of a more compassionate, equitable, and just society where individuals are equipped to engage thoughtfully and respectfully with one another.

3.6 Student-Centric SET Process and Instrumentation

As highlighted previously, traditional SET tools and processes often fall short of capturing the multifaceted dimensions of effective teaching, particularly from the student's vantage point, leading to a disconnect between educators and learners in their understanding of what constitutes quality instruction, especially in higher education. Addressing this lacuna necessitates, then, the development of student-centric SET frameworks and tools that incorporate student-perceived factors that significantly impact student learning experiences. Hence, the development of a student-centric SET process and instrumentation is recommended to genuinely reflect students' perspectives, experiences, and needs, thereby providing more actionable insights for improving teaching practices and enhancing the effectiveness of teaching in higher education.

Table 3. *Proposed Student-centric SET Items focusing on the Student-perceived Factors of Effective Teaching in Higher Education*

Factors	Items
Transformative and Critical Pedagogical Practices	The instructor presented different viewpoints on the course topics.
	The course activities kept me engaged in learning.
	The course material related to real-world situations helped me understand why it matters.
	The instructor led discussions well, so I felt comfortable sharing my thoughts.
	Assignments made me think more deeply and improve my problem-solving skills.
	The instructor encouraged us to question things, which helped me better understand the material.
	This course made me reflect on my role in broader issues.
	The instructors showed a passion for what they were teaching.
	This course helped me see how the material connects to my future career.
Optimized Learning Support and Resources	The instructor helped me connect my previous experience to the topic.
	The instructor provided us with resources that catered to what I needed to learn.
	The instructor explained the concepts clearly, which helped me understand the more challenging ideas.
	The instructor was easily accessible and provided help when I needed it.
	The instructor gave helpful feedback that helped me improve.
	The course materials were organized and made easy to find.
	The instructor provided chances to work with other students, which helped me learn.
	The instructor effectively used tools, such as slides and the board, to explain ideas.
	The instructor clearly defined what I needed to study, which helped me succeed.
Ethical Conduct and Socio-Emotional Intelligence	The instructor designed the course to help students learn.
	The instructor linked ideas from different courses and subjects.
	The instructor treated everyone fairly and with kindness, which made the class better.
	The instructor kept the class focused, allowing us to learn without distractions.
	The instructor made me feel respected, which created a good learning environment.
	The instructor graded relatively, so I felt the assessments were just.
	The instructor demonstrated an understanding of the diverse backgrounds of different students, making the course more welcoming.
	The instructor addressed sensitive topics thoughtfully, encouraging respectful discussion.
	The instructor listened to different opinions, ensuring that everyone felt heard.
	The instructor showed that they are still learning in their field, which was inspiring.
	The instructor made me feel like my learning was important.
	The instructor ensured I understood what I needed to improve to achieve better results.

The theoretical foundation for a student-centric SET process is grounded in the principles of transformative learning, constructivist pedagogy, and socio-emotional learning. By focusing on the dimensions of Transformative and Critical Pedagogical Practices, Optimized Learning Support and Resources, and Ethical Conduct and Socio-Emotional Intelligence, the SET process can be restructured to prioritize student engagement, personalized learning, and ethical interactions. Transformative learning theory emphasizes the importance of critical reflection and active engagement in the learning process, encouraging students to question assumptions, explore new perspectives, and develop higher-order thinking skills (Mezirow, 1997, as cited by Stansberry, 2020). In practice,

SET instruments should include questions that assess the extent to which instructors integrate critical thinking, problem-solving, and independent thought. Constructivist pedagogy highlights the importance of providing adequate resources and support to facilitate meaningful learning experiences, advocating for the integration of technology and diverse instructional materials to cater to different learning styles (Piaget, 1972, as cited by Shah, 2019). SET instruments should evaluate the availability and effectiveness of learning resources provided by the instructor. Socio-emotional learning theory emphasizes the importance of emotional intelligence and ethical behavior in fostering a supportive and inclusive learning environment, with a focus on developing interpersonal skills, empathy, and ethical decision-making (Goleman, 1995, as cited by Schonert-Reichl, 2021). SET instruments should include items that assess the instructor's ethical conduct and socio-emotional intelligence.

To effectively implement a student-centric SET process, institutions can take practical steps, such as involving students in SET design, using student-friendly language, incorporating open-ended questions, and preparing students for constructive feedback. Conducting focus groups and surveys to gather students' input on what aspects of teaching they find most impactful and relevant can help design SET instruments that address specific areas of interest to students. Framing questions in a way that resonates with students' everyday experiences, avoiding technical jargon or instructor-centric terms, can help students provide more accurate and meaningful feedback. Including open-ended questions that allow students to elaborate on their responses can provide deeper insights into students' perceptions and experiences. Providing orientation sessions or instructional materials that explain the purpose of SETs, the importance of honest and thoughtful responses, and how their feedback will be used to enhance teaching and learning can mitigate potential biases and improve the reliability of the data collected.

3.7 Further Implications

The dimensions identified in this study highlight the importance of adopting a contextualized and personalized approach to teaching, even in higher education. To genuinely promote lifelong learning, HEIs must prioritize responsive and critical pedagogies, not only to meet industry demands but also to empower learners to become valuable contributors to society. Effective teaching in higher education, therefore, goes beyond knowledge transfer and specialized skill instruction. It also incorporates reflective practices that enable learners to take ownership of their success. Furthermore, pedagogical innovation, effective resource management, and the cultivation of value systems should be key priorities for HEIs to achieve these objectives.

The shift towards a student-centric SET process has broader implications for the overall educational experience. By prioritizing students' perspectives, institutions can foster a more inclusive and responsive learning environment, ultimately enhancing the quality of teaching and learning. Insights from a student-centric SET process can inform the design of professional development programs that address the unique needs and challenges faced by educators. By identifying specific areas for improvement based on student feedback, institutions can offer targeted training and support to help educators refine their teaching strategies. The data collected from a student-centric SET process can inform institutional policies and practices, ensuring that they align with students' needs and preferences. For example, suppose students consistently highlight the need for more interactive and engaging teaching methods. In that case, institutions can prioritize the adoption of innovative pedagogical approaches, such as flipped classrooms or project-based learning. By involving students in the design and implementation of evaluation tools, institutions can create a more dynamic and effective learning environment. This approach not only empowers students to take an active role in shaping their educational journey but also ensures that their feedback directly contributes to the enhancement of teaching practices.

In line with this, teacher development programs should focus on these factors across all fields of specialization. These programs could include courses on inclusive educational practices in higher education, critical and responsive pedagogies, and advancements in educational technology. Moreover, teacher evaluation systems must acknowledge the interconnected nature of these dimensions when shaping educational policies that are both comprehensive and contextualized. Ultimately, these findings point to the need for a personalized curriculum in higher education, one that strives not only for professional proficiency but also for purposeful contributions to society.

4.0 Conclusion

Higher education must embrace a meaningful and holistic approach, ensuring that the educational journey is not merely a pathway to career readiness but also a catalyst for personal growth and self-determinism. An integrative framework for higher education promotes the development of well-rounded individuals who are equipped to navigate the complexities of modern life. As such, effective teaching in higher education should be designed to empower students, preparing them not only to meet the demands of their respective industries but also to adapt to the inevitable changes and challenges that life may present. This adaptability is crucial in today's rapidly evolving world, where the ability to learn, unlearn, and relearn is paramount.

The reimagining of the Student Evaluation of Teaching (SET) process to be more student-centric is essential for enhancing teaching effectiveness and improving the overall educational experience. By focusing on the dimensions of Transformative and Critical Pedagogical Practices, Optimized Learning Support and Resources, and Ethical Conduct and Socio-Emotional Intelligence, institutions can create evaluation tools that genuinely reflect students' perspectives and needs. Practical steps such as involving students in SET design, using student-friendly language, incorporating open-ended questions, and preparing students for constructive feedback can help achieve this goal. The broader implications of a student-centric SET process include more targeted professional development for educators, informed institutional policies, and a more inclusive and responsive learning environment. This approach aligns with the Sustainable Development Goals (SDGs) and prepares students to thrive in an increasingly complex and interconnected world.

To enhance the robustness of the findings from this research, a newly developed SET instrument has been introduced. This instrument is designed to incorporate the latent factors identified in the study, ensuring that it reflects the essential elements of effective teaching. By utilizing this tool, institutions can conduct Confirmatory Factor Analysis, which will further validate the constructs presented in this study and solidify their relevance in assessing teaching effectiveness.

Furthermore, the findings and the application of the SET instrument are integral to extending this research to other higher education populations. By exploring the cross-disciplinary implications of these results, educators and researchers can gain deeper insights into how effective teaching practices can be tailored to different fields of study. This broader investigation will not only enhance the understanding of effective teaching but also contribute to the ongoing improvement of educational practices across diverse academic contexts, ultimately fostering an environment where students are better equipped for both personal and professional success.

5.0 Contributions of Authors

Dinamling, SK – conceptualization, literature review, research design, data collection, manuscript writing, revision and editing
Depaynos, J – conceptualization, literature review, research design, data analysis, manuscript writing, revision and editing

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7.0 Conflict of Interests

The authors declare that they have no conflicts of interest in the study.

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