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A conceptual framework for analysing the impact of influences on student engagement and learning

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The notion that ‘customer satisfaction’ should be the ultimate measure of quality provision of any service organization is often accepted in the higher education context. However, measuring the quality of an educational institution based on students’ satisfaction is insufficient as it diverts the focus from student development, advancement and growth to an affective evaluation of the service. More appropriate measures of quality of higher education institutions are student engagement and learning. This study describes the likely impact of perceived overall quality of higher education institutions on student engagement. The contribution of this study is twofold. First, it draws attention to the importance of higher education institution quality as the main institutional-level determinant of student engagement and, second, it suggests a comprehensive multilevel conceptual framework for its empirical testing.

Keywords: student engagement; student learning; quality of provision; satisfaction

Introduction

The competitive landscape of higher education institutions has dramatically changed in recent years (McKelvey & Holmen, 2009). In an effort to become more competitive, higher education institutions have long considered their transformation into business-like organizations. The introduction of a variable fee system in higher education has further propelled the idea that students can be viewed as customers (Eagle & Brennan, 2007). This has led to the adoption of business practices in the core of their provision. The acceptance of business practices in higher education institutions has ignited an extensive debate about the appropriateness of the application of a ‘student-as-customer’ approach and how to specify the role of students in the system (Hewitt & Clayton, 1999; Owlia & Aspinwall, 1996; Vouri, 2013). For example, it has been argued that the ‘student-as-customer’ concept is:

Neither wholly flawed, nor a panacea for the higher education system – it is something in between. (Eagle & Brennan, 2007, p. 56)

Although the issue is still debated, one consequence of this shift is that the quality of higher education provision has been put in the spotlight by prospective students and stakeholders alike. In addition, higher education institutions have become increasingly interested in effectively managing students’ perceptions of education quality. Research

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findings indicate that there is a positive relationship between quality and satisfaction (Gruber, Fuß, Voss, & Glaser-Zikuda, 2010; Kara & DeShields, 2004; Lazibat, Baković, & Dužević, 2014; Mikulić, Dužević, & Baković, 2014; Sarrico & Rosa, 2014; Sultan & Wong, 2010). According to Quershi, Shaukat, and Hijazi (2010, p. 282):

To satisfy and motivate students is one of the primary purposes in education sector in order to get maximum output. Satisfied students are source of competitive advantage and product of inspiration for newcomers and prospective future intake.

However, measuring only student satisfaction as a main indicator of quality is not enough. Students can be satisfied with the provided service, but their knowledge, skills and competence can, at the same time, be unsatisfying. One suggestion is that higher education institutions' provision should aim not only at students' satisfaction, but also at the enhancement of engagement, and consequently students' learning and development. If this is achieved, students are more likely to be satisfied. This is in accordance with Tam's statement that quality in higher education can be best defined as the positive impact of university experiences on student outcomes (2006, p. 75). The aim of this study is to define how higher education institutions can improve students' engagement, development and growth. To meet this aim, a conceptual framework for delineating the influences of quality management practices on students' engagement and learning was developed. This is a theoretical paper intended to provide a conceptual basis for further empirical analysis.

Literature suggests that if a student is more engaged, then she/he will be more satisfied (Newswander & Borrego, 2009; Umbach & Porter, 2002; Zhao & Kuh, 2004). More engaged students achieve better learning outcomes (Astin, 1993; Gray, Swain, & Rodway-Dyer, 2014; Hytti, Stenholm, Heinonen, & Seikkula-Leino, 2010; Lizzio, Wilson, & Simons, 2002; Pascarella, Pierson, Wolniak, & Terenzini, 2004; Tinto, 1997; Umbach & Wawrzynski, 2005; Wolf-Wendel, Ward, & Kinzie, 2009), and students' achievements are positively related to students' satisfaction (Duque & Weeks, 2010; Strauss & Volkwein, 2004; Umbach & Porter, 2002). Most of the previous studies of student engagement focused on the effect of students' characteristics and behaviours on their engagement (Pike & Kuh, 2005; Zhao & Kuh, 2004), and only a few focused on the institutional impact (Porter, 2006). However, the relationship between perceived quality of provision and student engagement has not been tested. Indeed, the engagement studies include some aspects of quality, such as student interactions with faculty members, or the campus environment, but those issues are related only to academics and access attributes of quality. Therefore, a wider analysis could improve understanding of the relationship between institutional quality and student engagement.

Based on the literature review, a conceptual framework that integrates theories of student involvement, integration and engagement with market-oriented theories of students' satisfaction is proposed. Student engagement is introduced as a dependent variable in the model, because it is the best predictor of students' learning and development. The framework is hierarchically structured with two levels of analysis: institutional and individual. Institutional-level influences include typical variables from the student engagement literature, such as institutional characteristics and average students' results at the higher education institution. Moreover, it is proposed that average teachers' job satisfaction and perceived quality at the higher education institution may affect student engagement. Students' demographic characteristics, entry competences, experiences at the higher education institution and their perceived service quality are

individual-level variables. In this part of the framework, it is proposed that students' perceived quality of provision may affect engagement.

This framework may help administrators in higher education to recognize how different individual and institutional variables influence student engagement, and integrate their quality enhancement activities with activities for teaching and learning development.

Literature review

Service quality and students' perceptions

Quality in higher education is a complex concept. Because a consensus concerning a definition of quality does not yet exist, problems arise with measuring quality. However, measuring quality in higher education is increasingly important (Brocado, 2009; Sultan & Wong, 2010). Following a common conclusion in the higher education quality literature that customer focus and customer satisfaction are major drivers towards better quality (Kara & DeShields, 2004; Rønsholdt & Brohus, 2014), studies should focus on students' perceptions of provided services. Appleton, Christenson, and Furlong (2008, p. 369) provide an interesting account of the significance of students' perceptions, noting:

Laws may regulate the structure of the educational system, but student perspectives and experiences substantially influence academic and social outcomes.

Joseph, Yakhou, and Stone (2005) pointed out that research on quality in higher education has relied too strongly on input from academic insiders, while excluding input from the students themselves. Students' perceptions are needed as quality of provision cannot be objectively measured (Gruber et al., 2010), and only criteria defined by the customers count in measuring quality (Zeithaml, Parasuraman, & Berry, 1990).

Based on the student-as-the-customer paradigm, service quality is usually measured by the customers' ratings of service quality attributes. In the service quality literature, attributes are divided into five general categories: tangibles, reliability, responsiveness, assurance and empathy (Parasuraman, Zeithaml, & Berry, 1985). In the higher education context, service quality attributes include academic aspects, non-academic aspects, accessibility and reputation (Brocado, 2009; Firdaus, 2006; Lazibat et al., 2014). Academic aspects include the knowledge and courtesy of academic staff, and their ability to convey trust and confidence. Non-academic aspects relate to the support staff and services at the higher education institution, and their ability to perform the promised services dependably and accurately. Accessibility is related to staffs' willingness to help students and provide caring, individualized attention. The reputation of the higher education institution includes the appearance of the physical facilities, institutional tradition and recognizability, and the quality of the study programmes offered.

Perceived quality of provision is widely analysed in the higher education literature. It is connected to students' satisfaction (Duque & Weeks, 2010; Gruber et al., 2010), based on the theoretical frameworks and experiences from the business sector. Although students' satisfaction is an important measure for higher education institutions, because it is related to the institutional results (Kara & DeShields, 2004), other measures may be equally important. In particular, Bringle and Hatcher (2009), Donald and Denison (2001), Severiens and Schmidt (2009) and Tam (2002, 2006) highlighted the need to focus on student engagement and learning maximization. Some studies found a positive

effect of quality on student development and growth (Duque & Weeks, 2010; Tam, 2006). However, other authors argue that these findings have not changed institutional results and that more research is needed:

What is needed and what is not yet available is a model of institutional action that provides guidelines for the development of effective policies and programs that institutions can reasonably employ to enhance the persistence of all their students. (Tinto, 2006–2007, pp. 6–7)

Student engagement and learning

Student engagement is a very important issue for higher education institutions as it influences educational outcomes. It has an influence on learning outcomes, students' achievement, persistence and integration, satisfaction, development and growth (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008; Wolf-Wendel et al., 2009; Zhao & Kuh, 2004). Trowler (2010, p. 1) emphasized the importance of student engagement:

higher education institutions facing increasingly straitened economic conditions, attracting and retaining students, satisfying and developing them and ensuring they graduate to become successful, productive citizens matters more than ever.

In European higher education systems, the term student engagement is rarely used, and is connected to other traditions, such as student feedback, representation and approach to learning (Trowler, 2010).

Three theories mostly influenced today's works on student engagement: Astin's (1993) theory of student's involvement, an input-environment-outcomes model; Tinto's (1993) theory of integration and model of student retention; and Pascarella and Terenzini's (2005) model of the university's impact on students. Theories of student involvement, engagement, integration and retention provide useful information for researchers and policy-makers, but there are still issues that require further analysis. Higher education institutions are still struggling with low rates of graduation and high rates of student dropouts. Hence, institutional quality systems should focus more on issues such as student engagement and learning. Coates (2005, p. 32) argues that information about student engagement has a significant role in quality assurance, because it provides information for a higher education institution's management. Trowler (2010, p. 26) also emphasizes the importance of engagement for quality:

Engagement is a reliable proxy for learning; actual learning is a good indicator of quality; hence, engagement data are useful in determining quality.

Many studies related to student engagement have found that engaging environments have the highest impact on students' results (Trigwell & Ashwin, 2006; Umbach & Porter, 2002; Zhao & Kuh, 2004). Institutional aspects related to student engagement, such as students' support and quality of relationships, are closely related to quality programs. Kuh (2009a, p. 685) pointed out:

What the institution does to foster student engagement can be thought of as a margin of educational quality.

Hence, it is proposed that higher education institutions' *quality activities can enhance student engagement*, and engaged students will achieve better results.

Conceptual framework

A conceptual framework for delineating influences of quality and other institutional and individual factors on student engagement is proposed. The perceived quality of provisions and academic staff satisfaction are introduced as important determinants of student engagement. The conceptual model is based on elements from Porter's (2006) research on the impact of institutional structure on student engagement. Introducing quality attributes into the student engagement model should improve understanding of the relationship between quality and engagement, and identify possible measures to improve students' learning. More specifically, it could reveal if higher education institutions' quality practices and strategies enhance student engagement and define which quality attributes are the most significant.

This proposed conceptual framework (see Figure 1) is hierarchically structured and requires the exploration of multilevel relationships. Many studies have used multilevel techniques to analyse student commitment, persistence, engagement and satisfaction in an educational context (Porter, 2006; Rowe, 2003; Strauss & Volkwein, 2004; Umbach & Porter, 2002; Umbach & Wawrzynski, 2005). It is assumed that introducing quality of provision and teachers' satisfaction into the engagement model may improve understanding of student engagement. We also assume that main and cross-level interaction effects lead to the set of testable propositions.

Institutional-level factors

The institution's role in student engagement is significant. Learning is a shared responsibility between students and higher education institutions (Nelson Laird, Shoup, Kuh, & Schwartz, 2008). Higher education institutions can create engaging environments for students. Many studies have shown how institutional factors, such as size and density, location, type, expenditures per student, research emphasis, mission and selectivity, academic staff and discipline affect student engagement (Kezar & Kinzie, 2006; Nelson Laird et al., 2008; Pike, Kuh, & McCormick, 2011; Porter, 2006; Strauss & Volkwein, 2004; Umbach & Porter, 2002; Umbach & Wawrzynski, 2005; Zhao & Kuh, 2004).

According to Porter (2006), previous research indicates that institutional characteristics have a significant influence on students' engagement. However, with the introduction of new variables, he showed that an institution's structures affect student engagement in predictable and substantively significant ways. The following institutional characteristics were analysed in Porter's model: location (urban or suburban), expenditure per student, institutional density (faculty and students per acre), differentiation of the curriculum (number of majors), selectivity (average scholastic aptitude test (SAT) scores) and research orientation (% of PhD degrees, % of MA degrees and % of undergraduate professional degrees). According to Porter's results, increased expenditures per student, a higher number of majors, student density and PhD degrees awarded had a negative influence on student engagement. Positive influences were found for the following variables: higher average SAT scores, faculty density and undergraduate professional degrees awarded. Aggregate perceived quality of provision is also believed to have a positive effect on students' engagement. This measures students' beliefs and attitudes about the institutional climate. This notion is based on previous findings that institutional climate plays a mediating role in the relationship between quality and student achievements (Gray et al., 2014; Lazibat et al., 2014; Uline & Tschannen-Moran, 2008). In addition to Porter's institutional variables and aggregate quality perceptions, teachers'

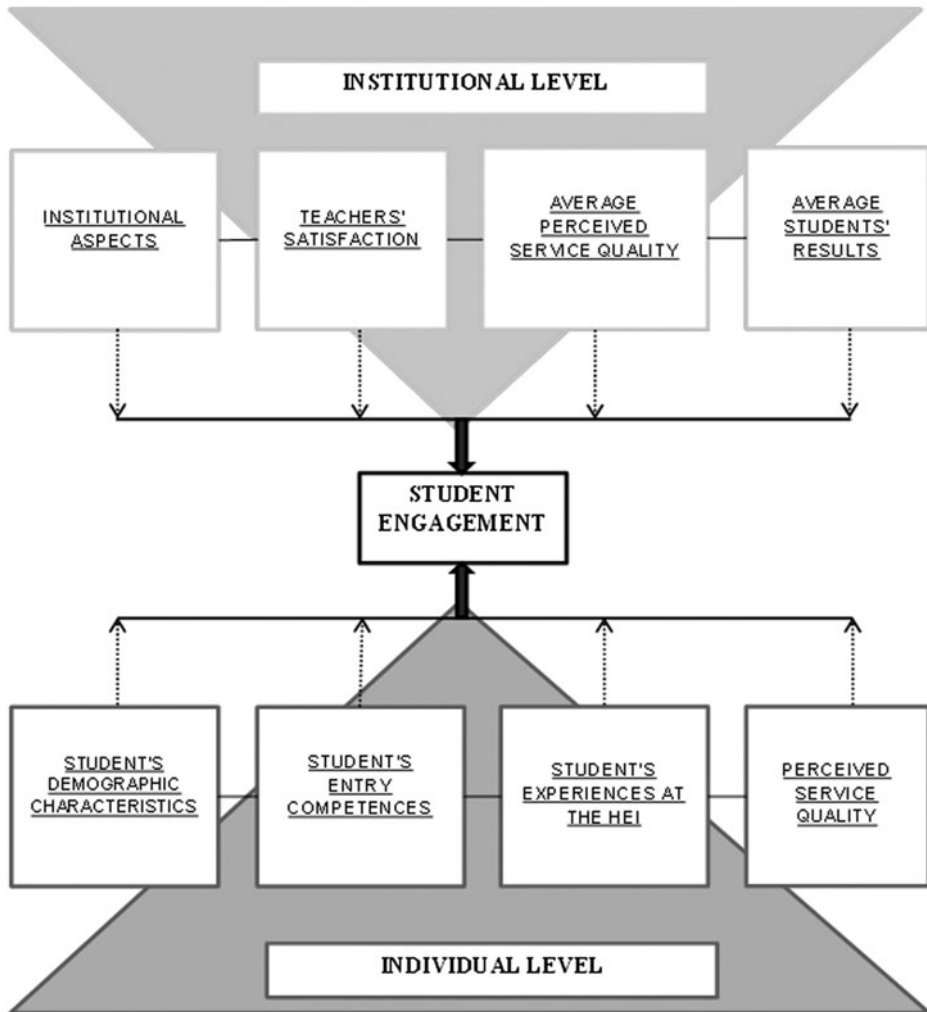


Figure 1. Conceptual framework of influences on student engagement.

job satisfaction is added at the institutional level. It is proposed that teachers' satisfaction positively influences students' engagement.

Proposition 1. Teachers' job satisfaction affects students' engagement

Development of quality assurance will need to recognize the 'increasingly diverse nature of higher education' and develop new cultures based on individual staff member 'innovation and self-improvement' (Hodson & Thomas, 2003, p. 375). Thus, academic staff have considerable responsibility in today's higher education systems; they play an important role in the higher education institution's success (Chen, Yang, Shiau, &

Wang, 2006; LeBlanc, London, & Huisman, 2013; Snipes, Oswald, LaTour, & Armenakis, 2005) and their approaches towards work and teaching influence students' approaches to learning and successful outcomes (Umbach & Wawrzynski, 2005). Rowe (2003, p. 19) highlighted the need to include teachers in the hierarchical relationship model, noting:

School organization factors influence how teachers conduct their work and how they teach. In turn, teachers' practices influence students' learning.

Moreover, Porter (2006, p. 552) emphasized:

It is clear that more detailed information about faculty behaviour is needed to understand the relationship between the research emphasis of an institution and student engagement.

Teachers' job satisfaction and provided support positively affect efficacy and behaviour (Chang, McKeachie, & Lin, 2010; Newswander & Borrego, 2009; Rosser, 2004; Ryan, Burgess, Connell, & Egbert, 2013). Moreover, satisfied, motivated and efficient teachers will encourage students to engage in educationally purposeful activities that will increase students' outcomes (Chen et al., 2006; Kember, 2009; Rosser, 2004). Therefore, it is proposed that *teachers' job satisfaction should have considerable impact on students' engagement*.

Individual-level factors

The influence of students' personal characteristics – such as gender, age, race, parental level of education, enrolment status, financing, living on campus, transfer students, marital status and children, academic major and student academic performance, including previous results from high school and current results – on engagement has been widely analysed in the literature (Pascarella et al., 2004; Pike & Kuh, 2005; Strauss & Volkwein, 2004; Umbach & Porter, 2002; Zhao & Kuh, 2004). Kuh (2009b, p. 15) pointed out the importance of student background information and conditional effects of engagement because:

students with certain characteristics benefiting from some types of activities more so than other students.

Furthermore, Porter (2006, p. 522) argued that:

Without appropriate measures of student pre-college characteristics, we cannot tell how much of the variation in engagement outcomes across institutions is due to differences in student bodies, and how much is due to the institutions themselves.

Based on the results of previous studies, individual-level factors are divided into four categories: student's demographic characteristics (age, gender, race and parents' level of education), student's entry competences (average grade in high school and results of higher education admission tests), experience at the higher education institution (enrolment status, year of study, academic major, membership in student associations, learning communities or sport groups and academic performance) and perceived service quality.

Proposition 2. Perceived quality of provision affects students' engagement

This study uses four attributes to analyse perceived quality of provision, namely: academic, non-academic, reputation and accessibility.

Academic attributes include competences, attitudes and behaviours of academic staff. This quality attribute is related to students' perceptions of teachers' interest and willingness to help, their feedback and time provided for consultations, and suitability of teachers' knowledge for answering students' questions (Firdaus, 2006). This attribute should be highly correlated to all aspects of engagement as teachers have a significant influence on students' engagement (Chang, McKeachie, & Lin, 2010; Hodson & Thomas, 2003; Koljatic & Kuh, 2001; Rosser, 2004; Trigwell & Ashwin, 2006). Teachers set expectations for student performance in the classroom and define levels of academic challenge. Furthermore, they encourage students to think about and apply what they learn (Lizzio et al., 2002; Nelson Laird et al., 2008); teachers can create a classroom environment that encourages teamwork, discussions and participation (Hytti et al., 2010; Trigwell, Prosser, & Waterhouse, 1997), and consequently fosters active and collaborative learning. Teachers' role in building good interactions with students is also very important (Kara & DeShields, 2004; Koljatic & Kuh, 2001; Umbach & Wawrzynski, 2005). Teachers can include students in their research projects and other extracurricular activities; they can motivate students to engage in different learning opportunities inside and outside the classroom (Hytti et al., 2010). Therefore, it is proposed that *academic aspects of quality have a significant influence on students' engagement*.

Non-academic attributes consist of the attitudes and behaviours of non-academic staff at the higher education institution, and the organization of the support activities for students, such as opening hours of administrative offices, dealing with inquiries and complaints, record management and procedures, and timely responses to student requests (Firdaus, 2006). This attribute of quality mostly relates to the organization of a supportive educational environment and enriching students' educational experiences. The attribute also includes course organization that influences students' attitudes and behaviours towards the institution (Quershi et al., 2010). Administrative staff are responsible for the provision of all relevant information about the organization of the educational and different extracurricular activities. If students can easily get all needed information, and if procedures for participation are simple, students are more likely to participate in educational and extracurricular activities (Kezar & Kinzie, 2006). In addition, positive attitudes of administrative staff, and their willingness to help, lead to supportive educational environments (Kara & DeShields, 2004; Kuh et al., 2008; Trigwell, Prosser, & Waterhouse, 1997) that will positively affect students' engagement. To summarize, *non-academic aspects of quality should have a considerable impact on students' engagement activities that depend on institutional support*.

Reputation consists of institutional image, quality and reputability of academic programmes, employability of graduates, and institutional facilities and location (Brocado, 2009; Firdaus, 2006). This quality attribute should impact in enriching students' educational experiences as it includes items related to opportunities for students to engage in sports activities, social and cultural groups and events. If higher education institutions provide more opportunities for students to engage in extracurricular activities, students' engagement results will be better (Sung & Yang, 2009). Availability of institutional facilities and resources is also important for student engagement and achievement (Duque & Weeks, 2010; Newswander & Borrego, 2009; Uline & Tschannen-Moran, 2008). Newswander and Borrego (2009, p. 554) point out that:

Financial and institutional support also facilitates engagement by freeing up time and providing incentive.

In addition, institutional image, quality and reputability of programmes and employability of graduates should have a positive impact on student engagement (Sung & Yang, 2009). Sung and Yang (2009, p. 804) found that:

University reputation also has a highly significant relationship with students' supportive behavioural intentions toward the university.

Hence, *theoretical foundations justify the suggestion of a relationship between reputation and students' engagement.*

Accessibility refers to approachability of academic staff and their treatment of students, counselling services, institutional attitude towards students' unions and students' feedback, and the higher education institution's procedures (Firdaus, 2006). If teachers are easily contacted and provide timely and appropriate responses, their interaction with students will be better, and it will have positive impact on students' engagement (Kara & DeShields, 2004; Umbach & Wawrzynski, 2005). Zhao and Kuh (2004) and Kuh et al. (2008) emphasized the importance of advising services for students' engagement. Appropriate institutional procedures can also positively affect students' engagement (Kezar & Kinzie, 2006; Lizzio et al., 2002). Appleton et al. (2008, p. 380) pointed out that 'school policies and practices can (and in some situations must) foster engaging climates'. Institutional attitudes can have a significant influence on students' engagement (Sung & Yang, 2009). Institutional support for student unions and learning communities should encourage student integration and engagement (Pike et al., 2011; Strauss & Volkwein, 2004; Zhao & Kuh, 2004). Moreover, if institutions value students' feedback and use it to improve performance and provide information about improvement activities to students, students will be motivated to participate in evaluation activities, and discuss these with other students or institutional members (Rowe, 2011). Finally, it is suggested that *accessibility has a considerable impact on students' engagement.*

Discussion

This study argues that quality management systems of higher education institutions should aim at students' learning and development. Because student engagement is the best predictor of learning and growth, quality management practices at higher education institutions should be focused on students' engagement. In the higher education context, it is very difficult to change students' behaviours and outcomes. Hence, even small institutional effects are important (Porter, 2006). Umbach and Wawrzynski (2005, p. 154) point out that:

Traditional 'quality measures' (e.g. selectivity in admissions, the number of PhDs among the faculty, library holdings, financial resources, and institutional prestige from faculty research) ... have become increasingly suspect in terms of their validity to measure excellence in undergraduate education.

Therefore, it is proposed that quality management practices of the higher education institution should have a positive effect on student engagement, and consequently their development and growth.

The proposed conceptual framework provides a method for the analysis of the relationship between quality of provision and student engagement. Engagement surveys (such as the National Survey of Student Engagement) were designed to provide another gauge of academic quality (Trowler, 2010), and some aspects of higher education institutions' quality are already included, such as student interactions with academic staff or the campus environment. However, many other quality aspects have not been included.

The approach in this study is based on institutional structure data, the student engagement literature, perceived service quality attributes and teachers' job satisfaction. The proposed framework includes quality of provision and teachers' satisfaction in the engagement model. Introduction of these variables can improve understanding of the institutional role in student engagement. Moreover, the majority of student engagement studies have focused mainly on the student's characteristics and used institutional factors only as control variables (Lizzio et al., 2002; Pike & Kuh, 2005; Zhao & Kuh, 2004).

The proposed research framework should reveal if certain quality attributes of higher education institutions have a positive or negative influence on student engagement. For example, if accessibility is positively related to student engagement, then institutional leadership may introduce strategies for enhancing counselling services and approachability of academic staff. Similarly, the proposed framework can be used to determine if teachers' job satisfaction affects engagement: if so, leadership should implement practices to empower and satisfy academic staff. Another result from the implementation of the proposed framework is to place quality among other engagement determinants (student's background characteristics and institutional structure). Implementation of the proposed framework could help leadership to improve strategies for quality and engagement, and consequently to achieve better student results.

This paper connects the two theoretical approaches aimed at analysing higher education performance from the students' perspective. It connects service quality literature, that is mostly based on a marketing approach and focused on students' satisfaction, and theories of student learning and development (such as student integration, involvement, engagement and retention) that are focused mostly on the learning and teaching processes and personal development. Moreover, introducing teachers' satisfaction at the institutional level, and perceived service quality at the individual level, extends a conceptual framework for the examination of institutional and individual influences on student engagement. Application of this framework enables simultaneous analysis of the issues related to service quality and students' learning and development.

Finally, it is important to point out limitations of the proposed framework. First, self-reports are proposed to measure quality of provision and student engagement. Although there are some concerns about the use of self-reported measures, objective measures are uninformative for the purpose of this study as these measures cannot reveal the effects of some institutional or personal characteristics on the students' engagement (Umbach & Wawrzynski, 2005). For example, poor graduation rates can only indicate that students are disengaged, but cannot explain what aspects of engagement are unsatisfying. Well-designed student surveys can provide insights into the student experience that cannot be obtained from other sources, such as self-estimations of students' abilities to interact with others or a change in students' values during study (Carini, Kuh, & Klein, 2006). Second, there is a problem of causal ambiguity. On the one hand, quality of provision creates an environment in which students can be more engaged. On the other hand, the engaged student is more likely to have higher perceptions of institutional quality. Therefore, one should be very careful when drawing conclusions about these relationships. The propositions and relationships in the proposed

conceptual framework need further empirical analysis in order to test their relevance and applicability in specific higher education contexts.

Conclusion

This study proposed a new approach to the analysis of students' engagement and quality of provision. It argued that focusing only on student satisfaction is uninformative and insufficient for quality improvement (Bringle & Hatcher, 2009; Donald & Denison, 2001; Tam, 2002). The focus of higher education institutional provision should be on students' engagement and learning maximization. Student development and learning are best predicted by student engagement (Carini et al., 2006). Therefore, a conceptual model for the analysis of the influences of quality of provisions on student engagement is proposed.

The proposed conceptual framework of individual and contextual factors of student engagement provides a comprehensive set of determinants for their empirical testing. A multilevel linear approach is suggested. Analysis of the proposed interactions should reveal useful information about institutional performance. At the individual level, it should highlight the attributes of institutional qualities that have the highest influence on students' engagement. It will show if quality of provision is more important than other individual and contextual factors related to student engagement. At the institutional level, analysis should reveal which quality of provisional attributes has the highest influence on student engagement, and how teachers' satisfaction influences student engagement. Accordingly, institutional leadership can use this conceptual framework to improve their strategies and policies, and to focus on the most important issues for their students.

References

- Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools, 45*, 369–386. doi:10.1002/pits.20303
- Astin, A. (1993). *What matters in college: Four critical years revisited*. San Francisco, CA: Jossey-Bass.
- Bringle, R. G., & Hatcher, J. A. (2009). Innovative practices in service-learning and curricular engagement. *New Directions for Higher Education, 147*, 37–46. doi:10.1002/he.356
- Brocado, A. (2009). Comparing alternative instruments to measure service quality in higher education. *Quality Assurance in Education, 17*, 174–190. doi:10.1108/09684880910951381
- Carini, R. M., Kuh, G. D., & Klein, S. P. (2006). Student engagement and student learning: Testing the linkages. *Research in Higher Education, 47*, 1–32. doi:10.1007/s11162-005-8150-9
- Chang, T. S., McKeachie, W., & Lin, Y. G. (2010). Faculty perceptions of teaching support and teaching efficacy in Taiwan. *Higher Education, 59*, 207–220. doi:10.1007/s10734-009-9243-8
- Chen, S. H., Yang, C. C., Shiau, J. Y., & Wang, H. H. (2006). The development of an employee satisfaction model for higher education. *The TQM Magazine, 18*, 484–500. doi:10.1108/09544780610685467
- Coates, H. (2005). The value of student engagement for higher education quality assurance. *Quality in Higher Education, 11*, 25–36. doi:10.1007/s10734-009-9281-2
- Donald, J. G., & Denison, D. B. (2001). Quality assessment of university students: Student perceptions of quality criteria. *The Journal of Higher Education, 72*, 478–502.
- Duque, L. S., & Weeks, J. R. (2010). Towards a model and methodology for assessing student learning outcomes and satisfaction. *Quality Assurance in Education, 18*, 84–105. doi:10.1108/09684881011035321
- Eagle, L., & Brennan, R. (2007). Are students customers? TQM and marketing perspectives. *Quality Assurance in Education, 15*, 44–60. doi:10.1108/09684880710723025

- Firdaus, A. (2006). The development of HEDPERF: A new measuring instrument of service quality for the higher education sector. *International Journal of Consumer Studies*, 30, 569–581. doi:10.1111/j.1470-6431.2005.00480.x
- Gray, C., Swain, J., & Rodway-Dyer, S. (2014). Student voice and engagement: Connecting through partnership. *Tertiary Education and Management*, 20, 57–71. doi:10.1080/13583883.2014.878852
- Gruber, T., Fuß, S., Voss, R., & Glaser-Zikuda, M. (2010). Examining student satisfaction with higher education services. *International Journal of Public Sector Management*, 23, 105–123. doi:10.1108/09513551011022474
- Hewitt, F., & Clayton, M. (1999). Quality and complexity – Lessons from English higher education. *International Journal of Quality and Reliability Management*, 16, 838–858.
- Hodson, P., & Thomas, H. (2003). Quality assurance in higher education: Fit for the new millennium or simply year 2000 compliant? *Higher Education*, 45, 375–387.
- Hytti, U., Stenholm, P., Heinonen, J., & Seikkula-Leino, J. (2010). Perceived learning outcomes in entrepreneurship education – The impact of student motivation and team behaviour. *Education + Training*, 52, 587–606. doi:10.1108/00400911011088935
- Joseph, M., Yakhou, M., & Stone, G. (2005). An educational institution's quest for service quality: Customers' perspective. *Quality Assurance in Education*, 13, 66–82.
- Kara, A., & DeShields, O. W. (2004). Business student satisfaction, intentions and retention in higher education: An empirical investigation. *Marketing Educator Quarterly*, 3, 1–25.
- Kember, D. (2009). Promoting student-centred forms of learning across an entire university. *Higher Education*, 58, 1–13.
- Kezar, A., & Kinzie, J. (2006). Examining the ways institutions create student engagement: The role of mission. *Journal of College Student Development*, 47, 149–172.
- Koljatic, M., & Kuh, G. D. (2001). A longitudinal assessment of college student engagement in good practices in undergraduate education. *Higher Education*, 42, 351–371.
- Kuh, G. D. (2009a). What student affairs professionals need to know about student engagement. *Journal of College Student Development*, 50, 683–706.
- Kuh, G. D. (2009b). The national survey of student engagement: Conceptual and empirical foundations. *New Directions for Institutional Research*, 141, 5–20. doi:10.1002/ir.283
- Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effect of student engagement on first-year college grades and persistence. *The Journal of Higher Education*, 79, 540–563. doi:10.1353/jhe.0.0019
- Lazibat, T., Baković, T., & Dužević, I. (2014). How perceived service quality influences students' satisfaction? Teachers' and students' perspectives. *Total Quality Management and Business Excellence*, 25, 923–934. doi:10.1080/14783363.2014.916036
- LeBlanc, S., London, C., & Huisman, J. (2013). Using groups to change the department head role: An organization development case. *Tertiary Education and Management*, 19, 127–143. doi:10.1080/13583883.2013.771210
- Lizzio, A., Wilson, K., & Simons, R. (2002). University students' perceptions of the learning environment and academic outcomes: Implications for theory and practice. *Studies in Higher Education*, 27, 27–52. doi:10.1080/03075070120099359
- McKelvey, M., & Holmen, M. (Eds.). (2009). *Learning to compete in European universities – From social institution to knowledge business*. Cheltenham: Edward Elgar.
- Mikulić, J., Dužević, I., & Baković, T. (2014). Exploring drivers of student satisfaction and dissatisfaction: An assessment of impact-asymmetry and impact-range. *Total Quality Management and Business Excellence*. doi:10.1080/14783363.2014.925291
- Nelson Laird, T. F., Shoup, R., Kuh, G. D., & Schwartz, M. J. (2008). The effects of discipline on deep approaches to student learning and college outcomes. *Research in Higher Education*, 49, 469–494. doi:10.1007/s11162-008-9088-5
- Newswander, L. K., & Borrego, M. (2009). Engagement in two interdisciplinary graduate programs. *Higher Education*, 58, 551–562. doi:10.1007/s10734-009-9215-z
- Owlia, M. S., & Aspinwall, E. M. (1996). A framework for the dimensions of quality in higher education. *Quality Assurance in Education*, 4, 12–20.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41–50.

- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *The Journal of Higher Education, 75*, 249–284.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco, CA: Jossey-Bass.
- Pike, G. R., & Kuh, G. D. (2005). First- and second-generation college students: A comparison of their engagement and intellectual development. *The Journal of Higher Education, 76*, 276–300.
- Pike, G. R., Kuh, G. D., & McCormick, A. C. (2011). An investigation of the contingent relationships between learning community participation and student engagement. *Research in Higher Education, 52*, 300–322. doi:10.1007/s11162-010-9192-1
- Porter, S. R. (2006). Institutional structures and student engagement. *Research in Higher Education, 47*, 521–558. doi:10.1007/s11162-005-9006-z
- Quershi, T. M., Shaukat, M. Z., & Hijazi, S. T. (2010). Service quality SERVQUAL model in higher educational institutions. What factors are to be considered? *Interdisciplinary Journal of Contemporary Research in Business, 2*, 281–290.
- Rønsholdt, B., & Brohus, H. (2014). Towards more efficient student course evaluations for use at management level. *Tertiary Education and Management, 20*, 72–83. doi:10.1080/13583883.2014.881912
- Rosser, V. J. (2004). Faculty members' intention to leave: A national study of their worklife and satisfaction. *Research in Higher Education, 45*, 285–309.
- Rowe, A. (2011). The personal dimension in teaching: Why students value feedback. *International Journal of Educational Management, 25*, 343–360. doi:10.1108/09513541111136630
- Rowe, K. (2003, October 19–21). *The importance of teacher quality as a key determinant of students' experiences and outcomes of schooling*. Paper presented at the conference Building Teacher Quality: What does the research tell us? Retrieved November 2011 from http://research.acer.edu.au/research_conference_2003/3
- Ryan, S., Burgess, J., Connell, J., & Egbert, G. (2013). Casual academic staff in an Australian university: Marginalised and excluded. *Tertiary Education and Management, 19*, 161–175. doi:10.1080/13583883.2013.783617
- Sarrico, C. S., & Rosa, M. J. (2014). Student satisfaction with Portuguese higher education institutions: The view of different types of students. *Tertiary Education and Management, 20*, 165–178. doi:10.1080/13583883.2014.900108
- Severiens, S. E., & Schmidt, H. G. (2009). Academic and social integration and study progress in problem based learning. *Higher Education, 58*, 59–69.
- Snipes, R. L., Oswald, S. L., LaTour, M., & Armenakis, A. A. (2005). The effect of specific job satisfaction facets on customer perceptions of service quality: An employee-level analysis. *Journal of Business Research, 58*, 1330–1339. doi:10.1016/j.jbusres.2004.03.007
- Strauss, L. C., & Volkwein, J. F. (2004). Predictors of student commitment at two-year and four-year institutions. *The Journal of Higher Education, 75*, 203–227.
- Sultan, P., & Wong, H. Y. (2010). Service quality in higher education – A review and research agenda. *International Journal of Quality and Service Sciences, 2*, 259–272. doi:10.1108/17566691011057393
- Sung, M., & Yang, S. U. (2009). Student–university relationships and reputation: A study of the links between key factors fostering students' supportive behavioral intentions towards their university. *Higher Education, 57*, 787–811. doi:10.1007/s10734-008-9176-7
- Tam, M. (2002). University impact on student growth: A quality measure? *Journal of Higher Education Policy and Management, 24*, 211–218. doi:10.1080/1360080022000013527
- Tam, M. (2006). Assessing quality experience and learning outcomes: Part I: Instrument and analysis. *Quality Assurance in Education, 14*, 75–87. doi:10.1108/09684880610643629
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: The University of Chicago Press.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *The Journal of Higher Education, 68*, 599–623.
- Tinto, V. (2006–2007). Research and practice of student retention: What next? *Journal of College Student Retention: Research, Theory and Practice, 8*, 1–19.
- Trigwell, K., & Ashwin, P. (2006). An exploratory study of situated conceptions of learning and learning environments. *Higher Education, 51*, 243–258. doi:10.1007/s10734-004-6387-4

- Trigwell, K., Prosser, M., & Waterhouse, F. (1997). Relations between teachers' approaches to teaching and students' approaches to learning. *Higher Education, 37*, 57–70.
- Trowler, V. (2010). *Student engagement literature review*. Heslington: The Higher Education Academy.
- Uline, C., & Tschannen-Moran, M. (2008). The walls speak: The interplay of quality facilities, school climate, and student achievement. *Journal of Educational Administration, 46*, 55–73. doi:[10.1108/09578230810849817](https://doi.org/10.1108/09578230810849817)
- Umbach, P. D., & Porter, S. R. (2002). How do academic departments impact student satisfaction? Understanding the contextual effects of departments. *Research in Higher Education, 43*, 209–234.
- Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education, 46*, 153–184. doi:[10.1007/s11162-004-1598-1](https://doi.org/10.1007/s11162-004-1598-1)
- Vouri, J. (2013). Are students customers in Finnish higher education? *Tertiary Education and Management, 19*, 176–187. doi:[10.1080/13583883.2013.784926](https://doi.org/10.1080/13583883.2013.784926)
- Wolf-Wendel, L., Ward, K., & Kinzie, J. (2009). A tangled web of terms: The overlap and unique contribution of involvement, engagement, and integration to understanding college student success. *Journal of College Student Development, 50*, 407–428. doi:[10.1353/csd.0.0077](https://doi.org/10.1353/csd.0.0077)
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. New York, NY: The Free Press.
- Zhao, C. M., & Kuh, G. D. (2004). Adding value: Learning communities and student engagement. *Research in Higher Education, 45*, 115–138.