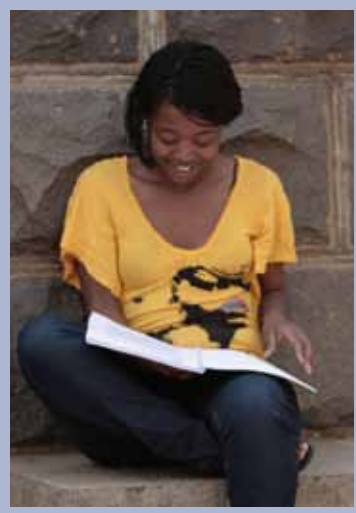
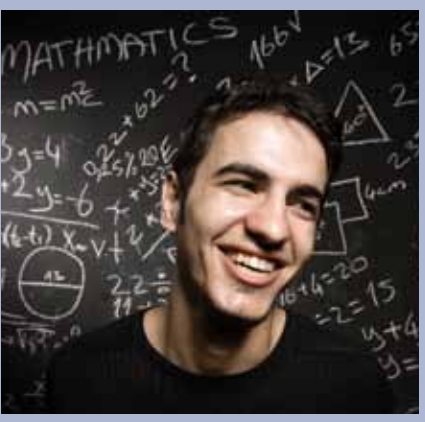
SASSE

South African Survey of Student Engagement

Focusing the Student Experience on Success through Student Engagement




J.F. Strydom & M. Mentz

CHE

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Student Engagement

J.F. Strydom
M. Mentz

The South African Council on Higher Education (CHE) is an independent statutory body responsible for advising the Minister of Higher Education and Training on all higher education policy issues, and for quality assurance in higher education and training.

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Foreword

How can we improve the success rates of students at our public universities? How can institutions assist students coming to university from an inadequate school system? How can universities cater for students with diverse languages and life experiences in inclusive ways? These seemingly intractable problems in South African higher education absorb policy-makers, researchers, administrators and lecturers. This study presents a way of understanding these problems and points to some solutions.

The Council on Higher Education has been asked to advise the Minister of Higher Education and Training on the desirability of a four-year undergraduate curriculum. Taking our understanding of curriculum to include not only a syllabus, but also the processes and practices of undergraduate education, the CHE commissioned this project on student engagement to better understand what it is that students do while they are at university and how this might impact on their success.

Student engagement has two components. The first of these is what students do – the time and energy that they devote to educationally purposive activities. The second is what institutions do – the extent to which they employ effective educational practices to induce students to do the right things. The notion of student engagement is supported by an extensive research literature which shows that 'the time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development' (Kuh, Kinzie, Schuh & Whitt, 2005).

This report reflects the results of a pilot study that administered the South African Survey of Student Engagement (SASSE) to over 13 600 undergraduate students at seven South African universities. SASSE is based on the well-established National Survey of Student Engagement (NSSE), widely used in the USA. It measures the level of academic challenge, the degree of active and collaborative learning, student–staff interaction, the provision of enriching educational experiences and the extent to which the campus environment is supportive.

The value of this research lies in the wealth of data that becomes available to institutions to diagnose problems and design interventions to improve student success. In the USA, the NSSE team have examined student engagement at institutions with better than average success rates. From this research, they have identified practical steps that can be taken by university leaders, administrators, lecturers and student leaders to improve student engagement and hence success. Repeated surveys can be used to monitor the impact of these interventions.

This study provides data at a systemic level, and also comparative and institution specific perspectives on student engagement. It is important for higher education in South Africa in several respects. Firstly, this study gives us a national picture of how students spend their time and what institutions do to provide a rich learning environment. Secondly, it will help us to identify the conditions and drivers of success among undergraduate students. Thirdly, it will help institutions to identify interventions that will have an impact on student throughput and success. And finally, in the light of the recent Soudien Report (2008) on discrimination at universities, this survey allows us to assess the extent to which students interact with people of other races and the extent to which institutions are supportive of all students.

The SASSE survey offers the hope of practical solutions to some of the complex problems of undergraduate teaching and learning and has the potential to become an important element of monitoring discrimination in our universities.

I am grateful to Dr Francois Strydom and his team at the University of the Free State, for their inspiration and dedication in bringing the student engagement work to South Africa. It has been a particular pleasure to be part of an impeccably managed project in which communication has been exemplary, several unexpected developments were sensitively and effectively handled, and every deadline was met. This team has made an important contribution to our understanding of undergraduate education in South Africa.

Judy Backhouse
Director: Advice and Monitoring
Council on Higher Education

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- National Survey of Student Engagement (NSSE) team at Indiana University, Bloomington in the USA who played a very supportive role in the development of the SASSE. Particular thanks to Prof Alexander McCormick, Prof George Kuh, Dr Robert Gonyea, Dr Jillian Kinzie, Mr Todd Chamberlain, Mr Shimon Sarraf. Items in SASSE have been used with permission from The College Student Report, NSSE, Copyright 2001–07, The Trustees of Indiana University.

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Executive summary

Understanding and improving the student experience is of critical importance if South African higher education is going to produce the number and quality of graduates and citizens needed in the 21st century. This report argues that if higher education is going to improve the complex phenomenon of student success, it needs a focused and research driven approach such as student engagement. More than a decade of higher education research indicates that the three best predictors of student success are academic preparation, motivation and student engagement (Kuh et al., 2005). Unfortunately, an exclusive focus on academic preparation and motivation limits the pathways towards improving student success to increasing selection criteria. This approach inevitably undermines the important imperative of increasing access. A focus on student engagement offers institutions the opportunity to enhance the prospects for a diverse range of students, especially underprepared students, to survive and thrive in higher education. Data obtained using the South African Survey of Student Engagement (SASSE) has the potential to help identify those conditions and drivers of success over which institutions have control, these can be used to improve the positive outcomes of higher education, such as improved throughput and success rates. This report:

- introduces student engagement as a field of research and illustrates its importance for improving the quality and outcomes of the student experience;
- shares results from the 2009 national CHE-UFS student engagement research pilot project; and
- reflects on the possible implications and application of student engagement for: the design and implementation of a four-year undergraduate degree; assessing the effectiveness of higher education (throughput and success rates); improving the quality of teaching and learning; and addressing social cohesion.

Student engagement can be defined by two key components: first, what students do (the time and energy they devote to educationally purposive activities), and second, what institutions do (the extent to which institutions employ effective educational practices to induce students to do the right things). The SASSE is based on the National Survey of Student Engagement (NSSE) developed in the USA. The NSSE has been used by over 1300 North American colleges and universities (USA and Canada), has been adapted and used in 35 universities in Australia and New Zealand and is being piloted in 23 Chinese higher education institutions. The SASSE instrument measures five benchmarks for effective educational practice, namely: Level of Academic Challenge, Active and Collaborative Learning, Student–Staff Interaction, Enriching Educational Experiences and Supportive Campus Environment.

The 2009 CHE-UFS student engagement research project piloted the SASSE in seven higher education institutions across South Africa. The seven were carefully selected to ensure representation of rural and metropolitan institutions, as well as different institutional types (universities, universities of technology and comprehensive universities). The final sample included 13 636 respondents. The results presented show the key differences between specific sub-groups in relation to the benchmarks of effective educational practice. These subgroups are: year of study (first-year vs. senior student experiences), institutional types, self-reported race groups and gender.

In reflecting on the implication and applications of student engagement within South African higher education, the report supports the development of a four-year degree. However, this report stresses the importance of thinking in innovative ways about how such a four-year degree could be designed to promote participation in effective educational activities by students, as well as the implementation of effective educational practices within higher education institutions. If South African higher education is going to improve the positive outcomes (such as 21st century graduate attributes, as well as improved throughput and success) and design of the student experience, it is going to have to become more intentional and even include requiring students to participate in activities that will contribute to their improved chances of success. Furthermore, the national pilot study confirmed the value of student engagement data in improving the quality of teaching and learning by providing institutions with an additional source of data for quality assurance processes. Finally, because the SASSE data allows institutions to analyse the experience of different subgroups of students within an institution, a more nuanced understanding of institutional cultures can be gained and effectively utilised to further social cohesion at an institutional and systemic level.

1. Quick facts about the SASSE project

Survey

The SASSE survey is available in paper-and-pencil and web format and takes about 25 minutes to complete. The survey is co-subsidised by the Council on Higher Education (CHE) and institutional participation fees.

Objectives

The objectives of the survey are to:

- provide institutions with data that can be used to measure those aspects of the undergraduate experience, both inside and outside the classroom, that are consistent with good practice in undergraduate education;
- promote student success by stimulating conversations about quality and effective educational practices; and
- contribute to the development of systemic and institutional capacity that will enable data driven improvement in higher education.

Partners

The project is supported by the CHE and managed by the Division of Student Development and Success (SDS) at the University of the Free State (UFS). Participating institutions provide implementation support.

Participating institutions

2009

Universities: University of Fort Hare, University of the Free State, University of the Witwatersrand

Universities of Technology: Cape Peninsula University of Technology, Tshwane University of Technology

Comprehensive Universities: Nelson Mandela Metropolitan University, University of Johannesburg

Each of the participating institutions received an institutional report and access to their institutional data file.

The sample

The total sample for the 2009 pilot SASSE study included 13 636 respondents. This included students from seven institutions across South Africa – 5 681 (42%) from universities, 4 441 (33%) from comprehensive universities and 3 459 (26%) from universities of technology. A total of 41% of the respondents were male and 59% female. The racial demographics of the respondents were 65% Black African, 7% Coloured, 2% Indian/Asian, 22% White and 4% other. Just more than 30% of the students who participated in the pilot study are enrolled for a degree in Business, Economics and Management, 25% are enrolled in the Humanities and Social Sciences, approximately 35% of the sample are enrolled for a degree in the Sciences, Engineering and Technology, and 8% are enrolled for an Education degree. Selected results from the study are shared to provide some insights into the student experience in South African higher education.

Validity and reliability

The SASSE is based on the National Survey of Student Engagement (NSSE) developed by higher education experts and has been modified for the South African context. Statistical analyses show that the SASSE is reliable and valid for the South African higher education context, with reliabilities comparable to NSSE reliabilities. The psychometric properties of the SASSE are discussed in an article entitled 'Enhancing success in higher education by measuring student engagement in South Africa'. This article and other results can be downloaded under the 'Useful Resources' link on the SASSE website: http://sasse.ufs.ac.za.

Participation agreement

Participating institutions agreed that SASSE data can be used for research purposes to develop undergraduate improvement initiatives. Institutions can use their own data for institutional analyses with acknowledgement of the source. All results specific to each institution and/or any results that may lead to a specific institution being identified will not be made public, except by mutual agreement.

Current and new initiatives

In 2010, participating institutions have the option of participating in the SASSE via the Internet, as well as participating in the pilot of the Lecturer Survey of Student Engagement (LSSE). The LSSE data can be used in conjunction with SASSE data to compare student and staff perspectives on student engagement at an institution.

Benchmarks of effective educational practice

The benchmarks of effective educational practice are:

- Level of Academic Challenge;
- Active and Collaborative Learning;
- Student-Staff Interaction;
- Enriching Educational Experiences;
- Supportive Campus Environment.

For more information, see Appendix 1.

2. Focusing the student experience on success through student engagement

The Stakeholder Summit on Higher Education Transformation highlighted the importance of and challenges around understanding the student experience – such as understanding the learning experiences of different students, providing support for academic success and how the student experience relates to high drop-out rates (low retention rates) and low throughput rates (Stakeholder Summit on Higher Education Transformation: Concept Document, 2010). Attempting to understand the complex nature of the student experience can be overwhelming, even paralysing, as it entails a network of societal, institutional, group and individual factors. It is argued in this report that higher education institutions need to focus their perspective of the student experience through specific lenses that would help the sector, and individual institutions, to maximise students' chances of success. One such a lens is student engagement.

The case for student engagement

Higher education research indicates that the best predictors of whether or not a student will graduate are academic preparation and motivation (Pascarella & Terenzini, 2005). Unfortunately, the only possible way to control these two variables is to employ more stringent admission and/or selection policies, which is not a viable alternative in a century where, internationally, higher education has had to enrol more students from increasingly diverse backgrounds to meet the skills needs of the knowledge economy. Years of research into effective higher education institutions in the United States points to a third factor that, at least marginally, can enhance the prospect that students will survive and thrive after entering higher education. Several decades of evidence suggests that, after controlling for student background characteristics, student engagement (i.e. students devoting their time to educationally purposeful activities) is also a significant predictor of their satisfaction and success (Kuh et al., 2005; Kuh et al., 2007; Pascarella & Terenzini, 2005).

Student engagement is defined in terms of two key components. The first is 'the amount of time and effort students spend on academic activities and other activities that lead to the experiences and outcomes that constitute student success. The second is the ways in which institutions allocate resources and organise learning opportunities and services to induce students to participate in and benefit from such activities' (Kuh et al., 2005). Put a different way, student engagement can be defined by two key components: first, what students do (the time and energy they devote to educationally purposive activities) and second, what institutions do (the extent to which they employ effective educational practices to induce students to do the right things).

Table 1 shows that there are many similarities between the US and South African higher education contexts. The table was developed through an analysis and integration of research by Kuh and others in 'Piecing together the student success puzzle: Research, propositions and recommendations' (2007) and Ian Scott's 'Addressing diversity and development in South Africa: Challenges for educational expertise and scholarship' (2007). The intention of the comparison between these two contexts is to highlight the similarity in challenges. Addressing these challenges within the specific

contexts of both countries is a complicated matter. The magnitude of these challenges is exemplified in the South African context given the socio-economic, capacity and resource constraints, as well as the challenges faced by South Africa as a developing country.

Challenges facing higher education	
United States of America	**South Africa**
Low pass rates	Very low pass rates (around 15% graduate in time)
Low enrolment of minority group students	Participation rates of previously excluded Black African students around 12%
Lower pass rates amongst low income, minority group students	One in three Black African students graduate in time, less than 5% of this cohort obtains a degree
Students not adequately prepared in high school	Students not adequately prepared in high school
Increased demand for graduates in the knowledge economy results in a rapidly expanding student body with unprecedented levels of diversity and large numbers of first generation students	Widening access and an increased demand for graduates in the knowledge economy lead to unprecedented levels of diversity and many first generation students

Table 1: Comparison of Challenges Facing Higher Education in the United States and South Africa

The urgent need for improved retention and graduation rates in South African higher education, and the similarities in the challenges facing these higher education contexts, provides a strong rationale for the investigation of student engagement as a third contributing factor to success in South African higher education. The need for data-driven research is underscored by Koen's analysis of postgraduate retention and success. Koen bemoans the quality of higher education research into the factors that affect postgraduate retention for the fact that it appears to be mainly based on anecdotal evidence (Koen, 2007).

In order to understand the importance of student engagement, the concept needs to be positioned within the puzzle of student success.

Putting together the success puzzle: A conceptual framework

Research into factors that improve student success have a long history, starting in the 1930s with Tyler's focus on the importance of time on academic task, through to Astin's research on student involvement in 1984, Tinto's research on social and academic integration (1987), and research by Chickering and Gamson on good practices in undergraduate education (1987). Each of these fields of investigation has informed the emergence of the field of student engagement led by Prof George Kuh since 1998. Kuh and others (2007) developed a framework to help clarify what matters to student success from an empirical perspective. Figure 1 on the next page graphically illustrates these 'things or factors that matter to success', and shows the central importance of student engagement in solving the success puzzle.

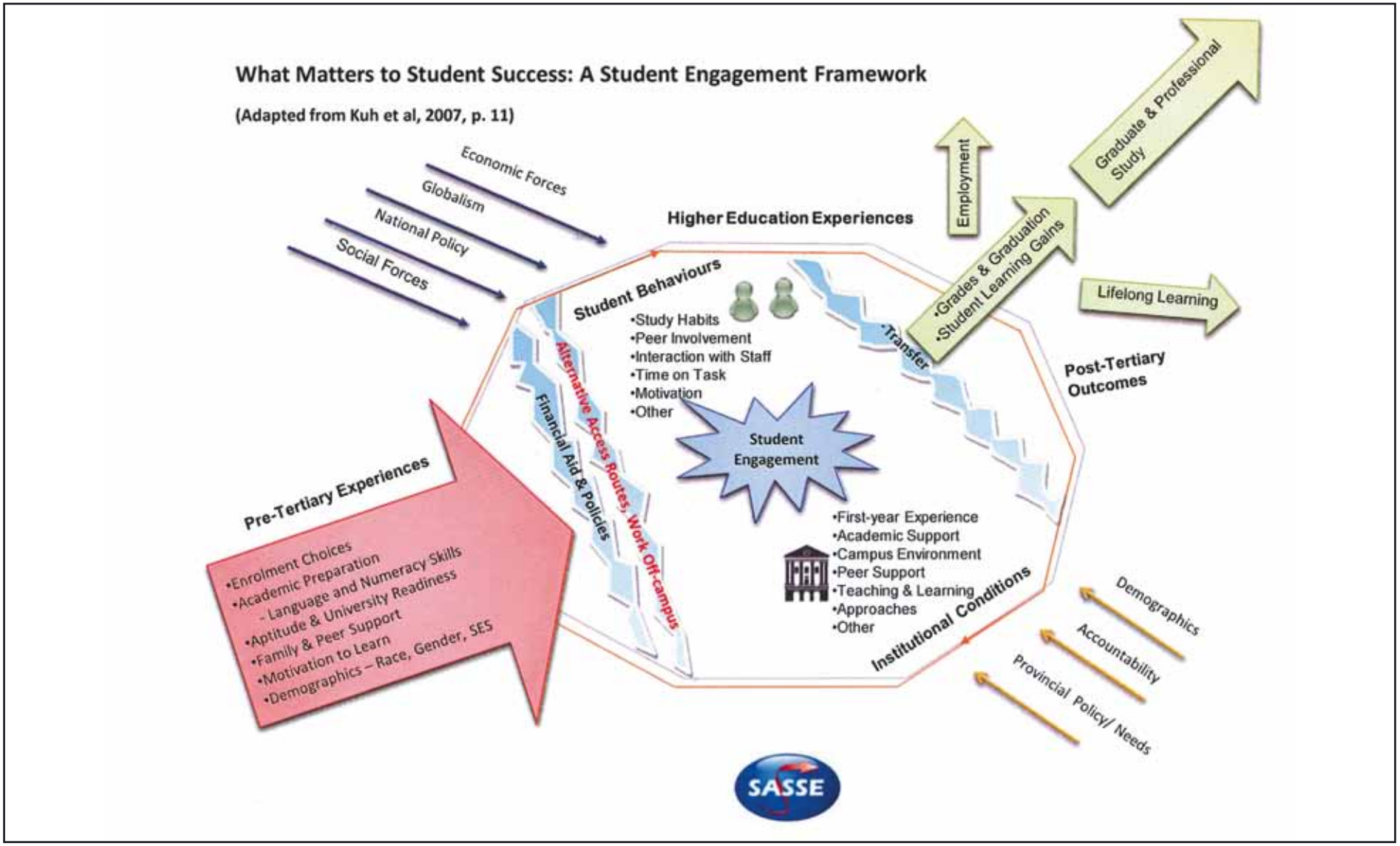


Figure 1: Student success framework (Adapted from Kuh et al, 2007, p.11)

Figure 1 presents a framework for understanding student success as 'a wide path with many twists, turns, detours, roundabouts and occasional dead-ends' (Kuh et al., 2007: 10), instead of the usual pipeline understanding of students entering and exiting education systems. Students can therefore enter at a specific time but exit, due to financial pressure or employment opportunities and return later to study further.

The pink arrow summarises some of the many pre-university experiences students enter into higher education with, such as family background, academic preparation, attitudes to university readiness, family and peer support, and motivation to learn. Within the South African context, addressing the low levels of language and numerical competence of learners exiting the secondary school system is part of the rationale for the debate around the development of a four-year degree structure as this could help to provide the space for innovative and engaging solutions to this specific challenge.

Mediating conditions (blue zigzags) are transitions which students must successfully navigate to continue their education. The National Student Financial Aid Scheme (NSFAS) review highlighted the importance of effective financial aid to help maximise poor students' chances of success. In the South African context alternative access routes such as bridging and foundation programmes (extended degrees) as well as Recognition of Prior Learning (RPL) have helped to broaden and mediate entry into higher education. If learners are able to navigate these transitions successfully, they enter the 'traditional' higher education environment.

The next part of the educational journey consists of a student's university experience, namely: student behaviours and institutional conditions. Student behaviours include study habits, peer involvement, interaction with staff, time on task and motivation, among other things. Institutional conditions include resources, educational policies, programmes, practices and structural features.

Student engagement, at the intersection of these behaviours and conditions, represents aspects of student behaviour and institutional conditions that universities have influence over, at least marginally. All the factors are intertwined and affect what students do during their time at university. Research into student retention shows the need for creating a more supportive mainstream environment for students than through access programmes which underlines the importance of a focus on student engagement (Letseka et al., 2009).

The green arrows represent successful student progress. By using the SASSE results, institutions are able to assess the prevalence of student behaviours and institutional conditions related to success and can use the data to develop interventions that can channel student energy to activities that matter to their success.

Having reflected on the importance of student engagement within the success puzzle, the next section provides a more in-depth discussion on the properties and conditions that are prevalent at engaging institutions.

Properties and conditions common to engaging institutions

Through an analysis of 20 of the most engaging US institutions, who also had higher than expected throughput rates, six common institutional characteristics and conditions essential for student engagement were identified. These properties and conditions enable student engagement to flourish and help to create institutional cultures that promote student success (Kuh et al., 2005).

- **A 'living' mission and 'lived' educational philosophy**

  The mission of an institution should be 'alive' or lived out by its staff and students. The mission should be used to explain the behaviour of staff and students and should provide insight into where the institution is heading.

- **An unshakeable focus on student learning**

  Student learning must become the rationale for the daily activities of everyone in the institution. Although sustaining this unwavering focus is labour-intensive, i.e. staff members and others must 'make time for students', in order to improve student success the whole institution has to prioritise innovation and performance around student learning (Kuh et al., 2005). In light of the concern about the quality of teaching and learning in South Africa, an emphasis on this condition could bring a new emphasis to the importance of focusing attention and resources on student learning (CHE, 2009).

- **Creating learning environments that promote educational enrichment**

  Physical and psychological environments within an institution should support learning and must reinforce its educational mission and values. This condition has implications for the rethinking of residence structures and campus layout, as well as providing facilities for commuter students who form the majority of students in higher education across the world today (Horn & Berktold, 1998).

- **Clarifying the pathways that maximise student success**

  Students, especially first generation students, need to be taught what the institution's values are, what successful students do and where to find resources. These messages can be clearly and effectively communicated through first-year experience programmes and/or formal orientation programmes. In order to effectively achieve the clarification of pathways to success, the appropriate investment of resources needs to be made, taking into account the institutional mission and student characteristics. An early warning system, as part of a more sophisticated student tracking approach, is essential in getting appropriate support provided to students as soon as they need it.

- **Facilitating an improvement-orientated institutional culture and ethos**

  Institutions that are effective at engaging and nurturing success are characterised by 'positive relentlessness' (Kuh et al., 2005). These institutions are confident about what they are and where they are going and they believe that they can always improve.

- **Making sure that the quality of learning and student success is owned by everyone in the institution**

  Everyone is an educator and everyone accepts responsibility for students' learning to create a culture that nurtures and promotes student success. The importance of student success has to be endorsed by the university council, driven and championed by top and middle management, facilitated by academic staff and complemented by support staff. Therefore, an institutional network is essential to impacting on success and throughput rates. This network approach enables an institution to do many different things better and more frequently; an approach that will be more successful at reaching a substantial number of students in meaningful ways than investing large amounts of resources in one large, complicated initiative.

In addition to the conditions that allow student engagement to flourish, there are certain things that highly engaging institutions do to foster engagement. These actions are effective educational practices.

Effective educational practices: An untapped dimension

SASSE data allows institutions to focus on effective educational practices. Empirical research has linked effective educational practices, as measured by the SASSE, to the improvement of quality in teaching and learning and to the enhancement of positive higher education outcomes. This section explains why effective educational practices represent an untapped dimension for improving quality and performance in higher education.

Student engagement and quality

The NSSE Institute indicates that the survey of student engagement was developed partly as a reaction to the media ranking systems in the USA. These rankings were, in the view of many higher education leaders, focused on the wrong criteria such as selectivity and staff credentials. The NSSE is aimed at refocusing the discussion of quality in higher education on students and their learning (NSSE, 2009).

In the Australasian context, Coates (2005) indicates that student engagement data has the potential to strengthen quality assurance systems in higher education. In a review of quality assurance mechanisms in the Australian context, Coates suggests that the emphasis on institutional perspectives on quality and more specifically, the quality of teaching, is too strong and that there is not enough emphasis on what students are actually doing. Coates (2005) criticises the use of progress rates (success rates) for assessing quality on two levels: first, progress rates are an inadequate indicator of the student's perception of institutional quality, and secondly, progress rates do not provide an objective measure of quality as they are relative to courses and/or modules. High progress rates through a system might in actual fact be an indication of the lowering of academic standards (Coates, 2005). He proposed that student engagement focuses the discussion of institutional quality on student learning (an essential, if not the most important, aspect of education) instead of the quality debate being monopolised by resources and institutional reputations (Coates, 2005).

As the first cycle of public institutional audits in the South African higher education system are drawing to a close, the results in this report beg the question of whether student engagement could contribute to a second cycle of audits.

Student engagement and higher education outcomes

Student engagement is empirically linked to success in higher education. Research in the USA shows links between levels of student engagement and higher academic grades, higher first-to-second year persistence and improved graduation rates. Despite students' pre-university experiences, academic preparation and personal motivation, student engagement is associated with desired outcomes for all students, but in particular for historically underserved students (Kuh et al., 2007). Research supports the following findings in the US context for the effect of student engagement on first-year students (Kuh et al., 2007). During the first year higher levels of student engagement:

- are significantly associated with increased academic grades;
- have a small compensatory effect on the academic grades of students who entered the institution with lower levels of academic achievement; and
- are significantly related to the likelihood that a student will return for their second year of study – even after controlling for their background characteristics, for academic achievement and for receipt of financial aid. Furthermore, African American students benefit more than White students in this regard from increased engagement levels.

Student engagement also benefits senior undergraduate students. Research supports the following findings (Kuh et al., 2007). For senior students:

- even after prior academic achievement is taken into consideration, increased participation in effective educational practices has a small, positive impact on the academic performance of seniors; and
- higher levels of engagement in the early years of college have a compounding effect on students' grades at a later stage of their university experience.

The relationship between academic performance and student engagement was investigated in the 'Testing the Linkages' study (Kuh et al., 2007). Results from this study indicate that higher scores on 4 of the 5 benchmarks (only enriching educational experiences excluded) are significantly correlated with academic performance. For first-year students, the largest correlations were for number of papers of fewer than five pages written, quality of relationship with academic and non-academic staff and working harder than they thought they could to meet a lecturer's expectations. Senior students benefited most from working with others on projects during class, integrating ideas from different classes, receiving high-quality academic advice and being at institutions that emphasise contact among students from different backgrounds. Furthermore, low-ability students benefited most from high-quality relationships on campus, a supportive campus environment, an integration of diversity into coursework, interaction with staff regarding coursework, as well as increased reading and writing. In 2010 the Wabash National Study of Liberal Arts Education found a positive relationship between effective educational practices as measured by the benchmarks of effective educational practices in the NSSE and five liberal arts education outcomes, namely: effective reasoning and problem solving, moral character, inclination to inquire and lifelong learning, intercultural effectiveness and personal well-being (Pascarella, Seifert & Blaich, 2010).

Evidence for similar relationships established through longitudinal research on student engagement in the South African context would provide institutional leaders and policy makers with evidence to confidently design and implement policies that promote the use of effective educational practices in higher education nationally. Although there are limits to what institutions can realistically do to address the effects of years of educational disadvantage, all institutions can improve levels of student engagement by promoting, and even requiring, participation in educationally effective practices (Kuh et al., 2007). Having reflected on the importance of effective educational practices for quality and higher education outcomes, the focus of this report now shifts to the definition and content of the benchmarks of effective educational practices.

Benchmarks of effective educational practices

The benchmarks that are reported annually in the US study are 'broad conceptual categories that represent important student behaviours and institutional factors' that, according to higher education research, are related to various desired higher education success outcomes (Kuh et al., 2005). The five benchmarks can be used by an institution to assess the prevalence of effective educational practices and to estimate the efficacy of their improvement efforts (Kuh, 2003). These indicators are based on 42 survey items that capture many of the more important aspects of the student experience (see Appendix 1). The benchmarks, which are included in the SASSE, are summarised on the following page.

Level of Academic Challenge focuses on whether students find their academic work intellectually challenging and creative since this is regarded as central to student learning and quality. Universities promote high levels of student achievement by emphasising the importance of academic effort and setting high expectations for student performance. This benchmark includes questions about the number of hours students spend studying, the amount of reading and writing that has to be completed, questions based on Bloom's taxonomy and the emphasis the campus environment places on studying and academic work.	**Examples of activities and conditions measured for Level of Academic Challenge:** • time spent preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic programme); • worked harder than you thought you could to meet a lecturer's standards or expectations; • number of assigned textbooks, books, or book-length course packages or subject readings; • number of written pages or assignments; • institution emphasised: spending significant amounts of time studying and on academic work; • coursework emphasised: – analysing the basic elements of an idea, experience, or theory; – synthesising/integrating and organising ideas, information, or experiences; – making judgments about the value of information, arguments, or methods; and – applying theories or concepts to practical problems or in new situations.
Active and Collaborative Learning is based on the premise that students learn more when they are intensely involved in their education and are required to reflect on their learning. This cluster of items asks about the extent to which students are active in class either through discussion, questions or presentations, whether they are involved in tutoring, in community-based projects and engaged in out-of-class discussions with others.	**Examples of activities measured by Active and Collaborative Learning:** • asked questions in class or contributed to class discussions; • made a class presentation; • worked with other students on projects during class; • worked with classmates outside of class to prepare class assignments; • tutored or taught other students (paid or voluntary).
Student-Staff Interaction asserts that by interacting with staff members inside and outside the classroom, students learn how experts think first-hand and how to solve practical problems. The benchmark asks students to what extent they discuss their grades, future plans and ideas with staff, whether they worked with staff on activities outside of class and how prompt assessment feedback is.	**Examples of activities measured by Student–Staff Interaction:** • discussed marks or assignments with a lecturer or tutor; • talked about career plans with a lecturer or counsellor; • discussed ideas from readings or classes with a lecturer outside of class; • received prompt feedback (written or oral) from lecturers on performance; • worked with a staff member on a research project.

Enriching Educational Experience focuses on the number of complementary learning opportunities students participate in that augment their academic programmes. The benchmark reflects experiences, use of IT for collaboration, internships, community service and capstone[1] experiences as a means to integrate and apply knowledge.	**Examples of activities measured by Enriching Educational Experiences:** • talking to students with different religious beliefs, political opinions, or values; • talking to students of a different race or ethnicity; • an institutional climate that encourages contact among students from different economic, social, and racial or ethnic backgrounds; • using electronic technology to discuss or complete assignments; • participating in: – internships or field experiences; – the development of a community project using knowledge obtained at university.
Supportive Campus Environment asks students about how they experience the campus environment and the quality of their relationships with other students and staff members on campus.	**Examples of conditions measured by Supportive Campus Environment:** • campus environment provides support needed to help you succeed academically; • campus environment helps you cope with non-academic responsibilities (work, family, etc.); • campus environment provides the support needed to help you thrive socially; • quality of relationships with other students, lecturers and staff members and with administrative personnel and offices.

Adapted from Kuh et al., 2005

1 **Capstone Courses and Projects**
Whether they're called 'senior capstones' or some other name, these culminating experiences require students nearing the end of their college years to create a project of some sort that integrates and applies what they've learned. The project might be a research paper, a performance, a portfolio of 'best work', or an exhibit of artwork. Capstones are offered both in departmental programs and increasingly, in general education as well. *Excerpt from; High-Impact Education Practices: What They Are, Who Has Access to Them, and Why They Matter, by George Kuh (2008: 9-11)*]

3. Research process

Sampling and Measurement

Participating institutions for the pilot study were selected by the CHE to be representative of all the institution types in the higher education landscape with representation from rural and metropolitan-based institutions, within the parameters of budget constraints.

As indicated earlier in this report, the SASSE is a contextualisation of the NSSE developed in the USA. To date, more than 1 300 institutions in the USA and Canada have participated at least once with 643 colleges administering the NSSE in 2009. The NSSE has been adapted and used in 35 universities in Australia and New Zealand and is being piloted in 23 Chinese higher education institutions. The SASSE was piloted at the UFS to ensure the acceptability of its psychometric properties (Strydom, Kuh & Mentz, 2010). The content of the SASSE was reviewed by representatives from each of the seven institutions participating in the 2009 pilot before use in this national pilot study. Continuous research into the psychometric properties of the SASSE benchmarks, as well as newly developed scales and sub-scales, is being conducted. Details of these results are available on the website at http://sasse.ufs.ac.za.

Data collection

The SASSE and the informed consent sheets (developed by the SDS) intended for use in the data collection were presented to institutional ethics committees by the individual institutional representatives and received ethical clearance from all seven participating institutions. A stratified, systematic sampling strategy was used to produce a robust, generalisable and representative estimate of first-year and senior student engagement.

Data collection was done by data collection teams trained and managed by the SDS at all institutions, except at the Tshwane University of Technology where dedicated internal institutional data collectors were trained by the SDS. The completed surveys were then scanned and analysed to prepare the institutional and national reports on student engagement. In total, the data of 13 636 students was captured and used in the development of the reports. The research process will be reviewed by the institutional representatives and the SDS as part of ongoing quality assurance to improve research practices.

4. Results

2009 Pilot sample

The total sample for the 2009 pilot SASSE study included 13 636 respondents. This included students from seven institutions across South Africa – 5 681 (42%) from universities, 4 441 (33%) from comprehensive universities and 3 459 (26%) from universities of technology. A total of 41% of the respondents were male and 59% female. The racial demographics of the respondents were 65% Black African, 7% Coloured, 2% Indian/Asian, 22% White and 4% other. A total of 0.5% of the sample indicated they 'prefer not to answer' on the question regarding race. The overwhelming majority of the sample was comprised of South African citizens (90%).

The overall sample included 44% first-year students, 55% senior students and 0.8% occasional students. Almost all of the students who participated are full-time students, with just more than 1% of students indicating they study part time. Almost a third of the students who participated are registered for extended degrees and 15% did not know if they were registered for an extended degree or not. Just more than 30% of the students who participated in the pilot study are enrolled for a degree in Business, Economics and Management, 25% are enrolled in the Humanities and Social Sciences, approximately 35% of the sample are enrolled for a degree in the Sciences, Engineering and Technology, and 8% are enrolled for an Education degree. The vast majority of the sample reported receiving their tuition in English (90%). Almost three-quarters of the students who participated (73%) indicated they live off campus.

Institution Name	Typology	Number of under-graduates	SASSE sample
Cape Peninsula University of Technology	University of Technology	28 857	1 127
Nelson Mandela Metropolitan University	Comprehensive	20 933	2 246
Tshwane University of Technology	University of Technology	51 741	1 996
University of Fort Hare	University	8 479	1 686
University of Johannesburg	Comprehensive	42 671	2 426
University of the Free State	University	19 610	3 050
University of the Witwatersrand	University	19 547	1 105

Table 2: Summary of participating institutions by typology, undergraduate enrolment and sample size

Student engagement at a glance

This section provides an overall picture of engagement in the South African context by discussing each benchmark in terms of the overall sample's performance on the benchmark and its associated subscales. The results are provided for the overall sample, as well as for first-years and for seniors separately. For the purposes of this report, a first-year is defined as any student who entered the institution for the first time at the start of the year in which the survey was administered.

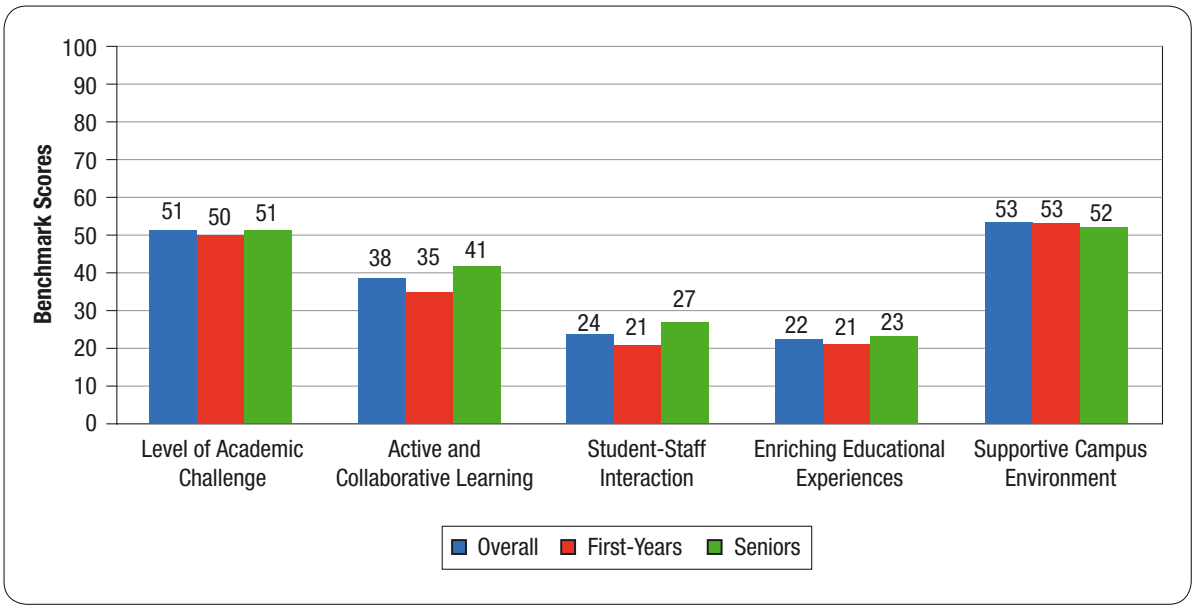


Figure 2: Benchmark performance SASSE 2009 pilot

The scores for the sample of participating institutions in the 2009 SASSE pilot study are shown in figure 2. All benchmark scores are a mean score for the scale out of a maximum of 100. It can be seen that there is very little variation in the Level of Academic Challenge reported by the first-year and senior students in the 2009 sample. On the Active and Collaborative Learning benchmark, senior students reported significantly higher levels of participation in these types of learning activities than first-year students. On the Student–Staff Interaction benchmark, senior students reported significantly more interaction with staff than first-year students. Overall, participation in Enriching Educational Experiences is low although senior students reported significantly more participation in these activities than first-year students. For the Supportive Campus Environment benchmark, first-years reported significantly higher levels of support from the campus environment than seniors. These overall results will be discussed in a more in-depth manner under each of the separate benchmark headings.

Student engagement patterns

In this section engagement patterns for each benchmark are discussed, highlighting promising and disappointing findings from the South African 2009 pilot study. The key differences between three selected sub-groups of interest are reported, namely: institutional types, self-reported race groups and gender. Once again the results are provided for the overall sample, as well as separately for first-years and for seniors. Appendix 2 provides a detailed breakdown of performance on benchmark items by typology.

Although these patterns highlight the differences between institutions and different groups, it should be kept in mind at all times whilst interpreting these results that comparisons of average scores are being made, and that differences within groups are always greater than the differences between them.

Level of Academic Challenge

Level of Academic Challenge *focuses on whether students find their academic work intellectually challenging and creative as this is regarded as central to student learning and quality. Higher education institutions promote high levels of student achievement by emphasising the importance of academic effort and setting high expectations for student performance. This benchmark includes questions about the number of hours students spend studying, the amount of reading and writing that has to be completed, questions based on Bloom's taxonomy and the emphasis the campus environment places on studying and academic work (Kuh et al., 2005).*

The majority of students (82%) who participated in the pilot study indicated that their institution places significant emphasis on spending time studying and on academic work. Only 54%, however, have often worked harder than they thought they could to meet a lecturer's standards or expectations. There is furthermore a large degree of variance between racial groups within the responses to this item. For example, 59% of Black African students, compared to 49% of Coloured students, 45% of White students and 40% of Indian/Asian students reported often working harder than they thought they could to meet a lecturer's standards or expectations. Students at the universities of technology reported significantly lower levels of academic challenge than all the other students, whilst students at the universities reported the highest levels of academic challenge. In the overall sample, Black African and Indian/Asian students reported significantly higher levels of academic challenge than White and Coloured students. No differences were found between male and female students regarding their reported levels of academic challenge.

How do students use their time?

The average student spends 10 hours per week preparing for class and 16 hours per week attending scheduled academic activities. Students reported spending only 2 hours per week on co-curricular activities and an average of 11 hours per week socialising. More than 80% of the sample reported attending more than 75% of their scheduled academic activities, and first-years reported attending significantly more of their scheduled academic activities than seniors did. Overall, students at the universities of technology spend significantly more time preparing for class than the students at the comprehensive institutions (10.7 and 10 hours per week respectively). Students at the universities reported spending significantly more time participating in scheduled academic activities than the rest of the sample. Students at universities spend significantly less time per week socialising than the students at the universities of technology and the comprehensive institutions.

Analysis by demographic variables showed that White students reported spending significantly less time preparing for class than Black African students (9.2 and 10.9 hours respectively). Interestingly, Black African students spend the least amount of time attending scheduled academic activities (15.4 hours per week). White students spend significantly more time attending scheduled academic activities (18.3 hours) than Black African and Coloured students (16.8 hours per week). Female students spend significantly more time studying per week than their male counterparts, whilst male students – both senior and first-year – on average spend significantly more time socialising in a week.

Promising findings	Disappointing findings
• Only 10% of students said they have never worked harder than they thought they could to meet a lecturer's standards or expectations. • Some 82% of students who participated in the pilot study indicated that their institution places significant emphasis on spending time studying and on academic work. • Senior students reported participating in significantly more deep learning activities than first-years, indicating a more challenging senior level academic experience.	• As many as 43% of students indicated that they spend less than 6 hours preparing for class each week. A further 32% indicated they spend between 6 and 20 hours. Thus, only 1 in 4 students studies more than 20 hours per week. • The longstanding convention is that students should spend at least 2 hours studying and preparing for every hour that they will be spending in class, thus full time students should be spending 25-30 hours per week on preparing and studying. This is true for less than 10% of all the respondents.

Active and Collaborative Learning

Active and Collaborative Learning *is based on the premise that students learn more when they are intensely involved in their education and are required to reflect on their learning. This cluster of items asks about the extent to which students are active in class either through discussion, questions or presentations, whether they are involved in tutoring, in community-based projects and engaged in out-of-class discussions with others (Kuh et al., 2005).*

Overall, students in the sample (both first-years and seniors) participate in significantly more collaborative learning than active learning experiences. Students at the comprehensive institutions (both first-years and seniors) reported significantly lower levels of participation in active and collaborative learning activities than the other institutional types, whereas students at the universities of technology reported significantly higher levels of participation in active and collaborative learning than all the other institutional types. The demographic analysis showed that White and Coloured students reported participating in significantly more active and collaborative learning activities than Black African and Indian/Asian students did. In particular, Coloured students reported participating in significantly more collaborative learning activities than any other group. White students reported participating in significantly more active learning activities than Indian/Asian and Black African students. No differences were found in the number of active and collaborative activities participated in by male and female students.

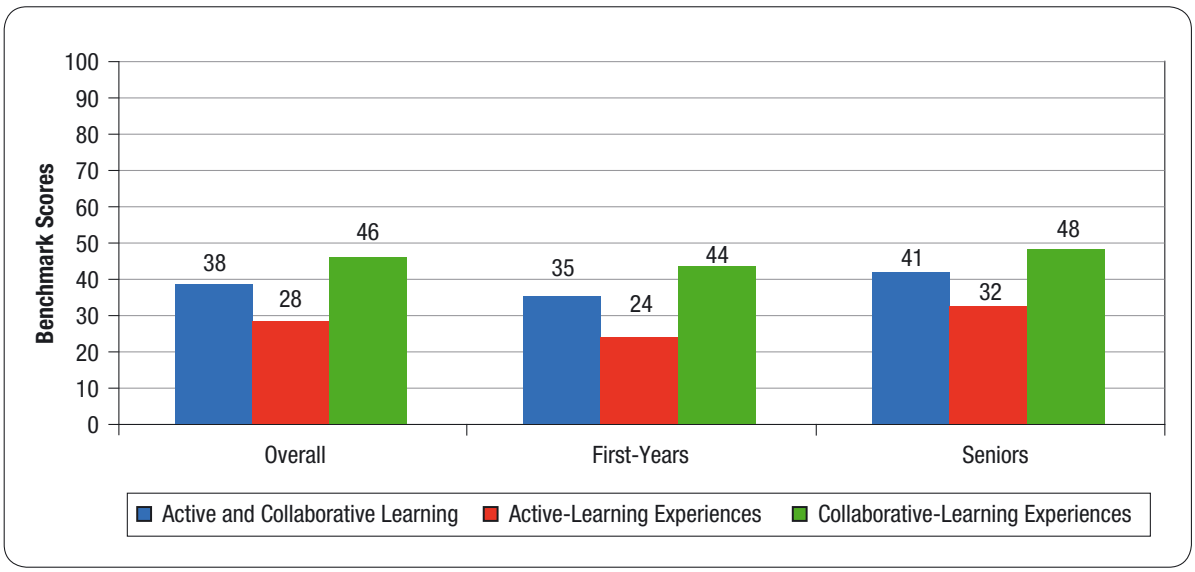


Figure 3: Active and collaborative learning SASSE 2009 pilot

As can be seen in Figure 3 above, senior students in the sample of participating institutions participate in more active and collaborative learning than first-year students in the SASSE 2009 sample. In terms of active learning experiences, senior students make significantly more class presentations than first-years. A total of 58% of first-year students have never made a class presentation, compared to 33% of seniors who have never done so. Furthermore, senior students ask questions and contribute to class discussions significantly more often and work more often with classmates during class time on projects than first-years.

In terms of collaborative learning experiences, seniors work with classmates outside of class to prepare assignments more regularly, tutor other students more frequently, and discuss ideas from readings with others outside class more often than first-years do. For example, two-thirds of seniors often work with classmates outside of class on assignments, compared to 58% of first-years. A total of 62% of senior students and 72% of first-year students have never participated in a community-based project as part of a regular course.

Promising findings	Disappointing findings
• Senior students participate in significantly more active and collaborative learning activities than first-years. For example, two-thirds of seniors often work with classmates outside of class to complete assignments. • Approximately 60% of students often discuss ideas from their classes with others outside of class.	• Almost 60% of first-years have never made a presentation in any of their classes, although this percentage almost halves by the time students are in their senior years. • More than 60% of senior students have never participated in a community-based project as part of a regular course.

Student-Staff Interaction

Student-Staff Interaction *asserts that by interacting with staff members inside and outside the classroom, students learn how experts think first-hand and how to solve practical problems. The benchmark asks students to what extent they discuss their grades, future plans and ideas with staff, whether they worked with staff on activities outside of class, and how prompt assessment feedback is (Kuh et al., 2005).*

For the overall sample of participating institutions, students interact with staff more frequently for course-related matters than for activities outside of the classroom environment. Furthermore, senior students interact with staff more frequently than first-years – both inside and outside the classroom (see Figure 4 below). Approximately a third of the sample often receive punctual feedback on their academic performance from lecturers and only 16% of students often discuss ideas from class with their lecturers outside of class.

Overall, students at the universities of technology reported significantly more interaction with staff members than both the other institutional types.

The demographic analysis showed that White students reported significantly more interactions with staff members than Black African and Indian/Asian students did. White and Coloured students reported significantly more course-related interactions than Black African and Indian/Asian students did. In relation to gender, the results showed that male students interact significantly more often with staff than female students – both inside and outside the classroom.

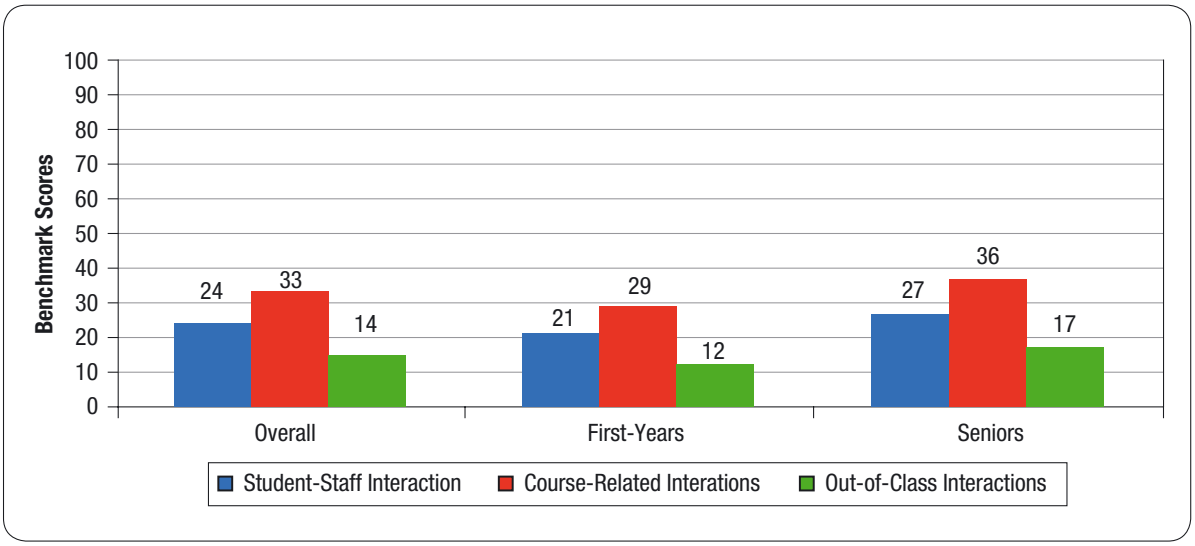


Figure 4: Student-Staff Interaction SASSE 2009 Pilot

Promising findings	Disappointing findings
• Around three-quarters of students reported having discussed marks or assignments with a lecturer or tutor at some point.	• 44% of seniors have never discussed their career plans with a lecturer or counsellor.

Enriching Educational Experiences

Complementary learning opportunities inside and outside the classroom have been shown to augment the academic programme. Experiencing diversity teaches students valuable things about themselves and other cultures. Used appropriately, technology facilitates learning and promotes collaboration between peers and instructors. Internships and community service provide students with opportunities to synthesise, integrate, and apply their knowledge. Such experiences make learning more meaningful, and, ultimately, more useful because what students know becomes a part of who they are (Kuh et al., 2005).

Overall, students at the universities reported significantly higher levels of participation in enriching educational activities than all the other students.

Indian/Asian students participate in significantly more enriching educational experiences than any of the other groups. Female students also reported participating in significantly more enriching educational experiences than male students.

Are students using information technology (IT) in academic work?

The majority of the sample (82%) indicated that their institution places significant emphasis on the use of IT in academic work and 84% of the sample indicated that their experience at the institution has contributed very much to their personal development in the area of using computers and IT.

Students at the universities use IT in academic work significantly less than students at the other two institutional types. The demographic analysis showed that White students reported using significantly less IT for academic purposes than all other groups and that female students – both first-year and senior – make significantly more use of IT for academic purposes than male students.

Are students interacting with diverse peers?

In the overall sample, first-year students reported significantly more interactions with diverse peers than senior students. Less than half of the students in the sample indicated that their institution places adequate emphasis on encouraging contact between students of different economic, social, and racial/ethnic backgrounds. Only 42% of the sample reported often having serious conversations with students from different racial/ethnic groups, whilst almost 50% reported often having serious conversations with students who are very different from themselves in terms of religious beliefs, political opinions and personal values.

Students at comprehensive institutions reported interacting significantly more frequently with diverse peers than the students at the universities and the universities of technology.

The demographic analysis showed that White students – both senior and first-year – reported significantly fewer interactions with diversity than all other groups. Indian/Asian students – both first-year and senior – reported the most diversity interactions. In relation to gender across racial/ethnic groupings, females interact significantly more frequently with diverse peers than males (see Figure 5 below).

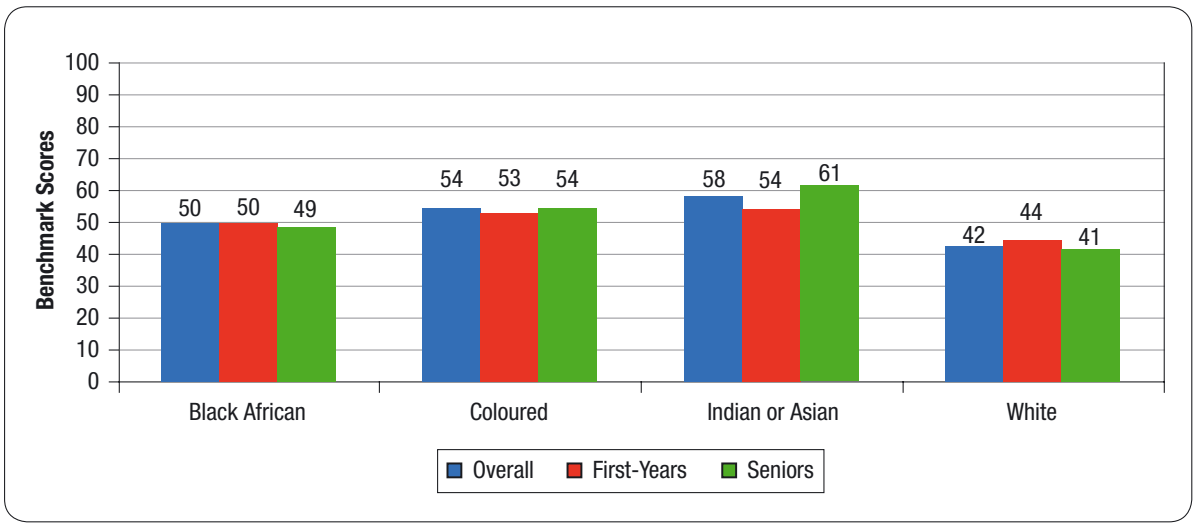


Figure 5: Diversity experiences: Comparison by race

Promising findings	Disappointing findings
• Approximately 80% of students reported using electronic media of some kind to complete or discuss assignments.	• Only 42% of students often have serious conversations with students from different racial or ethnic groups. • 70% of students reported spending no time participating in co-curricular activities.

Supportive Campus Environment

Students perform better and are more satisfied at universities that are committed to their success and cultivate positive working and social relations among different groups on campus. ***Supportive Campus Environment*** *asks students about how they experience the campus environment and the quality of their relationships with other students (Kuh et al., 2005).*

First-year students reported higher levels of overall satisfaction with the institution and higher levels of support for student success. Just more than three-quarters of the overall sample indicated that their relationships with other students were friendly and supportive. In contrast, only 54% of students reported that academic staff were helpful, available and sympathetic, and 38% of the sample rated administrative staff as helpful, considerate and flexible. First-year students reported their relationships with other students, with academic staff and with administrative staff to be significantly less positive.

There is no difference between the three institutional types in terms of the overall support the students experience from their particular campus environments (for both first-year and senior students). However, students at the comprehensive institutions reported significantly higher levels of support for student success (for first-year and senior students).

The demographic comparison showed that, overall, Black African students find the campus to be significantly more supportive than students from any of the other groups – Black African students reported experiencing the most support for student success, whilst White students reported the lowest mean in this regard (significantly lower than Coloured and Black African students). Female students experience significantly more overall support from the campus environment and report significantly more support for student success.

Are students satisfied with their overall experience?

A total of 72% of the sample would choose to study at their institution again if they were to start their studies over. However, significantly more first-years would return to their institutions (76%) than seniors (68%). As many as 79% of the first-year sample, and just over three-quarters of senior students, evaluated their overall experience at the institution as positive.

Students at the universities of technology are significantly less satisfied than students at other types of institutions. The demographic analysis showed that Indian/Asian students are significantly more satisfied with their overall experience than Coloured students. No differences were found in terms of overall satisfaction with the institution for senior students of different racial groups. Coloured and Black African first-year students are significantly less satisfied with their overall experience than White and Indian/Asian first-year students. There were no significant gender differences in relation to overall satisfaction.

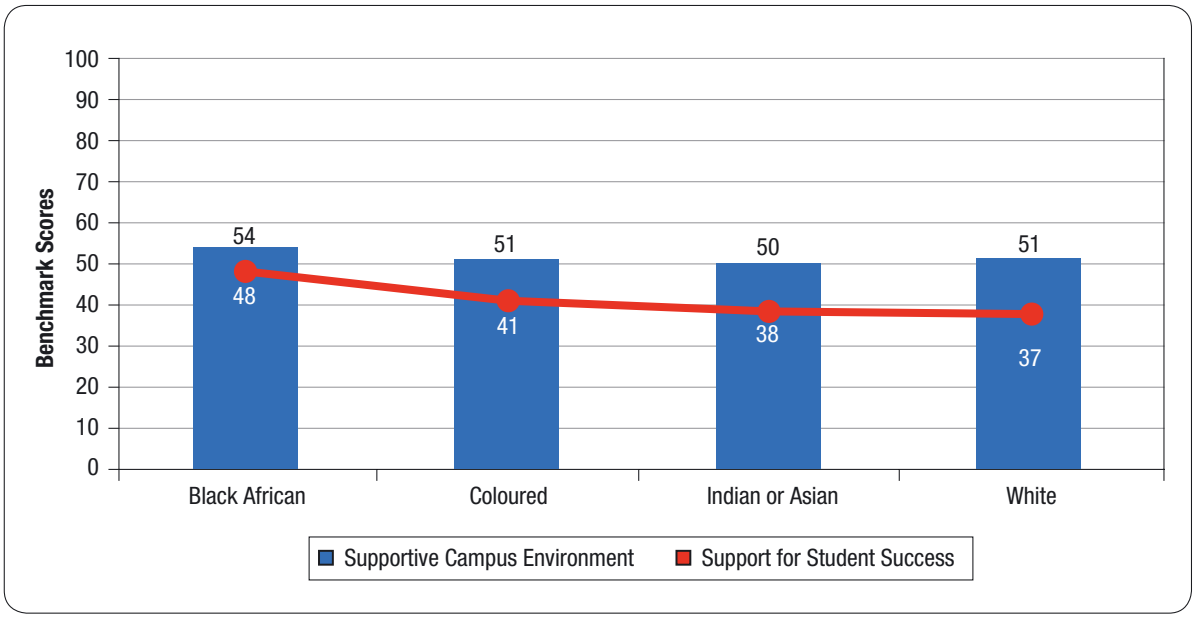


Figure 6: Supportive campus environment: Comparison by race

In the overall sample (Figure 6), Black African students find the campus to be significantly more supportive overall than students from any of the other groups – Black African students reported experiencing the most support for student success, whilst White students reported the lowest mean in this regard (significantly lower than Coloured and Black African students). Although Coloured students reported significantly less support for student success than Black African students, they still experience significantly more support in this regard than White students.

Promising findings	Disappointing findings
• Three-quarters of students described their relationships with other students as positive. • 71% of students reported that their campus provides them with support to succeed academically.	• Only 38% of students described their relationships with administrative staff as positive.


MICHAEL GRAVES 1982-1989
GROOT
2000
Multicultural Aspects
of Posttraumatic Stress Disorder
Wilson
Raphael
International Handbook of
Traumatic Stress Syndr
Honoring Differer
HANDBOOK OF STRESS, TRAUMA, AND THE
Post-Traumatic Stress D
1999
J.L. STEVENS

5. Implications and application for higher education

Having reflected on the results from the 2009 SASSE pilot, this section considers the implications and applications for student engagement results for some of the current challenges facing higher education in South Africa.

Design of a four-year undergraduate curriculum

One of the critical questions to be answered in the debate about the possible creation of a four-year undergraduate curriculum is: Will a four-year degree structure help success or should we just do better within the current three-year structure? Based on the results from this pilot it is argued that a four-year curriculum would be more effective for improving levels of student engagement, and as a result, success rates. For example, to improve Level of Academic Challenge through more challenging assessments and the use of writing-intensive courses will require additional support (preferably in the form of peer-facilitated learning such as supplemental instruction or tutorials) particularly in view of the differences in preparatory level of students on grounds of race and socio-economic status. Additional support requires additional time, and it is doubtful that current curricula could be restructured in such a manner that such time would become available without making compromises on academic content or quality.

Making use of additional support based on peer-facilitated learning could help to improve Active and Collaborative Learning, but as was the case with the Level of Academic Challenge, this will require additional time. Placing additional time pressures on students who are already struggling to cope within the system is unlikely to enhance success. Thus, even though students would be participating in activities that should enhance their success, the impact of these activities would be negated by the additional pressures they experience on their time.

Enriching Educational Experiences and Supportive Campus Environment could be addressed through an integrated year long first-year experience that is based on a general education model. This year could be structured to include high impact activities such as community service learning, writing-intensive courses, as well as foundation courses in academic literacy and numeracy. Furthermore, academic advising and first-year seminars where students can experience and develop diversity skills in smaller groups could form an integral part of this model. An innovative first-year curriculum could help to frontload support to Grade 12 learners, the majority of whom are underprepared for higher education.

Improving higher education outcomes

During the CHE-UFS colloquium on Improving Student Success in 2009, Prof George Kuh, leading expert on student engagement in the USA, emphasised that South African higher education institutions need to think about how to start requiring students to do things that help them to be successful, i.e. higher education must become intentional about student engagement and success. Requiring students to do the 'right things' does not mean that all undergraduates need to have exactly the same experiences, which often leads to paralysing thoughts on how to go about doing this for thousands of students, particularly in a resource constrained environment. Instead, an institution that wants to improve student engagement and success should start to think of how it can create a 'menu' or 'matrix' of different engaging experiences that will present the majority of (ideally all) undergraduate students with the opportunity to participate in various engaging and effective educational practices through the course of their undergraduate studies.

Years of research on student engagement have produced a wealth of literature that can be used for improving student success. Hopefully the emergence of research on student engagement in South Africa will result in reflection on how these interventions can be implemented in the South African context to improve success. More detailed information is available under the "Useful Resources" link on the SASSE website (http://sasse.ufs.ac.za/).

Enhancing quality assurance in teaching and learning

As the first cycle of public institutional audits in the South African higher education system is drawing to a close, the results in this report beg the question of whether the second cycle should not include a broader, more nuanced measure of the student experience of higher education, such as student engagement, to complement the emphasis on throughput and success rates to date?

SASSE data can also be used to initiate conversations about the most effective teaching and learning methodologies and techniques for engaging diverse groups of students. SASSE data is even more powerful when it is combined with other sources of data such as course evaluations, module assessments, and throughput and success rates, providing a better understanding of students' learning experiences (NSSE, 2006). Student engagement research has been presented at numerous student affairs conferences in the US context to facilitate the transformation of student affairs structures and practices. Therefore, SASSE data could be used to better align student affairs structures with teaching and learning so that student life starts to complement the development of specific competencies. Examples of these competencies, such as the application of knowledge and critical thinking skills, are proposed in "Learning Reconsidered" (Keeling, 2004; 2006).

Furthering social cohesion in South African higher education

The results of this study have shown that there are differences in how different subgroups experience higher education in South Africa. Student engagement data can be used to enrich orientation programmes and to create targeted interventions for specific groups, such as first generation students, to provide them with more nuanced support.

The case for diversity in the educational setting is grounded in the benefits students accrue from such interactions.

Hurtado et al., (2003) show how diversity results in both individual development for the student, and collective benefits for their institutions and society at large. Individuals who are educated in diverse settings are far more likely to work and live in racially and ethnically diverse environments after they graduate and they are better prepared for life in an increasingly complex and diverse society. Given the history of group segregation in South Africa, preparedness for an increasingly complex society and the ability to be meaningful role-players in a diverse democracy are life skills every graduate must be equipped with. Universities cannot shirk their responsibility to maximise favourable conditions for this social and personal development to occur. In order to ensure that students develop optimally through exposure to diversity, a wide range of multidimensional activities planned as long-term interventions that deliberately create inter-racial connections (both inside and outside the classroom) should be implemented by institutions (Hurtado et al., 1999).

However, a critical factor in the success of the above-mentioned initiatives is the institutional commitment and management support for diversity programmes. Research findings indicate that students' perceptions of the institution's commitment to diversity influence the extent to which they will benefit from diversity interactions (Milem et al., 2005) and the potential benefits of diversity are diminished in the face of problematic racial climates on campuses (Hurtado et al., 1999).

Examples of specific strategies for ensuring that diversity leads to educational benefit, supported by research, include:

- Create opportunities for students to develop inter-racial friendships. Research points to this as a powerful way of benefiting students (Antonio 2001a; 2001b; 2004). A particularly important element of such friendships is the equal status of the individuals who are interacting. Student residences, innovative accommodation provision, orientation programmes and faculty-based initiatives are all recommended as catalysts for the development of intergroup friendships (Milem et al., 2005).
- Require students to take a diversity-related course. Chang (2002) found that diversity course requirements can play a meaningful role in diminishing divisive racial prejudices and can subsequently improve race relations. By requiring students to interact in classrooms, active and collaborative learning opportunities are immediately increased.
- Encourage participation in multi-cultural campus events. Such events could form part of carefully planned and managed orientation programmes, first-year experience programmes, etc.
- Reward positive behaviour. Behaviour that gets rewarded is more likely to be repeated. Institutions can promote the diversity cause by rewarding staff who are actively implementing meaningful projects and programmes that promote inter-group interaction (Hurtado et al., 1998).
- Communicate clearly stated policies on resolving harassment and discrimination. The perception that the environment is just and fair is essential to the reduction of prejudice on campuses (Hurtado et al., 1998).

Ideally no student should be able to leave their higher education experience without being able to say that they often interacted with diverse others, and that they developed significantly in terms of understanding diverse groups during their time at the institution. With this in mind, the low percentage (42%) of students in this pilot study who had serious conversations with students from different racial/ethnic backgrounds is a warning flag signalling that institutions and policy makers alike should purposefully design learning opportunities that orchestrate meaningful interaction with diverse peers.

6. Looking forward

Following the success of the 2009 national pilot, the CHE has commissioned further research in this area in 2010. The 2010 sample includes 7 institutions of which 4 are first-time participants. Several institutions who participated in 2009 indicated that they first want to use the data to effect institutional change before participating in the SASSE again. This is similar to the US context where many institutions participate in 3-year cycles to allow them time to develop interventions that will improve engagement.

Innovations in the 2010 project include an online version of the SASSE, as well as an online pilot of the Lecturer Survey of Student Engagement (LSSE) to provide institutions with the ability to compare student and staff perspectives on student engagement in the same year.

Potential uses of student engagement data

The results of the 2009 SASSE pilot suggests that the data generated from the survey can be useful at various levels within the higher education system.

Systemic level

At a systemic level the data from this pilot could contribute to help support higher education in planning, funding and quality initiatives. Possible uses of the information are:

- **Planning**

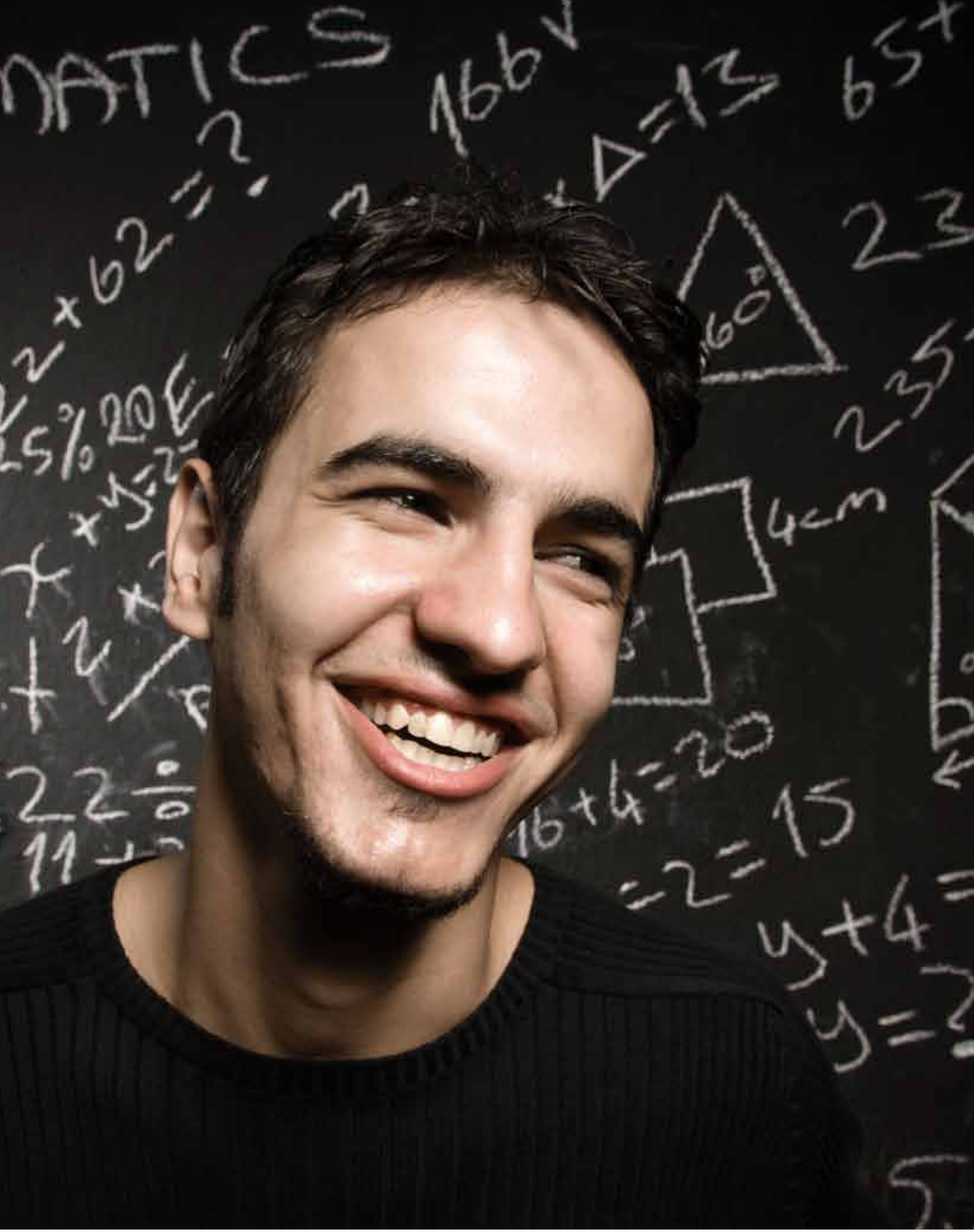
  Data on the nature of student engagement at a systemic level can inform reflection on the status of student learning in the current higher education landscape, and what systemic level strategies would be needed to improve student learning and success.

- **Funding**

  A more nuanced understanding of the nature of student learning could help to develop earmarked funding foci to improve engagement and student success, thereby enhancing the effectiveness and efficiency of the system.

- **Quality**

  The quality of higher education provision is enhanced since student engagement data provides evidence of the nature of student learning in the system, and the extent to which students' learning experiences will result in their success. The data therefore promotes the development of a culture of evidence to inform critical self-reflection on fitness for purpose, fitness of purpose, value for money and transformation.



Inter-institutional improvement conversations

The value of sharing information on student engagement lies in the potential this has to stimulate constructive conversations between institutions about improving success. This was evident from the interaction between participating institutions during the SASSE pilot workshop in March 2009, and the CHE colloquium on improving undergraduate performance in May 2009. Research in the US shows that student engagement data has had a powerful effect on increasing collaboration between higher education institutions as they share practices and initiatives that actively improve success and higher education quality (NSSE, 2009). The need for a forum for sharing of results in the South African context was expressed by participants in the 2010 CHE colloquium and the 2010 users' workshop.

Intra-institutional improvement conversations and initiatives

The research cited in this report is a testimony to the wealth of literature available in the field of student engagement. The fact that research in this field relates strategies and interventions back to their potential impact on the success of students makes it an empowering resource to develop strategies for addressing success at an institutional level.

The above-mentioned possible future uses of the SASSE will depend on investment in continued research. Only continued longitudinal research using this instrument will enable an analysis of trends and interventions at both a systemic and institutional level that will make a measurable difference to success.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7. Conclusion

This report introduced student engagement as a field of research and illustrated its importance for improving the quality and outcomes of the student experience. The introduction was followed by results from the 2009 national CHE-UFS student engagement research pilot project showing the promising and disappointing aspects of the student learning experience. Finally, the possible implications and applications of student engagement for: the design and implementation of a four-year undergraduate degree; assessing the effectiveness of higher education (throughput and success rates); improving the quality of teaching and learning; and addressing social cohesion were considered.

In her opening of the second Colloquium on Improving Undergraduate Success, Judy Backhouse, Director: Advice and Monitoring at CHE, outlined the formidable challenge of improving success in South African higher education and proposed that to meet this challenge greater creativity and effort is needed about 'how we will be able to tell that our interventions are working' (Backhouse, 2010). The SASSE provides a new perspective on South African conversations about improving student success in that it provides institutions with data which can be used to:

- monitor the frequency with which students engage in effective educational behaviours and the prevalence of educationally effective practices at an institution;
- identify problem areas related to student success which institutions can do something about;
- paint a picture of students at an institution;
- refocus institutional conversations on quality of education;
- enhance decision making through rich contextual data; and
- mobilise actions towards success.

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Appendix 1: Benchmarks of Effective Educational Practice

The benchmarks are based on 42 key questions from the SASSE survey and capture vital aspects of the student experience.

Level of Academic Challenge

Challenging intellectual and creative work is central to student learning and institutional quality. Universities promote high levels of student achievement by emphasising the importance of academic effort and setting high expectations for student performance.

Activities and conditions:

- Time spent preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic program)
- Worked harder than you thought you could to meet a lecturer's standards or expectations
- Number of assigned textbooks, books, or book-length course packages or subject readings
- Number of written pages or assignments of 20 pages or more
- Number of written pages or assignments between 5 and 19 pages
- Number of written pages or assignments fewer than 5 pages
- Coursework emphasised: Analysing the basic elements of an idea, experience, or theory
- Coursework emphasised: Synthesising/ integrating and organising ideas, information, or experiences
- Coursework emphasised: Making judgments about the value of information, arguments, or methods
- Coursework emphasised: Applying theories or concepts to practical problems or in new situations
- Institution emphasised: Spending significant amounts of time studying and on academic work

Active and Collaborative Learning

Students learn more when they are actively involved in their education and have opportunities to think about and apply what they are learning in different settings. Collaborating with others to solve problems or master difficult materials prepares students to deal with the messy, unscripted problems they will encounter daily during and after university.

Activities:

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects during class
- Worked with classmates outside of class to prepare class assignments

- Tutored or taught other students (paid or voluntary)
- Participated in a community-based project as part of a regular course
- Discussed ideas from readings or classes with others outside of class (students, family members, co-workers, etc.)

Student-Staff Interaction

Students see first-hand how experts think about, and solve practical problems by interacting with staff members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, life-long learning.

Activities:

- Discussed marks or assignments with a lecturer or tutor
- Talked about career plans with a lecturer or counsellor
- Discussed ideas from readings or classes with a lecturer outside of class
- Worked with staff members on activities other than coursework (committees, orientation, student life activities, etc.)
- Received prompt feedback (written or oral) from lecturers on performance
- Worked with a staff member on a research project

Enriching Educational Experiences

Complementary learning opportunities inside and outside the classroom augment the academic program. Experiencing diversity teaches students valuable things about themselves and other cultures. Used appropriately, technology facilitates learning and promotes collaboration between peers and instructors. Internships and community service provide students with opportunities to synthesise, integrate, and apply their knowledge. Such experiences make learning more meaningful and, ultimately, more useful because what students know becomes a part of who they are.

Activities and conditions:

- Talking to students with different religious beliefs, political opinions, or values
- Talking to students of a different race or ethnicity
- An institutional climate that encourages contact among students from different economic, social, and racial or ethnic backgrounds
- Using electronic technology to discuss or complete assignments
- Participating in:
  - Internships or field experiences
  - Community service or volunteer work
  - Foreign or additional language coursework
  - Study abroad
  - Study of a subject or course for non-degree purposes
  - The development of a community project using knowledge obtained at university
  - Co-curricular activities
  - Academic student societies (law, psychology, etc.)

Supportive Campus Environment

Students perform better and are more satisfied at universities that are committed to their success and cultivate positive working and social relations among different groups on campus.

Conditions:

- Campus environment provides support needed to help you succeed academically
- Campus environment helps you cope with non-academic responsibilities (work, family, etc.)
- Campus environment provides the support needed to help you thrive socially
- Quality of relationships with other students
- Quality of relationships with lecturers and staff members
- Quality of relationships with administrative personnel and offices

Appendix 2 Benchmark items: performance by Typology

a Column percentages (%) are weighted, but counts are not. Therefore, column % cannot be directly calculated from the counts.

b Univ = Universities

c Comp = Comprehensives

d UOT = Universities of Technology

Benchmark Items by Typology: Level of Academic Challenge[a]

		Name	Response Options	SASSE Sample		SASSE First-Year		SASSE Senior		Univ[b] Overall		Univ[b] First-Year	
				N	%	N	%	N	%	N	%	N	%
14a	Spending significant amounts of time studying and on academic work	envschol (AC)	Very little	473	3%	182	3%	277	4%	189	3%	78	2%
			Some	2081	15%	868	14%	1146	16%	867	13%	366	12%
			Quite a bit	4918	38%	2038	36%	2723	39%	2099	38%	866	37%
			Very much	6059	44%	2700	47%	3165	41%	2625	47%	1127	49%
			Total	13531	100%	5788	100%	7311	100%	5780	100%	2437	100%
4r	Worked harder than you thought you could to meet a lecturer's standards or expectations	workhard (AC)	Never	1367	10%	639	11%	687	9%	606	12%	279	13%
			Sometimes	4747	36%	2025	36%	2564	35%	2028	36%	832	35%
			Often	4807	36%	2004	35%	2644	37%	2024	34%	840	34%
			Very Often	2478	18%	1057	18%	1342	19%	1058	18%	447	18%
			Total	13399	100%	5725	100%	7237	100%	5716	100%	2398	100%
5b	Analysing the basic elements of an idea, experience or theory, for example by examining a particular case or situation in depth and considering its components	analyse (AC)	Very little	880	6%	399	7%	441	6%	333	5%	151	5%
			Some	3581	26%	1588	27%	1869	25%	1496	23%	643	23%
			Quite a bit	5160	39%	2161	38%	2838	40%	2209	39%	910	38%
			Very much	3905	29%	1641	29%	2149	29%	1717	33%	730	34%
			Total	13526	100%	5789	100%	7297	100%	5755	100%	2434	100%
5c	Synthesising/ integrating and organising ideas, information or experiences into new, more complex interpretations and relationships	synthes (AC)	Very little	1424	11%	634	11%	732	10%	518	8%	225	8%
			Some	4377	33%	1903	33%	2312	32%	1728	28%	745	29%
			Quite a bit	4632	34%	1944	33%	2554	35%	2028	36%	840	35%
			Very much	3060	22%	1281	22%	1694	23%	1471	29%	611	29%
			Total	13493	100%	5762	100%	7292	100%	5745	100%	2421	100%
5d	Making judgements about the value of information, arguments or methods, for example by examining how others gathered and interpreted data and assessing the accuracy of the conclusions	evaluate (AC)	Very little	1923	14%	870	15%	984	13%	755	11%	336	12%
			Some	4135	30%	1771	30%	2217	30%	1746	29%	748	30%
			Quite a bit	4556	34%	1911	33%	2527	36%	1957	35%	798	34%
			Very much	2894	21%	1221	21%	1569	21%	1297	25%	543	25%
			Total	13508	100%	5773	100%	7297	100%	5755	100%	2425	100%
5e	Applying theories or concepts to practical problems or in new situations	applying (AC)	Very little	831	6%	408	7%	396	5%	341	5%	172	6%
			Some	2649	20%	1231	21%	1306	18%	1104	18%	518	20%
			Quite a bit	4497	34%	1917	34%	2446	35%	1889	34%	785	33%
			Very much	5374	40%	2167	38%	3048	41%	2347	43%	938	41%
			Total	13351	100%	5723	100%	7196	100%	5681	100%	2413	100%
6a	Number of assigned textbooks, books, or book-length course packages or subject readings	readasgn (AC)	None	341	2%	133	2%	196	2%	147	2%	58	2%
			1-4	3971	30%	1635	28%	2195	32%	1559	25%	663	25%
			5-10	5362	40%	2416	42%	2785	39%	2130	37%	965	39%
			11-20	2313	17%	994	18%	1243	16%	1136	21%	470	21%
			20+	1486	11%	580	10%	859	11%	774	15%	267	13%
			Total	13473	100%	5758	100%	7278	100%	5746	100%	2423	100%
6c	Number of written pages or assignments of 20 pages or more	writemor (AC)	None	5149	36%	2408	41%	2584	32%	2349	46%	1136	54%
			1-4	3993	30%	1575	27%	2299	33%	1626	27%	616	22%
			5-10	2176	17%	877	15%	1219	18%	901	14%	360	12%
			11-20	1158	9%	507	10%	611	8%	456	7%	178	6%
			20+	1048	8%	426	8%	580	9%	426	7%	145	5%
			Total	13524	100%	5793	100%	7293	100%	5758	100%	2435	100%
6d	Number of written pages or assignments between 5 and 19 pages	writemid (AC)	None	2393	17%	1121	18%	1185	15%	1013	18%	477	22%
			1-4	5745	43%	2530	43%	3032	44%	2342	41%	1051	43%
			5-10	3185	23%	1259	22%	1818	24%	1431	24%	559	22%
			11-20	1491	11%	600	11%	847	12%	670	11%	254	9%
			20+	678	5%	270	5%	392	6%	296	5%	92	4%
			Total	13492	100%	5780	100%	7274	100%	5752	100%	2433	100%

Univ[b] Senior		Comp[c] Overall		Comp[c] First-Year		Comp[c] Senior		UOT[d] Overall		UOT[d] First-Year		UOT[d] Senior	
N	%	N	%	N	%	N	%	N	%	N	%	N	%
105	3%	122	3%	48	2%	70	3%	160	4%	55	3%	101	5%
482	14%	619	13%	269	12%	330	13%	587	18%	232	17%	327	18%
1173	38%	1619	35%	686	33%	887	37%	1185	40%	481	38%	654	41%
1417	44%	2264	50%	1060	53%	1136	47%	1155	38%	505	41%	605	36%
3177	100%	4624	100%	2063	100%	2423	100%	3087	100%	1273	100%	1687	100%
316	12%	509	11%	256	13%	235	9%	247	8%	101	8%	134	8%
1142	37%	1654	36%	755	36%	843	35%	1051	35%	434	36%	570	35%
1118	33%	1664	37%	707	35%	909	39%	1105	36%	452	36%	608	37%
577	18%	767	16%	341	16%	405	17%	645	20%	266	20%	355	20%
3153	100%	4594	100%	2059	100%	2392	100%	3048	100%	1253	100%	1667	100%
166	4%	264	5%	130	6%	127	5%	280	8%	116	9%	147	8%
812	23%	1186	24%	568	25%	578	23%	889	29%	372	31%	474	27%
1235	40%	1768	38%	753	37%	955	39%	1167	39%	494	39%	637	40%
941	33%	1422	32%	621	32%	764	33%	756	24%	287	22%	437	25%
3154	100%	4640	100%	2072	100%	2424	100%	3092	100%	1269	100%	1695	100%
274	7%	514	10%	239	11%	253	10%	387	13%	166	14%	204	11%
924	28%	1536	32%	693	32%	799	32%	1098	37%	462	37%	578	36%
1137	36%	1571	35%	693	34%	833	35%	1021	33%	407	31%	576	34%
822	29%	1000	23%	435	23%	534	24%	582	18%	232	17%	334	19%
3157	100%	4621	100%	2060	100%	2419	100%	3088	100%	1267	100%	1692	100%
399	11%	685	14%	316	15%	348	14%	478	15%	216	17%	234	13%
940	29%	1461	31%	646	31%	760	31%	914	31%	374	31%	506	31%
1112	36%	1509	33%	676	34%	799	34%	1075	35%	429	33%	610	37%
713	24%	973	21%	426	21%	515	22%	619	20%	251	19%	337	19%
3164	100%	4628	100%	2064	100%	2422	100%	3086	100%	1270	100%	1687	100%
160	4%	254	5%	135	6%	111	4%	233	7%	101	8%	122	7%
538	17%	881	18%	417	19%	430	17%	661	22%	295	24%	336	20%
1057	35%	1549	33%	696	33%	801	33%	1049	35%	431	34%	583	36%
1351	44%	1896	44%	796	42%	1053	46%	1110	35%	426	33%	631	37%
3106	100%	4580	100%	2044	100%	2395	100%	3053	100%	1253	100%	1672	100%
86	2%	112	2%	45	2%	64	3%	81	2%	29	2%	46	2%
849	26%	1317	26%	544	24%	727	28%	1089	36%	428	33%	613	38%
1100	34%	2094	45%	965	47%	1069	44%	1125	38%	480	41%	609	37%
640	20%	683	17%	321	18%	342	16%	483	15%	199	16%	255	14%
483	17%	410	10%	185	9%	212	10%	293	8%	125	9%	158	8%
3158	100%	4616	100%	2060	100%	2414	100%	3071	100%	1261	100%	1681	100%
1146	37%	1861	39%	848	39%	954	39%	932	28%	421	33%	480	24%
966	31%	1393	29%	573	28%	792	31%	962	33%	384	30%	531	35%
512	15%	677	16%	300	15%	352	16%	586	19%	213	16%	347	21%
261	8%	357	8%	180	8%	164	6%	340	11%	147	13%	184	10%
271	8%	346	9%	170	9%	161	9%	271	9%	107	8%	147	10%
3156	100%	4634	100%	2071	100%	2423	100%	3091	100%	1272	100%	1689	100%
504	15%	923	20%	437	22%	457	18%	453	13%	204	13%	223	12%
1221	39%	2125	47%	957	46%	1112	48%	1259	42%	516	41%	686	43%
834	26%	953	20%	387	18%	529	21%	794	26%	312	26%	449	26%
396	13%	410	9%	176	9%	219	9%	405	13%	167	14%	229	13%
197	7%	211	5%	109	6%	98	5%	166	6%	67	6%	95	6%
3152	100%	4622	100%	2066	100%	2415	100%	3077	100%	1266	100%	1682	100%

Benchmark Items by Typology: Level of Academic Challenge[a] (continued)

		Name	Response Options	SASSE Sample		SASSE First-Year		SASSE Senior		Univ[b] Overall		Univ[b] First-Year	
				N	%	N	%	N	%	N	%	N	%
6e	Number of written pages or assignments of fewer than 5 pages	writesml (AC)	None	3045	24%	1196	21%	1733	26%	985	15%	369	13%
			1-4	5859	43%	2572	44%	3109	43%	2611	46%	1180	48%
			5-10	2339	17%	1052	18%	1204	16%	1130	20%	481	20%
			11-20	1279	9%	575	10%	663	9%	585	10%	247	11%
			20+	1000	7%	394	7%	585	7%	450	8%	158	7%
			Total	13522	100%	5789	100%	7294	100%	5761	100%	2435	100%
12a	Preparing for class (studying, reading, writing, doing homework or laboratory work, analysing data, rehearsing, and other academic activities)	acadpr01 (AC)	0 Hrs	399	3%	142	2%	241	3%	179	3%	68	3%
			1-5 Hrs	5494	40%	2268	39%	3044	41%	2309	39%	949	37%
			6-10 Hrs	2761	20%	1172	20%	1505	21%	1201	21%	514	22%
			11-15 Hrs	1636	12%	713	13%	871	12%	688	12%	279	12%
			16-20 Hrs	1236	9%	562	10%	636	9%	524	9%	238	9%
			21-25 Hrs	775	6%	360	7%	383	6%	319	6%	141	6%
			26-30 Hrs	522	4%	257	5%	249	4%	238	5%	105	5%
			30+ Hrs	692	5%	309	5%	364	5%	297	6%	135	6%
			Total	13515	100%	5783	100%	7293	100%	5755	100%	2429	100%

Benchmark Items by Typology: Active and Collaborative Learning[a]

		Name	Response Options	SASSE Sample		SASSE First-Year		SASSE Senior		Univ[b] Overall		Univ[b] First-Year	
				N	%	N	%	N	%	N	%	N	%
4a	Asked questions in class or contributed to class discussions	clquest (ACL)	Never	2171	15%	1058	17%	1044	14%	845	16%	409	18%
			Sometimes	7621	56%	3296	58%	4090	54%	3278	57%	1404	59%
			Often	2706	20%	1049	18%	1555	22%	1205	19%	462	18%
			Very Often	1096	8%	416	7%	642	9%	464	8%	170	6%
			Total	13594	100%	5819	100%	7331	100%	5792	100%	2445	100%
4b	Made a class presentation	clpresen (ACL)	Never	5989	44%	3279	58%	2532	33%	2709	50%	1381	61%
			Sometimes	4877	34%	1752	28%	2963	40%	2052	34%	773	30%
			Often	1963	15%	591	11%	1301	19%	758	12%	226	8%
			Very Often	732	6%	185	4%	518	8%	258	4%	60	2%
			Total	13561	100%	5807	100%	7314	100%	5777	100%	2440	100%
4g	Worked with other students on projects during class	classgrp (ACL)	Never	2883	22%	1487	26%	1297	18%	1115	22%	571	26%
			Sometimes	4537	33%	1940	34%	2452	32%	1973	35%	837	35%
			Often	3971	29%	1580	26%	2273	32%	1767	30%	695	28%
			Very Often	2146	16%	787	14%	1281	18%	911	13%	329	11%
			Total	13537	100%	5794	100%	7303	100%	5766	100%	2432	100%
4h	Worked with classmates outside of class to prepare class assignments	occgrp (ACL)	Never	1434	11%	693	13%	672	9%	549	11%	276	13%
			Sometimes	3740	27%	1726	29%	1886	25%	1648	30%	762	32%
			Often	4673	36%	1984	35%	2569	37%	1972	35%	837	35%
			Very Often	3599	26%	1363	23%	2117	29%	1569	24%	556	20%
			Total	13446	100%	5766	100%	7244	100%	5738	100%	2431	100%
4j	Tutored or taught other students (paid or voluntary)	tutor (ACL)	Never	8083	59%	3652	62%	4172	56%	3497	61%	1559	64%
			Sometimes	3489	27%	1411	26%	1965	28%	1402	25%	556	23%
			Often	1219	9%	484	8%	686	9%	512	8%	210	8%
			Very Often	764	5%	257	4%	488	6%	356	6%	111	4%
			Total	13555	100%	5804	100%	7311	100%	5767	100%	2436	100%

	Univ[b] Senior		Comp[c] Overall		Comp[c] First-Year		Comp[c] Senior		UOT[d] Overall		UOT[d] First-Year		UOT[d] Senior	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	577	17%	1335	31%	554	28%	735	33%	714	24%	268	21%	415	26%
	1362	43%	1909	41%	860	41%	993	42%	1323	43%	527	43%	743	43%
	613	20%	644	13%	313	14%	309	12%	558	18%	257	20%	276	16%
	324	10%	397	8%	192	9%	193	7%	294	9%	135	10%	145	9%
	284	10%	346	7%	149	8%	190	6%	200	6%	84	6%	110	6%
	3160	100%	4631	100%	2068	100%	2420	100%	3089	100%	1271	100%	1689	100%
	105	4%	169	3%	61	3%	101	4%	48	2%	13	1%	32	2%
	1298	41%	2007	43%	861	42%	1083	44%	1164	39%	454	38%	654	38%
	653	21%	908	18%	386	18%	496	19%	644	21%	269	20%	351	22%
	387	12%	555	12%	259	12%	276	12%	389	13%	172	13%	207	13%
	271	8%	388	8%	189	9%	187	8%	318	10%	131	10%	176	9%
	164	5%	234	6%	122	6%	105	5%	220	7%	97	7%	112	7%
	126	4%	157	4%	84	4%	68	3%	127	4%	68	5%	55	3%
	154	5%	216	5%	105	5%	106	5%	176	5%	68	5%	102	6%
	3158	100%	4634	100%	2067	100%	2422	100%	3086	100%	1272	100%	1689	100%

	Univ[b] Senior		Comp[c] Overall		Comp[c] First-Year		Comp[c] Senior		UOT[d] Overall		UOT[d] First-Year		UOT[d] Senior	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	414	15%	1009	23%	521	28%	455	18%	309	9%	124	9%	171	10%
	1784	55%	2598	54%	1144	54%	1377	53%	1721	57%	739	60%	914	55%
	702	20%	737	16%	294	13%	419	20%	758	24%	292	22%	429	26%
	277	10%	310	7%	122	5%	179	9%	319	9%	123	9%	185	10%
	3177	100%	4654	100%	2081	100%	2430	100%	3107	100%	1278	100%	1699	100%
	1251	40%	2308	51%	1382	69%	858	35%	956	35%	507	46%	416	27%
	1216	37%	1517	28%	478	18%	992	36%	1289	40%	497	36%	741	44%
	512	16%	605	15%	165	9%	419	20%	594	17%	198	13%	366	20%
	189	7%	222	6%	54	4%	161	9%	252	7%	71	5%	168	9%
	3168	100%	4652	100%	2079	100%	2430	100%	3091	100%	1273	100%	1691	100%
	506	18%	1195	27%	630	32%	528	22%	565	18%	281	22%	260	15%
	1078	34%	1603	33%	695	33%	858	34%	943	31%	403	33%	503	30%
	1035	33%	1267	27%	534	25%	693	29%	928	31%	349	27%	539	34%
	547	15%	572	13%	212	10%	344	15%	657	20%	243	18%	387	21%
	3166	100%	4637	100%	2071	100%	2423	100%	3093	100%	1276	100%	1689	100%
	252	9%	604	13%	283	14%	291	13%	279	9%	133	12%	128	7%
	839	27%	1304	28%	636	30%	623	25%	777	25%	324	26%	417	23%
	1090	35%	1611	35%	697	34%	879	37%	1074	37%	445	35%	590	38%
	960	28%	1094	24%	445	22%	615	25%	925	29%	357	27%	536	31%
	3141	100%	4613	100%	2061	100%	2408	100%	3055	100%	1259	100%	1671	100%
	1845	58%	2856	62%	1327	62%	1430	60%	1711	55%	756	60%	888	52%
	799	26%	1162	24%	494	25%	640	25%	914	30%	360	29%	516	31%
	281	8%	412	9%	164	8%	235	9%	287	9%	106	7%	167	10%
	239	7%	228	5%	98	5%	126	5%	178	5%	48	4%	121	7%
	3164	100%	4658	100%	2083	100%	2431	100%	3090	100%	1270	100%	1692	100%

Benchmark Items by Typology: Active and Collaborative Learning[a] (continued)

		Name	Response Options	SASSE Sample		SASSE First-Year		SASSE Senior		Univ[b] Overall		Univ[b] First-Year	
				N	%	N	%	N	%	N	%	N	%
4k	Participated in a community-based project (e.g. service learning) as part of a regular course	commproj (ACL)	Never	8659	67%	4050	72%	4326	62%	3437	62%	1619	69%
			Sometimes	2934	20%	1122	18%	1732	22%	1361	22%	531	20%
			Often	1265	9%	418	6%	792	10%	646	11%	203	7%
			Very Often	659	4%	207	3%	429	6%	327	5%	93	3%
			Total	13517	100%	5797	100%	7279	100%	5771	100%	2446	100%
4t	Discussed ideas from your readings or classes with others outside class (students, family members, co-workers, etc.)	oocideas (ACL)	Never	1029	8%	458	8%	530	7%	423	8%	184	8%
			Sometimes	4558	33%	1926	34%	2468	33%	1962	34%	831	35%
			Often	4745	35%	1982	34%	2620	35%	2100	37%	861	35%
			Very Often	3263	24%	1455	25%	1716	24%	1315	22%	573	22%
			Total	13595	100%	5821	100%	7334	100%	5800	100%	2449	100%

Benchmark Items by Typology: Student-Staff Interaction[a]

		Name	Response Options	SASSE Sample		SASSE First-Year		SASSE Senior		Univ[b] Overall		Univ[b] First-Year	
				N	%	N	%	N	%	N	%	N	%
4n	Discussed marks or assignments with a lecturer or tutor	facgrade (SSI)	Never	3631	26%	1915	32%	1578	19%	1655	28%	845	34%
			Sometimes	5811	42%	2411	42%	3238	43%	2557	45%	1034	43%
			Often	2888	22%	1060	18%	1729	26%	1142	20%	421	17%
			Very Often	1212	10%	411	8%	763	12%	429	7%	138	5%
			Total	13542	100%	5797	100%	7308	100%	5783	100%	2438	100%
4o	Talked about career plans with a lecturer or a counsellor	facplans (SSI)	Never	6665	50%	3198	56%	3248	44%	2877	53%	1373	59%
			Sometimes	4488	33%	1721	30%	2637	36%	1907	32%	709	28%
			Often	1711	12%	622	10%	1021	14%	725	11%	256	9%
			Very Often	633	5%	238	4%	373	6%	247	4%	94	3%
			Total	13497	100%	5779	100%	7279	100%	5756	100%	2432	100%
4p	Discussed ideas from your readings or classes with a lecturer outside of class	facideas (SSI)	Never	6236	46%	3002	52%	3033	40%	2695	49%	1293	55%
			Sometimes	5096	38%	1988	35%	2963	42%	2118	36%	802	33%
			Often	1677	12%	607	10%	990	14%	723	12%	243	10%
			Very Often	482	3%	175	3%	297	4%	217	3%	86	3%
			Total	13491	100%	5772	100%	7283	100%	5753	100%	2424	100%
4q	Received punctual written or oral feedback from lecturers on your academic performance	facfeed (SSI)	Never	4633	34%	2265	39%	2219	30%	1938	36%	971	43%
			Sometimes	4492	34%	1791	31%	2564	36%	1976	35%	770	31%
			Often	3021	22%	1186	21%	1727	24%	1291	21%	468	18%
			Very Often	1341	10%	544	9%	759	10%	552	8%	228	8%
			Total	13487	100%	5786	100%	7269	100%	5757	100%	2437	100%
4s	Worked with staff members (lecturers or other) on activities other than coursework (committees, orientation, student life activities, etc.)	facother (SSI)	Never	9476	72%	4340	77%	4849	68%	3882	71%	1773	77%
			Sometimes	2612	18%	997	16%	1519	20%	1216	20%	446	16%
			Often	997	7%	318	5%	644	9%	451	7%	147	5%
			Very Often	449	3%	135	2%	296	3%	222	3%	70	2%
			Total	13534	100%	5790	100%	7308	100%	5771	100%	2436	100%
10d	Worked on a research project with a staff member (lecturers or other) outside course or programme requirements	resrch04 (SSI)	Have not decided	4726	35%	2115	36%	2464	33%	1963	35%	881	37%
			Do not plan to	2962	21%	1106	18%	1764	24%	1287	24%	502	22%
			Plan to do	5087	38%	2357	41%	2561	35%	2169	35%	975	39%
			Done	792	6%	224	4%	539	8%	362	6%	83	3%
			Total	13567	100%	5802	100%	7328	100%	5781	100%	2441	100%

	Univ[b] Senior		Comp[c] Overall		Comp[c] First-Year		Comp[c] Senior		UOT[d] Overall		UOT[d] First-Year		UOT[d] Senior	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	1721	55%	3172	69%	1507	74%	1561	64%	2031	68%	913	72%	1036	64%
	796	25%	894	18%	353	16%	521	20%	662	21%	234	19%	402	22%
	415	13%	372	9%	143	7%	215	10%	245	8%	72	6%	160	9%
	227	7%	188	4%	67	3%	115	6%	142	4%	47	3%	86	5%
	3159	100%	4626	100%	2070	100%	2412	100%	3080	100%	1266	100%	1684	100%
	227	7%	383	8%	179	9%	184	7%	223	7%	95	8%	119	7%
	1072	33%	1584	33%	688	34%	849	33%	995	33%	401	33%	537	33%
	1175	38%	1618	34%	710	34%	863	36%	1016	33%	407	33%	575	34%
	709	22%	1069	24%	505	24%	533	24%	867	26%	373	27%	466	26%
	3183	100%	4654	100%	2082	100%	2429	100%	3101	100%	1276	100%	1697	100%

	Univ[b] Senior		Comp[c] Overall		Comp[c] First-Year		Comp[c] Senior		UOT[d] Overall		UOT[d] First-Year		UOT[d] Senior	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	752	21%	1283	29%	734	37%	498	21%	688	22%	332	26%	327	18%
	1463	48%	1926	40%	821	39%	1061	41%	1308	42%	550	44%	701	41%
	685	22%	1001	21%	371	17%	594	25%	733	24%	264	20%	442	28%
	277	9%	431	10%	150	7%	270	12%	348	12%	122	11%	213	13%
	3177	100%	4641	100%	2076	100%	2423	100%	3077	100%	1268	100%	1683	100%
	1424	46%	2337	52%	1150	58%	1105	46%	1429	46%	665	51%	708	42%
	1141	36%	1526	32%	612	29%	881	36%	1043	34%	396	32%	607	36%
	449	14%	549	11%	215	9%	311	12%	432	14%	150	13%	257	15%
	145	4%	206	5%	87	4%	114	6%	178	5%	57	4%	112	7%
	3159	100%	4618	100%	2064	100%	2411	100%	3082	100%	1268	100%	1684	100%
	1320	43%	2248	49%	1082	53%	1101	45%	1278	42%	621	50%	604	36%
	1269	40%	1716	37%	722	34%	943	39%	1244	41%	458	37%	739	45%
	449	14%	521	11%	209	10%	289	12%	426	14%	152	11%	248	15%
	126	4%	145	3%	57	3%	85	4%	119	4%	32	2%	85	5%
	3164	100%	4630	100%	2070	100%	2418	100%	3067	100%	1263	100%	1676	100%
	918	30%	1762	38%	897	45%	805	31%	914	30%	387	31%	488	29%
	1144	38%	1478	31%	590	27%	844	35%	1031	35%	429	34%	571	36%
	785	24%	946	21%	399	19%	521	23%	775	24%	318	24%	413	24%
	311	8%	440	10%	185	9%	242	11%	344	11%	129	10%	203	11%
	3158	100%	4626	100%	2071	100%	2412	100%	3064	100%	1263	100%	1675	100%
	2005	65%	3448	74%	1621	79%	1723	69%	2123	71%	937	76%	1107	69%
	730	23%	772	16%	312	14%	439	18%	611	19%	234	17%	343	19%
	291	8%	296	7%	101	5%	183	9%	246	7%	69	5%	167	9%
	144	4%	118	2%	36	2%	77	3%	109	3%	29	2%	75	3%
	3170	100%	4634	100%	2070	100%	2422	100%	3089	100%	1269	100%	1692	100%
	1030	33%	1708	36%	788	38%	869	35%	1042	33%	440	35%	558	32%
	746	26%	1125	23%	410	19%	685	27%	543	18%	193	15%	327	21%
	1131	32%	1624	36%	813	40%	756	32%	1274	41%	561	44%	662	39%
	267	10%	191	4%	63	3%	122	6%	238	7%	78	6%	150	8%
	3174	100%	4648	100%	2074	100%	2432	100%	3097	100%	1272	100%	1697	100%

Benchmark Items by Typology: Enriching Educational Experiences[a]

		Name	Response Options	SASSE Sample		SASSE First-Year		SASSE Senior		Univ[b] Overall		Univ[b] First-Year	
				N	%	N	%	N	%	N	%	N	%
14c	Encouraged contact among students from different economic, social and racial or ethnic backgrounds	envdivrs (EEE)	Very little	2638	21%	1070	19%	1498	23%	1087	21%	451	20%
			Some	4314	32%	1818	32%	2363	33%	1866	34%	782	34%
			Quite a bit	3939	28%	1727	29%	2079	27%	1698	29%	727	29%
			Very much	2609	18%	1165	20%	1353	17%	1099	17%	463	18%
			Total	13500	100%	5780	100%	7293	100%	5750	100%	2423	100%
4l	Used an electronic medium (SMS, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment	itacadem (EEE)	Never	3121	21%	1390	21%	1610	20%	1405	23%	647	26%
			Sometimes	4073	29%	1745	30%	2215	29%	1749	30%	736	31%
			Often	3312	25%	1416	25%	1789	25%	1424	26%	592	25%
			Very Often	3062	25%	1265	24%	1696	25%	1201	21%	466	19%
			Total	13568	100%	5816	100%	7310	100%	5779	100%	2441	100%
4u	Had serious conversations with students of a different race or ethnicity than your own	divrstud (EEE)	Never	2979	22%	1324	22%	1553	21%	1365	21%	589	21%
			Sometimes	4887	36%	2047	36%	2686	36%	2093	35%	877	35%
			Often	3293	24%	1343	24%	1837	25%	1350	24%	530	23%
			Very Often	2395	18%	1086	19%	1235	17%	971	19%	445	20%
			Total	13554	100%	5800	100%	7311	100%	5779	100%	2441	100%
4v	Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions or personal values	diffstu2 (EEE)	Never	2266	16%	1002	16%	1194	16%	1087	17%	470	16%
			Sometimes	4761	35%	2027	35%	2571	35%	2034	35%	852	35%
			Often	3677	27%	1564	27%	1985	27%	1539	28%	655	28%
			Very Often	2897	22%	1234	22%	1580	22%	1138	21%	476	21%
			Total	13601	100%	5827	100%	7330	100%	5798	100%	2453	100%
10a	Practicum, internship, field experience or clinical assignment	intern04 (EEE)	Have not decided	2918	20%	1416	22%	1409	18%	1374	22%	649	24%
			Do not plan to	944	6%	434	7%	485	6%	485	7%	219	7%
			Plan to do	8455	63%	3713	67%	4465	59%	3371	60%	1457	65%
			Done	1225	11%	231	4%	950	17%	540	11%	113	5%
			Total	13542	100%	5794	100%	7309	100%	5770	100%	2438	100%
10b	Community service or volunteer work	volntr04 (EEE)	Have not decided	2796	21%	1280	21%	1430	20%	1085	18%	503	19%
			Do not plan to	1758	14%	726	13%	972	15%	697	12%	278	10%
			Plan to do	6301	46%	2842	50%	3250	43%	2706	46%	1216	50%
			Done	2692	19%	952	16%	1659	22%	1286	24%	441	20%
			Total	13547	100%	5800	100%	7311	100%	5774	100%	2438	100%
10c	Participated in academic student societies (law, psychology, etc.) where students engage in topics related to their subject	lrncom04 (EEE)	Have not decided	4187	32%	1828	33%	2225	32%	1668	30%	721	30%
			Do not plan to	3077	23%	1147	20%	1844	27%	1250	23%	446	19%
			Plan to do	5032	36%	2419	41%	2436	31%	2278	37%	1103	44%
			Done	1265	8%	415	6%	809	10%	581	10%	174	7%
			Total	13561	100%	5809	100%	7314	100%	5777	100%	2444	100%

	Univ[b] Senior		Comp[c] Overall		Comp[c] First-Year		Comp[c] Senior		UOT[d] Overall		UOT[d] First-Year		UOT[d] Senior	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	608	22%	867	20%	373	19%	475	22%	674	22%	244	18%	407	24%
	1029	33%	1442	31%	617	31%	780	32%	992	33%	415	32%	544	33%
	926	29%	1369	29%	628	29%	699	28%	864	28%	368	30%	450	26%
	600	16%	949	20%	453	21%	466	18%	554	18%	245	20%	285	16%
	3163	100%	4627	100%	2071	100%	2420	100%	3084	100%	1272	100%	1686	100%
	712	20%	1119	23%	492	21%	583	23%	589	19%	247	18%	311	19%
	974	30%	1390	29%	628	30%	719	28%	923	29%	374	29%	519	30%
	784	27%	1107	24%	492	25%	588	24%	767	24%	328	25%	407	24%
	701	23%	1035	24%	469	24%	536	25%	819	28%	330	29%	452	27%
	3171	100%	4651	100%	2081	100%	2426	100%	3098	100%	1279	100%	1689	100%
	738	21%	936	20%	451	22%	453	18%	670	23%	280	22%	359	24%
	1162	35%	1653	36%	723	36%	882	36%	1123	37%	442	36%	629	37%
	774	25%	1200	26%	511	24%	651	27%	734	23%	297	23%	408	23%
	495	18%	853	18%	390	18%	437	19%	565	17%	250	19%	298	16%
	3169	100%	4642	100%	2075	100%	2423	100%	3092	100%	1269	100%	1694	100%
	588	17%	680	15%	327	16%	334	13%	493	17%	202	16%	270	18%
	1126	35%	1675	36%	744	36%	877	36%	1036	35%	427	34%	556	34%
	835	28%	1291	28%	551	27%	692	29%	836	26%	353	28%	452	25%
	627	20%	1012	22%	460	21%	528	22%	739	22%	295	22%	420	23%
	3176	100%	4658	100%	2082	100%	2431	100%	3104	100%	1277	100%	1698	100%
	682	21%	929	20%	475	23%	435	18%	607	19%	289	21%	287	16%
	256	8%	271	6%	127	6%	136	6%	183	6%	86	7%	90	6%
	1819	55%	3062	66%	1401	69%	1558	63%	1998	63%	845	68%	1074	58%
	409	16%	376	8%	67	3%	296	14%	305	12%	51	4%	242	19%
	3166	100%	4638	100%	2070	100%	2425	100%	3093	100%	1271	100%	1693	100%
	547	16%	1030	22%	496	24%	511	20%	671	22%	278	21%	365	22%
	398	12%	622	13%	268	13%	330	13%	434	16%	179	14%	240	17%
	1413	42%	2087	46%	973	47%	1048	44%	1494	47%	645	51%	783	43%
	812	29%	897	19%	337	16%	532	23%	498	16%	171	14%	308	17%
	3170	100%	4636	100%	2074	100%	2421	100%	3097	100%	1273	100%	1696	100%
	903	30%	1451	32%	660	33%	749	31%	1057	34%	444	35%	565	34%
	773	27%	1148	25%	447	22%	664	28%	669	23%	253	19%	398	26%
	1106	30%	1572	34%	803	39%	716	29%	1166	37%	505	40%	607	33%
	384	13%	472	9%	164	7%	298	11%	208	7%	74	6%	126	7%
	3166	100%	4643	100%	2074	100%	2427	100%	3100	100%	1276	100%	1696	100%

Benchmark Items by Typology: Enriching Educational Experiences[a] (continued)

		Name	Response Options	SASSE Sample		SASSE First-Year		SASSE Senior		Univ[b] Overall		Univ[b] First-Year	
				N	%	N	%	N	%	N	%	N	%
10e	Completed a course in a foreign or additional language	forlng04 (EEE)	Have not decided	3957	29%	1700	28%	2127	29%	1666	28%	712	29%
			Do not plan to	5088	38%	2116	36%	2817	40%	2179	41%	918	40%
			Plan to do	3746	28%	1721	32%	1904	25%	1555	26%	698	28%
			Done	738	5%	252	4%	454	6%	354	6%	103	4%
			Total	13529	100%	5789	100%	7302	100%	5754	100%	2431	100%
10f	Participated in an international exchange programme	stdabr04 (EEE)	Have not decided	4282	32%	1817	31%	2328	32%	1815	31%	782	32%
			Do not plan to	3473	25%	1245	20%	2117	30%	1640	32%	598	26%
			Plan to do	5453	41%	2593	47%	2684	36%	2165	35%	1005	40%
			Done	260	2%	107	2%	144	2%	111	2%	35	1%
			Total	13468	100%	5762	100%	7273	100%	5731	100%	2420	100%
10g	Studied a subject or course for non-degree or non-diploma purposes	indstd04 (EEE)	Have not decided	3656	27%	1628	29%	1895	26%	1521	26%	668	27%
			Do not plan to	5569	42%	2475	43%	2936	41%	2352	41%	1038	42%
			Plan to do	3299	25%	1382	24%	1815	26%	1400	25%	597	27%
			Done	963	6%	272	4%	645	8%	467	8%	115	4%
			Total	13487	100%	5757	100%	7291	100%	5740	100%	2418	100%
10h	Developed a community project in which you use your university knowledge to address a problem in your community	snrx04 (EEE)	Have not decided	3642	27%	1642	28%	1881	27%	1419	26%	629	26%
			Do not plan to	2061	15%	816	14%	1190	16%	901	17%	359	15%
			Plan to do	6762	50%	3007	53%	3529	48%	2911	49%	1311	54%
			Done	1096	7%	335	5%	723	9%	542	8%	134	4%
			Total	13561	100%	5800	100%	7323	100%	5773	100%	2433	100%
12e	Participated in co-curricular activities (organisations, campus publications, involvement in SRC projects, residence duties, inter-residence sports, community services, etc.)	cocurr01 (EEE)	0 Hrs	8949	69%	4000	72%	4670	67%	3494	62%	1549	65%
			1-5 Hrs	2479	17%	977	16%	1418	18%	1242	22%	486	21%
			6-10 Hrs	906	6%	339	6%	533	7%	440	7%	161	6%
			11-15 Hrs	431	3%	171	3%	248	3%	231	4%	94	3%
			16-20 Hrs	237	2%	93	2%	135	2%	109	2%	45	2%
			21-25 Hrs	141	1%	55	1%	79	1%	84	1%	35	1%
			26-30 Hrs	85	1%	27	1%	54	1%	41	1%	12	0%
			30+ Hrs	129	1%	41	1%	83	1%	61	1%	21	1%
			Total	13357	100%	5703	100%	7220	100%	5702	100%	2403	100%

Benchmark Items by Typology: Supportive Campus Environment[a]

		Name	Response Options	SASSE Sample		SASSE First-Year		SASSE Senior		Univ[b] Overall		Univ[b] First-Year	
				N	%	N	%	N	%	N	%	N	%
14b	Providing the support you need to help you succeed academically	envsuprt (SCE)	Very little	831	7%	297	5%	505	8%	364	6%	129	5%
			Some	3051	22%	1198	20%	1755	24%	1412	26%	565	24%
			Quite a bit	5248	39%	2195	38%	2903	40%	2288	40%	949	39%
			Very much	4351	32%	2082	36%	2126	28%	1683	28%	780	32%
			Total	13481	100%	5772	100%	7289	100%	5747	100%	2423	100%

	Univ[b] Senior		Comp[c] Overall		Comp[c] First-Year		Comp[c] Senior		UOT[d] Overall		UOT[d] First-Year		UOT[d] Senior	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	903	27%	1348	29%	626	30%	683	29%	931	29%	359	27%	532	30%
	1205	41%	1868	42%	800	41%	1008	44%	1028	33%	393	29%	597	37%
	809	25%	1217	24%	558	26%	629	23%	959	33%	458	40%	458	27%
	240	8%	214	4%	91	4%	110	4%	170	5%	58	4%	104	6%
	3157	100%	4647	100%	2075	100%	2430	100%	3088	100%	1268	100%	1691	100%
	980	30%	1469	32%	630	31%	799	33%	980	31%	400	31%	536	31%
	994	36%	1203	26%	439	21%	732	31%	621	21%	205	15%	386	25%
	1100	31%	1862	40%	947	45%	851	34%	1414	46%	635	52%	727	41%
	75	2%	92	2%	48	3%	38	1%	55	2%	23	2%	30	2%
	3149	100%	4626	100%	2064	100%	2420	100%	3070	100%	1263	100%	1679	100%
	803	25%	1266	28%	577	28%	647	27%	857	28%	377	31%	439	25%
	1260	40%	1899	41%	874	43%	969	40%	1304	43%	557	44%	699	42%
	762	24%	1162	25%	509	25%	622	26%	724	24%	273	21%	422	26%
	331	11%	302	6%	103	4%	185	7%	192	6%	54	5%	127	7%
	3156	100%	4629	100%	2063	100%	2423	100%	3077	100%	1261	100%	1687	100%
	751	25%	1419	31%	668	32%	709	30%	793	26%	342	26%	413	25%
	520	18%	727	15%	289	14%	415	16%	428	14%	167	13%	251	15%
	1509	44%	2175	47%	992	49%	1116	46%	1653	53%	693	55%	893	52%
	393	12%	328	7%	127	6%	191	8%	225	7%	74	5%	138	7%
	3173	100%	4649	100%	2076	100%	2431	100%	3099	100%	1276	100%	1695	100%
	1851	60%	3324	73%	1545	77%	1680	70%	2105	70%	895	72%	1124	68%
	720	24%	725	16%	295	14%	408	17%	507	16%	196	15%	285	16%
	260	8%	262	5%	96	4%	157	6%	202	6%	81	6%	115	7%
	130	4%	112	3%	42	2%	67	3%	86	3%	35	3%	49	3%
	61	2%	71	1%	30	1%	38	2%	54	2%	17	1%	35	2%
	46	1%	25	1%	8	1%	15	1%	32	1%	12	1%	18	1%
	27	1%	16	0%	7	0%	7	0%	28	1%	8	1%	20	1%
	38	1%	29	1%	7	0%	20	1%	37	1%	11	1%	25	1%
	3133	100%	4564	100%	2030	100%	2392	100%	3051	100%	1255	100%	1671	100%

	Univ[b] Senior		Comp[c] Overall		Comp[c] First-Year		Comp[c] Senior		UOT[d] Overall		UOT[d] First-Year		UOT[d] Senior	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	218	7%	181	4%	72	3%	106	5%	282	9%	96	7%	177	10%
	813	28%	879	18%	330	15%	516	22%	748	24%	300	23%	417	24%
	1280	41%	1784	39%	769	38%	967	40%	1161	39%	472	37%	647	40%
	848	24%	1772	39%	896	44%	828	34%	888	29%	400	33%	448	25%
	3159	100%	4616	100%	2067	100%	2417	100%	3079	100%	1268	100%	1689	100%

Benchmark Items by Typology: Supportive Campus Environment[a] (continued)

		Name	Response Options	SASSE Sample		SASSE First-Year		SASSE Senior		Univ[b] Overall		Univ[b] First-Year	
				N	%	N	%	N	%	N	%	N	%
14d	Helping you cope with your non-academic responsibilities (work, family, etc.)	envnacad (SCE)	Very little	5558	43%	2321	41%	3070	45%	2235	41%	937	42%
			Some	3894	28%	1632	28%	2148	28%	1772	30%	702	28%
			Quite a bit	2676	19%	1191	20%	1393	18%	1182	19%	519	20%
			Very much	1387	10%	637	11%	694	9%	580	9%	275	11%
			Total	13515	100%	5781	100%	7305	100%	5769	100%	2433	100%
14e	Providing the support you need to thrive socially	envsocal (SCE)	Very little	4277	33%	1644	29%	2500	37%	1768	33%	672	30%
			Some	4599	34%	2006	35%	2456	33%	1971	34%	844	35%
			Quite a bit	3188	23%	1458	25%	1626	21%	1412	24%	632	25%
			Very much	1369	10%	640	11%	675	8%	576	9%	265	10%
			Total	13433	100%	5748	100%	7257	100%	5727	100%	2413	100%
11a	Relationships with other students	envstu (SCE)	1= Unfriendly, Unsupportive, Sense of alienation	160	1%	66	1%	84	1%	68	1%	25	1%
			2	255	2%	127	2%	120	2%	106	2%	47	2%
			3	704	5%	329	6%	361	5%	294	5%	126	5%
			4	2061	16%	909	17%	1077	15%	765	13%	333	14%
			5	2775	21%	1214	22%	1474	20%	1137	21%	480	21%
			6	3577	27%	1490	26%	1980	29%	1530	28%	659	28%
			7=Friendly, Supportive, Sense of belonging	3807	27%	1579	26%	2105	28%	1758	29%	719	29%
			Total	13339	100%	5714	100%	7201	100%	5658	100%	2389	100%
11b	Relationships with lecturers and academic staff members	envfac (SCE)	1= Unavailable, Unhelpful, Unsympathetic	468	3%	216	4%	235	3%	217	3%	92	4%
			2	832	6%	410	7%	394	6%	346	6%	167	7%
			3	1649	12%	772	14%	824	11%	687	12%	316	13%
			4	3132	24%	1344	24%	1680	24%	1345	26%	558	26%
			5	3085	23%	1273	22%	1735	24%	1303	24%	541	24%
			6	2477	19%	1017	18%	1389	20%	1058	18%	429	17%
			7= Available, Helpful, Sympathetic	1660	12%	668	11%	923	12%	680	10%	276	10%
			Total	13303	100%	5700	100%	7180	100%	5636	100%	2379	100%
11c	Relationships with administrative staff and offices	envadm (SCE)	1=Unhelpful, Inconsiderate, Rigid	1489	11%	641	11%	794	11%	645	10%	264	11%
			2	1718	13%	783	14%	883	13%	690	13%	303	13%
			3	2206	17%	968	17%	1170	16%	911	17%	389	17%
			4	2821	21%	1207	21%	1533	21%	1218	22%	514	23%
			5	2298	18%	971	17%	1254	18%	959	18%	410	18%
			6	1617	12%	649	11%	919	13%	712	13%	285	12%
			7=Helpful, Considerate, Flexible	1129	8%	469	7%	616	8%	492	8%	208	8%
			Total	13278	100%	5688	100%	7169	100%	5627	100%	2373	100%

	Univ[b] Senior		Comp[c] Overall		Comp[c] First-Year		Comp[c] Senior		UOT[d] Overall		UOT[d] First-Year		UOT[d] Senior	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	1236	41%	1919	42%	817	40%	1046	44%	1387	45%	561	43%	777	47%
	1023	33%	1316	28%	576	27%	705	29%	797	26%	352	28%	413	24%
	627	18%	892	19%	425	20%	440	19%	595	19%	244	20%	322	18%
	284	7%	496	11%	246	13%	233	9%	304	10%	112	10%	175	10%
	3170	100%	4623	100%	2064	100%	2424	100%	3083	100%	1269	100%	1687	100%
	1047	37%	1456	33%	584	30%	823	36%	1043	34%	385	28%	623	39%
	1072	33%	1584	33%	704	33%	840	34%	1026	34%	450	36%	534	33%
	741	22%	1048	23%	507	24%	514	21%	720	23%	317	26%	366	20%
	288	8%	507	11%	260	13%	227	9%	282	9%	113	10%	158	8%
	3148	100%	4595	100%	2055	100%	2404	100%	3071	100%	1265	100%	1681	100%
	41	1%	55	1%	26	2%	24	1%	37	1%	15	1%	19	1%
	56	2%	88	2%	49	3%	36	2%	61	2%	31	2%	28	2%
	164	5%	279	6%	137	7%	134	6%	130	5%	65	5%	63	4%
	408	13%	821	18%	371	19%	420	17%	466	15%	202	17%	243	14%
	619	21%	1034	22%	461	23%	549	21%	598	20%	272	22%	301	19%
	832	28%	1220	26%	517	24%	665	28%	820	28%	310	26%	481	31%
	989	30%	1115	24%	496	23%	589	24%	919	29%	360	27%	516	30%
	3109	100%	4612	100%	2057	100%	2417	100%	3031	100%	1255	100%	1651	100%
	118	3%	142	3%	75	4%	61	3%	108	3%	49	4%	55	3%
	169	5%	297	7%	161	8%	125	5%	187	6%	82	6%	98	6%
	357	12%	642	14%	298	15%	317	13%	313	11%	153	13%	148	9%
	743	26%	1091	24%	495	25%	564	22%	687	23%	289	23%	366	23%
	731	24%	1093	23%	456	22%	616	25%	684	23%	276	22%	383	24%
	605	19%	785	17%	329	16%	435	19%	629	21%	256	20%	348	21%
	375	10%	555	12%	241	11%	295	13%	416	12%	148	11%	247	13%
	3098	100%	4605	100%	2055	100%	2413	100%	3024	100%	1253	100%	1645	100%
	364	10%	499	12%	235	12%	246	11%	343	12%	141	11%	183	12%
	364	12%	637	15%	311	16%	302	13%	387	13%	166	14%	216	13%
	497	17%	806	18%	368	18%	412	17%	484	16%	210	17%	257	16%
	674	22%	1030	22%	447	22%	557	23%	560	19%	241	19%	294	19%
	518	18%	782	17%	331	15%	432	18%	554	19%	229	19%	302	18%
	412	14%	514	10%	214	10%	288	11%	389	13%	150	12%	217	14%
	268	7%	330	7%	146	6%	172	7%	299	9%	113	8%	171	9%
	3097	100%	4598	100%	2052	100%	2409	100%	3016	100%	1250	100%	1640	100%

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