

Introduction¹²³

A guide to using AUSSE data

The Australasian Survey of Student Engagement (AUSSE) provides data for each institution on student engagement that is both generalisable and sensitive to institutional context. The data can help universities monitor and enhance the quality of education.

This guide suggests how Australasian universities might use AUSSE data in a productive manner to bring about positive educational change. The idea of student engagement crosses conventional institutional divisions. Differentiated materials and methods may be required to communicate effectively to different audiences and it is likely that a range of strategies will be helpful in generating conversations about student engagement.

Why student engagement?

Student engagement measures are increasingly understood to be important for higher education quality. Student engagement is defined as students' involvement with activities and conditions likely to generate high-quality learning.

The concept of student engagement is based on the assumption that learning is influenced by how individual students participate in educationally purposeful activities. While students are seen to be responsible for constructing their knowledge, learning is also understood to depend on institutions and staff generating conditions that stimulate and encourage student involvement.

The concept has emerged from many decades of research into higher education student learning and development. In addition to confirming the importance of ensuring appropriate academic challenge, this research has emphasised the importance of examining students' integration into institutional life and involvement in educationally relevant, beyond-class experiences.

Measures of student engagement provide information about individuals' intrinsic involvement with their learning, and the extent to which they are making use of available educational opportunities.

¹ Acknowledgement: This guide is based on one developed by Jillian Kinzie as part of the USA NSSE. We are grateful for her permission to adapt and use this guide and for her input as co-author.

² Several enhancement activities have been sourced and adapted from: Coates, H. (2006). *Student Engagement in Campus-based and Online Education: University connections*. London: Routledge.

³ The Australasian Survey of Student Engagement (AUSSE) is run by the Australian Council for Educational Research (ACER) in collaboration with Australasian higher education institutions. For further information email ausse@acer.edu.au.

Student engagement data provides information on learning processes, is a reliable proxy for learning outcomes, and provides excellent diagnostic measures for learning enhancement activities.

The AUSSE measures student engagement through the administration of the Student Engagement Questionnaire (SEQ) to an institutionally representative student sample. The SEQ is designed for administration in under 15 minutes in online or paper form. It has been validated for use in Australasian higher education.

The SEQ provides measurement of six scales. Data on these areas of student engagement are included in the information provided to each institution:

- Active Learning – students’ efforts to actively construct knowledge
- Academic Challenge – the extent to which expectations and assessments challenge students to learn
- Student and Staff Interactions – the level and nature of students’ contact and interaction with teaching staff
- Enriching Educational Experiences – students’ participation in broadening educational activities
- Supportive Learning Environment – students’ feelings of legitimation within the university community
- Work Integrated Learning – integration of employment-focused work experiences into study.

With formative links to the USA National Survey of Student Engagement (NSSE), data from the AUSSE provides the opportunity for institutions to gather internationally comparable data focused on the quality of teaching and the learning environment. It provides each university with a valuable mechanism for improving the effectiveness of learning and teaching.

Responding to challenges and opportunities

As experience in the USA and Canada has shown, ‘student engagement’ provides a practical lens for addressing the significant dynamics, constraints and opportunities facing higher education institutions. The lens provides key insights into what students are actually doing, a structure for framing conversations about quality, and a stimulus for guiding new thinking into practice.

The last decade has been a time of great change for higher education around the world. Tertiary education markets have changed with the growth of commercial, corporate and online providers of tertiary education, increasing internationalisation, and shifting funding dynamics. The increasing mobility of students and knowledge has increased the need to understand the emerging borderless forms of university education.

Knowledge and skill development offered by universities has been flagged in conversations about ‘education for all’, and linked with national and regional economic growth. The demography of university students has changed, with students coming from increasingly diverse national, cultural, economic, employment, and age backgrounds. Even those students once considered ‘conventional’ are

bringing a perspective to their university education that is different to that of their comparable peers in the past.

Higher education is facing increasing pressures to produce 'knowledge workers' who can participate in contemporary developed economies, to respond to perceived commercial and competition dynamics, and to maintain and improve quality standards.

Widespread changes are penetrating campus-based undergraduate education, challenging practices and longstanding assumptions. There has been a loosening of the close, and sometimes historically dependent or intrinsic, connections between on-campus learning and specific locations and buildings. University education is being increasingly freed from fixed institutional timetables and, accordingly, rather than being grouped together in batches, students are being given greater flexibility to vary the rhythms of their learning.

Ever more powerful and pervasive information and communications technologies are supplementing or replacing whiteboards, overhead projectors and printed materials. Constructivist pedagogical perspectives have started to have a real influence on instructional practices in lectures, laboratories and tutorials. Rather than passive recipients of university activities, students are being seen as 'clients' or 'customers' whose needs must be placed at the centre of educational considerations.

It is important to note in particular the large growth in international higher education and workplace learning in the last decade. Such changes are challenging many conventions and characteristics of campus-based learning.

As this guide suggests, student engagement information can be used to provide information to potential students, for internal and external quality assurance activities, to help academic staff target their teaching, to understand how students are interacting with institutional resources, to inform employers about student characteristics and growth, and to manage particular student cohorts. Most importantly, understanding student involvement can be used to attract, engage and retain students in university education.

Designing dissemination activities

Reporting opportunities

The most important role institutions play in the AUSSE is in determining how best to leverage survey results for internal quality improvement. The AUSSE focuses on student behaviours and effective educational practice. This emphasis relates directly to issues of major contemporary relevance to higher education.

AUSSE results can be used in many different ways. It is likely that a multifaceted approach is likely to be most effective. Possibilities include:

- Assessing institutional performance
- Determining the value added by university education
- Monitoring learning outcomes

- Informing improvement efforts
- Informing student learning and development support
- Developing a cohort experience for groups of students
- Facilitating student retention and engagement
- Monitoring academic standards
- Accountability purposes
- Managing resources, programs and services
- Guiding staff development initiatives
- Improving internal communication
- Marketing to prospective students
- Communicating with alumni
- Providing a means for stakeholder engagement.

Some of these possibilities are explored below. Many options exist, but the most effective uses of AUSSE results are determined through consideration of how reporting is most likely to enhance educational policy and practice. This involves identifying the audience and contexts that surround reporting activities.

Identifying the audience

In order to effectively communicate results internally, it is necessary to first determine what data is most relevant for the different audiences to whom data might be given. Decisions about the areas in which improvement efforts might be made initially will also help determine what is communicated and to whom.

For example, the results that are shared with Deans might be 'big picture' overview results that relate to the degree program or year levels within a program broadly. Heads of Departments might benefit from having access to more nuanced data on particular cohorts of students.

A useful first step is to determine the audiences to whom various data will be communicated. Typical targeted audiences include Deputy and Pro Vice-Chancellors, Deans, Academic Registrars, Heads of administrative divisions, Directors of academic development units, Department Heads, and student representative bodies.

Institutions might also consider communicating summary data to the wider academic community, internally and externally, including academic and general staff, alumni, employers and other stakeholder groups.

Improvement approaches

Institutions must make informed, professional decisions about what particular student engagement data they will act on and about how to take necessary action.

Focusing on data that indicates what is working well in terms of engaging students is as important as focusing on data that indicates gaps or weaknesses. In order to keep doing what is working and further enhance those efforts, close scrutiny of areas of excellence is critical. Analysis of positive data also provides 'good news' that can be shared internally and externally and that recognises the work of staff that has led to

positive outcomes. Data that points to areas in need of improvement are also useful and can be used strategically to direct, guide and encourage improvement efforts.

In both cases, triangulation of the AUSSE data with other sources of data will be helpful in ensuring validity per se and in reassuring staff within institutions of the validity of the AUSSE data. Data sources such as student evaluations of teaching, student experience questionnaires, and graduate surveys are obvious starting points for triangulation.

In terms of bringing about action, the Provost at many higher education institutions in the United States asks Faculty Deans to submit plans for improving NSSE scores in areas where they are low in relation to institutional priorities. Once Deans and staff within institutions become more familiar with AUSSE data over a number of years, it may be helpful to develop templates like those used by some US Provost offices for updating Deans on response rates and significant findings so that Faculty specific trend data can be assembled. Over time, these and similar sorts of resources will be developed for the AUSSE.

Dealing with obstacles

Questions about the validity and reliability of the AUSSE and SEQ are inevitable as staff in Australian and New Zealand universities are introduced to the concept of student engagement and to the AUSSE data. It is important that these questions are adequately addressed so that staff are more likely to accept the findings and consider changes to their practice to address areas in which they might be able to enhance student engagement.

The AUSSE and SEQ are underpinned by a considerable amount of development and validation, in the USA, Canada, New Zealand and Australia. The quality of the processes and instrument have been assured through consultations, expert reviews, research reviews, focus groups, cognitive interviews, pilot testing, and psychometric and statistical analysis. These development activities build on nearly a decade of national administration of the NSSE, involving around 1,200 institutions.

A small sample size will limit the generalisability of the data an institution receives. While institutions are encouraged to promote the AUSSE and facilitate, as far as possible, a reasonable response rate, it may be the case that, for a number of reasons outside the control of the institution, an institutional response rate is lower than desirable.

However, small data sets can still be helpful in providing indicative information that can be followed up with further investigation. This is particularly so if the sample is representative of student populations of interest and this can be communicated to staff.

In order to foster interest in the data, the relevance of the data for staff needs to be established. Effective internal communication systems are critical in establishing, maintaining and increasing interest in the concept of student engagement and what might be done to improve an institution's efforts in this regard.

As suggested, linking the AUSSE results to other evaluation data, such as student evaluation of teaching and of student support data, may help staff see its relevance. Providing accessible examples and resources to help staff increase student engagement may also heighten staff interest. Finally, if contributions to improving student engagement are recognised and rewarded by institutions, this will do much to garner buy-in from relevant individuals within universities.

Learning from the NSSE

Collective experience gained through the USA NSSE provides a wealth of insights that Australasian institutions can interpret in the AUSSE context. The following suggestions for incorporating AUSSE data in institutional change efforts have been adapted from the NSSE advice:

1. **Make sure staff understand and endorse the concept of student engagement.** The value of student engagement results to improving teaching and learning needs to be convincingly explained to those academic staff less familiar with assessment in general and the engagement concept in particular.
2. **Collect results from enough students so the information is usable at the department or unit level.** Surveying more students than called for by the AUSSE standard sampling strategy can allow institutions to produce department or unit level results, which may increase staff interest in using engagement data.
3. **Understand what student engagement data represent and use the results carefully.** It will take time, perspective, and experience to understand and make the best use of AUSSE results.
4. **Report student engagement results in a responsible way.** Institutions are encouraged to share their results in ways that lead to a better understanding of collegiate quality and promote institutional improvement efforts.
5. **Don't allow the numbers to speak for themselves.** Every number and comparison reported should be accompanied by an explanation and interpretation of what can and cannot be concluded from the results.
6. **Examine the results from multiple perspectives.** Use the available comparisons (normative perspective) to confirm or challenge assumptions about institutional performance. Consider a criterion-referenced view of student engagement in the context of the institution's mission. It is also wise to compare the engagement levels of specific student groups, such as, for example, first-year male students or later-year students in various disciplines.
7. **Link the results to other information about the student experience and complementary initiatives.** The positive impact of student engagement results will be multiplied if the data can be made relevant to groups of staff working on different reform efforts in various parts of the institution.
8. **Don't go it alone.** The chances that changes in policy and practice will succeed tend to increase when institutional teams are formed and institutions work together in consortia on topics of mutual interest. Even greater success may be achieved when institutions develop these partnerships at the start of

the SEQ administration cycle to make early decisions about strategic use of the data.

Using AUSSE insights internally

Focusing educational strategy and reviews

Ideas about student engagement can be infused into strategic plans in relation to research, internationalisation, community engagement, infrastructure, resources, and student access and equity.

Goals and strategies might be directly derived from aspects of engagement. That is, 'enhancing engagement' might itself be set as a goal, with a series of derivative strategies concentrated on: enhancing challenging, active and collaborative learning; enhancing students' interaction with staff; enhancing development of individual talent; developing supportive and responsive learning environments; enhancing the online experience; and developing adaptive and online pedagogies.

Alternatively, the idea of engagement might be infused across a range of different areas in an institution. For example, engagement ideas could be distributed through strategies pertaining to educational quality, internationalising learning experiences, promoting an institutional 'ethos of learning', or developing online pedagogy.

In a more applied way, evaluations of student engagement can and should be woven into cycles of institutional evaluation and research. The information about key learning processes, which are captured in measures of engagement, occupies a critical position in performance indicator systems that integrate information on student, teacher and institution inputs, processes and outcomes. At an operational level, the measurement of student engagement can be conducted alongside the measurement of phenomena such as teaching quality, the teaching qualifications of academic staff, institutional resources, levels of prior academic performance, and academic outcomes.

Timely information about student engagement provides coincident data on the participation of a particularly significant group of stakeholders in institutional and educational processes. Without such information, institutional managers and leaders may be left to rely on assumptions or ad hoc anecdotal reports about how students are interacting with valuable resources and with their learning.

Linking institutional data

Linking engagement data with data in administrative systems provides a means of studying issues such as student retention and attrition. Engagement data provides rich information on key aspects of students' interactions with their institutions. Analysing engagement data in light of information about attrition and retention may well expose specific patterns of interaction that are distinctive to students who choose to discontinue their courses. This might help develop strategies and practices for preventing student attrition or at least managing student retention.

Institution teaching and learning collaborations

Institution-wide committees, partnerships or interest groups can be a powerful means of managing, taking responsibility for, and promoting discussions about engagement. Engagement is a broad idea that brings together a range of ideas, activities and people. Engaging students in beyond-class collaboration, for instance, may require the people who design and develop spaces around campus, and who develop online tools that support specific interactions within groups, to support such work. Equally, the support of teaching staff who develop courses, learning activities and assessments, and of student support staff to manage diverse non-academic aspects of the student experience is also necessary. Such developments typically require co-ordination of ideas, work and people across an institution, and may benefit from the direction and support that institution-wide committees provide.

Academic staff development

Explicit steps can be taken to infuse the idea of 'student engagement' into both formal and colloquial discussions about teaching. The induction and development of new and experienced academic staff can include discussion of student engagement and its importance to educational outcomes, as well as offer pedagogical strategies and practices for enhancing engagement.

Discussions about teaching in departmental seminar series and colloquia can emphasise the value of stimulating engagement. Academic staff can be encouraged to record evidence of their 'capacity to engage students' into the academic or teaching portfolios that are used for appointment, confirmation and promotions procedures. Clearly, if criteria used to judge applications for employment and advancement include evidence of contributions to student engagement, this would be ideal as efforts to this end could be recognised and rewarded.

Institutions can do much to develop the capacity of teaching staff to enhance engagement. Incorporating key ideas about engagement into staff development policies, particularly those pertaining to supportive and adaptive teaching practices, is one strategy. Academic development activities provide a key means of embedding perspectives on engagement into teaching processes, and helping faculty and support staff understand how to manage and lead effective forms of engagement.

Other ways in which AUSSE insights might be used internally include teaching and learning colloquia, summits and other fora where discussion of initiatives to target the increase of student engagement might be facilitated and teaching grant schemes that specifically target the development of initiatives that promote student engagement.

Involving students in improvement activities

Students are an often under-utilised source of assistance in efforts to improve student engagement. Students can provide insightful first-hand interpretation of AUSSE results, which can assist institutions in raising awareness of and interest in the phenomenon.

Learners can be involved in conversations about engagement in a range of ways. They can have representation on groups developed to stimulate and manage organisational conversations about engagement. Focus groups can be held with students from target cohorts, or from a cross-section of the institution. Student fora and colloquia may be useful, and/or students can be given a voice in staff fora or colloquia. Finally, targeted reports can be factored into student publications and academic or administrative communications.

Developing resources for students

One of the most immediate steps that institutions can take to enhance student engagement is to develop resources and other strategies to help students learn about engagement.

The incorporation of seminars and classes about engagement into orientation and transition activities, and the dissemination of key ideas through first-year lectures, laboratories and tutorials are some of the ways in which students can learn about how to help themselves make the most of their educational experiences. Thus it may be useful to supply academic staff with generic materials about engagement, and perhaps even disseminate resources and 'useful tips' via online learning management systems. Multimedia resources could be developed to give life to findings about students' engagement at a particular institution.

The process of simply using the SEQ to measure students' perceptions of their university study may in itself be one of the most effective means of enhancing overall engagement. Responding to student engagement questionnaires provides students with an opportunity to reflect actively on university study. Along with exposing students to a list of good online and general educational practices, students may value the opportunity to participate in organisational feedback processes.

General staff development

Students' engagement with university cuts across a range of academic and administrative activities and areas and managing student engagement is a whole-of-institution activity. In particular, managing beyond-class interactions plays a critical role in enhancing students' engagement in learning and development activities.

General staff play a significant role in shaping the student experience and are central in student engagement activities. Specific activities, such as briefings or internal conferences, focused on how general staff might contribute to improving student engagement, might be worth considering in some institutions. There would be considerable value in hosting combined events for both general and academic staff.

Survey engagement

Research has shown that there is great value in taking active steps to enhance students' participation in survey processes.⁴ Staff at institutions can use a range of approaches to engage students in the AUSSE, including:

- Informing potential respondents about the AUSSE during general teaching activities
- Affirming the importance of the survey and student feedback during the collection period
- Disseminating feedback about the survey to all relevant stakeholders.

The scope of the AUSSE is institution-wide, and much value is derived from providing institutional stakeholders other than students with an overview of the survey. Such stakeholders might include senior staff, teaching staff, interested researchers, support staff, and relevant committees.

There might be value in targeting information at particular cohorts or groups of students. First-year students, 'at risk' students, students in equity groups, and students who are first in their family to attend higher education may benefit from knowing about how to engage with university, and about opportunities that exist to provide feedback.

These stakeholders can be provided with basic information about the AUSSE (see: www.acer.edu.au/ausse). There would also be value in stimulating more substantive conversations with these groups as they can play a critical role in enhancing conversations about and the improvement of student engagement.

Survey engagement is critical. The quality of survey responses influences the quality of survey results, which then influence important decisions about educational quality and provision. For future administrations, as part of ACER's work to enhance conversations about student engagement within Australasian universities, a suite of survey engagement resources, which institutions can use to enhance students' participation in the important survey feedback process itself, will be supplied.

Using results externally

Public reporting considerations

Whether a participating institution makes public its student engagement results is up to the institution.

Institutions may choose, over time, to report AUSSE findings publicly. When doing so, particular care should be taken to ensure that the data on which the report is based has been analysed in technically appropriate ways, that privacy and confidentiality considerations are respected, and that reports are likely to support appropriate and informative interpretations.

⁴ Coates, H., Tilbrook, C., Guthrie, B. & Bryant, G. (2006). *Enhancing the GCA National Surveys: An examination of critical factors leading to enhancements in the instrument, methodology and process*. Canberra: Department of Education, Science and Training.

The Australian Council for Educational Research (ACER) encourages public disclosure of student engagement results in ways that increase understanding of educational quality and support institutional improvement efforts.

Disclosing institutional results from the AUSSE survey provides an opportunity to help educate the wider tertiary education community and the public about the value of student engagement as a new metric for defining and examining higher education quality. ACER especially supports public reporting of student engagement results in ways that enable thoughtful, responsible institutional comparisons while encouraging and celebrating institutional diversity.

ACER does not make institutional scores available to third parties. Institutions may do so if they wish. After thoroughly vetting the results, institutions are encouraged to:

- Focus on educationally meaningful indicators that are linked to student success in the context of the institution's mission
- Provide a rationale for selecting institutions included in any comparison groups so that people can draw their own conclusions about the merits of the comparisons
- Explain what types of students, kinds of behaviours, and institutional characteristics and actions the indicators represent and what they do not represent, as well as what can and cannot be concluded from them.

ACER does not support the use of student engagement results for the purpose of rankings. ACER believes that reducing student engagement to a single indicator obscures complex dimensions of student behaviour and institutional performance. Comparisons become particularly problematic in the case of institutions that differ in terms of mission, resources and student mix.

Benchmarking between groups

Institutions are able to benchmark measures of engagement within the institution and between institutions. Benchmarking can formalise assessment and evaluation activities by placing them in more enduring and generalisable frameworks. It can provide an impetus to assure the quality of measurement activities, generate methodological discussions about the measurement, analysis and reporting of engagement, and generate collaborative interaction between organisations, consortia and networks focused on engagement.

The cross-national and cross-institutional scope of the AUSSE offers institutions the potential to partake in broader regional, sectoral, national and international conversations about engagement. Key activities here include linking data and benchmarking results, giving presentations at conferences about engagement, documenting and disseminating initiatives, programs and resources that have a record of fostering engagement, and cataloguing and distributing novel pedagogies and resources.

Several forms of data-focused benchmarking activities might be considered. Institutions could compare their results with like-institutions if collaborations are formed. Such comparisons would help identify areas of strength and those in need of improvement. Alternatively, institutions might work from engagement results, and source out institutions with similar student engagement profiles. Benchmarking student engagement profiles can bring out complementarities in student mixes and educational practices that institution-level comparisons can mask.

A matter to consider is whether to take a normative or criterion approach to benchmarking. The normative approach involves comparing results across groups. A criterion-referenced approach focuses instead on comparing results against targets. Such targets may have been derived from past practice, institutional strategy or the performance of like-institutions.

There may be value in coordinating the reporting of AUSSE results. Coordinated NSSE reports have been used with a range of networks and consortia in the USA. Interesting reports could also be produced for various fields of education. Combined reports can help build more synthesised understanding of the nature and characteristics of student engagement in a range of institutional or course environments.

Scholarly research

Ideally, the study of engagement within universities will flow beyond institutional research into academic research activities. Stimulating research about student engagement that is scholarly in nature has the potential to expand conversations about student engagement into institutional learning. Research-driven inquiry about the nature and trends in student engagement within an organisation has the potential to stimulate forms of organisational activity that will enhance the effectiveness of education.

ACER will be working to develop research-based papers and resources that provide insight into contemporary students' engagement with university. ACER encourages individual institutions to use their own data to document patterns of student engagement.

Communicating with potential students

Data on student engagement can be used to communicate with potential students. While such practices will depend on an institution's student markets and mix, internal contexts, and general operating environments, a few key approaches can be sketched.

Information on student engagement can be added to relevant sections of an institution's website and course promotion materials. Student engagement data can be included in materials specifically prepared for distribution to potential students. Such materials, which may be distributed through schools, recruitment agencies and networks, or industry and employer organisations, can provide information on the characteristics of cohorts and learning environments at an institution.

Engagement data can be used to shape informational materials. Knowledge of student characteristics and activities helps understand how to pitch and deliver course information. It can also be used to set expectations and suggest possibilities for student involvement in key educational activities.

External quality assurance activities

Measures of student engagement are being increasingly woven into conversations about educational quality. It is becoming common for determinations about the quality of university education to be made with information about whether students are engaging with the kinds of practices that are likely to generate productive learning, and about whether institutions are providing the kinds of conditions that, based on many years of education research, seem likely to stimulate such engagement.

Enhancing conversations about engagement

Collecting and documenting information about how institutions are using student engagement information is an ongoing process. We would very much like to hear about how you are using your AUSSE data so that we can share best practice across Australia and New Zealand. If you would like to send us specific examples of internal reports or brochures highlighting AUSSE data, usage strategies, and particular activities you have undertaken in relation to improving student engagement, our contact details appear below. These examples will form a free, shared resource for universities and assist in our continuing efforts to improve the quality of the undergraduate experience for all students.

Please email ausse@acer.edu.au or send hard copy material to the following postal address: AUSSE, ACER, Private Bag 55, Camberwell, 3124, Victoria, Australia.