Evidencing educational excellence
A guide for staff

Who is this guide for?

The purpose of this guide is to help staff, supervisors and broader organisational units within the university think about how evidence for educational excellence can be gathered from a diverse set of sources. Valuing excellence in education is one of the core commitments of University's *Advancing Students and Education* strategy. Evidence of educational quality and impact is essential for maximising student success, institutional quality assurance, and for informing decisions about instructional approaches, academic hires, performance, confirmation, promotion and awards. But unlike research, there are few well-established, broadly accepted metrics for measuring and demonstrating quality and impact in the educational sphere.

A meaningful characterisation of educational excellence needs to consider the full range of educational activities that staff undertake. The University of Melbourne's *Framework for Educational Excellence (FEE),* developed in consultation with staff and students, identifies seven critical dimensions of staff activity that contribute to an excellent educational experience. These provide an agreed structure and vocabulary for guiding teaching practice and for describing staff contributions. The framework challenges the notion that some individuals are inherently more talented or capable, instead identifying a set of practices that can be successfully adopted, adapted, and refined by anyone.

In this document, we offer suggestions for how excellence across each of the dimensions of activity in the Framework can be evidenced, to help individual staff to evaluate their practices and articulate their effectiveness as educators. The guide may also be adapted by discipline-specific education committees to include references and exemplars particular to that discipline.

Background

Historically, staff have relied heavily on scores associated with student evaluations of teaching to demonstrate educational excellence, and in particular the End of Subject Survey (ESS). While the student voice is an essential element of evaluation, and these surveys provide valuable feedback, they have well-known limitations as instruments for quantification of educational quality and impact[1–6]. Students' perspectives on their educational experiences are necessarily limited to aspects they can observe and informed by their own expectations and perceptions. This can lead to assessments that are potentially incomplete, subjective, or even misleading.

Overreliance on a single source of evidence is furthermore undesirable from the perspective of validity, reliability and fairness. Robust evidencing of educational excellence therefore calls for a more holistic, multidimensional approach that recognises the complexity of educational endeavours and allows for the student voice to be balanced and complemented by reasoned judgements made by other relevant parties[7–9].

Obtaining more than one perspective on excellence

Three broad groups of stakeholders can offer insight and evidence into the achievement of educational excellence across one or more dimensions of the *Framework for Educational Excellence*:

Educators, who can articulate the rationale that informs their approaches, e.g. how their practice is evidence-based.

Students (both current and past), who can speak directly to satisfaction with their educational experience, and for whom metrics of engagement and learning gains can provide independent measures of the value and impact of their educational experience.

Independent experts, who, in their capacity as academic peers, practitioners, employers or community/industry partners can provide a perspective on how the quality and impact of activities being reviewed compares to best practice in Australia or internationally.

Below, we highlight some of the ways in which we can draw upon evidence from educators, students and independent experts to assess and evidence the quality of the education we provide.

Educators

Alignment with evidence-based practice: Educators are well-versed in providing a narrative explanation of their teaching philosophy and approach in the service of confirmation, promotion or awards. However, there has not always been a strong culture of expectation to demonstrate that personal beliefs around teaching align with pedagogical evidence. Each of the dimensions of the *Framework for Educational Excellence* is supported by a rich pedagogical literature, which provides an opportunity to demonstrate an evidence-based rationale for practice. This may also include research-informed narratives that underpin teaching innovations that may be tested or in development, and the development of new offerings and/or subjects. Table 1 below includes recommended publications relating to each dimension of the framework that may provide a useful starting point.

Evaluation of own educational practice: Analysis of data gathered from one's own teaching practice can constitute a strong form of evidence for educational impact or efficacy. This evidence may be qualitative or quantitative and range from informal analysis of trends in key metrics to rigorous scholarly research investigating the impact of an educational initiative. Potentially relevant evidence measures may include everything from subject enrolment trends to employment outcomes, or adoption of educational innovations by peers within or outside the institution.

Scholarship of Teaching and Learning (SoTL) and Discipline-based Educational Research (DEBR) are terms that describe the practice of undertaking systematic research inquiry into student learning with the goal of gaining insights to improve practice. Research methods may include interviews and focus groups, questionnaires and surveys, classroom experiments or quasi-experiments, or observational research. With the appropriate ethics permissions, such research is very feasible to conduct, generally inexpensive to carry out, and offers one of the highest levels of evidentiary rigour. The Centre for the Study of Higher Education is able to provide advice and support for such projects.

Professional development: Although education is an integral part of the role of many academic staff, most academic staff do not have formal teaching qualifications [10]. Staff who undertake such professional development are able to demonstrate a range of benefits from this participation and learning, including improved awareness of pedagogy, greater self-efficacy, and more effective practice due to the translation of learning into teaching improvements[11,12]. There are a range of such programs available to staff at the University of Melbourne. These include university-wide professional development programs offered by the Centre for the Study of Higher Education (CSHE) and Learning Environments (LE), but also through workshops offered within academic divisions (e.g. Arts Teaching Innovation (ATI), Built Environments Learning + Teaching (BEL+T), the Teaching and Learning Lab (TLL) in the Faculty of Engineering and IT, and the Williams Centre for Learning Advancement (WCLA)).

Students

There are at least three broad aspects of the student experience for which relevant data are routinely captured and which can therefore provide evidence of educational excellence: student *satisfaction*, student *engagement* and student *outcome measures*.

Satisfaction: Student evaluations of teaching attempt to measure student perceptions about, and satisfaction with, aspects of teaching. They are routinely administered near the end of subject delivery through the End of Subject Survey (ESS) and typically involve both 'quantitative' (Likert scale scores indicating the level of agreement with a statement) and qualitative assessments (comments) about different aspects of the students' experiences in a subject.

In making claims for excellence, it is common practice to calculate average scores awarded by students to a subject and compare these to some standard (e.g. the faculty average). However, staff should be aware that, due to low response rates, subject averages are generally derived from an incomplete and potentially non-random sample of the class, and may be biased with respect to teacher gender[2], ethnicity[3], physical attractiveness[13], grading leniency[14] and class size[15]. Although the ability to compute and compare numerical scores is appealing and appears objective, averaging subjective categorical responses is also statistically dubious[16,17]. For this reason, such scores should be interpreted with caution, and a culture of expectation related to static benchmark scores for a subject (e.g. >4) as evidence of 'excellence' is ill-advised.

Written comments from students (both unsolicited and received through formal surveys) provide potentially powerful testimonials of their learning experiences. However, the use of such comments to evidence excellence can also be problematic, for at least two reasons. First, because students are unaware that their comments might be used for a purpose other than subject evaluation, such use may be both inappropriate and misleading. Second, it is difficult for evaluators of this evidence to know whether a comment selected to demonstrate a point is representative of the overall pool of comments, or an instance of 'cherry-picking' of the most favourable comments.

There is an option to survey students earlier via the Mid-Semester Survey (MSS). Students may be more motivated to participate in MSS because there is the possibility for their feedback to be implemented in the second half of the subject they are undertaking and therefore result in improvement to their own experience. Considered responses to MSS student feedback may also improve students' satisfaction with their learning experience and their perception of the value of participating in such surveys.

How students interpret questions in these surveys may differ from how they are understood by staff. Staff-student liaison committees and student focus groups may provide an opportunity to obtain more nuanced understanding of how student satisfaction is affected by different aspects of their educational experience.

Engagement: The degree to which students are engaged with their learning in a subject can be an important indicator of whether the subject content, delivery methods and assessment are resonating. Class attendance and active participation are key measures of face-to-face engagement. Various learning analytics metrics related to online engagement, including frequency and duration of access to subject pages and resources, are recorded for every subject in the learning management system (Canvas) and can provide information on student engagement with specific resources or the subject more generally.

Outcome measures: How well students perform on the assessments in a subject is presumably related to the quality of the educational experience, but this is difficult to interpret in isolation. Where some aspect of student performance can be measured before and after an educational intervention using a validated test instrument, this can provide compelling evidence for quality and

impact. For instance, in the sciences, *concept inventories* are used in a wide range of disciplines to compare 'baseline' student conceptual understanding at the start a subject with conceptual understanding at the end of the subject[18,19]. Where growth in conceptual understanding can be demonstrated following an educational intervention, this allows strong inferences to be made about the efficacy of the intervention or learning experiences. Validated instruments are now available for assessing change in a wide range of competencies and more generic learning-relevant attributes, ranging from self-efficacy (students' self-belief or confidence) to capacity for critical thinking, and perceptions.

Independent experts

Peer Review of Teaching involves academic peers providing feedback on one or more aspects of an individual's educational practice[20]. As fellow teachers, academic peers have useful expertise and perspectives to offer, particularly on aspects of curriculum and learning design and how these compare to their experience of best practice. How peer review is practiced varies considerably, ranging from informal, collegiate observations of classroom practice to more formal, evaluative assessments of a wider spectrum of educational activities. Historically, peer review of teaching has tended to emphasise observation of face-to-face or online lectures, tutorials, laboratory classes, but there is tremendous potential for academic peers to provide evidence-based feedback for a much wider spectrum of educational activities, including every dimension of the *Framework for Educational Excellence.*

The Melbourne Peer Review of Teaching program provides options for both developmental and evaluative reviews of teaching. The developmental option takes place within academic divisions and involves giving and receiving feedback on teaching and participating in discussions about teaching and learning with disciplinary colleagues in a supportive context. The evaluative option involves more formal evaluation and recognition of teaching performance aligned with the University's Academic Performance Framework by a panel of pedagogical experts.

Awards, fellowships, grants and other external esteem measures: The process of being considered for educational awards, fellowships and grants, or having scholarly work accepted for presentation at conferences or publication in journals generally involves intensive scrutiny of aspects of an educator's portfolio and achievements. Such esteem measures from external experts therefore form a strong and broadly accepted source of evidence for educational excellence. Educational awards exist at departmental/school, faculty, University and national level. The University is a member of Advance HE, whose fellowships are widely recognised across Australia and abroad.

A multidimensional evidence matrix

Mapping the types of evidence discussed above against the seven dimensions of the *Framework for Educational Excellence* generates an 'evidence matrix' (Table 1). This serves as a guide to the ways in which different sources may be drawn upon in performance and development reviews, confirmation, promotions and job applications to evidence excellence for each dimension of the framework.

The strength and reliability of evidence presented is influenced by the degree to which independent inputs provide corroborating evidence for achievement in a particular dimension. Thus, strongly aligned, 'triangulated' evidence for excellence for any dimension of the framework that comes from two or more input sources might be considered more balanced, thorough and compelling than evidence from one source alone. It is nevertheless important to keep in mind that triangulated evidence is not necessarily expected or possible for every dimension, or for all dimensions of the framework.

Table 1. Forms of evidence that could be used to demonstrate educational excellence for each dimension of the *Framework for Educational Excellence*.

Dimension	Educator evidence	Student evidence	Independent expert evidence
1. Well-designed and engaging learning experiences **Important aspects of practice** • Clear alignment between intended learning outcomes and learning activities • Contemporary and relevant curricula taught by subject matter experts • Curricula, assessment design, and course materials that ensure equity and accessibility • Learning experiences that foster inquiry, experimentation, and practical application • Ongoing opportunities for experiential learning through practice and consolidation • Peer and self-directed learning activities that foster collaboration and teamwork skills • Intellectual challenges that encourage autonomous learning, decision-making and reflection • Effective use of educational technology for engagement and learning [key references:[21]]	Annotated course/lesson plans demonstrating constructive alignment of intended learning outcomes and learning activities Examples of course activities and other teaching materials that foster enquiry, and that draw on subject matter expertise Peer- and self-directed learning activities that foster collaboration and teamwork Examples of course activities and other teaching materials that demonstrate the qualities outlined under this dimension Class observations using validated protocols[22,23] Intentional design or redesign of learning experiences, aligned with evidence from the literature Experimentation with, and successful development of, effective use of technology to support student engagement and learning	Student evaluations/commentary on learning experiences that are accessible, engaging, relevant and intellectually stimulating Student evaluations/commentary on learning experiences that have encouraged them to acquire effective teamwork and collaboration skills, and to study positively with peers Metrics of student engagement including through learning analytics Students' reflective writing on their learning experiences Student evaluations/commentary on learning experiences that have supported them to better engage with technology for learning and in application in their discipline area Student evaluations/commentary on learning experiences that have encouraged them to reflect, and to learn independently and with self-direction Positive ESS responses to Q5	Peer evaluation of curriculum design and student learning experiences, relative to best practice Department/School, Faculty, University and National teaching awards), Advance HE, Universitas 21 and GEM Scott Fellowships, grants and other esteem measures that recognise excellence in this dimension Delivery of an education-focussed development (eg LTI) or research project positively addressing this dimension Invited review of others' scholarship (eg as a journal reviewer) addressing this dimension, or invited keynotes or presentations Adoption of developed innovations or guidance by other educators or institutions that address this dimension

Dimension	Educator evidence	Student evidence	Independent expert evidence
2. Evidence-based and inclusive teaching practices **Important aspects of practice** • use of evidence-based delivery methods and teaching practices • clear communication of expectations and rationale for teaching approaches to students • teaching methods that engage, stimulate interest and inspire/motivate students to learn • clear and accessible explanation of complex ideas • creating a classroom environment that is respectful, inclusive and accessible for all learners • teaching approaches that promote social connection, foster belonging and support wellbeing • demonstrating enthusiasm, relatability, empathy and self-awareness • facilitating active participation, questioning and interaction among staff and students • conveying openness and responsiveness to student feedback and perspectives [key references:[24,25]]	Annotated course/lesson plans outlining the application of research evidence in learning design and delivery Sample resources supporting clear communications with students, opportunities for students to seek more information, approaches to ensuring consistent messaging with teaching colleagues Explanation of how instructional choices are guided by awareness of situational factors and student needs Examples of inclusive teaching practices Class observations using validated protocols[22,23,26]	Student evaluations/commentary on learning experiences that are encouraging, engaging, clearly communicated and responsive to student needs Student evaluations and commentary on diverse aspects of teaching practice, including communication, inclusiveness, responsiveness and accessibility Positive ESS responses to Q1, Q2 and Q4	Peer evaluation of teaching practices relative to best practice Department/School, Faculty, University and National teaching awards), Advance HE, Universitas 21 and GEM Scott Fellowships, grants and other esteem measures that recognise excellence in this dimension Delivery of an education-focussed development (eg LTI) or research project positively addressing this dimension Invited review of others' scholarship (eg as a journal reviewer) addressing this dimension, or invited keynotes or presentations Adoption of developed innovations or guidance by other educators or institutions that address this dimension

Dimension	Educator evidence	Student evidence	Independent expert evidence
3. Effective assessment and feedback **Important aspects of practice** • clear alignment between assessments and intended learning outcomes • variety and choice in assessment tasks and evidencing of learning • assessment and grading practices that are secure, reliable, transparent, fair and scalable • authentic forms of assessment that are relevant to students' current and future goals • assessments that encourage the development of critical thinking and evaluative judgement • staged assessments that build learning through cycles of feedback and iterative improvement • provision of constructive and timely feedback • helping students to develop skills in giving, receiving and responding to feedback • modelling reciprocal feedback by soliciting and using feedback from learners [key references:[27]]	Evidence-based rationale for assessment regime and alignment with intended learning outcomes through curriculum design Examples of both formative and summative assessments that conform to principles of good assessment design, and that work together to develop student understanding of key learning in the subject Clear explanation of practices in relation to students' development and practice of feedback literacy Demonstration of variety and choice in assessment tasks, and inclusion of authentic assessment approaches relevant to students' needs and ambitions Assignments, assessment briefs and rubrics that are clearly expressed, aligned, and provide students with equitable and transparent, reliable guidance	Student evaluations of the perceived value, relevance and alignment of assessment and feedback Examples of student contributions to feedback as part of peer feedback, and development of this skill over time Examples of student assignments that are developing over time in response to formative feedback provided by the staff member/s Positive ESS responses to Q2 and Q3	Peer evaluation of assessment regime in relation to best practice Benchmarking with other Go8 universities Review of authentic assessments by practitioners or employers Department/School, Faculty, University and National teaching awards), Advance HE, Universitas 21 and GEM Scott Fellowships, grants and other esteem measures that recognise excellence in this dimension Delivery of an education-focussed development (eg LTI) or research project positively addressing this dimension Invited review of others' scholarship (eg as a journal reviewer) addressing this dimension, or invited keynotes or presentations Adoption of developed innovations or guidance by other educators or institutions that address this dimension

Dimension	Educator evidence	Student evidence	Independent expert evidence
4. Guidance and support inside and outside the classroom **Important aspects of practice** • providing consultation and advice • helping students to connect with appropriate support services • participating in student advising or mentoring programs • identifying and communicating opportunities for co-curricular learning • leveraging networks to connect students with co-curricular opportunities • identifying and reaching out to students in need of support [key references:[28,29]]	Explanation of approach to student guidance and support, and how this aligns with recommended practice Examples of educational initiatives or innovations that contribute to improved student wellbeing Re/design of assessments or of learning materials that respond to the support needs of particular students or groups of students, or that respond to concerns raised by students Participation in student advising Examples of opportunities provided to students to engage with co-curricular activities, or of leveraging networks to enhance or develop these Active engagement in the 'at-risk' program and provision of support for students in response	Student evaluations/commentary on the staff member's pro-activeness and availability for consultation and advice Student evaluations/commentary on the effectiveness and value of guidance and support received	Peer evaluation of guidance and support of students relative to best practice Department/School, Faculty, University and National teaching awards), Advance HE, Universitas 21 and GEM Scott Fellowships, grants and other esteem measures that recognise excellence in this dimension Delivery of an education-focussed development (eg LTI) or research project positively addressing this dimension Invited review of others' scholarship (eg as a journal reviewer) addressing this dimension, or invited keynotes or presentations Adoption of developed innovations or guidance by other educators or institutions that address this dimension

Dimension	Educator evidence	Student evidence	Independent expert evidence
5. Integration of scholarship and professional practice into teaching and learning **Important aspects of practice** • incorporation of educational scholarship into teaching practice • ability to connect subject matter to contemporary research/industry/professions/life and society • learning that encourages the development of research, civic and/or professional skills • conducting discipline-based educational research as a part of teaching • providing students with opportunities to conduct research and inquiry • incorporating professional, industry and community experiences into the curriculum • designing and implementing innovations in teaching practice that enhance student learning [key references:[30,31]]	Evidence of curriculum development informed by evaluative data and research evidence Published research that relates to own practice as Scholarship of Teaching and Learning, or through Education Research Subject design and/or content that links to contemporary issues and challenges, and encourages positive and informed student engagement with these issues Integration of the development of research skills within curriculum design for students (all levels) Examples of teaching initiatives or innovations that involve authentic professional practice and/or partnerships with community/industry partners	Student perceptions of the relevance of their educational experience to their future aspirations Evidence linking teaching and learning to graduate outcomes	Department/School, Faculty, University and National teaching awards), Advance HE, Universitas 21 and GEM Scott Fellowships, grants and other esteem measures that recognise excellence in this dimension Delivery of an education-focussed development (eg LTI) or research project positively addressing this dimension Invited review of others' scholarship (eg as a journal reviewer) addressing this dimension, or invited keynotes or presentations Adoption of developed innovations or guidance by other educators or institutions that address this dimension

Dimension	Educator evidence	Student evidence	Independent expert evidence
6. Continuous improvement and professional development **Important aspects of practice** • participating in professional development activities related to teaching and learning needs • engaging in scholarly inquiry in relation to one's own practice • improving curriculum, subject design or teaching practice as a result of literature research, learning analytics, self-, student- or peer evaluation • contributing to teaching-related workshops, seminars and conferences • contributing to informal and formal peer review of teaching and scholarly research • membership of internal or external teaching networks or communities of practice [key references:[11],[12]]	Completion of education-focussed professional development programs such as the Graduate Certificate in University Teaching (GCUT) or equivalent Engagement with education-focussed workshops, training modules or seminars run by the CSHE, TLI or in academic divisions Attendance at educational conferences, or participation in education-focussed streams of disciplinary conferences or events Evidence of reflection and action plan in response to student or peer evaluations Grant applications to support teaching improvement or innovation Processes / practices for ongoing review and refinement of teaching content and approaches	Mid-semester survey report and responses End-of semester survey report and responses Survey/focus group interview responses from students Feedback from student representatives at mid- and end-of-semester timepoints One-minute papers[32,33]	Participation in Peer Review of Teaching as reviewee and evidence of response to feedback Participation in internal and external communities, networks, events with other educators Department/School, Faculty, University and National teaching awards), Advance HE, Universitas 21 and GEM Scott Fellowships, grants and other esteem measures that recognise excellence in this dimension Delivery of an education-focussed development (eg LTI) or research project positively addressing this dimension Invited review of others' scholarship (eg as a journal reviewer) addressing this dimension, or invited keynotes or presentations Adoption of developed innovations or guidance by other educators or institutions that address this dimension

Dimension	Educator evidence	Student evidence	Independent expert evidence
7. Educational collaboration, leadership and commitment to dissemination **Important aspects of practice** • building constructive professional relationships around teaching, including across disciplines • a culture of sharing teaching-related learnings at internal and external forums • positive and constructive contributions to teaching-related committees and teams • mentoring and support of colleagues around teaching • effective and collegial leadership of teaching teams • contributions to teaching-related policies and processes • ethical practice in all aspects of teaching [key references: 34]	Examples of constructive contribution to collaborative educational endeavours, including curriculum design and subject delivery Evidence of sharing educational learnings in blogs, media, seminars, panel discussions or workshop/ conference presentations; evidence of uptake of these by others Involvement in formal or informal mentoring of colleagues Examples of leadership roles undertaken in the teaching and learning domain Contributions to committees/ working groups focussed on education	Examples of collaborations with students in learning design and evaluation	Feedback or testimony from colleagues, mentors and mentees, especially about influence on adoption or change of practice (ie impact of leadership) Department/School, Faculty, University and National teaching awards), Advance HE, Universitas 21 and GEM Scott Fellowships, grants and other esteem measures that recognise excellence in this dimension Contribution to internal, national or international processes, guidelines, policies, accreditation practices, recommendations, or standards Invited review of others' scholarship (eg as a journal reviewer) addressing this dimension, or invited keynotes or presentations Adoption of developed innovations or guidance by other educators or institutions that address this dimension

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