

U-MAP: BEYOND CURRICULUM MAPPING

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This paper reports on the development of U-Map, an innovative design-focused, forward looking, and user-friendly tool for higher education teachers that promotes the constructive alignment of units, systematically and progressively accumulates data for course accreditation, and facilitates ongoing critical review of teaching. U-Map scaffolds the design of units, supports discrimination between quality of unit composition and teacher delivery, and acts as a diagnostic tool for comprehensive remediation. U-Map places teachers at the front end of quality enhancement by helping them unite the elements that we know contribute to high impact learning experiences and support student engagement.

Keywords: *Curriculum mapping, unit design, constructive alignment.*

INTRODUCTION

This paper reports on the initial development of *U-Map*, a curriculum mapping exercise in the Faculty of Education at the University of Tasmania that has progressed into a user-friendly innovative tool that supports unit¹ design, evaluation and curriculum renewal, and automatically and progressively charts accreditation requirements. *U-Map* facilitates constructive alignment ([Biggs & Tang, 2011](#)) and reveals lecturer thinking behind the design of units. In an increasingly regulated and competitive educational environment, *U-Map* maintains the focus on learning outcomes rather than compliance. The journey related in this article reveals how a focus on the enhancement of teaching and learning can help teachers seize unexpected opportunities to respond positively to accreditation challenges and teaching performance expectations.

THE BIRTH OF AN IDEA

The Bachelor of Education (Applied Learning) (BE_{EdAL}) was approved for delivery and commenced in the second semester of 2011. This undergraduate course aimed at teachers in the vocational education sector may well have been the first to be designed completely using the National (now the Australian) Professional Standards for Teachers which were issued in February 2011 by the Australian Institute of Teaching and School Leadership ([AITSL](#)). Although the actual course approval was through the Teachers Registration Board of Tasmania, all education courses are being progressively accredited in detail by AITSL, the national professional teaching standards authority.

From the perspective of one who had just participated in the administrative challenges of getting approval for and launching a new course, two major developments in October 2011 signalled another massive challenge for national AITSL accreditation expected within five years:

¹ Within this paper, ‘unit’ refers to a semester teaching package, and ‘course’ the full degree schedule.

- The Australian Council of Deans of Education defined the Level 7 Australian Qualifications Framework threshold learning outcomes (TLO) for bachelor degrees in education, providing another course standard for accreditation ([Heath, 2011](#)).
- The Australian Government established the Tertiary Education Quality and Standards Authority to “regulate higher education using...a standards-based quality framework” (<http://www.teqsa.gov.au/about/legislation>). Teaching quality would most likely have implications on institutional compliance, and thus generate additional requirements at the course and unit level.

Awareness of these factors prompted a simple question: If accreditation requires the time-consuming mapping of curriculum against certification requirements, then why can't we progressively and consistently map and evidence standards as our new units are developed? Observation of colleagues already experiencing the accreditation cycle proved to be a powerful motivator.

CURRICULUM MAPPING

Curriculum mapping is a common response to the expansion of professional standards and increasing pressures for both course and institutional accreditation. Industry demands for “work ready” responsive programs coalesce with greater competition in the higher education sector so that institutions are spurred to ensure not just that they cover the curriculum efficiently, but also that there are procedures to identify and remedy gaps and overlaps ([Perlin, 2011](#)). The definitions of a curriculum map vary:

- “a roadmap of a curriculum, guiding students, faculty members, teachers, curriculum planners, evaluators, and coordinators through the various elements of the curriculum and their interconnections” ([Perlin, 2011](#), p.28).
- “a consideration of when, how, and what is taught, as well as the assessment measures utilized to explain achievement of expected student learning outcomes” ([Plaza, Reiersen Draugalis, Slack, Skrepnek, & Sauer, 2007](#), p.1).
- “to evaluate the links between curriculum content and its target learning outcomes” ([Lam & Tsui, 2013](#)).

Both [Perlin \(2011\)](#) and [Plaza, Reiersen Draugalis, Slack, Skrepnek, and Sauer \(2007\)](#) expand these definitions by citing [Harden's \(2001\)](#) view that curriculum mapping identifies whether the intended material is being taught, demonstrates links between key components, and examines specific aspects of the curriculum. The mapping referred to in this article contains the first two of [Harden's \(2001\)](#) purposes, overlaid with the primary motivation of verifying the linkages between academic outcomes and professional standards for course accreditation. Curriculum mapping is thus viewed as a *process* with particular tools devised and constructed to meet the aim, scope, and context of the mapping exercise.

In general, curriculum maps generate tables ([Lam & Tsui, 2013](#); [Perlin, 2011](#)), graphical maps ([Lam & Tsui, 2013](#); [Plaza, Reiersen Draugalis, Slack, Skrepnek, & Sauer, 2007](#); [Spencer, Riddle, & Knewstubb, 2012](#)), “tick-box” grids ([Landry, et al., 2011](#); [Tariq, Scott, Cochrane, Lee, & Ryles, 2004](#)), or spreadsheets ([Fraser, Crook, & Park, 2007](#)) wherein teaching practices are aligned to learning outcomes, skill domains or teaching standards. Depending on the project objective, these outputs are then used to identify areas for strategic improvement, curriculum

renewal ([Britton, Letassy, Medina, & Er, 2008](#); [Landry, et al., 2011](#); [Spencer, Riddle, & Knewstubb, 2012](#)), or become evidence for accreditation. The strength of curriculum mapping is that it can yield both horizontal and vertical perspectives of learning programs. Lam and Tsui ([2013](#)) also see curriculum mapping as a means of resolving wider issues of inconsistency and lack of coherence in teacher education curriculum.

A key issue for curriculum mapping is the transition from an attribution process into conversations about change and renewal of teaching and learning ([Spencer, Riddle, & Knewstubb, 2012](#)). Plaza, Reiersen Draugalis, Slack, Skrepnek, and Sauer ([2007](#)) report using a triangulation method to examine the intended curriculum (faculty handbook), taught curriculum (interviews with instructors), and received curriculum (student group interviews), as a means of identifying issues in learning and teaching. They also make the point that mapping “can be used to make the curriculum more transparent and to demonstrate the links between various components of the curriculum” (p.5). Although utilizing this transparency to allow students map their own skills could be inclusive and engage students to reflect on their own learning ([Tariq, Scott, Cochrane, Lee, & Ryles, 2004](#)), the potential for individual bias would need to be considered. Nonetheless, it could shift the locus of student feedback from satisfaction to perceived learning outcomes, and contribute an essential additional lens on the curriculum map ([Spencer, Riddle, & Knewstubb, 2012](#)).

The literature suggests an ongoing tension between the intentions of accreditation/compliance and course planning/improvement. Tariq, Scott, Cochrane, Lee, and Ryles ([2004](#)), go so far as to mention that curriculum mapping outcomes become “distorted as they [are] misappropriated by the quality assurance agenda to facilitate managerial processes” (p. 79). There is, however, little examination of the intersection of these two purposes and the transitions between them. Course renewal curriculum mapping might lend itself easily to accreditation, whether intended or not. The key question in an increasingly regulated education environment is whether the process works in the other direction; accreditation mapping generating ongoing improvement. A major benefit of the curriculum mapping effort can be overlooked unless those undertaking it are able to reorient the certification and compliance agenda at an early stage ([Britton, Letassy, Medina, & Er, 2008](#)).

Even when the objective is well-defined, curriculum mapping comes with limitations and challenges that should be recognised and acknowledged during the process and when drawing conclusions from the data. Plaza, Reiersen Draugalis, Slack, Skrepnek, and Sauer ([2007](#)) note the retrospective nature of curriculum mapping, because the data is derived from formal documentation of courses that already have been delivered, such as the unit outline in the author’s institution [<http://www.teaching-learning.utas.edu.au/planning/unit-outlines>]. They also mention the inability to capture differences between the intended and delivered curriculum; what the documentation says should happen and what actually takes place within the classroom or learning management system. For this reason, some mapping exercises intentionally constrain themselves to learning outcomes only. Lam and Tsui ([2013](#)) explicitly remain in the intended learning domain, whilst [Harris and Cullen \(2009\)](#) similar to [Blumberg \(2009\)](#), align curriculum level criteria with types of learning and expectations for cognitive engagement. Meanwhile Tariq, Scott, Cochrane, Lee, and Ryles ([2004](#)), caution against inflated staff perceptions of skills claimed by lecturers in the application of their audit tool. They were forced to mandate explanations of how the skills were achieved, but the elaborations appear general and there is no mention of links to evidence. A less obvious issue, hinted at by Perlin ([2011](#)) and discovered by Spencer, Riddle, and Knewstubb ([2012](#)), is that the mapping exercise can achieve its

improvement agenda only if the assessment and teaching are considered also, bringing together all of the elements of constructive alignment ([Biggs & Tang, 2011](#)).

Spencer, Riddle, and Knewstubb ([2012](#)) describe the retrospective nature of curriculum mapping as a “static snapshot” (p. 220) of the curriculum, but they do not expand on the analogy to note that, like a photograph, such mapping represents a view of the past: what has been delivered at a point in time. Curriculum mapping for *renewal* thus equates to surveying the past to look to the future. Efforts focused on accreditation alone are less likely to progress beyond meeting the licensing requirement, and there appear few examples of mapping processes being concurrent with all the *living* elements of a course; design, delivery and evaluation. Notably, whilst admitting to an accreditation agenda, Uchiyama and Radin ([2009](#)) describe a real time course mapping exercise occurring during delivery to identify areas of coverage, gaps, and overlaps. Their pre-formatted tool is not described, but is likely to have yielded one of the diagrammatic outcomes referred to above.

Within discussion of the characteristics and limitations of curriculum mapping, it is interesting how the term *mapping* is used to describe this retrospective process. Usually, we use maps to identify the way to an objective or guide others who intend to travel the same path, and we might check our present location to confirm and reinforce the way forward. However, checking to see where we have been tends to occur more often when lost. If we talk truly about curriculum *mapping*, then the emphasis should be on planning the journey forward, seeking in advance the most effective, efficient, and often most pleasant route. If we know where we are at all times and are confident where we have been, then there should be no necessity to consult the map.

FIRST BEDAL MAPPING

Our first attempt to respond to the accreditation challenge and answer the question posed at the start of this paper, was a simple attribution table that mapped assessment tasks against the AITSL Teaching Standards Outcomes and the Australian Qualifications Framework Threshold Learning Outcomes (TLO) and listed the forms of evidence (see [Appendix A](#)). This seemed a reasonable idea at the time. We even experimented with setting up a wider curriculum map spreadsheet to track the teaching standards and TLO against units, although this quickly revealed itself to be a mammoth undertaking for a staff of two, one tenured and one sessional. Meanwhile, concurrent with this initial mapping documentation, the University of Tasmania initiated trials of unit review procedures in response to the same national education compliance pressures mentioned earlier. Voluntary participation in the trial review process prompted a comprehensive reflection on all aspects of the first mapped units additional to those prompted by student survey feedback. The table proved to be a highly beneficial scaffold for reflection by bringing together key unit elements in one place. Although not fully appreciated at the time, this use of the initial BEdAL mapping table marked the start of a gradual transition in the application of our efforts to improve practice. While we had started off mapping for accreditation only, we soon began to reflect for improvement. Accreditation remained the primary motivation nonetheless.

U-MAP LOOKING BACK

Our second attempt into curriculum mapping took the form of a tabular map format called U-Map which had been largely the province of one person – the university unit co-ordinator. Discussions with Faculty leadership identified potential mapping benefits of curriculum mapping for all undergraduate courses. The subsequent success of an internal university teaching development grant application exposed wider institutional implications, although these were anticipated rather than identified. Despite the leadership interest, we agreed that unit coordinators had to feel ownership if tokenism was to be avoided and the mapping tool was to contribute to curriculum review and improvement as well as support accreditation. The name *U-Map* emerged to reflect that it was unit mapping done by you, the university unit coordinator. The justification within the development grant application is worth considering as an indication of both the objectives of the U-Map project and the perceived benefits at that time.

This project aims to enhance teaching and learning in the School of Education by developing and implementing a user-friendly system (referred to as U-Map) that will bring together unit learning outcomes, national teaching standards, University of Tasmania graduate attributes, assessment tasks and student evaluations, in order to provide a clear picture of the effectiveness of a particular unit of study. U-Map will serve several purposes: it will ensure improvement to unit design, learning and teaching approaches and assessment strategies; it will offer professional development opportunities for academic staff; and it will ensure that appropriate evidence is collected and stored in a timely manner for the purposes of re-accreditation or quality assurance processes. This project will provide the Faculty of Education (and potentially the University more broadly) with a tool that becomes part of the normal cycle of design, delivery and evaluation of units, and particularly useful when students indicate through the *eVALUate* [[student feedback survey](#)] process that there is room for improvement in the units they have completed.

Despite the ambitious wide ranging objectives and mention of unit design, it was expected that the U-Map tool would be applied initially to existing units, maintaining the retrospective characteristic of curriculum mapping. In considering the wider application of the tool, and in response to the impetus of the teaching development grant requirement, the first U-Map version included unit learning outcomes, AITSL teaching standard outcomes, assessment tasks and university graduate attributes (see [Appendix B1 and B2](#)). Pull-down lists were added to the professional teaching standards and standards focus columns to ease construction and amendment. Furthermore, task criteria originally found in the initial BEdAL curricular mapping were moved from a subordinate position in the tabular form to alongside the standards that they must evidence in the new U-Map.²

In reviewing this first version of U-Map, it is important to not just examine the content of the tool, but also appreciate the procedural perspective of the builder/user and the process flow in its construction. [Figure 1](#) reveals that the driving objective remained generation of standards, outcomes, and evidence summaries for accreditation. Reflection of teaching practice and unit review were consequent benefits rather than factors in design of the tool. The first version of the U-Map thus looked backwards, like most curriculum maps.

² Full document available at

<https://cloudstor.aarnet.edu.au/plus/public.php?service=files&t=e592b40c984f32eb5a0e240779880bb9>.

It was at this point that the author undertook ELT 501- *Foundations of University Learning and Teaching* as a probationary requirement for new academic staff at the University of Tasmania. ELT501 emphasized the application of the revised Bloom's (Krathwohl, 2002) and SOLO (Biggs & Tang, 2011) taxonomies to define levels of cognitive engagement, and promote clarity and simplicity in unit and task learning objectives. In addition, assignments in this probation unit emphasized the application of constructive alignment (Biggs & Tang, 2011) to establish coherence between teaching activities, assessment tasks, and objectives that were clear and intelligible to students. Rather than create extra work, the assessment tasks in ELT501 were used to review and revise the objectives, assessment, and teaching activities within a unit that was "live" and being taught concurrently. U-Map was utilized as the planning vehicle for the tasks in this unit. Along the way, U-Map changed and revealed its potential to be more than the servant of accreditation, but rather a vehicle for the evaluation and review of *living* elements of a unit. The *tool* was starting to overtake the *process* and resolve the retrospective limitation of normal curriculum mapping. Course learning outcomes, Blooms and SOLO taxonomies, and teaching and learning activities were included into a revised U-Map in response to this new perspective and demand (Appendix C1 and C2)³. Also, the longer TLO statements were broken down, coded, and formed into pull downs lists to encourage detailed examination and alignment. When complete, the revised and expanded spreadsheet format of U-Map allowed calibration of constructive alignment and improvements from unit reviews in both directions; learning outcomes down, and evidence of student attainment upwards. Furthermore, retention of the previous U-Map iterations could verify changes and establish a unit history that would be available to inheritors of a unit, peer reviewers, and faculty leadership.

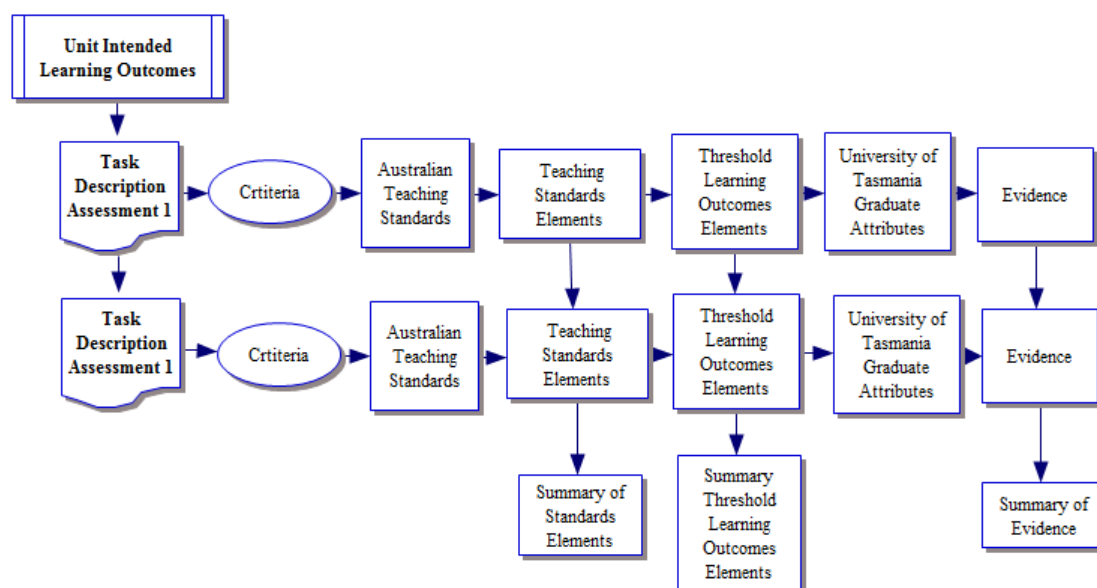


Figure 1. U-Map Version 1 process flow

Whilst standards focus areas and TLO were still listed at the bottom of this revised U-Map, accreditation was relegated to a consequence rather than the primary objective. From a flat accreditation and evidence-focused tool (Figure 1), U-Map emerged as a comprehensive framework to support improvement of teaching and learning from the ground up (Figure 2). At a time when tertiary regulatory authorities and university administrations have been focusing increasingly on student satisfaction surveys and review processes alone for quality assurance, U-

³ Full document available at <https://cloudstor.aarnet.edu.au/plus/public.php?service=files&t=d3deea8abf2c449bbda676154780993f>.

Map was revealing its potential to actively insert unit design into the quality loop, thus achieving the “part of the normal cycle of design” objective foreshadowed in the teaching and development grant application. More significantly, U-Map was orienting towards the proactive *quality enhancement* principle advocated by Biggs and Tang (2011). The only remaining limitation was that up to this point U-Map had been applied only to existing units. However, with the potentialities of the tool overtaking the limitation of process, the way was open to test U-Map in building a brand new unit where alignment would be demonstrable and verifiable throughout the design phase.

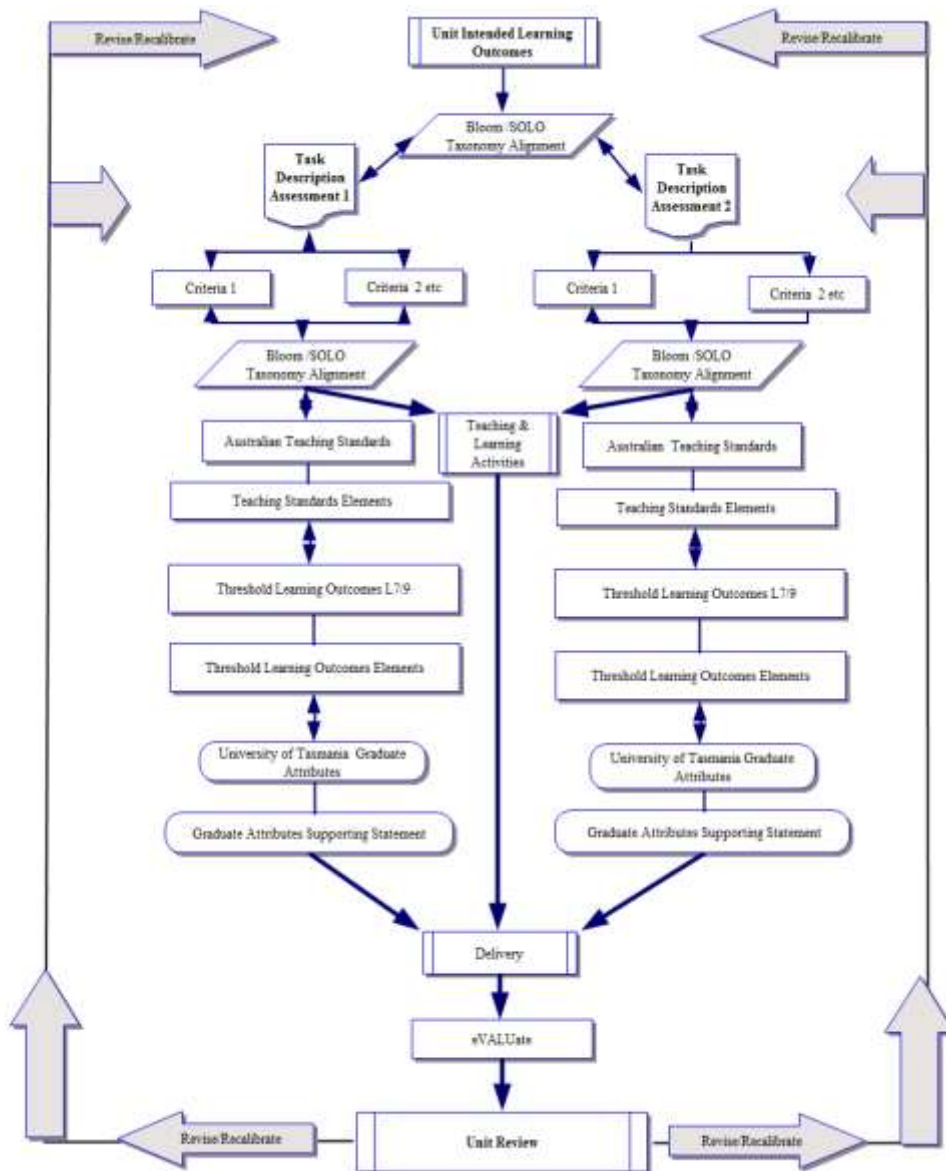


Figure 2. Revised U-Map Concept Flowchart

U-MAP LOOKING FORWARD

The progression to designing units using U-Map is not surprising in retrospect, since the structure of the tool, whether in the horizontal spreadsheet form of table found in [Appendix C1 and C2](#), or vertical flowchart of [Figure 2](#), conforms to the *Identify desired results – Determine acceptable evidence – Plan learning experiences and instruction* stages of the backwards design approach to planning promoted by Wiggins and McTighe ([2001](#)):

Backwards design calls for us to operationalize our goals or standards in terms of assessment evidence as we *begin* to plan a unit or course. It reminds us to begin with the question, What would we accept as evidence that students have attained the desired understandings and proficiencies – *before* proceeding to plan teaching and learning experiences (p. 8).

Backwards design, like U-Map, seeks greater coherence between objectives, assessment, and teaching activities as the unit is being built. U-Map provides a convenient scaffold for this process reinforced by the capacity to measure constructive alignment in one glance.

EAL302- *Literacy strategies within discipline* ([Appendix C1 and C2](#)) was the first of a number of units successfully constructed using U-Map as the focus for backwards design. Planning started at the unit learning outcomes on the left and worked to the right and down for each assessment task and learning module ([Blumberg, 2009](#)). By this stage, U-Map had diverged from traditional curriculum mapping to become a *forward looking* and *design orientated* innovation that does far more than map and collate data for accreditation objectives. Furthermore, U-Map extends beyond the initial design phase to promote consistent curriculum renewal by taking the reviewer back to the learning outcomes in the first instance, and then forcing consideration of the consequences of change on other parts of the unit.

Although still in development and limited in its use within the Faculty of Education, initial experience with U-Map suggests it has considerable potential to verify unit coherence and the quality of teaching by:

- revealing and sharing unit designer thoughts on the relationship between course and unit objectives, assessment, and learning activities, which could be of particular significance in transferring the intent of a unit and not just teaching responsibility between lecturers ([Hardré, 2005](#));
- providing ongoing vertical and horizontal “live” mapping of the curriculum ([Hughes, 2013](#));
- correlating assessment to ensure coherent and mutually supporting formative feedback that informs deep transformative learning that helps “students see themselves as agents of their own change, and develop an identity as a productive learner who can drive their own learning” ([Boud & Molloy, 2013](#), p. 705; [Linder, Cooper, McKenzie, Raesch, & Reeve, 2014](#); [Rexwinkel, Haenen, & Pilot, 2013](#); [Wang, Su, Cheung, Wong, & Kwong, 2013](#));
- establishing at the point of unit design objective systematic moderation practices that focus a forward-looking scholarship of teaching and learning for quality student outcomes ([Adie, Lloyd, & Beutel, 2013](#); [Lodge & Bosanquet, 2014](#); [Schuck, Gordon, & Buchanan, 2008](#)); and
- supporting discrimination between unit design and teaching practices in evaluations, and evidencing structural improvement to students in response to evaluative feedback ([Freeman & Dobbins, 2013](#); [Palermo, 2004](#)).

The only currently mandated planning document for approved units within the University of Tasmania is the *unit outline* which “provides students with core information about their units of study” [<http://www.teaching-learning.utas.edu.au/planning/unit-outlines>]. The level of detail and relationships between teaching and learning elements is substantially clearer in U-Map which remains at present a lecturer planning and evaluation document. However, this distinction does not have to remain. Early in the journey a colleague suggested that the relevant U-Map could be shared eventually with students alongside the course outline, and assessment rubrics. In recent years the mystery behind assignment marks has been dispelled through criterion referenced assessment. There is no reason why the mystery behind unit planning cannot go the same way ([Linder, Cooper, McKenzie, Raesch, & Reeve, 2014](#)). Shared explicit constructive alignment could help initial teacher education students in particular to:

recognise the expectations of the instructor and the learning priorities and build up the links among CILO [course intended learning outcomes, TLAs [teaching and learning activities] and ATs [assessment tasks] so that they understand why they needed to take the course and how the course was related to other courses and even the programme goals. In other words, the alignment could help promote student perception of the learning environment ([Wang, Su, Cheung, Wong, & Kwong, 2013](#), p.487; [Hardré, 2005](#)).

Furthermore, informing students more explicitly of the intended and taught curriculum should generate a more informed perspective of the experienced curriculum than is available through student surveys alone.

U-MAP NEXT STEPS

A group of seasoned senior and new academics from the Faculty of Education has been recruited to trial U-Map, and a research project has been established to capture feedback on the scope and functionality of the tool, and to help identify the point of balance between the needs of both unit coordinators and management. It is hoped that this research will generate a U-Map that can serve the teaching and certification needs of other disciplines, and support wider University of Tasmania accreditation requirements. Although somewhat in the distance, U-Map also may be transferable to other higher education institutions seeking positive solutions within an increasingly regulated and competitive Australian educational environment.

In their initial responses to U-Map, members of the trial group saw the benefits of U-Map as making planning explicit, scaffolding unit design for new teachers, and focusing reflection on teaching quality:

Well, I think the main thing it has done is to help me and perhaps others to be more conscious of their planning, to be more conscious of alignment, and to be more conscious of some of the things they can build into their design and the need for some of these things to be made more explicit.

I think the biggest advantage for me would be... processes; the fact that I am a relatively new academic, so designing units and unit outlines is something that I finally just started having to do. But what it has enabled me to do is to understand the different components of the unit outline in more detail and how they link with each other and how they inform each other.

It does make you sit down and think through... Well, it has made me rethink... well, I didn't know my learning outcomes weren't written very well. So I didn't know I needed to do that. But having this process here today has really given me a tangible way of attacking what I needed to do and forcibly thinking through, "What are my learning outcomes? How do they connect to the tasks and what tasks do I do in the classroom?" I don't think that process has changed for me at all because I think they are things that I did before, but not necessarily as well as what I've done at this time.

Whilst acknowledging the positives, one colleague, who had recently emerged from a demanding experience of curriculum mapping for accreditation, raised concerns that implementing U-Map across the Faculty could generate additional workload demands.

I suppose with a number of the processes that we're going through in the Faculty, one of the things that I seem to be hitting is repetition and overlap in the documents. That's across teaching and learning and performance. It's a number of things. It's just knowing how these relate to what. So that's probably the nature of the timing of the U-Map in relation to some other things.... I suppose what I'm saying is, I don't want to do this and that. I want to just do this.... So if one of them can be the thing that we do, that would make my life better.

This is a valid concern, particularly when the anticipated benefits for accreditation may well be years away. Conscientious and successful teachers could question the need for an additional step in their planning ([Uchiyama & Radin, 2009](#)). Meanwhile, less confident teachers or those with weaker planning skills might feel threatened as U-Map appears concurrent with institutionally mandated unit review procedures and the inclusion of formalized teaching performance expectations into career management. For these reasons, U-Map is being introduced gradually, incrementally, and collegially into the trial group initially, and their feedback is facilitating consideration of alternative forms of the tool so as to avoid the feared duplication mentioned above. Meanwhile, leadership is considering introducing U-Map to the Faculty through professional learning sessions. Surprisingly, the increased scrutiny of higher education in Australia might prove to be beneficial for U-Map. Teachers using it to improve their teaching can establish positive evidence for assessment of their teaching performance, and the Faculty can verify its measures to improve performance.

CONCLUSION

By providing an explicit and holistic overview of unit constructive alignment at the design end of units, U-Map has the potential to enhance the consistency and coherence of courses, increase student engagement and satisfaction, and contribute to the teaching reputation of our institution. However, it significantly also has the potential to focus on the wider discussion of quality enhancement and assurance in higher education back to the point of design where it belongs, and away from student satisfaction at the tail end of units. New academic staff can benefit from having a tool that displays the rationale behind inherited units and scaffolds their design of new units. However, ongoing collegial input into the further development of U-Map remains essential to ensure that it remains a teacher-owned manageable tool for educational improvement that concurrently and in an unthreatening manner satisfies organizational compliance and wider accreditation requirements.

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Appendix A

The first BEdAL curricular mapping – Extract from the EAL102 Course Appendix B1

Assessment Task 1: Exploring the Vocational Education and Training (VET) context in Australia		AITSL Teaching Standard Outcome	Australian Qualifications Framework Threshold Learning Outcomes (TLO) Level 7	Evidence
<p>Task description: Throughout the first five weeks of the unit, you will be introduced to the graduate standards of professional teaching practice and develop increasingly richer and more complex reflections. The alignment with a needs analysis methodology should facilitate the identification of immediate professional learning needs that will form the basis of further discussions with your mentor, as well as becoming objectives for your Entry Level Professional Experience stage.</p> <p>For your assignment submission, you should:</p> <ul style="list-style-type: none"> Utilize at least two reflective perspectives to identify a key area for professional improvement and align this learning need with the professional standards Conduct a needs analysis for self-directed change based on the chart adapted from Collins (1998) and establish a learning goal Identify options to address the learning goal and develop an outline professional learning plan for your Entry Level Professional Experience module Examine both feedback procedures and the options for validation to determine goal achievement Justify your needs analysis and professional learning plan. 		<p>6. Engage in Professional Learning</p> <p>6.1 – Demonstrate an understanding of the role of the National Professional Standards for Teachers in identifying professional learning needs.</p> <p>6.2 - Understand the relevant and appropriate sources of professional learning for teachers.</p> <p>6.4 - Demonstrate an understanding of the rationale for continued professional learning and the implications for improved student learning.</p>	<p>1. Graduates:</p> <ul style="list-style-type: none"> Have particular knowledge of their field of education and/or teaching discipline(s) and the learning theory and practice relevant in that field or discipline. <p>5. Graduates:</p> <ul style="list-style-type: none"> have the capacity for independent, autonomous, self-directed learning understand the importance of self motivation, and critically-reflective practice engage collaboratively to enhance self-knowledge and personal resilience seek and learn from constructive feedback and professional evaluation for further learning and professional advancement. <p>6. Graduates:</p> <ul style="list-style-type: none"> adopt reflective practice, show respect for colleagues and community members understand the importance of good judgement and sound decision-making conduct their practice in education settings in an ethical, collaborative, professional and accountable manner 	<p>A written submission in the form of a:</p> <ul style="list-style-type: none"> Explanation of reflective practice to derive specific learning need. Table illustrating self directed change learning plan. Reflection on implications for future practice.
Task length	1000 words: Process description - 300 words, Tables – 300 words, Critical reflective justification – 400 words			
Assessment Criteria	<ol style="list-style-type: none"> Identification of learning needs based on reflection and their alignment to professional standards Establishment of appropriate learning goals and the development of realistic solutions in a professional learning plan Critical examination and justification of personal professional learning solutions 			
Task 1 Standards Summary: 6.1, 6.2, 6.4		Task 1 TLO Summary: 1, 5, 6	Task 1 Forms of Evidence: Written submission identifying development of an area for professional learning.	

Appendix B1

U-Map Version 1- Extract from the EAL102 Course (Left)

COURSE: BEd(AL)	UNIT CODE: EAL102	UNIT TITLE: Foundations of Professional Learning		
Unit Learning Outcomes	Assessment Task Outline	Assessment Task Criteria	AITSL National Teaching Standard Outcome	AITSL Standards Focus Area
<ol style="list-style-type: none"> 1. Understand the theory of reflective practice and apply it to your teaching. 2. Demonstrate knowledge of the role and application of teacher professional standards 3. Critically reflect on, identify, and take responsibility for, professional learning needs 4. Understand the application of ePortfolio and other digital tools to portray rich evidence of teaching practice aligned with professional standards 	<p>Task 1 description:</p> <p>Throughout the first five weeks of the unit, you will be introduced to the graduate standards of professional teaching practice and develop increasingly richer and more complex reflections. The alignment with a needs analysis methodology should facilitate the identification of immediate professional learning needs that will form the basis of further learning and objectives for your Entry Level Professional Experience stage. For your assignment submission, you should:</p> <ol style="list-style-type: none"> 1. Utilize at least two reflective perspectives to identify one key area for professional improvement and align this learning need with the professional standards. For in-service teachers this should be based on your current practice. <i>Pre-service teachers</i> should select from a foundation skills area, such as knowledge of how students learn, behaviour management, and lesson planning and sequencing; these all form professional teacher standards elements. 2. Based on the chart adapted from Collins (1998), conduct a needs analysis for self-directed change and establish a learning goal. 3. Identify options to address the learning goal and develop an outline professional learning plan for your Entry Level Professional Experience module. 4. Examine both feedback procedures and the options for validation to determine goal achievement. 5. Justify your needs analysis and professional learning plan. 	<ol style="list-style-type: none"> 1. Identify learning needs based on reflection and consideration of professional standards. 2. Establish learning goals and develop solutions in a professional learning plan. 3. Justify the plan and consider implications for future practice. 	<p>6. Engage in professional learning</p>	<p>6.1 Identify and plan professional learning needs: Demonstrate an understanding of the role of the Australian Professional Standards for Teachers in identifying professional</p>
				<p>6.2 Engage in professional learning and improve practice: Understand the relevant and appropriate sources of professional learning for teachers.</p>
				<p>6.4 Apply professional learning and improve student learning: Demonstrate an understanding of the rationale for continued professional learning and the implications for improved student learning.</p>

Appendix B2

U-Map Version 1- Extract from the EAL102 Course (Right)

UNIT COORDINATOR: John Kertesz		U-Map Version 1 (Jan14)
Graduate Attribute	Australian Qualifications Framework Threshold Learning Outcomes (TLO) Level 7	Assessment Task Outcome Evidence
<p>KNOWLEDGE</p> <p>Graduates will have an in-depth knowledge in their chosen field of study and the ability to apply that knowledge in practice. They will be prepared for life-long learning in pursuit of personal and professional development</p>	<p>1. KNOWLEDGE – Graduates:</p> <ul style="list-style-type: none"> • know and understand learning and learners through the history, philosophies, sociology and current issues and practices of education; • know and understand the physical, social and emotional dimensions of learners & learning; • know and appreciate the importance of developmental learning contexts; • have knowledge and understanding of education policies, appropriate curricula, learning theory and practice, Indigenous Australian and other cultures; • know education theory and practice from a global perspective; • know and understand of the discipline and the profession of education; • have particular knowledge of their field of education and/or teaching discipline(s) and the learning theory and practice relevant in that field or discipline. 	<p>A written submission in the form of: (a) an explanation of reflective practice to derive a specific learning need; (b) a table illustrating a self-directed change learning plan; and (c) a reflection on the implications for future practice.</p>
<p>COMMUNICATION SKILLS</p> <p>Graduates will be able to communicate effectively across a range of contexts</p>	<p>5. PROFESSIONAL LEARNING - Graduates:</p> <ul style="list-style-type: none"> • have the capacity for independent, autonomous, self-directed learning ; • understand the importance of self motivation, and critically reflective practice; • engage collaboratively to enhance self-knowledge and personal resilience; • seek and learn from constructive feedback and professional evaluation for further learning and professional advancement. 	
<p>PROBLEM-SOLVING SKILLS</p> <p>Graduates will be effective problem-solvers, capable of applying logical, critical and creative thinking to a range of problems. They will have developed competencies in information literacy</p>	<p>6. ETHICAL & RESPONSIBLE PROFESSIONAL PRACTICE – Graduates</p> <ul style="list-style-type: none"> • adopt reflective practice, show respect for colleagues and community members; • understand the importance of good judgement and sound decision-making; • display fair and equitable treatment of students or clients; • apply relevant professional code of ethics; • conduct their practice in education settings in an ethical, collaborative professional and accountable manner; • value social and environmental sustainability, understand environmental issues and will be able to contribute to education for sustainable development; • engage sensitively and ethically with all stakeholders across the field of education. 	

Appendix C1

U-Map Version 2 - Extract from the EA302 Course (Left)

Yr 2014 Sem 2	Course BEdAL	Unit Code: EAL102	UNIT TITLE: Literacy Strategies within Discipline			
Course Learning Outcomes	Unit Learning Outcomes	Bloom/SOLO	Assessment Task Outline	Assessment Task Criteria	Bloom/SOLO	
1. Design, develop, deliver and evaluate applied learning programs in different learning and teaching contexts	1. Examine current literacy issues in a range of educational contexts.	Applying: Use a concept in a new situation or unprompted use of an abstraction. Apply what is learned in the classroom into novel situations in the work place - demonstrate, illustrate, interpret, solve	<p>Task 1: Developing Literacy Philosophy - Task description:</p> <p>Over the first seven weeks of this unit, you will examine two distinctly different perspectives within educational and workplace literacy, as well as the wider Australian perspective of literacy support in vocational education and training. Active participation and contribution to the associated discussion boards will encourage you to connect these perspectives and issues with your current or intended teaching setting, and to develop progressively a literacy teaching philosophy that can be further refined during your professional experience placement. Experienced teacher practitioners should constructively contribute to contextualising literacy for pre-service colleagues in the unit, and to support grounding their intentions into teaching realities.</p> <p>At the conclusion of the module, you will submit an ePortfolio Presentation webfolio that contains:</p> <ul style="list-style-type: none"> • a 500 word literacy philosophy teaching statement aligned to your professional situation and career stage. • all of your contributions to the discussion boards, extracted and embedded in a Word document uploaded as an artefact, and • a 500 word reflection that critically examines your key learnings from the readings and discussions, and how these relate to the philosophy statement • to how your contribution to the discussions improved both your and your colleagues' understanding of this very important educational issue. 	1. Construction of literacy teaching philosophy	Creating: Build a structure or pattern from diverse elements. Put parts together to form a whole, with emphasis on creating a new meaning or structure - construct, design, formulate, propose	
2. Research own teaching practice using educational theory and research literature		Relational: Compare & contrast, analyse, apply, explain, argue, analyse, distinguish,			2. Evaluation of educational perspectives	Evaluating: Make judgments about the value of ideas or materials - argue, evaluate, assess, predict
3. Reflect on teaching practice for continual improvement using the Australian Professional Teaching Standards	2. Evaluate student literacy needs within school and vocational education context	Evaluating: Make judgments about the value of ideas or materials - argue, evaluate, assess, predict				Extended abstract: Theorize, hypothesize, generalize, evaluate, justify, reflect, predict, design
4. Apply pedagogical content knowledge at the graduate level of the Australian Professional Teaching Standards in school and vocational education settings		Extended abstract: Theorize, hypothesize, generalize, evaluate, justify, reflect, predict, design				

Appendix C2

U-Map Version 2 - Extract from the EA302 Course (Right)

Face-to-Face/Online/Mixed: Fully online		UNIT COORDINATOR: Dr John Kertesz		U-Map Version 4 (May 2014)		
Teaching & Learning Activity	AITSL Teaching Standard Outcome	AITSL Standard Focus Area	Graduate Attribute	Australian Qualifications Framework Threshold Learning Outcome (TLO) L7	Learning Outcome L7 Elements	Assessment Task Outcome Evidence
<p>Module 1: The Literacy Context</p> <p>Topic 1: Adult literacy approaches in different educational settings</p> <p>Readings: McKenna & Fitzpatrick (2004)</p> <p>Discussion board activity:</p> <ul style="list-style-type: none"> • What are the common issues between countries? • When you examine the various responses, what do you see? <p>Topic 2: A tale of perspectives</p> <p>Readings: AIG (2010)</p> <p>Discussion board activity:</p> <ul style="list-style-type: none"> • Do you agree that there is an adult literacy crisis as depicted? • Whose perspective does this represent? 	1. Know students & how they learn	1.3 Students with diverse linguistic, cultural, religious and socioeconomic backgrounds: Demonstrate knowledge of teaching strategies that are responsive to the learning strengths and needs of students from diverse linguistic, cultural, religious and socioeconomic backgrounds.	<p>KNOWLEDGE</p> <p>Graduates will have an in-depth knowledge in their chosen field of study and the ability to apply that knowledge in practice. They will be prepared for life-long learning in pursuit of personal and professional development</p> <p>In this unit, students will develop an understanding of the challenges facing the implementation of effective literacy support in different context and be able to distinguish between deficit and socially contextualized approaches to workplace literacy. Students will also develop knowledge of explanation and procedural text types and strategies that can support student engagement with both in the school and vocational education settings.</p>	1. KNOWLEDGE	1.1 Graduates know and understand learning and learners through the history, philosophies, sociology and current issues and practices of education	<p>An ePortfolio webfolio containing:</p> <ul style="list-style-type: none"> • Educational philosophy statement, • embedded discussion participation artifacts, and • structured reflection.
	2. Know the content & how to teach it	2.1 Content and teaching strategies of the teaching area: Demonstrate knowledge and understanding of the concepts, substance and structure of the content and teaching strategies of the teaching area.			<p>COMMUNICATION SKILLS</p> <p>Graduates will be able to communicate effectively across a range of contexts</p> <p>In this unit, students will develop the skills to effectively communicate orally with a diverse range of learners in both the school and vocational education settings. Written skills will be enhanced through the development and sharing of lesson planning documentation and reflective evidence-based tools, including ePortfolios and blogs.</p>	
		2.3 Curriculum, assessment and reporting: Use curriculum, assessment and reporting knowledge to design learning sequences and lesson plans.	1.6 Graduates know and understand of the discipline and the profession of education			
		2.5 Literacy and numeracy strategies: Know and understand literacy and numeracy teaching strategies and their application in teaching areas.	1.7 Graduates have particular knowledge of their field of education and/or teaching discipline(s)			