

ARE TEACHER EDUCATION STUDENTS READY FOR ONLINE LEARNING?

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Abstract

Recent reviews of active and participatory learning design are critical of the effectiveness of such strategies, pointing out that students' participation levels in technology-mediated discussion tasks are generally low. In addition, they note that when students are made to participate, through the attachment of assignment points to participation in online discussions, students become skilled in taking full advantage of the assignment points, without necessarily engaging in deep learning. These reviews point to a disturbing trend in student engagement that needs urgent attention. Does student effort or the lack of it pose an inherent problem for the design of online discussion tasks? Is there a need to factor in students' ambivalence towards online communicative collaboration when designing LAMS learning tasks? In this paper, I document the use and usefulness of non-assessed discussion forum learning design, discussing the meaning of student content engagement and its relationship to deep learning before reporting preliminary research results that sought to investigate current student engagement with non-assessed learning tasks. My findings illustrate the importance of reassessing current conceptualisation of learning and assessment tasks as a linear progression. Moreover, I conclude that it is counter-productive to 'make students collaborate' through the simple attachment of assignment points to tasks, because it rewards compliance rather than learning.

Introduction

Active and participatory learning design that challenges conventional forms of educational traditions of passive learning are increasingly implemented in higher education (HE). The change in pedagogy from 'chalk and talk' approaches to increased collaborative learning design are resulting from constructivist educational beliefs about 'good' teaching practices that are now generally accepted as the underlying principles of effective learning and teaching in HE and elsewhere (Biggs, 1991; Zeegers, Deller-Evans, Egege, & Klinger, 2008).

The recent emphasis of learning design in the professional higher education literature and the increasing offering of professional development courses that focus on the teaching quality of post-secondary teaching, clearly shows that learning design matters (Conole & Fill, 2005; Goodyear & Ellis, 2007, Koper & Oliver, 2004; Laurillard, 2007; Ziegenfuss & Lawler,

2008). This can be taken as an implicit message that teaching practices need to be adjusted to help students achieve better results through improved engagement with learning content. However, is it sufficient to design (online) learning spaces that enable active participation and collaboration to support students' content engagement and thus new knowledge creation? The above-mentioned educational researchers do not believe this to be the case. They voice concerns about 'new constructivist practices', which make contributions to discussion forums compulsory and they also point out that students' participation level in technology-mediated discussion tasks is generally low. Moreover, if students are made to participate – through the attachment of assignment points – they do not seem to take full advantage of the communicative processes that comprise critical thinking. As Goodyear & Ellis (2007) pointedly note:

Students' accounts of their activities quite often reflect a very pragmatic stance in relation to course requirements; that engagement in discussion as a way of achieving a new understanding of phenomena is rather less likely to occur than engaging in discussion because that is what is seen as being required by the teacher. ... The teacher may espouse the intrinsic virtues of discussion, but if the assessment regime rewards signs rather than substance of engagement in discussion, the students will learn that token participation is more cost-effective than deep engagement. (p. 342)

Therefore, it seems that contemporary students have accepted the changed, non-traditional cultural practices of HE teaching and learning, playing within the 'rules of the game', and, rather than engaging in deep learning, many of them seem to 'go through the motions' to receive their assignment points. I find this practice of 'playing student' particularly problematic, as students seem content to simply comply with requirements without showing an understanding and willingness to fully engage with the learning task.

Students' effort or the lack of it, as pointed out by Goodyear & Ellis (2007), seems to illustrate inherent problems with the misalignment between teachers' conceptualisation of the usefulness and students' use of asynchronous online discussion forums. Students' ambivalence towards online communicative collaboration and dialogue and their level of contribution to discussion forums needs urgent attention. This research is a contribution to this body of knowledge that seeks to extend current understandings of student engagement levels with non-assessed learning tasks.

The pilot study reported here centres around principles and practices aligned with constructivist beliefs of good teaching, carried out in a final year teacher education unit, offered in the Kindergarten through Primary (K-7) program at Edith Cowan University. The carefully designed activities in the unit called *Values in Education*, with its main purpose to

engage students in deep thinking about the interrelationship of education philosophy, policy and practice, sought to achieve its aims through the design of multi-faceted learning spaces (formal and informal, assessed and non-assessed, face-to-face (F2F) and online) and active student participation (e.g. peer-to-peer collaboration). Before describing my pilot study that has as its main aim the documentation of the use and usefulness of non-assessed discussion forum learning design, I briefly outline what I mean by student content engagement and its relationship to deep learning. This is followed by an elaboration of one of my preferred methods to trigger students' interest when designing collaborative peer-to-peer communication tasks: a technique known as 'structured controversy', which is used in conjunction with simulation exercises (SimEx), where focus issues and problems are embedded in a scenario and students are asked to take on the role of a particular person in the story.

Student content engagement

The literature dealing with student engagement levels has grown considerably in recent years (Krause, 2005; McLaughlin, McGrath, Burian-Fitzgerald, Lanahan, Scotcher, Enyart, and Salganik, 2005; The Australian Council for Educational Research, 2007). McLaughlin et.al, (2005), have reviewed the current literature and coined the phrase 'Student Content Engagement (SCE)'. I follow their lead and, synthesising the various views on SCE, define students who show deep content engagement (DCE) as being intrinsically motivated and willing to think deeply and engage in deep learning. This means that students with DCE exert effort, initiate action and spend significant time on learning tasks that may or may not be assessed. On the other hand, I define students who show shallow content engagement as being mainly extrinsically motivated. This means that they tend to show less active engagement in exerting effort, do not seem to initiate action, spend more time off task, seem to prefer passive learning styles, and seem to 'give up easily' when faced with challenges and avoid engaging with non-assessed learning tasks (ACER, 2007).

Triggering student interest and reflection through a structured controversy approach

The learning tasks in the Values Education unit were designed so that students' interest was triggered through a 'structured controversy' approach embedded in learning scenarios. Structured controversy is a method that presents opposing views on a given topic and uses the strength of argument to invite students to take their personal opinion and value position as a starting point to think critically about the topic at hand and begin inquiring about underlying

(controversial) issues and their relationship to ideological positions. In other words, I use structured controversy as a pedagogical tool to provide students with critical thinking training. Commencing with an adversarial standpoint discussion (pro-and-con-argument), illustrated powerfully in contemporary court-room dramas such as *Boston Legal*, the Structured Controversy method demonstrates the importance of the understanding of values positions on issues that are often hidden from view. Johnson and Johnson (1989) found that this pedagogical tool was effective in engaging students with the subject knowledge and bringing underlying principles and concepts into sharp focus.

I use contemporary real-life problems in teaching and learning to motivate students' thinking about the issues. Expanding on Schoen's well-established conceptualisation of reflection-in-action and reflection-on-action, Baume & Yorke (2002) add a third type of reflection practice: reflection for action. This is reflection on established knowledge and processes (prior knowledge) and the strategic evaluation of its usefulness in the given situation (planning ahead). Thus, the process of prolonged engagement with a given issue or problem is knowledge that leads to the creation of theory-based understanding where new knowledge and insights are gained that improve both the critical thinking capabilities of students and their subject matter knowledge. In the case of the students enrolled in the Values Education unit, these thinking tasks would be problems that centre around values dilemmas.

Reflective writing and critical thinking

To engage students in deep learning and gain their attention and interest for the content to be studied, I used a set problem, embedded in a scenario (or story), as a trigger. This design was purposely chosen to necessitate students' use of their problem-solving skills and reflective abilities.

This method builds on students' learning-to-learn skills, often referred to as 'soft skills' or 'generic skills', and involves the following sub-steps:

- deconstruction of the story into necessary and unnecessary information
- deep understanding of the problem posed
- brainstorming possible ways to go about solving the problem

Unsurprisingly, this process demands effort and deep engagement with the learning content.

Adapting Turner, Ireland, Krenus & Pointon's (2008) five stages-approach to learning at university, which was originally devised by Tooley in 1999, I conceptualised students' engagement with the workshop content as follows:

- (1) Encounter or be introduced to an idea

- (2) Get to know more about ‘the idea’
- (3) Experiment with practices that are based on ‘the idea’
- (4) Seek and receive feedback about personal conceptualisation and enactment of ‘the idea’
- (5) Reflect on the feedback received and feed-forward to redesign and refine practices

The online workshops design adhered to the above framework and began with a short online PowerPoint presentation recorded in Camtasia, in which the topic and various conceptualisations were introduced. The relevance to Values Education and pre-service teacher’s practices was made explicit (stage 1). This short introduction was followed by the provision of further resources (i.e. hot links to relevant policy documents and research papers) (stage 2). Next, some simulation exercises (SimEx) (see below), where students were invited to think through an issue by taking on a particular role were introduced. For example, in workshop 3, students were asked to imagine that they were the CEO of a professional organisation and they needed to prepare a working paper for their next meeting around a vexed issue (see Table 2) (stage 3). The SimExs were deliberately structured in a way that invited students to explore various value positions and think through possible implications for them as teachers, but also for possible implications for students, parents, school administrators and the wider community. Students were encouraged to not simply respond to the questions and problems in isolation, but to read each other’s entries and provide feedback to position statements and thus engage in dialogue and debate (stages 4 and 5).

To showcase the learning design described above, four examples (all uneven workshop numbers: 1, 3, 5, 7) of the simulation exercises (SimEx) provided online through LAMS are illustrated in Table 1.

Table 1. Examples of scenario tasks on LAMS

Workshop No and topic	Sim Ex - Background	Sim Ex - Tasks
<p>Workshop 1: Topic: The significance of values education</p>	<p>Imagine you are the head of the steering committee that tries to frame a ‘Code of Ethics’ for the teaching profession. You want to prepare for your next meeting and have opened a mind-map page and drawn three circles for three major concepts. Before you commence, you skim the final <i>Australia 2020 report</i> taking particular note of the common shared values articulated in the report and identify your three subheadings to be inserted in your mind-map.</p>	<p>1a: Identify three key works (sub-headings)</p> <p>1b: Now that you have reviewed some ideas from the Australia 2020 summit and have come up with your own key themes/concepts for a draft ‘Code of Ethics’ check how the Western Australian College of Teaching has framed its draft Code of Ethics.</p> <p>How do you like their three sub-groups? How do they match your conceptualisation? Do you think it is important to know about this document? How will it be useful for you as a beginning teacher?</p>
<p>Workshop 3: Topic: The value of professional associations</p>	<p>Imagine you are the chief executive officer (CEO) of a professional association. At present, you are chairing a meeting of the executive committee. On the agenda is <i>the discussion on the use of the professional standards document</i> that has been developed over the last few months in consultation with teacher educators, school leaders, teachers, parent and student representatives. And the discussion becomes heated. There is a problem ...</p> <p>A principal and a teacher, both executive members of the professional association are in disagreement about how the standards should be used.</p> <p>The teacher, Betty, asserts that the standards should be used for professional learning: <i>“the standards should be seen as a guideline, a frame of reference for ‘best practice’ to enable me and my colleagues (other teachers) to think through our practices and identify needs for further development”</i></p> <p>The teacher identifies a developmental purpose of the standards (= self-regulation)</p> <p>The principal, Bob, asserts that the standards should be used as a performance management tool: <i>“I should be able to use the standards as a measurement</i></p>	<p>3a: Think through the benefits and potential drawbacks of Betty’s model (Standards for professional learning) and Bob’s model (Standards for the use in performance management) and provide an argument clearly outlining why you, as the CEO of the professional association, urge the members of the executive committee to adopt one model as the preferred option to be put to the members for consultation.</p>

	<p><i>of teacher performance in my school, to enable me to point out to teaching staff what they do well, but also where they seem to have deficiencies. If we want teacher quality, we need to have a measure of ‘outstanding’, ‘good’, ‘adequate’ or ‘inadequate’ practice. These standards enable us to do that! The standards also helps us better understand what ‘best practice’ actually looks like.”</i></p> <p>The principal identifies the purpose of the standards very differently, as a performance management tool (= ‘benchmarking’ teacher performance)</p>	
<p><i>Workshop 5</i> <i>Topic: Student dress codes and the management of student behaviours</i></p>	<p>Imagine you are the teacher in charge of the review of the school uniform policy and your working group (consisting of two parent representatives, three student representatives and another teacher) has been given the task to review ‘the enforcement of the school dress code’ following an incident at a neighbouring school (School X). The practices at the two schools are very similar; both made students who have failed, after many warnings, to abide by the school uniform policy ‘stay in the classroom and write lines at lunch and/or recess’.</p> <p>School X is entangled in a law suit because of the punishment practices for repeated ‘infringement of dress code’. The plaintiff (parents of three students frequently punished) argued that the in-class detention practice is not only ‘bad teaching practice’, but is as a matter of fact ‘unlawful’. It discriminated against the students who did not in any way interfere with the rights of other students to learn or teaching staff to teach. Therefore, they argue, the punishment is not only ‘unreasonable’ but contravenes the School Education Regulation 2000.</p> <ul style="list-style-type: none"> • Your working group needs to make a recommendation to the school council. 	<p>Review the School Education Regulation 2000 and your ATP school’s uniform policy. Think through the issues that the working group is facing. Based on your research and current understanding, formulate a recommendation, clearly outlining why you, as the person in charge of the working group, urge the school council to (a) keep current practices - punishing students for not abiding by the uniform rules of the school by ‘writing lines during lunch and/or recess’ or (b) abandoning this practice based on your research and the pending law suit faced by School X.</p>
<p><i>Workshop 7</i> <i>Topic: Student profiling and student</i></p>	<p>Imagine you have been working in one of your recent prac schools as a classroom teacher for 18 months. You and the principal have arranged a video-conferencing</p>	<p>Investigate your APT school’s ‘learning platform’. Formulate a short statement describing the school context (its location, physical environment and culture). Look</p>

<i>variability</i>	session with the parents of a new child. The family is currently living in South Africa. The child, Anna, will commence her schooling in Western Australia in your classroom in two weeks' time. The session is just about to start when the principal is called away to an emergency situation. You are left on your own and are asked to describe Anna's new 'learning platform'. What would you tell the parents about: the school, the teachers, the other children, the location, the physical environment, the culture?	closely at the descriptions of Abernethy PS, Bolton PS, Crystal Montessori School and Deanmoor Independent School when constructing your ATP school's profile.
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As stated above, the aim of the SimExs were for students to engage with the issues presented at a deeper level, and practice and to interconnect theory with practice through their prior knowledge gained in various theory- and practice-based formal learning over the course of their enrolment in the K-7 Bachelor of Education program. A number of topics were explored to raise students' awareness and enable them to think through day-to-day issues and reflect on their often taken-for-granted beliefs and assumptions about teaching and learning practices. Enhancing awareness of implications of habitual actions and reactions (such as in-class detention for disobeying uniform rules; writing names on the board for unsolicited communication with peers etc.) is of paramount importance in a Values Education unit.

In total, seven SimEx tasks were uploaded onto LAMS prior to the commencement of the unit and students were free to engage with them at any time during the winter school unit. Although the scenarios were purposely ordered to follow the unit design topics: Module 1 – Values in Policy and Module 2 – Values in Practice, the online workshops in which the scenarios were embedded were self-contained, providing students with the possibility to work ahead rather than needing to stay lock-step with the F2F lecture and tutorial work.

The study

This preliminary study gives me the opportunity to document how I approached the unit design process. The research questions that guided this work were:

- How effective is the provision of collaborative learning spaces provided through LAMS?
- How are students utilising collaborative, conversation-based learning spaces provided through LAMS?

To address these questions, I examined all the entries posted to the discussion forums on LAMS that constituted part of the course work in a fourth-year teacher education unit title Values Education. The intention of the study was to ascertain whether there are patterns of engagement that can be established across this small sample that would contribute to the discussion on SCE and the effectiveness of students' participation level in technology-mediated, non-assessed discussion tasks.

All student postings were read and considered holistically. A brief characterisation of each entry was then developed (see Table 2), using a factor analysis model of three dimensions of quality:

Table 2. Nature of LAMS SimEx entry

<i>Factor</i>	<i>Title/ Heading</i>	<i>Description</i>	<i>Student Example</i>
<i>Factor 1</i>	simple statement	The 'simple statement entry' is of a personal nature, providing personal opinions or agreeing/ disagreeing with positions stated by peers without any supporting evidence of research, analysis or deep reflection.	The vision of [the school] is to be a dynamic educational community ... when students leave the school they will be prepared for the next phase of their lives as independent learners. ... I agree with the outcomes they hope to achieve. (SimEx 2b)
<i>Factor 2</i>	inquiry-based argument	The 'inquiry-based argument' is providing evidence of deep thinking, expressing uncertainty, doubt, curiosity and a willingness to consider alternative options, signalling a preparedness to move beyond simply stating personal opinions.	As the CEO of a professional association I would urge the members to take on Betty's model of self regulation ... I feel Betty's model is the most realistic and provides teachers with the trust to act as a professional and make professional decisions. However, I do see the value and importance of Bob's model because unfortunately there are ... teachers .. who seem not to have the capacity, values, knowledge and understanding to self regulate... If their wasn't a system or model like Bob's in place who would regulate the teachers who opt out of self regulation? (SimEx 3a)
<i>Factor 3</i>	evaluative, evidence-based position-taking	The entry is the result of inquiry and an explicit connection between theory and practice and provides evidence from theory and/or practice in support of an explicitly stated values position, reached after careful analysis of	Before discussing my school's uniform policy I have to make the following statement: My son started work at [a private company] at age 16. He was issued with [a standard uniform]... Why am I writing this? Well, the company has a dress standard which reflects their particular ethos and

		multiple positions.	promotional slant ... I personally am not interested in negotiating on issues which are part and parcel of life. ... After spending over two years overseas, with two children in a non uniform school, I see the value of having a uniform, because ... Most importantly, students' at Piaget's final stage of cognitive development increase their ability to think abstractly. ... So, is the issue of wearing a uniform a child or parental condition when it comes to the primary years? (SimEx 5a)
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Findings

Importantly, but perhaps unsurprisingly, a simple analysis of the number of comments posted shows that the majority of students were able and made the effort to gain physical access the online workshops. However, as the figures (see Table 3, below) illustrate, the initial interest in and engagement with the online workshops was not sustained by the majority of student teachers. The number of students who continued to engage with the online workshops out of personal interest and out of free will declined sharply, particularly after the school holiday break (weeks three and four). A major contributor may have been the demands of planning for their final seven-week workplace practice that was simply deemed more valuable by students, as reported during unit evaluation sessions. Moreover, the competition for student attention between the 'Maths Clinic' and 'the Values Ed unit', both offered as high-demand winter school units, meant that some students deemed 'maths' to be more important than 'values'. These points are exemplified by the following entries on end-of-unit feedback sheets:

I am not particularly proud of my achievements in this unit. I could have done much more. But if you want me to contribute to LAMS [online workshops], you need to make it an assessable task. This was frankly just a waste of time. (2008, final-year teacher education student)

I liked the online workshops, they were kind of fun, but planning for prac was way more important. Don't expect quality work from me, prac prep [practice preparation and planning] is stressful enough as it is. (2008, final-year teacher education student)

The scenarios were interesting but I needed to get my head around my maths assignment, which was confusing and far more important. I simply did not need to do LAMS, so I didn't. (2008, final-year teacher education student)

The following histogram of student content engagement with the various SimEx reflects the stated views of the three students (see Table 3).

Table 3. Histogram of SCE with SimEx

SimEx No*	No of contributing students (online) n=145	No of contributing students (F2F)** n= 145	Comparing the contributing student group with non-contributing student group in %
1a	110	0	76% vs 24 %
1b	95	0	66% vs 34 %
2a	96	0	66% vs 34 %
2b	77	6	57% vs 43 %
3a	73	5	54% vs 46 %
4a	50	0	34% vs 66%
5a	33	4	26% vs 74%
5b	28	0	19% vs 81%
6a	21	5	18% vs 82%
7a	14	0	10% vs 90%
7b	9	5	8% vs 92%

* Workshops 1, 2, 3, 5 and 7 included two SimExs and workshops 4 and 5 included only one.

** all online workshops were also offered in face-to-face (F2F) mode. A small number of students chose to attend the F2F workshops instead of working online and some withdrew prematurely from the unit. Time did not permit to engage with two SimExs in the F2F workshops.

The data presented here clearly shows the sharp drop of communication activity during the second school holiday week (week 4) which was sustained through the rest of the unit. These findings cannot be ignored.

As for the quality of the contributions made, the factor analysis described earlier, shows a similar pattern. For ease of analysis, the F2F contributions were excluded from the Table below.

Table 4. Factor analysis of SimEx entry

SimEx No*	No of contributing students (online)	Frequency of Factor 1 – Simple Statement		Frequency of Factor 2 – Inquiry-based argument		Frequency of Factor 3 – Evaluative, position-taking		Invalid entries (repeat/unrelated/test/empty)	
1a	110	98	89%	5	5%	3	3%	4	3%
1b	95	78	82%	13	14%	2	2%	2	2%
2a	96	82	86%	8	8%	2	2%	4	4%

2b	77	73	95%	4	5%	0	0%	0	0%
3a	73	58	80%	11	15%	1	1%	3	4%
4a	50	43	86%	5	10%	2	4%	0	
5a	33	27	82%	4	12%	2	6%	0	
5b	28	14	50%	10	36%	4	14%	0	
6a	21	18	86%	3	14%	0	0%	0	
7a	14	11	76%	3	21%	0	0%	0	
7b	9	7	78%	2	22%	0	0%	0	

Discussion

Analysing the effectiveness of collaborative, conversation-based non-assessed task design, it became clear that there is a need for change in practices. The LAMS-based tasks were designed to create a learning space that opens up opportunities for discussions about changing beliefs about ‘good teaching’ and the alignment of personal teaching philosophies and teacher’s roles and responsibilities within and outside of the classroom. The data shows that the planned learning task design, although educative and useful, was underutilised by students. The outside constraints, such as a heavy workload (the offering of the unit in winter school mode prior to students’ final major practice experience) and its competitiveness vis-à-vis the Maths Clinic can and should be addressed. Nevertheless, my analysis of the success of this learning design in isolation, based on (a) the number of students who chose to actively contribute to collaborative peer-to-peer conversations, and (b) the quality of contributions made, clearly highlights the difficulty of implementing active learning design for non-assessed online learning tasks. The time restrictions that many contemporary students face needs to be investigated further, as it may be time factors, rather than motivation factors that prevent students from deep engagement with learning content. It goes without saying that factors two and three require higher levels of DCE compared to factor one. A key finding of this study is that the preparation of engaging online learning material, in its present form, is time-intensive and, does not seem to be particularly effective in engaging final-year teacher education students in the learning of values in education.

These results support earlier findings made by Goodyear & Ellis (2007) and point to an inherent dilemma in education that has not yet been resolved: democratic governing systems in education and the wider society do depend on the rule of law, rewarding people for compliance with the system (paying the taxes etc, contributing to assessed learning tasks), but they are equally, if not more, dependent on people’s sense of duty to themselves and the common good, often referred to as active citizenship. The sense of duty to the self and others

through an appreciation of ownership of learning cannot be enforced. It is derived from a personal value position through the appreciation of free will and every person's right to the protection of basic human rights. Children's right to a quality education brings with it a duty of teachers and teacher educators (and their supporting institutions) to act upon their duties. Although it may be difficult to draw conclusions comparing assessed with non-assessed online collaboration, it is noteworthy that the preliminary findings presented here largely substantiate earlier claims made by Goodyear & Ellis (2007) that student contributions in online-collaboration are generally poor.

Conclusion

A particular strength of the LAMS workshop task design was thought to be its grounding in (a) contemporary controversial issues, (b) the synthesis of pedagogical content knowledge, subject matter knowledge and generic skills building, as (c) students were provided procedural freedom (to engage with learning tasks when they want it, where they want it and how they want it – online or F2F) and freedom from assignment pressures. However, the students needed to demonstrate intrinsically motivated content engagement as they occupied themselves with the task of deconstructing the scenarios into problem statements. It was made explicit that this was 'pedagogy in action' and was meant to be 'value-laden' and complex. The value of learning that such complexity (structured controversy) provides may need to be brought to students' consciousness using explicit formal teaching. Students need to come to understand particular learning design features before they can value them.

This research made it clear that it is not sufficient to simply provide flexible collaborative learning provisions. Students need to be provided with assessed learning tasks that test their understanding of particular pedagogy. Only when students are able to explain the interrelationship of pedagogical steps, such as: (a) the usefulness of short introductory vodcasts, which provide an opening into the relevance of a given topic, (b) followed by 'hot-linked' online reference materials that can be accessed in conjunction with personal teaching experiences, strategically positioned to enable students to find a personal value position, (c) uploaded onto a learning activity management system (LAMS), which enables the reading of each other's opinion and argument, designed to expose fallacies of logic as well as particular stand-points (d) and necessitating the preparation of uncluttered, purified value positions and resulting actions. This is a demanding task and may be resisted by students and lecturers because of its cognitive, affective and ethical demands.

Effective partnerships are built on mutuality, on shared understandings of not only the right to participate, but also a sense of obligation to make use of this right not only for personal benefit, but also for the ‘common good’. Sustainable education commences with personal engagement and intrinsic motivation to learn. As indicated above, substantial research is being directed towards better understanding the value-adding nature of technology-mediated discussions (such as provided through the scenario work) to support higher order thinking, focusing on asynchronous, text-based discussion to encourage student content engagement. In this study, I aimed to contribute to the construction of an active learning model that needs to move beyond tokenism. I acknowledge that this model may not be viable within current higher education structures. Developing new models is time intensive and they are hard to implement. But, I still believe that online collaborative learning design can ‘add value’ to student learning and result in a richer and more rewarding learning experience for the majority of students.

Note

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