

# A critical reflection on transformational learning practice

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**Abstract:** *This paper critically reflects on the initial implementation of a Transformational Learning approach in a First Year Information Systems course at UNSW@ADFA. The paper reviews and synthesises elements of contemporary thinking in the student-centred paradigm of higher education and learning under the banner of Transformational Learning.*

**Keywords:** *transformational learning, higher education, university learning and teaching, information systems, knowledge, change.*

## What?

“In the beginning the Universe was created. This has made a lot of people very angry and has been widely regarded as a bad move.”

-Douglas Adams, author.

Transformational learning is where I am changing who I am in co-evolution with my environment and the Knowing domains I am immersed in. Transformational learning is for me the kind of learning that changes people’s values. It is inherently a moral activity, and the most powerful tools to enable it are reflection and adduction: reflecting to find the meaning of a learning experience, and adduction to bring that meaning into future action through Knowing and values.

When we talk about Knowledge I have found we enter into a highly disputed domain in academe. There are so many different views of Knowledge that it is clear to me that people have not got the first idea of what it really is. Rowley and O’Connell in Steyn (2004) say that Knowledge is the product of learning, where learning is the continuous interpretation of meaning in people, objects and events and Knowledge then supports and informs decisions, behaviour and actions. Knowledge becomes more of a relationship rather than a commodity. Knowledge (as a creative act) emerges from perception of information and is an attribute of subjective experience but inter-subjectively derived. It seems that the important attribute to develop is “Knowing” rather than Knowledge.

As a systems thinker it becomes very important to identify whether something is a component in a system or a relationship. If something is a component like a byte of information, then it can exist in and of itself and can be managed as a resource. If something is a relationship, then it is an embodied attribute that cannot exist without environment and context. If Knowledge is a component then it is possible to approach it from a managed or administered approach, and hence a service provision model of learning can be appropriate, such as traditional lectures or hunter-gatherer learning from texts – a Knowledge Provider role. If however we must engage in “Knowing” rather than in Knowledge Management, then the role of the educator is a very different animal indeed. We become a composer of a transformational environment where the dynamic of the relationships between learners and context are of primary concern. The surge and ebb of experience, reflection, adduction and action become the rhythm and melody of our immersion in a learning system.

Ideologically I do not align well with the idea of standing in front of a class and reading notes to students and then rehashing an exam someone wrote 15 years ago to administer an assessment that purportedly will classify whether the student has consumed sufficient facts to earn a qualification. Then to send that graduate out into the world and into a job where they are meant to employ the “Knowledge” they “learnt” at university and sometimes in situations where someone’s life or livelihood is at stake. I think the move to a trade of Knowledge undermines the future, and constrains Understanding -the pursuit of Knowing – in a way that limits diversity and develops unsustainable practices. I feel learning is most creative when freed from the constraints of power relationships both in its domain (through university administrative practice) and in its environment – the learning space.

### **Who?**

Boud et al (2001) discuss peer learning in the context of students learning “from and with each other in both formal and informal ways” as a system of thinking, doing, and feeling. I want to extend this definition that all agents within the learning space are immersed in the learning experience and that includes whoever is designing or influencing the direction of learning at any particular point. I see the Knowing that evolves in students as an outer fractal of the shape of the Knowing I have evolved with my peers and teachers (not the same, but similar in shape) and I hope the student will then engage in learning relationships with others and that Knowing will continue to evolve and grow.

Active learning (Mestre and Cocking 2002) is a priori in this transformational learning landscape. The student must critically engage in the investigation, analysis and discourse of each problem space and with their learning team to create the opportunity for the emergence of Knowing. Ausubel in Cavallo et al. (2003) states that “to achieve sound scientific understandings, students must actively form interrelationships among information, concepts and processes learned” and that “students must use deep learning strategies that allow them to link new ideas to those they already know or engage in meaningful learning”. In transformational learning I think students must also extend this Knowing network to their belief systems, other students and participants in the learning context, and the environment itself and through synthesis and orchestration of this learning network, the educator can guide learning towards the emergence of Knowing of particular purposes and educational outcomes.

Knowing, like Science (to paraphrase Ryan and Aikenhead 1992) is a tentative, dynamic process and administering it as if it was a construction project will, by opposing its very nature, cause it to lose meaning and relevance. This can, theoretically, only mean good things for experiential learning approaches because we assume that there is a high degree of proportionality between relevance and engagement in students. However one must be cautious, as I have found in my students this year – just because something is highly relevant to the discipline domain does not guarantee engagement. It must be subjectively relevant to the student. You are simply not going to engage students who do not see any relevance to their immediate or short term ambitions in either the content or process of the learning experience you facilitate. Furthermore, the lack of engagement when adopting the transformational model of learning becomes a critical constraint on the entire learning network. Imagine playing a Rachmaninoff on the Piano where 5 keys do not work. Sooner or later the network’s potential to emerge a Knowing becomes constrained. So what do I think should be done about this? Firstly stop playing Rachmaninoff in first year and play Mary had a Little Lamb instead, and secondly orchestrate the complexity of the learning network according to positive feedback from the students within it and the relationships between the students, that is, evolve the network in the dimensions of least resistance.

### **How?**

Relationships seem to be increasingly important in the learning experience and peer relationships in particular seem to be “central to a successful learning experience” (Lundberg 2003). Furthermore Lundberg’s study found that “the most profitable investment of student effort is in educationally related peer relationships, regardless of age.” If the educator was available to students as a peer then surely students’ relationships with the educator would also be

considerably profitable, and arguably more profitable. Certainly personally I have found that those students who spend time with me outside the learning environment evolve and describe a more meaningful conceptual Knowing in the problem domain than others who do not invest in that relationship.

Clearly the focus for achieving learning outcomes should be centred around what the student is doing (Shuell, 1986) which is the student centred approach, but perhaps we are missing an important dimension if we focus solely on the student in the absence of their relationship with other students, the educator and their learning environment. If Knowing is inter-subjectively derived and subjectively projected then just assessing the quality of the projection or designing around the subjective will not impact the root derivation of where the learning begins – within the relationship of students and educators.

Biggs (1999) says that teaching is a personal matter and that meaning arises from the individual depending on their motives and intentions. This is the crux of the constructivist theory of learning. However motives and intentions do not arise from individuals alone, they are the result of values and belief systems that form across and within social systems (Andrews, 2004) and must influence learning through constraining or advancing particular relationships. I am not a phenomenographer either, as stated before, because I think transformative learning flourishes under non-power constrained relationships and that Knowing emerges, it is not imposed.

Biggs (1999) also promotes the idea of educative conceptual change. He says that the acquisition of information alone does not bring about change but it takes place when students understand what is appropriate, are motivated, are engaged with the material not with the need to be assessed, and work collaboratively in dialogue with others. What I think Biggs is describing here is a social system with clearly defined protocols for relationships that through providing clarity in how the system works, we liberate relationships to experience Knowing. What I mean is, if we all speak the same language and we know that if I say x I mean a particular kind of x, then we can build on this common experience to create further Knowing between us and are liberated creatively by constraining the relationships' language and environmental context.

### **Why?**

Biggs' ontology is missing the value laden aspects of Knowing by concentrating the measures of quality on the process of "constructurization" of the environment and the social system rather than on what I believe provides the power for transformation or change. The cause of transformational change, the fundamental driver for the emergence of Knowing is the relationship and the values exchange within that relationship. This is why transformational learners find in Knowing a feeling of satisfaction or completion, a realignment of their values with the information they perceive and a satisfying learning environment is also one that aligns well with the collective values of the learners – hence the measure of appropriateness that Biggs talks about. If something is appropriate then it is aligned with ones' values. So we come back again to the idea that transformational learning – or conceptual change as Biggs puts it- is fundamentally a moral endeavour that is founded on the creative alignment of beliefs and information derived from the interrelationships between learners, educators and their context or environment. Through social participation in alignment of values and information the individual can create identity and meaning (Wenger, 1998) and thus feedback into the social system that meaning and identity: coevolving and emerging belief and Knowing.

### **To what end?**

This is a problem because inherently Knowing then is an inter-subjective concern and how do we give it a mark??!! Well my personal opinion is not to mark it for two very good reasons, marks mean nothing and secondly I hate marking but the academy requires us to differentiate the ability of one student to know from another. Fundamentally this is a major design flaw because Knowing cannot be attributed to the student alone as I have just argued. So we are not able to assess Knowing, but we can and must engage in the process of Knowing with the students and

provide feedback to the student on the domain vector and rate of Knowing within the social learning context. We do this with praxis.

Brookfield (1990) talks about praxis. This is the balance of opportunities for reflection and action that creates a sustainable rhythm for the practice and assimilation of Knowing. Although this doesn't specifically describe the subjective act of reflection and adduction in the sense that I meant, it is close enough from a process and environment perspective to illustrate my point. The rhythm required for praxis must not follow a neat linear progression because learners do not experience static relationships – remember my view is that Knowing is from the relationship not from the information. Just because there is a neat framework for the developmental progression of information does not mean that it becomes “known” in the same direct fashion. The information may well be neatly bounded but the relationships and environment of the learner may not be well established with a predictable rate of Knowing. As Brookfield (1990) says emerging a Knowing is more of a “transitional mambo” than a one way track. As such assessment around praxis should account for the cycles of Knowing that emerge from learning relationships.

The other issue with assessing a relationship-based emergence of Knowing through reflection and adduction is the concept of competitive assessment. Creating an economy of grades forces students to compete capitalist-fashion for the grades of choice. This creates distrust and constrains creativity in relationships because you now need to seek advantage over your learning partners. This leads to protective behaviours withholding information that could further evolve the learning system towards Knowing. “Competitive grading is directly antithetical to the creation of a supportive, emotionally sustaining learning network.” (Brookfield 1990). However implementing a non-competitive grading system in our universities seems impossible. The government and university management want to differentiate themselves so they can attract more students. The easiest way to differentiate oneself is by throwing quantitative statistics around that say you get higher marks than anyone else. This is so well entrenched in our educational system now that students do not believe there is any valid alternative approach. Certainly my students have this approach reinforced by having privileges granted or withheld according to average marks achieved. There is a system in place and it is expected that educators will comply with the system, never minding the huge paradoxes the system creates for someone interested in Knowing. So the system of the university poses a risk to the implementation of an ideal praxis in the learning context.

Bourner (2003) argues that critical thinking practice lessons can be extended to the domain of reflective learning practices. So on that basis reflective learning is about developing a Knowing of your own and others' assumptions or values and how they interact with the domain problems and being able to challenge those assumptions or values. To assess this Knowing we must be in a position to recognise when a learner or group of learners can identify, challenge and act critically with regard to their assumptions and values and be able to quantify the progress made on that. I don't think this is an achievable goal. Surely it is more sensible and useful to provide an environment that feeds back to those who engage in reflective learning by providing opportunities to be selected by the students to articulate the transformations they are undergoing as individuals and groups. This year I have provided this opportunity by asking students for journals and providing a mark of participation in that journal and a mark for those who were ostensibly making an effort to articulate the actions resulting from their reflective practice. I can't really tell you if anyone learnt anything but I can tell you nearly all of my students changed – a good indicator of Transformational Learning.

## **Change**

I ran a journal exercise the entire year this year for the First Years and also asked them to provide a final summary of their experience of the year and their thoughts in the last week of the semester. The vast majority of students felt a vast improvement in environment and learning style during the year. The students started out feeling extremely certain about what they were going to learn and then increasingly more uncertain until we reached a critical level of

disharmony within the class regarding what was viewed as unstructured learning – that is reflective work, discussion, group work and basically anything that wasn't Powerpoint lectures. I feel this moment characterised the time of highest potential for learning and the actual point before transformation where values of the learners were most challenged.

I believe the work we did to support and develop opportunities to create new learning systems in the class paid off subsequently with comments like: "A thought to end with: the advice to remove much of the unstructured team learning environment was dealt with too seriously. A discipline such as IS requires students to learn to think "outside the box", perhaps in unconventional ways." Comments like these were very satisfying when thinking on the vehement response from students at the middle of the year. Now the students were preaching our words back to us: Transformation. Other kinds of responses to the transformation in learning practice and the development of a relationship based approach to learning included:

"very interesting hands on experience, you can see your own progress develop."

"looking back on this session of IS I think I actually enjoyed it, which is saying a bit considering I absolutely hated first session...I believe I have actually learnt something."

"Out of all my subjects, this has been the most stressful and to a certain degree, challenging. I found it was great because with the uncertainty involved with each task it allowed us to be resourceful as we liked. I really loved hearing about the personal experience of our lecturers shared in each studio. I think I'm heading towards an IS Major."

One of the key success factors was in developing a team approach that adopted critical responsiveness to the students' feedback through class, formal liaison methods and the discussion on the website and in their journals. I would never call it more than a clumsy attempt at trying to establish the pedagogical philosophy I have been discussing but it was definitely a start and I do believe we achieved somewhat of the transformation we were out to achieve in the students – that is to change their ideas about learning and learning style, to develop a particular frame of thinking for IS problems and scholarship in general, and to know that our discipline and learning and research in it were not the same kind of endeavours that they had been rewarded for in high school.

I do think that we still have some issues to resolve around explaining the approach and developing that early rhythm and aligning the assessment to the educational outcomes. All in all I think we have developed the first prototype of a good way of helping people learn through relationship, Knowing, action and experience. In particular, addressing the notion of power within the learning relationships will be central to future development of the approach. Foucault's work in this area (Brookfield, 2001) seems to highlight some of the major difficulties in addressing the philosophy in practice. Some of the key mistakes made this year had the ring of an imbalance in power relationships. Further research with colleagues in this area will be conducted.

## **Knowing**

Because we team teach, we share very similar pedagogical approaches here in IS. Our entire approach and the philosophy I've waxed rhapsodic about in this paper is something that those that teach IS feel incredibly passionate about or are happy to go along with. The Key learning we have come to in practising our philosophy in First Year is an amalgam of Biggs and Brookfield's ideas where we provide sufficient rules, particularly first up, within the environment to establish the language and expectations of the students. Then we spend a lot of time – in fact the rest of the year – developing those relationships and managing the emotional overhead that is a byproduct of transformational learning. It is about setting the context, the tempo and the key we're playing in, and leading the rhythm and melody until the relationships established are sufficiently trusting and creative to emerge the learners' own improvisation. Certainly it is agreed by my esteemed colleagues that we aren't there yet but we think we're on the right track.

## Um what was I saying again?

So to sum up, education is not about acquiring knowledge, it is about experiencing Knowing. Knowing comes from learning relationships, not from people or facts alone.

Some of the continuing issues are around assessment design and the paradox of the existing paradigm vs the rhythm of experiential Knowing creating an imbalance in constraining creativity and sharing in relationships, and the development of relationships that are not inadvertently tainted with power imbalances.

Transformational learning is the kind of learning that creates Knowing through the reflection and adduction of learners' values and beliefs and it is this kind of learning that creates the opportunity for the most powerful and persistent Knowing to emerge. This is a moral practice, which the educator should create diverse opportunities for mutual immersion for all participants in the learning system.

In my view this is the only real task of the Skillful University Educator.

“Clever people master life; the wise illuminate it and create fresh difficulties.”

-Emil Nolde, painter and print maker.

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