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Exploring Creative Pedagogies for Creative Learning Ecologies



Issue Number 7C June 2017

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CAM 7 is being subdivided into several pdfs which can be downloaded from
<http://www.creativeacademic.uk/magazine.html>

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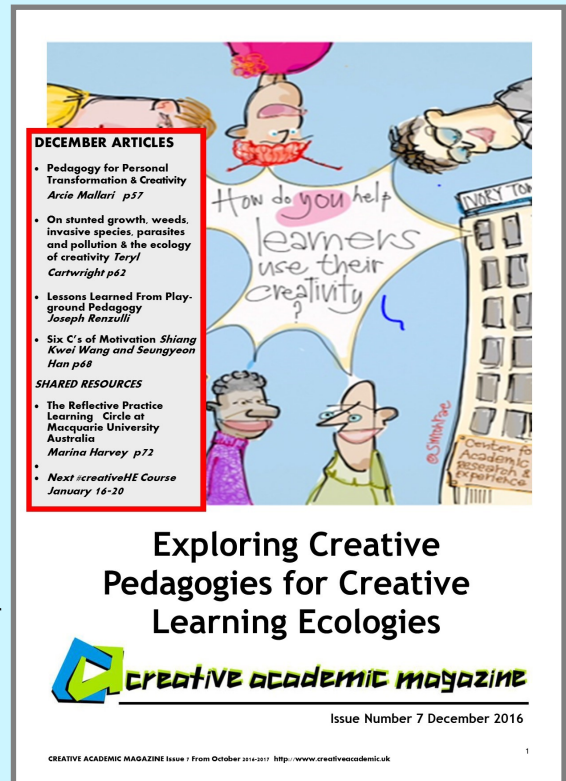
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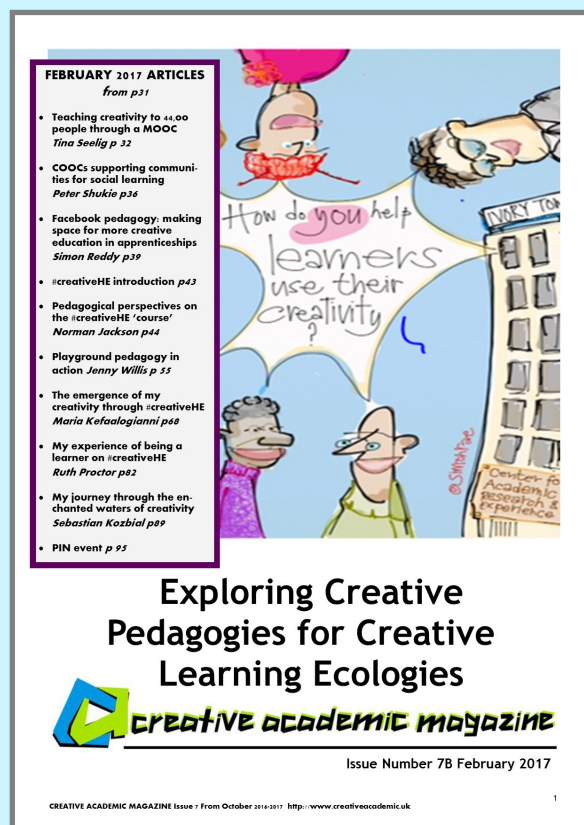
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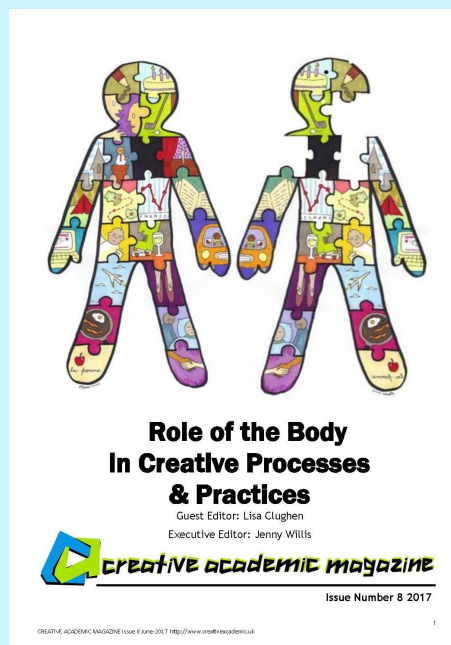
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March 2017

Creative Pedagogies for Creative Learning Ecologies

Commissioning Editor's Introduction

CAM7 is our first attempt to create an 'emergent magazine'. By this I mean we are not finding, editing and organising all the content before the magazine is published, rather we launched the magazine in October 2016 in articles relevant to the topic we are addressing, *Creative Pedagogies & Learning Ecologies*. So far the hope and belief that every month we will be able to update the magazine with one or more this belief is well founded and CAM7A contains articles published between October-December 2017.

We believe that if you create the affordance for people, who care about and are interested in something, stuff will happen - ideas will emerge as conversations take place and people share their understandings and practices. Through our *Creative Pedagogies & Learning Ecologies project* we are trying to foster and facilitate new conversations about the importance of creativity in higher education teaching, learning and students' development and achievements. In the coming year we are trying to bring together and connect educational practitioners and researchers, educational development teams, networks, communities, universities and colleges who share this interest and concern for students' and teachers' creative development, through a partly planned / partly emergent programme of activities.

In 2016 we began to develop the idea of *creative ecologies* and our intention is to explore and develop the idea further by linking it to *creative pedagogies* - the imaginative ecologies that teachers create within which students learn and are able to use and develop their creativities. In CAM7 we aim to publish at least one article each month that describes an approach to teaching and learning in which the objective was to enable learners to use and develop their creativity either as a specific goal or as an ancillary outcome of other achievement goals. We also try to bring together research and surveys that cast light on the idea of creativity and what it means to the people involved in facilitating creativity or who are trying to be creative. By considering lots of different perspectives and approaches, in different disciplinary, pedagogic and institutional contexts we hope to develop our understanding of what being creative means and what sorts of practices and behaviours encourage and enable students to be creative and to understand their creativity.

We believe in collaboration and cooperation and we welcome the involvement of our readers in developing and creating this magazine. We believe in collegiality, openness and sharing and the knowledge we develop will be treated as open learning/ open educational resources. The ecology we are creating to explore these ideas is open to new ideas and to people and institutions who want to contribute. We are particularly keen to connect researchers to practitioners so that educational practice can be informed by evidence from research in this area. We are also keen to engage with the enormous range of learning contexts within higher education institutions in which students' are encouraged to use their creativity. If you would like to share your own thinking and practices by writing an article for the magazine please do contact me.

Norman Jackson Commissioning Editor
normanjjackson@btinternet.com

Creative Pedagogies & Learning Ecologies Project
<http://www.creativeacademic.uk/2016-17-programme.html>



March 2017

Exploring Creative Pedagogies for Creative Learning Ecologies Project

Visit <http://www.creativeacademic.uk/creative-pedagogies.html> for updates

		INSTITUTIONAL PROFESSIONAL DEVELOPMENT ACTIVITIES	
July 2016	#creativeHE conversation 'Exploring Creative Ecologies' ✓	CAM 7 'Exploring Creative Pedagogies for Creative Learning Ecologies' Oct 16 - Oct 17	#101creativeideas project https://101creativeideas.wordpress.com/
September 2016	Launch of Creative Pedagogies & Learning Ecologies Project <ul style="list-style-type: none"> Publication CAM 5 'Exploring Creative Ecologies' ✓ Launch of #101creativeideas project ✓ 		
October 2016 November 2016	<ul style="list-style-type: none"> 'Developing the idea of ecologies for learning & creativity' presentation BERA Creativity SIG seminar at the University of Cambridge: Advancing Creativities Research: Making connections across diverse settings. ✓ #creativeHE conversation 'Creative Pedagogies' 30/10 to 04/11 ✓ 		
January 2017 February	<ul style="list-style-type: none"> #creative Creativity Course (open course Creativity for Learning in HE) 16 - 20 January 17 ✓ Publication CAM 6 Curation of the #creativeHE Creativity Course ✓ 		
March 2017 Contribution to 'Open Education Week' Mar 27-31	<ul style="list-style-type: none"> #LTHEchat Exploring Personal Pedagogies ✓ TLC online seminar Exploring the Ecology of Learning and Teaching ✓ #creativeHE conversation 'Exploring Personal Pedagogies' 26-31st March ✓ Institutional seminar Exploring the Ecology of Learning and Teaching ✓ Publication of #101creativeideas project - 1 idea of an activity to encourage students' creativity posted on Twitter each day prior to WCIW ✓ 		
April 2017 Contributions to World Creativity & Innovation Week April 15-21	<ul style="list-style-type: none"> Publication CAM 8 'Exploring the Role of the Body in the Process of Creation/Re-creation' - particular reference to teaching and learning processes. Edited by Lisa Clughen #creativeHE conversation also exploring the role of body in creativity during World Creativity and Innovation Week Publication of #101creativeideas project - 1 idea of an activity to encourage students' creativity will be posted on Twitter each day prior to WCIW 		
May-July 2017	<ul style="list-style-type: none"> #creative Creativity Course (open course Creativity for Learning in HE) 22-26 May 17 institutional professional development events (several planned) 		
September & beyond	SYNTHESIS <ul style="list-style-type: none"> Face to face event 'Exploring Creative Pedagogies & Learning Ecologies' Publication of 'Exploring Creative Pedagogies & Learning Ecologies' book Completion of CAM 7 'Exploring Creative Pedagogies for Creative Learning Ecologies' 		

Exploring Personal Pedagogies

Norman Jackson

Introduction

March, quite unexpectedly, has turned out to be the month for exploring the idea of 'personal pedagogy': an idea that is emerging through our ongoing *Creative Pedagogies for Creative Learning Ecologies* project¹. I reasoned that each teacher is unique in their past history of experiences and their becoming the teacher they are, in their beliefs and values, in the knowledge they have developed from their readings and practical experiences of teaching and in their interests and willingness to try new things and take risk. All these things will affect the way a teacher thinks, senses and shapes what they do to help others learn. In other words, a teacher's pedagogical thinking and practice has to be personal and individual, and out of this personal pedagogy emerges pedagogical thinking and practices that are creative because of the way they have combined, interpreted and integrated ideas, and practices that enable learners to use their creativity. So exploring the idea of personal pedagogy in higher education seems like an important stepping stone towards understanding the link between a teacher's pedagogy, their creativity and the way learners' creativity is enabled.

For me our March exploration began with a #LTHEchat ^(a), it continued with a presentation and workshop I made at Dublin Institute of Technology and finished with a week long discussion on the #creativeHE platform^(b). All these processes encouraged other people to share their perspectives on the idea of personal pedagogy, including the other four contributors to this issue. We will be adding further contributions from the #creativeHE discussions in future issues.

What is pedagogy?

This is the question that underlies and confounds our inquiry because pedagogy is not a term that is commonly used by academics and even if we are familiar with the term it's not something we think about very much. Furthermore, it is viewed by many as a bit of educational jargon and rejected on the grounds that it is 'not part of my vocabulary'. I discovered this scepticism even amongst educational developers which surprised me.

The term pedagogy is applied to the discipline that deals with the theory and practice of learning and teaching. The word comes from the ancient Greek *paidagogos*, a compound comprised of "paidos" (child) and "agogos" (leader) ie 'to lead a child'. The original Greek meaning applied to a servant who accompanied and cared for a child on their developmental journey.

Pedagogy has come to mean 'the method and practice of teaching, especially as an academic subject or theoretical concept's. Mark Smith² provides an interesting, informative and authoritative article on the history, meanings and uses of the term. He summarises thus

A common way of approaching pedagogy is as the art and science (and maybe even craft) of teaching.

The commonest view is that pedagogy is about teaching, and in the context of the academic curriculum it is about teaching a subject. In fact, this view of pedagogy is essentially a didactic view, 'the concerns of didactics are: what should be taught and learnt (the content aspect); how to teach and learn (the aspects of transmitting and learning): to what purpose or intention something should be taught and learnt (the goal/aims aspect)^{3:236}.

Viewing pedagogy in this way both fails to honour the historical experience, and to connect crucial areas of theory and practice. Here we suggest that a good way of exploring pedagogy is as the process of *accompanying learners; caring for and about them; and bringing learning into life*³.

This deeply caring and relational view of a teacher's pedagogy is recognized by Giles and McCarty^{4:67} 'pedagogy.... is always relational in nature, and as such is central to our everyday teaching strategies'. It's through these caring relationships and the teacher's encouragement and demonstration that 'we are making this journey together', that a climate or culture of trust and respect emerges..

SOME QUESTIONS

Q What concepts of pedagogy do you hold?

Q Are teaching and pedagogy the same thing?

Q Can/does a person develop their own pedagogical thinking and practices that is unique to them?

Pedagogy & culture

The idea that teachers, through their thinking, behaviours and pedagogical practices create a culture within which people are encouraged, helped and enabled to learn and achieve is often overlooked. We can learn about the dimensions of pedagogy that facilitate the development of a culture within which students' learning and creativity can flourish from Amabile and Kramer's study⁵ of the socio-cultural work environment. They identified two types of event or condition which they termed catalysts and nourishers, that support what they term a person's '*inner work life*' - the constant stream of emotions, perceptions and motivations that people experience as they go through their work days^{5:29-39}. Throughout the day, people react to events that happen in their work environment and try to make sense of them. These emotional reactions and perceptions affect their motivation for the work and have a powerful influence on their performance. When people have a positive inner work life, they are more creative, productive, committed to their work, and more co-operative toward the people they work with. When they have poor inner work lives, the opposite is true - they are less creative, productive, committed and co-operative.

In Denmark, a pedagogue is a practitioner of pedagogy. The term is primarily used for individuals who occupy jobs in pre-school education (such as kindergartens and nurseries) in Scandinavia. But a pedagogue can occupy various kinds of jobs, e.g. in retirement homes, prisons, orphanages, and human resource management. These are often recognized as social pedagogues as they perform on behalf of society.

The pedagogue's job is usually distinguished from a teacher's by primarily focusing on teaching children life-preparing knowledge such as social skills and cultural norms. There is also a very big focus on care and well-being of the child. Many pedagogical institutions also practice social inclusion. The pedagogue's work also consists of supporting the child in their mental and social development.

<https://en.wikipedia.org/wiki/Pedagogy>

The catalyst factor includes events that directly enable a person to make progress in their work. Catalysts include such things as: having clear goals (self-determined goals are more motivating), having autonomy to determine how to work, having access to sufficient resources when you need them, having enough time to accomplish the tasks, being able to find help when you need it, knowing how to succeed, being encouraged to let your ideas flow. The opposite of catalysts are inhibitors; these make progress difficult or impossible. They are the mirror image of the catalysts, and include giving unclear goals, micro-managing, and providing insufficient resources etc..

Amabile and Kramer^{5:131-33} identified four factors that *nourish* a work culture in which people feel supported and positively influenced their motivation, productivity and creativity namely:

1 Respect - managerial actions determine whether people feel respected or disrespected and recognition is the most important of these actions.

2 Encouragement - when managers or colleagues are enthusiastic about an individual's work and when managers express confidence in the capabilities of people doing the work it increases their sense of self-efficacy. Simply by sharing a belief that someone can do something challenging and trusting them to get on with it without interference, greatly increases the self-belief of those involved in the challenge.

3 Emotional support - people feel more connected to others at work when their emotions are validated. This goes for events at work, like frustrations when things are not going smoothly and little progress is being made, and for significant events in someone's personal life. Recognition of emotion and empathy can do much to alleviate negative and amplify positive feelings with beneficial results for all concerned.

4 Affiliation - people want to feel connected to their colleagues so actions that develop bonds of mutual trust, appreciation and affection are essential in nourishing the spirit of participation.

These insights gained into the work place are likely to be true of educational environments where work effort is directed to learning and management of that enterprise is the teacher. A teacher's modelling and pedagogical actions shape the climate or culture in the ecologies they create for learning which encourage or inhibit students' creativity.

A broad working concept of pedagogy

A teacher's pedagogy is fundamentally about relationships: relationships with the learners they are accompanying and caring for, with their subject which they often care passionately about, with the resources they prepare to help students learn, with the activities for learning they design and animate through their teaching, with the assessment tools they create, with the technology they use and with the spaces they create and their students inhabit. Affordance for learning is in all these things and the teacher's role is to enable learners to recognize and act on these affordances. This broad ecological view of pedagogy, is similar to that adopted by Thomson et al^{6:10} in their investigation into the signature pedagogies of artists and other creative practitioners.

Pedagogy is more than teaching method, more than curriculum, more than assessment practice⁷. It is all these things, but it is also how they are made into patterns of actions, activities and interactions⁸ by a particular teacher, with a particular group of students [in a particular context]. The concept of pedagogy encompasses relationships, conversations, learning environments, rules, norms and culture within the wider social context^{9,10} and may extend beyond school to community and public settings^{11,12}. It takes in the ways in which what teachers and students do is framed and delimited within a specific site, a policy regime and the historical context¹³.

I am arguing that a personal pedagogy is all the thinking and practices that an individual higher education teacher develops and draws upon when designing and teaching a course and encouraging and facilitating learning, finding and preparing resources, supporting and giving feedback to learners and assessing their learning. An individual's personal pedagogy reflects their unique personal history of learning experiences, and the unique set of circumstances, past and present, that influence their beliefs and values, their identity as a teacher and their educational practices.

A teacher's personal pedagogy is not fixed. Rather we should think of it as a dynamic expression of their knowledge, skill and judgement and sensing of what is needed because they are deeply in tune with the learners' interests and needs, and the contexts, circumstances and situations in which they practice. A teacher's pedagogical thinking and practices are not fixed because they are influenced by the professional, institutional, social and technological world they inhabit.

Key questions to explore in any inquiry into a personal pedagogy are: 'what have been the key influences on knowledge, beliefs and values in the formation and development of a teacher?' and 'what are the current influences?'

Figure 1 provides a conceptual framework for viewing important influences on individuals' pedagogical practices in the contexts of their discipline, the educational needs of the programme and the learners on the programme, the strategic priorities of the institution, including the provision it makes for the development of higher education teachers, and some of the influences that are external to the institution.

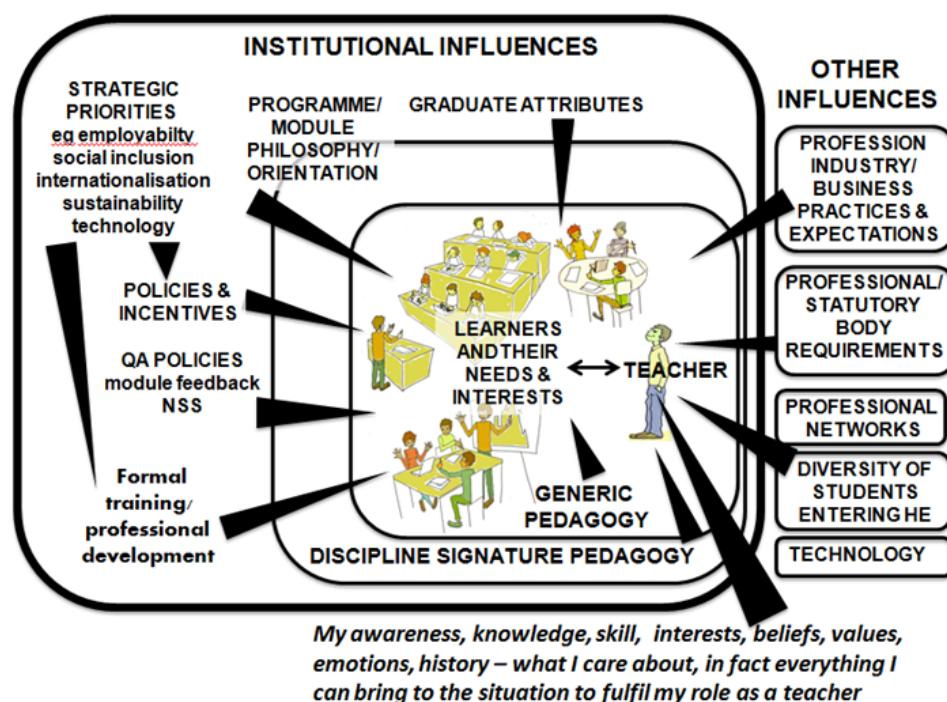


Figure 1 Representation of the influences on a teacher's pedagogical thinking and practices in a university ecosystem the manifestation of which I am calling a personal pedagogy.

I am grateful to Robert Jenkins for suggesting during the #lthechat that a personal pedagogy embraces the whole and not the core of this concept map.

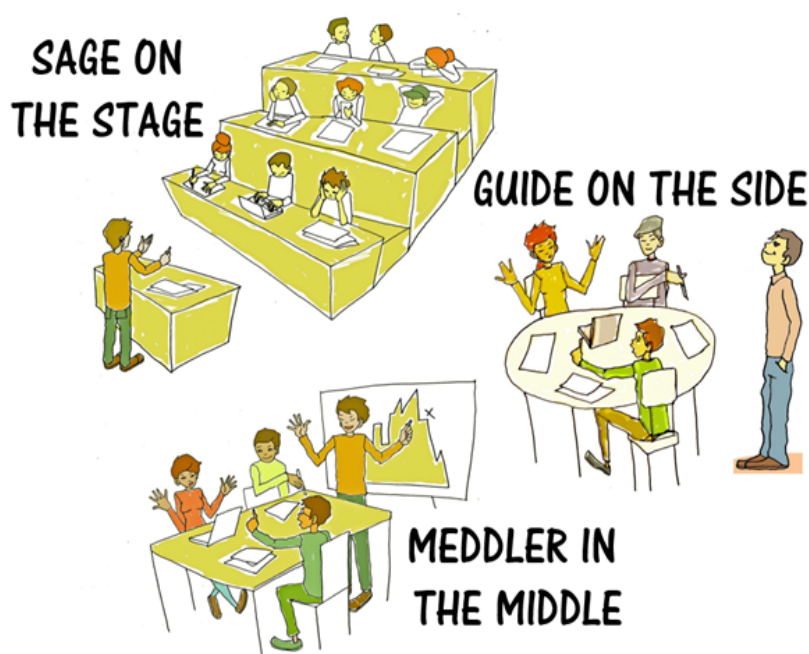
This diagram is a conceptual aid to try to convey that there are many possible influences - past, present and future that are likely to impact on a teacher's pedagogical thinking and practice. At the centre of this concept map are the learners who are participating in a module and a programme, it is their needs and interests that provide the most important context for the teacher's personalised pedagogical thinking and practice. A module or programme might have a particular content, theoretical or practical orientation that shapes a teacher's approach. Their pedagogical knowledge is formed and influenced from many different sources, here are just a few of them.

- The teaching practices the individual has encountered as a learner in their disciplinary field and the *signature pedagogies*^{14,15,16} of their discipline which are core to the ways in which disciplinary practitioners think, solve problems, and develop and use knowledge.
- The generic pedagogical practices learnt from peers within or outside the institution or from professional development activities within their work environment - they include such practices as a traditional lecture or seminar and the use of criteria to assess students' work
- A teacher's research interests, knowledge, practices and related resources and networks which can be drawn upon
- Institutional strategic policies that impact on teaching and learning - for example an institution might have a policy that encourages all graduates to possess certain qualities and attributes that might impact on pedagogical practices. Institutional quality assurance procedures may also require certain forms of practice such as curriculum designs that are based on learning outcomes.
- Issues the institution is engaging with. For example an institution might be committed to social inclusion and widening participation, or to internationalisation or sustainability all of which can affect the pedagogical approaches used by teachers.

The other articles in this issue develop further the idea of influences on a teacher's personal pedagogy.

Generic pedagogical knowledge & practice

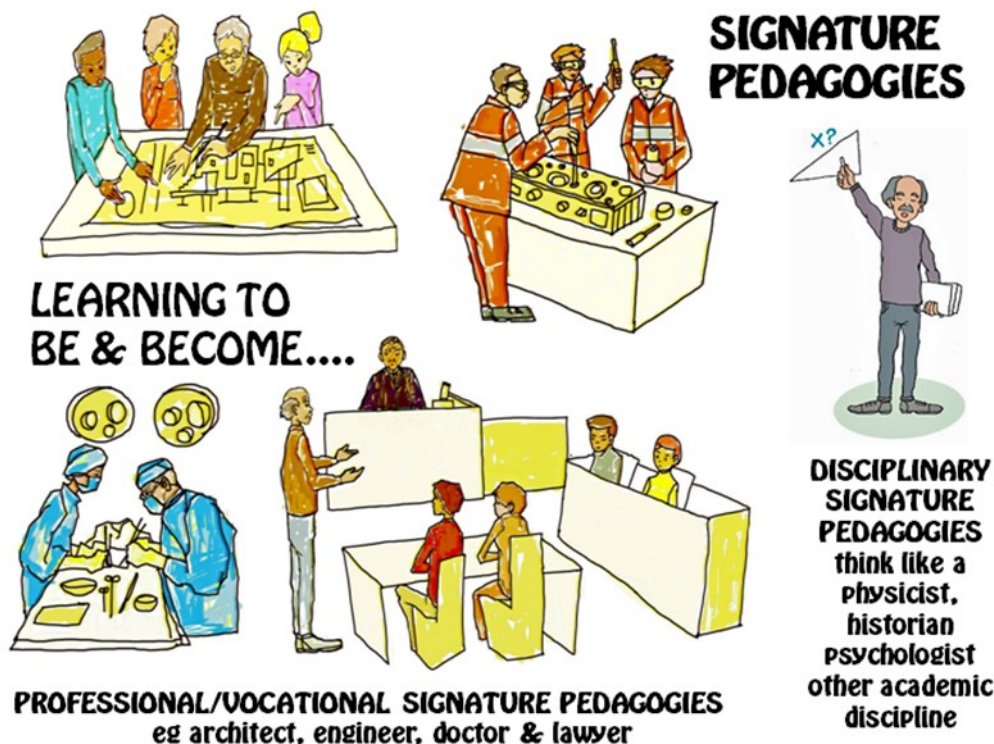
Experienced and skilled teachers are likely to have developed a repertoire of pedagogic approaches, practices and orientations from which they can select depending on the circumstances of the educational context. McWilliam¹⁷ captures a sense of this in her threefold characterization of pedagogic orientations - *sage on the stage*, *guide on the side* and *meddler in the middle* but there are likely to be many other metaphoric representations of complex pedagogic practice. Perhaps it's more appropriate to think that every teacher has a repertoire of pedagogic practices and orientations that they chose from according to the circumstances, or the type of learning ecology, they want to create. In this way a complex ecology for learning and creative achievement might contain all three of McWilliam's pedagogical stances.



Signature Pedagogies

Signature pedagogies are the modes of teaching, used in the preparation of people for a particular profession such as law, medicine, engineering, teaching or being an architect or geologist. The idea of signature pedagogies has been extended to the educational practices in non-professional subjects

Lee Shulman^{14:52} defines signature pedagogies as "*the types of teaching that organize the fundamental ways in which future practitioners are educated for their new professions.*" Professional education involving close to real world simulations, and on-the-job learning in professional workplace situations are the main contexts for these pedagogic practices. These types of pedagogies comprise a synthesis of three apprenticeships—a cognitive apprenticeship wherein one learns to think like a professional, a practical apprenticeship where one learns to perform like a professional, and a moral apprenticeship where one learns to think and act in a responsible and ethical manner that integrates across all three domains. A signature pedagogy has three dimensions: surface structure, deep structure, and an implicit structure. Surface structures consist of concrete, operational acts of teaching and learning, while deep structures reflect a set of assumptions about how best to impart a certain body of knowledge and know-how. The implicit structure includes a moral dimension that comprises a set of beliefs about professional attitudes, values, and dispositions^{14:54-55}.



Gurung et al¹⁵ and Chick et al¹⁶ argued that signature pedagogies are not unique to professional/vocational education and training: academic disciplines also have distinctive habits of mind that are reflected in the pedagogic practices adopted by teachers in the discipline. These authors explore how 29 disciplinary and interdisciplinary fields foster deep learning and help students think like disciplinary experts. These “signature pedagogies” reflect the deep structures of the discipline and attempt to answer questions such as: “What does our pedagogy reveal, intentionally or otherwise, about the habits of head, hand, and heart as we purport to foster through our

disciplines?” “Is there, or should there be, a consistent connection between a way a discipline creates or discovers new knowledge and the way it apprentices new learners?”^{18:xii}

Ecologies for Learning Created by Teachers in a University Ecosystem

The ecological conception of pedagogy proposed by Thomson et al¹⁰ and the conceptual framework proposed for the influences on a personal pedagogy (Figure 1) requires us to also think about the ecosystem within which teaching and learning takes place¹⁹.

A traditional university course taught face to face is designed, organised and implemented by one or more academic teachers who have both disciplinary and pedagogic expertise, within an institutional socio-cultural environment that is full of support and resources to aid learning. There is a structure (timetable/lecture schedule/credit structure) and procedural framework (rules and regulations) within which learning takes place. Programmes are organised into units or modules with explicit objectives, content, resources and processes that engage learners in activities through which they learn, and some of their learning is assessed using one or more methods determined by teachers. The institutional ecosystem for learning includes people - learners, teachers and other professionals who help learners, a physical environment including classroom spaces, social spaces, resources centre and virtual spaces where learners and teachers interact for the purpose of learning, a bureaucratic environment of rules, regulations, policies and procedures, administrative and management practices all of which foster a culture.

Figure 2 identifies the components of typical course-based learning ecologies that are designed and taught by a teacher and are hosted by an institutional ecosystem which provides the physical, social-cultural and virtual environment. The teacher's personal pedagogy both facilitates the creation of the ecology for learning and but is also an integral part of the ecology.

Affordance for learning within the context of an academic programme is everywhere. It is contained in the course, programme or module content, in the activities that teachers organise and facilitate for learners, in the *physical and virtual spaces* that are provided which support particular activities (both academic and social) and in the *intellectual spaces* that the pedagogic activities promote.

Affordance for learning and development is also found in the *resources* including books, journals, computers, software and other tools and mediating artefacts that are used, and in the teaching and learning *processes* and practices that are used to engage learners and encourage personal development is also found in the additional support and advisory services the university provides, and in the *relationships* and interactions between teacher and students, and student peers, and in learner's own responses to all of these things. Furthermore, some academic programmes also contain affordances for learning in contexts and environments that lie outside the institution for example through work placements and internships, community-based projects, fieldwork and study visits and more.

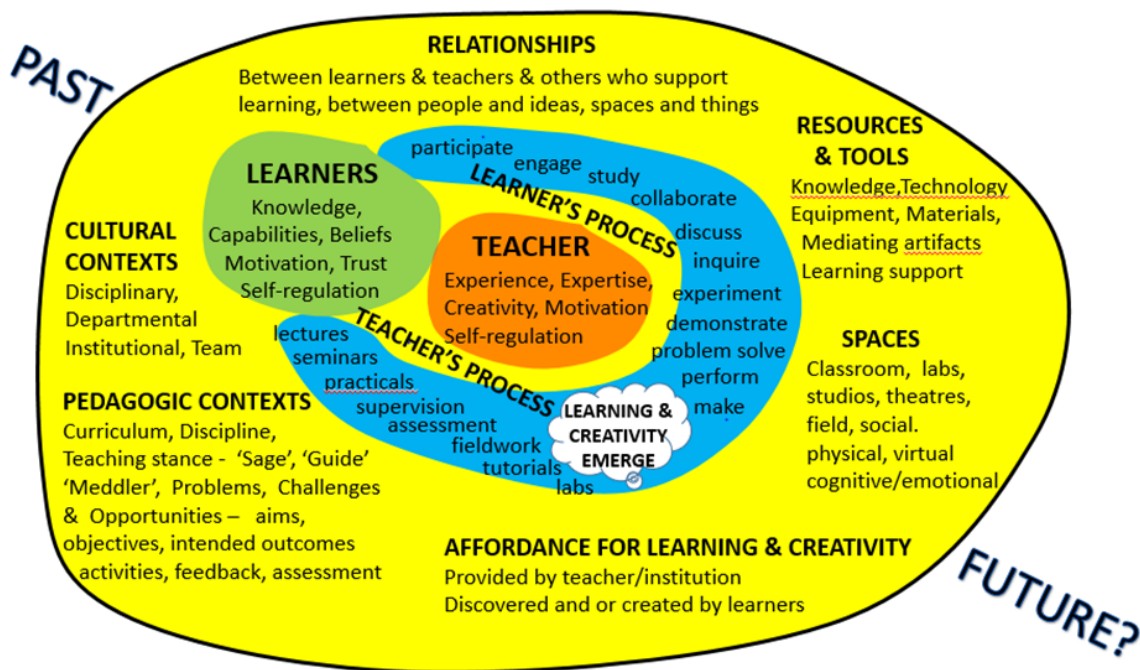


Figure 2 Typical ecology for learning developed through a teacher's pedagogical thinking and practice and associated with a taught course within an institutional ecosystem¹⁹ The model of a learning ecology²⁰ provides a framework for the elaboration of this pedagogically constructed learning ecology which links to the past experiences present and will inform future of the teacher, exists during an unfolding pedagogic adventures. In this ecological model of pedagogy everything has the potential to interact.

Concluding thoughts

These are just a bunch of conceptual ideas which we are trying to explore and create meaning. They grapple with the complexity of what it is to be a higher education teacher whose purpose and role is to work with such complexity. All too often we simplify the role to simply one of standing in front of students to lecture them when all teachers know that this is a tiny element of the role they perform: a role that requires the complex balancing and judgements of many factors and situations. A role that requires the blending and enacting of knowledge derived from disciplinary and pedagogical sources.

At the moment these ideas mean something to me but if they don't make sense to anyone else then it will remain only my meaning making. By discussing these ideas in various on-line and face to face forums, and presenting these ideas through our magazine we are encouraging readers to play with the ideas in their own professional contexts and explore whether they are useful, and more importantly develop them further.

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Who has Influenced my Pedagogical Thinking?

John Cowan



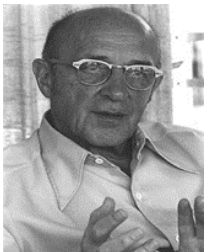
John is an extraordinary teacher whose higher education career spans over 50 years during which he has championed and practised student-centred learning. His writings, including his book, 'On becoming an innovative university teacher: reflection in action' have influenced many teachers including the editor of this magazine.

As an engineer, I suppose I have always expressed theories and particular ideas in diagrams. But the influences in and the components of my personal pedagogy are stored and recalled in what I can only describe as “memory videos.”

After 70 years, I can still picture and hear the influential personality of the teacher whose almost languid tones infected me with his love for mathematics, and endeared to me the very mathematical concept of an “elegant” proof. I have clear video snippets in my mind from the evening conversations after dinner at the UMIST Summer School with the eminently facilitative Bill Morton, whose questions led me, and many lecturers at an early point in our careers, to think in terms of learning instead of teaching.

I often quote the eloquent Tyrrell Burgess from an occasion when he was asserting firmly to an audience, which included me, that: “I always tell my first-year students that, during their course, they must **never** read a technical book.” And, after a shocked pause: “They must **use** books.” I can hear him and see him, whenever I quote him.

I never met or heard Carl Rogers, but as someone for who *Freedom to Learn* had become my pedagogical bible, I recall being caught up short when I was privately reviewing plans I had made with a Third-Year Design class for student-directed learning in



this important subject - “provided you do the assessing, JC”. Suddenly a challenging thought struck me. What would the great man would think of me, if he heard I was going to assess student-directed learning?” And of course, I knew immediately that he would have been ashamed of me. So, I went back next morning and re-negotiated for my first venture into truly and fully self-assessed learning. I can and often do play back that Damascus Road experience, almost second by second.

My memory videos do not only feature teachers. I have a moving memory of sitting alongside an excellent student in that self-assessed class. She had been extremely upset by certain fraught events in the sometimes-tense group inter-relationships. As she let the tears flow, in a gesture which was acceptable in those days, I put an arm round her shoulder and said comfortingly: “I know how you feel, Helen.” Even as I key this description, I have a vivid memory picture of an upturned, tear-stained face, and eyes almost spitting fire, as she sternly told me: Don’t you **ever** tell me that **you** know how **I** feel.” Since that day, I have had occasion to comfort students, colleagues and friends who have experienced disasters or tragic bereavements. Helen’s face and words often flash across my memory. Even when someone has just lost a child, the echo of her passionate words means that I never tell anyone that I know how they feel - although I may tell them how *I* myself felt, when we lost our newly married son to cancer.

In particular, I have many significant memory videos of conversations with the charismatic Alan Harding, as we engaged with a range of difficult challenges in staff development in various countries in the Middle East. These are the keener in my memory because, on many later occasions when I was working on my own in Latin America, and wrestling with the emerging challenges there, suddenly I heard and saw part of a conversation from an occasion when Alan and I had gone for a walk in which to work out our plans. And that playback immediately made me realise: “That’s what Alan would have said”.

I find it difficult to describe any of these influences in words, but I can see and hear many powerful personalities, and their messages for me, in my mind and in my memory - as vital components of my personal pedagogy. It’s interesting that they feature wonderful people even more strongly than the important messages which I have taken from them - and often that those messages were expressed in one sentence, and sometimes as questions.



Using Metaphor to Make Sense of My Personal Pedagogy

Rebecca Jackson



I am a teaching fellow in English Language and Linguistics at the University of Sussex. I research how we understand repetition and emphasis in the field of pragmatics. I am passionate about innovative and creative teaching and I am delighted to be part of the facilitation team for this #creativeHE conversation. @chasing_ling

Why metaphor?

I am a linguist. I work on how we understand language and how we communicate. One of the concepts I teach is metaphor which can be understood as talking about an abstract thing in terms of something more tangible (Lakoff & Johnson, 1980). With metaphor, the attributes of something we already understand are transferred cognitively to a 'target' that is more abstract and harder to make sense of (Lakoff & Johnson, 1980). Love is complex but journeys are not. If we say "our relationship is at a cross-roads", we use a less abstract domain to talk about something that is hard to conceive of. This is the essence of metaphor in Conceptual Metaphor Theory (Lakoff & Johnson, 1980, and see Evans & Green, 2006).

Pedagogies are slippery beasts (itself a metaphor!). We can't touch a pedagogy, or see, smell or hear it. But while a pedagogy is an abstract concept, we can perceive the traces and influences of a pedagogy in ourselves, in our students, and in our learning artefacts. However, since pedagogies are ever present in our teaching and learning thinking and practices, we need to understand what they are and what they can offer us, and metaphor can help.

I would like to tell you about my personal pedagogy, in part using metaphors. I see my pedagogy as a toolkit, as a lump of fresh, brightly-coloured play-doh, and as a good luck charm, like Dumbo's white feather that helps him fly. I also see my pedagogy as something that can help me model creativity for students, and I shall explain how. But, first, I'd like to start by explaining why it became so important for me to develop and cultivate a personal pedagogy.

Who has shaped the way I teach?

When I was a graduate teaching assistant, I was expected to go into the classroom with virtually no training and assist undergraduate students in their learning activities. Before the first week of teaching, I prepared diligently. I read. I planned. I memorised. I printed things. I got to my classes, thinking I was ready to inspire young minds. But the students were quiet, disengaged, and, perhaps, even bored. I didn't understand. I thought I had done a good job of getting ready to teach. I was replicating the forms of teaching I had enjoyed myself, and I had earned good marks, so I had just assumed I could carry on transferring knowledge and 'delivering' content in the same way that other people had taught me. But, something clearly wasn't working. I hadn't realised that I could teach in a different way, that I could change what I was doing to fit what would benefit the students as a group. I didn't even think I was allowed to do this.



Illustration by Simon Rae

I was perplexed but as a result, I contacted the amazing Chrissi Nerantzi and signed up [for a Postgraduate Certificate in Academic Practice](#) where I was encouraged to explore, experiment, play and be creative in my teaching - and to do so boldly and with confidence. I have never looked back. It was the best thing I have done, as a teacher. Students became much more involved in my classes, and started to take much more responsibility for their own learning. In my classes, we were asked to think about how we see ourselves as educators - to develop

metaphors for understanding our teaching and learning ethos. I found this so helpful, and that's why I carry on using metaphors to explain my practice.

I understood myself as a *gardener*, setting up the conditions for fertility of the mind, and healthy growth and development, stepping back when conditions were right to let the 'plants' grow. In spite of this, I still didn't know what a pedagogy was. I didn't know I had recognised the need to develop one, and had set about doing so. I told you pedagogies were slippery beasts!

The ecological metaphor

Jackson (2016, 2017) uses the metaphor of 'ecology' to try to make sense of learning and teaching. In nature, an ecology is understood as the organism living in and interacting with its environment to achieve a particular purpose. In nature this purpose would be to sustain life and procreate. Organisms can and do shape their ecologies, and an ecology can shape an organism. Ecologies provide resources and nourishment for all that are inside them, and we could transfer this attribute of ecologies to make sense of pedagogies. When the environment changes, the organism must adapt (change its ecology) to survive.

In human ecosocial systems, people create and inhabit ecologies not just to sustain their life but to learn and develop, and achieve many other things. Teaching as a means of encouraging others to learn is an example of an ecology in an educational ecosocial system.

The elements of a learning ecology (Figure 1) which I find most helpful to think about, and which overlap with my own understanding, are as follows:

Pedagogies can change over time, and are influenced by the past, present and the future. My history as a learner, and as an academic in the early part of my career shape what I do now, and goals and future student needs shape where I am going. Framing pedagogies in time helps me reflect on my learning journey as an educator.

Pedagogies include our relationships to other students, and to colleagues and collaborators. I think we should see these relationships as resources. I learn more from working with and for my students than from anyone else. We explore subjects together.

You should be a whole person inside your pedagogy. This includes two important sub-elements:

- You should try to be creative.
- You should not ask your students to do anything that you would not do yourself. This embeds care and respect for the student, and enshrines a principle of modelling what you would like the students to do.

I interpret the idea of "being a whole person" as "being our authentic self". Allowing our true self to be confidently and proudly seen in the learning environment helps students to be comfortable with and proud of who they are. I believe that sharing our own identity with our students is a vital way of supporting the diverse identities of our students. I like cats, bad pop music, and karaoke - unashamedly. My students know this, and I've been able to find points of commonality with students because of this, helping me to forge good pastoral relationships.

It is also important for us to think about the context when shaping a pedagogy. One way is to see context as institutional culture. Educators do have to consider institutional ethos and requirements about courses, teaching styles and standards. However, context can also include the physical environment of the classroom, the objects within it, and the affordances of these items. Part of a pedagogy might be taking the decision to move furniture around or display items differently to encourage students to move, interact, and think in new and interesting ways. By manipulating or accommodating contextual factors in a pedagogy, it is possible to deepen and widen what we can think about in learning situations. In my own practice, it was a light bulb moment when I realised

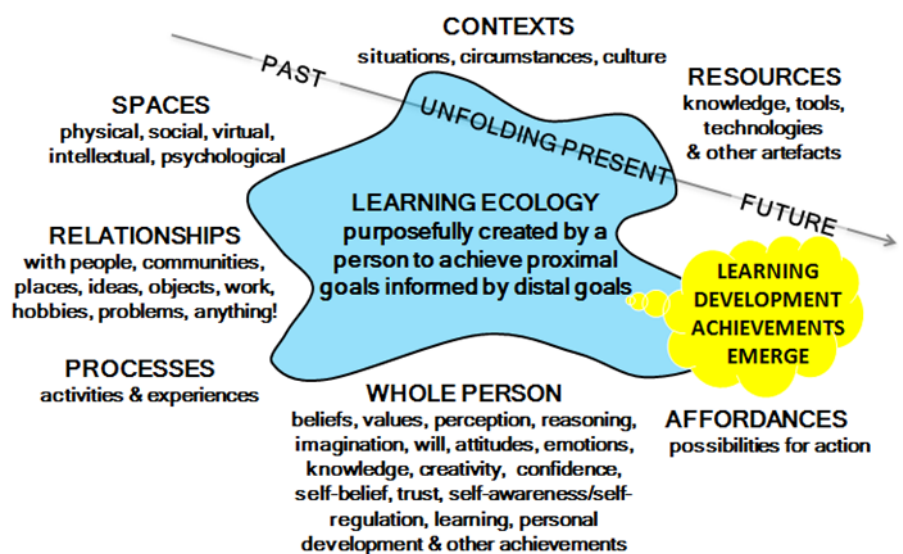


Figure 1 Model of a learning ecology: An ecology developed for the purpose of teaching in a specialised ecosocial system called a university would contain these elements (Jackson, 2016).

that I could move chairs and stand at the back of the room instead of at the front.

Let's now build on these ideas by looking at the metaphors I use for my own pedagogy.

My toolkit metaphor

I see my pedagogy as a toolkit. What attributes do toolkits have that I can carry across to understanding pedagogies? I can take a toolkit with me. It is portable. If I prepare it, and think about it before I go "on the job", I can set it up to have the tools I think I need. But there are also just tools lying about in my toolkit that I can use on-the-fly and unexpectedly. I can lend the tools to other people. I can show - or model how I use - my toolkit for people. I can teach my students how to use my tools, just like a plumber helps his apprentice learn his craft. In fact, we might see a toolkit pedagogy as a kind of cognitive apprenticeship (Collins, 1987), where learning occurs not through didactic teaching, but through 'coaching'. Instead of hammers, nails, crowbars, gaffer tape and a screwdriver, my toolkit is filled with reflective knowledge, tips and tricks from other educators, and positive personal attributes such as a can-do ethos and a creative outlook. My toolkit features practical tools such as pens, paper, post-it notes, toys, props and technology. You never know when students will finish a task early, and you will need something else to do!

My play doh metaphor

My pedagogy is a fresh, bright lump of play doh. It is mouldable into whatever I and my students need it to be. It won't hurt us - it's non-toxic. The play-doh can be transformed creatively. It IS creativity itself. I can safely play and tinker with my designs for tasks and for courses, and with solutions for supporting students. If it goes wrong, no matter. We just start again. By visibly living my pedagogy as something that can be creatively shaped, and by openly accepting it can go wrong, I show students that it is safe to create, to fail and, indeed, we can only learn from this cycle of creation and development.

My "lucky charm" metaphor

Finally, my pedagogy is a lucky charm. I am not superstitious, but when I think of how I approach teaching for my students, I want to do the best for them at all times. I want ideas to work. I want students' needs and interests to be met. I know that teaching can be high stakes for all involved. Tasks might not work. People - me included - might not prepare sufficiently or they might be derailed by something I have not considered. We might hit a roadblock in understanding that means we progress slowly. It doesn't matter what challenges come along if you see your pedagogy like Dumbo saw his white feather, or Harry Potter saw his invisibility cloak.

With my good luck charm, I feel prepared, ready, pumped and motivated for whatever comes. Develop and cultivate your pedagogy, however you see it. Be open to filling your toolkit, to using and sharing it. Be open to moulding your pedagogy like putty to twist it into new shapes to make learning fun and engaging for all - yourself included. Grasp your white feather and enter learning situations with confidence, being yourself, and being visibly willing to create and fail. It can only help students to develop and grow.

By writing this article, I have come to realise just how important metaphor is to me in visualising my pedagogical toolkit. **What metaphors appeal to you when you think about your own pedagogy?**



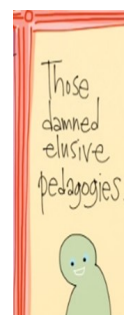
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My Personal Pedagogy: A Constructivist's Perspective - Not what but who!

Will Haywood

Will is a teacher educator based at the University of Warwick where he teaches on the secondary PGCE and coordinates the undergraduate Warwick in Schools programme. Prior to working in higher education, he was a secondary science teacher. He is currently studying the MSc Teacher Education at the University of Oxford. Will can be found on Twitter @willhaywood where he is active as part of the 2017 organising team for the weekly Learning & Teaching in HE Twitter chat #LTHEchat www.LTHEchat.com and has recently started to blog at www.TeacherEducator.net. He was a co-facilitator of the #creativeHE conversation on exploring personal pedagogies.



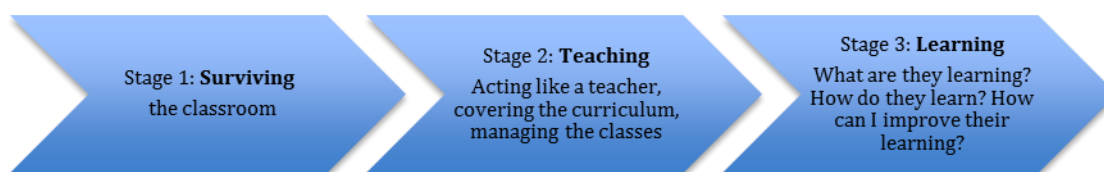
First impressions

When I first saw the topic '*Personal Pedagogies*' in the lead up to #LTHEchat [1] the first thought which came to mind was an ongoing joke that my '*signature pedagogy*' consists of flipchart paper and coloured marker pens! My thoughts then moved on to when I had to create a '*teaching philosophy*' statement or outline my 'aims as a teacher' where I'm not ashamed to admit when having to condense it down to three words I cheesily said I aimed to, '*engage, challenge and inspire*' learners. But when the Twitter chat arrived, the chat itself delved much deeper than that and I think anyone who participated will agree it was one of the more thoughtful and perhaps even challenging chats we've had.

During the Twitter chat, I shared that prior to working in HE I was a science teacher and my practice as a science teacher was greatly influenced by the *constructivist* movement and it is around this that I was then invited to reflect and share here. But before considering constructivism I'd like to share another guiding principle. My first head teacher, inspired by Bill Clinton's "It's about the economy, stupid!" had a sign in his office stating, "It's about the learning, stupid!" to act as a constant reminder that no matter what else was happening the students' learning was what mattered most. This focus on learning is also a feature in the suggested stages in the development of a teacher put forward by Scaife [2] (Figure 1).

So perhaps this notion of a developmental journey would form a key part of my personal pedagogy; it is not about me as a teacher and how I am teaching - it's about the learning, stupid!

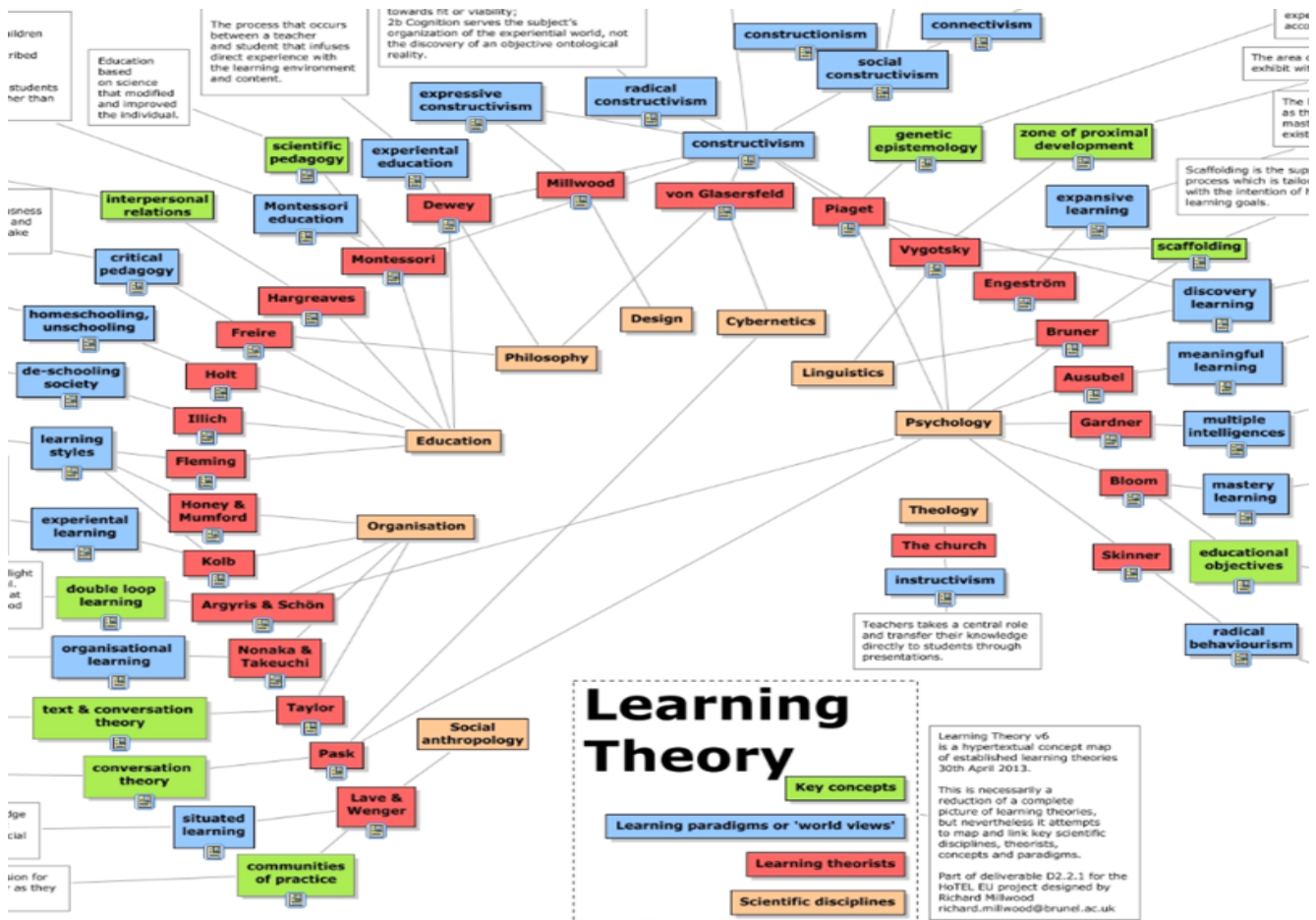
Figure 1 Stages in the development of a teacher²



The issue, however, is that how people learn is not a straightforward question. The concept map shown in Figure 2 [3] gives an indication of the many schools of thought when discussing leaning theories, along with their different disciplinary roots and how they interlink.

In science education the discussion of teaching and learning is often simplified down to that of *transmission* versus *constructivism*. Transmission refers to traditional didactic teaching or 'chalk and talk', where the teacher passes their knowledge on to the student. Constructivism can be seen as being a fairly 'broad church' which is home to several schools of thought (eg Figure 2) A key belief held by constructivists is that people construct knowledge to fit what they experience rather than acquire knowledge about an independent reality [2] While constructivism is not without its criticisms, some key ideas have influenced my practice as a science teacher and I would say still continue to influence my practice today, and therefore my personal pedagogy. I outline below some of the educational theorists who have influenced my pedagogical thinking so perhaps my pedagogical thinking owes a lot to this group of individuals, their ideas and writings and my readings and appropriation and application of their ideas.

Figure 2 Learning theories concept map³

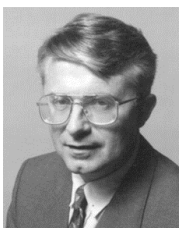


Piaget

Constructivism began with Jean Piaget and although his ideas of maturation and staged cognitive development in children may not be so relevant now I'm working with adults in HE, however the idea of progressing from the concrete ideas through to the more abstract can be a sensible one. However the idea that learners construct their knowledge through interactions with the environment is still appropriate. Furthermore his notion that individuals can learn through the resolution of the cognitive conflict that can occur between their expectations and observations can be a powerful tool^[4], one which I often use in deploying examples and scenarios which may challenge their expectations and trigger thinking and discussion.



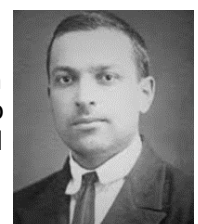
Ausubel



Ausubel wrote about what he called *meaningful learning* and stressed the importance of learners being active, criticising passive learning in favour of discovery and inquiry^[2] He particularly criticizes rote learning and suggests that in order to develop knowledge it should be well connected with other knowledge and not superficial or arbitrary. Ausubel stresses that "The most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly."^[5] (apologies for the gendered pronoun!) This is a crucial point and links with the ideas of *diagnostic assessment* and *assessment for learning*. This establishment of what my learners already know has been important for guiding what and how I teach them.

Vygotsky

Social Constructivism is a movement stemming from the ideas of Vygotsky who regard the development of knowledge as a social activity where one can develop their understanding through joint activity and conversation with others. This is typically with '*more knowledgeable other*' who in the context of the course could be a peer, colleague, mentor or teacher, but beyond that could be a friend or family member^[2] These ideas have led to the focus on discussion and peer learning embedded within my teaching.



Siemens

Stepping away from constructivism but building on the social idea, a few years ago I saw a talk by George Siemens introducing the idea of *connectivism - a learning theory for a digital age*. Connectivism “uses the concept of a network with nodes and connections to define learning. Learners recognize and interpret patterns and are influenced by the diversity of networks, strength of ties and their context. Transfer occurs by connecting to and adding nodes and growing personal networks.”[6]



The idea of connectivism chimes with my own experiences of how I learn and develop, in the internet enabled world. I respond well to being part of a network (online such as #LTHEchat, or otherwise), learning from my connections, and looking to them when I have a problem. This has influenced me in finding opportunities for my students to collaborate and form networks within the class and stay connected through in between and my on-going encouragement for them to increase their wider professional networks.

Recent example

Constructivism means that we are constantly evaluating and adding concepts to what we already understand. For example I was introduced, through the #LTHEchat to the idea of *learning ecologies*, a theory currently being developed by Norman Jackson. An ecology for learning includes the processes and set of contexts, relationships and interactions, and resources that provide an individual with the affordances for learning, development and achievement [7]. I work in Initial Teacher Education, teaching on the Post-Graduate Certificate in Education (PGCE) leading to Qualified Teacher Status (QTS) for secondary teaching in the UK. The nature of this course and the vast range of different backgrounds of the students make for a rather complex learning situation. All students are graduates so they are bringing their existing university experiences; many are career changes and so bring experiences of employment too in addition to their personal life and prior school experiences. The PGCE is a one year intensive course and is different to a lot of traditional university courses, after an initial induction at university our course is one day a week at university with the remainder of the week on professional placement in a school. So in addition to teaching at university and individual scholarly engagement with literature, our students have their school experience in their ecology. This includes their own practice as a teacher, their school-based mentor and other colleagues. There are also not only academic influences, in order to achieve QTS they must engage with the Department for Education's Teacher Standards and there are influences of Ofsted, subject associations and more. On reflection, I have been pedagogically aware of the complexity of this learning situation, but until I was introduced to the idea of learning ecologies, I did not have a theory by which to explain it. The theory of learning ecologies fits with my observations and experiences and builds on what I already know and believe; and so my appropriation of the theory and assimilation into my own working understanding could be considered an illustration of constructivism in action.

Pajares



Frank Pajares^[8] writes about the importance of understanding teachers' beliefs due to the affect they can have on a teacher's practice and how beliefs can be used to predict how teachers make decisions and can sometimes be considered more influential than a teacher's knowledge. To this end, constructing a personal pedagogy could be a valuable exercise as it allows opportunity for reflection and to unpick one's beliefs and consider how they influence your teaching.

In considering some of my own influences and through writing this article, on reflection perhaps my aims to engage and challenge were well grounded in my beliefs around constructivism and weren't so contrived after all, and who as a teacher doesn't want to inspire?

Finally, Shulman^[9] describes the signature pedagogy of a teacher as consisting of surface structures (the concrete acts of teaching and learning), deep structures (assumptions about how best to teach a body of knowledge) and implicit structures (beliefs about professional attitudes and values). If this is the case then the implicit structures of discussion and reflection; deep structures of constructivist principles of students working together to construct knowledge; which can be realised through the surface structure of using flipchart paper and coloured marker pens then perhaps that is a principle driven signature pedagogy I can be proud of after all!

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I am my Pedagogy - my Personal Ecological Pedagogy

Maria Kefalogianni



Maria is a Lecturer in Counselling & Psychotherapy at the University of Salford. She teaches across MSc and BSc programmes and is a module leader of Bereavement & Loss; Her current research interests are on autoethnographic methods of research enquiry and creativity in HE. Maria also holds a small private practice where she offers therapy and supervision for counsellors but also other professionals (ie. In social work, mental health etc). Amidst all this she is also a mother to a toddler, a wife, dog owner and a curious not grown up child! As if this is not enough she is a member of the Lifewide Education & Creative Academic Team -and what a pleasure that is to be so! :)

What does my personal pedagogy mean to me?

It's hard to define concisely but here is my attempt.

My personal pedagogy that I aspire to embody when I contemplate and act to help other people learn is drawing on my core knowledge around Person Centred theory, my belief that students have already within themselves the ability to flourish and my values around deep transformative learning coming from the inside than outside. I draw predominantly on experiential forms of learning and it has a strong relational and dialogical nature.

My personal pedagogy, that which I embody, is the result of an amalgamation of various moments of growth in my lifetime; gained through my interaction with significant /people (students, clients other educators and theorists) /spaces/ resources, experiences which I have symbolised to the best of my understanding as well as the learning I have gained through these experiences and in applying this to my own circumstances (including teaching).

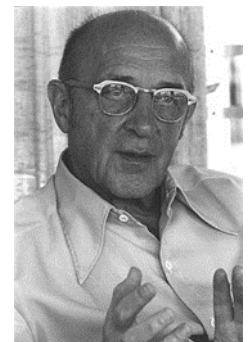
Historic and current influences on my pedagogy

My pedagogical thinking and practice - my personal pedagogy, is very much influenced and shaped by everything which has contributed to make me the person that I am today. EVERYTHING - yet limited to the synthesis / meaning I give to this pedagogy in my here and now. This may (indeed is likely to) be modified as I am exposed to new influences - eg people, reading, experiences and circumstances. This belief stems from my closely held view that we see the world as we are. If we take this to be true, could we argue that we teach as we are?. More recent influences are my core professional training as a Counsellor in the Person Centred Approach, my PGcap training and my involvement in ongoing "reflective spaces" (eg: #CreativeHE community) my ongoing interest in mindfulness and self-enquiry as well as my transition to motherhood.

Below I will attempt to clarify how I *feel* those influences have shaped my currently perceived pedagogy.

The influence of theorists

Carl Rogers is one of the most important theorists in my professional world and his writings have certainly influenced my thinking, my beliefs about human nature (a man's nature is a "trustworthy organism" ¹ change/growth, learning, my practice as well how I aspire to live in my own and relate to the world. In Rogerian theory, we are born into this world with a state of an "organismic process" where we are open to receive and symbolize all experience (conscious and unconscious) that are present in the moment without any inhibition or barriers biases or judgement. This process gets disturbed by "conditions of worth" which is our selective perception of our experience based on our innate need since babyhood for unconditional positive regard (I'd say love). It is this need that "gets in the way" of our optimal growth. As a consequence we develop a self-concept which is formed around that need and in order to get that regard. In other words, our self concept is built in order to keep us "sane" from the threat of absence of that regard/love. It is in fact our actualising tendency which always looks out for opportunities to grow, but not without consideration to the context in which we grow. Sometimes this tendency can feel at odds with our organismic valuing process, because the environment we are finding ourselves in does not nurture us in a way which feels to us like we are growing and so our growth is somehow always consistent with the view of self we have³. It is nonetheless the force which "pushes" the self towards optima growth and oneness with experience (in a nutshell).



During my first lecture on my MSc degree on “love”, I recall thinking “This feels the right path/career for me OR is it that I am the right person for this job? Am I?”. I had the ability to enquire on my experiences with “shades of grey” from a very young age. Looking back I would experience the world intensely but I had not developed the “conception” or cognition to put words to it or symbolise my experiences with sufficient depth. I was feeling that I had a total absence of a guide (as in the original meaning of “pedagogos”) meant that I often felt I had to figure out my answers on my own. As a child it felt lonely and painful (*what a gift to be given, on retrospection*). This form of personal enquiry was never encouraged or praised so it was often held in “secrecy” in my head, in my diaries; I was questioning everything and often feeling lost from the overwhelming questions in my head from: “Daddy, is there enough numbers for all cars in the world?” and how do we know they won’t repeat that number? -((I remember I was told each car had a unique plaque) deeply inconceivable in my little brain; I was just beginning to sense the concept of “infinity”). I recall sending messages to myself in the future, notes towards the adult me to remember how the “child me” felt and not to “mock” or “forget” this experiences I had as “right now it feels real”. I always remember feeling on a very visceral level that this recognition was important but I didn’t know why. It was only through my MSc training that I began to develop my sense of conscious awareness and begin to slowly give it and my life deeper meaning. Looking back now, this is what I call my “observing self” which has served and is serving me greatly in my current profession and teaching. My ongoing interest and practice in mindfulness and the element of the transpersonal serves as another medium for me to help me answer the question “why now” in anything I engage myself in (this reflects my belief that our learning is relevant to the ecology of our life in that present moment).

Carl Rogers in his book² described our actualizing tendency as being an ‘organismic valuing process’, where our goals are based on our inner values and purpose.

This organismic valuing process includes any of the principles below:

Authenticity: Getting away from superficiality and being our congruent self

Autonomy: Moving away from “conditions of worth” what you ‘should’ to and making your own decisions based on what you need and value

Internal locus of evaluation: Judgement based on one’s own view, rather than looking to receive the approval of others.

Unconditional positive self-regard: its essentially the acceptance of yourself including all thoughts and emotional reactions.

Process living: Recognising that we are in a constant state of becoming, always on a journey than arrival..

Relatedness: Seeking close and deep meaningful relationships where

Openness to inner and outer experience: Being able to notice and accept how others and oneself behaves and feels (in increasing congruence)

amended from http://changingminds.org/explanations/values/organismic_valuing.htm

The influence of my own experiential learning

Another important influence on the way I think and behave as a higher education teacher was my own experience as a learner: I came to know the Person Centred Approach in a highly experiential environment. This has reinforced my awareness and emphasis on the experience of my learners. I believe we carry and perhaps transfer our “inner learner self” into our “teacher self”. I would extend this idea and say that we carry our inner child in every step of the way*. As a higher education teacher, I see myself as a facilitator to help students turn their experiences into learning and develop more concrete understanding from their synthesis and more meaning for themselves. This has influenced massively how I approach my teaching. When I first began teaching I walked into a class and started the lesson without any outline of objectives or aims, I was even dismissive over them for a while as I felt that they somehow constrained the process. I wanted to rely on my student’s inner wisdom and knowledge (I believe that people hold in themselves their own answers). Something in me innately rejected the need to break down in advance what I would teach.

The influence of my PGCAP experience and community forums

But thanks to the learning I gained through my PGCAP experience I have shifted my perspective and embraced more the need to have an informed position about why I am teaching the way that I do. I aspire to be as transparent as possible to my students and explain, articulate my biases/agendas and where my ideas have evolved from. I want and aspire to offer them the space to explore in their own ways but knowing how my ideas have been influenced -I anticipate those ideas to keep changing ...

Adopting a creative medium and techniques is another way I feel helps me to achieve this aim. I see a real marriage between the psychotherapy (the Person Centred Approach), mindfulness practice and deep approaches to teaching and learning. Likewise with my clients, I want to be a fellow traveller to my students. I want to strive to trust their organismic process for growth by offering the right facilitative environment with empathy respect and unconditional positive regard. The environment in which we teach is crucial in influencing this creative force in each person to flourish.

Spaces that nurture and expand my pedagogy

I recognise the vitality of nurturing spaces to keep me inspired and alert to my own creativity. My involvement in my PGCAP training, connecting to and becoming involved in the lifewide education and creative academic communities, my involvement in the community group I have set up, my role as a mother and daily play, my yoga and mindfulness practice, my interest in transpersonal modes of healing, where do I stop?: all these spaces I inhabit everyday provide affordance for experiences that have influenced and keep influencing my thinking and practices as a higher education teacher and contribute to synthesis of my ever developing pedagogy.

Classroom ecology

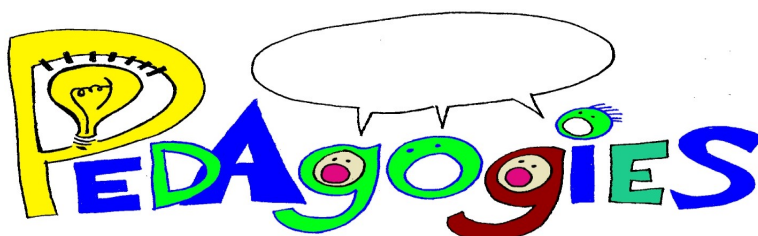
But how do these influences translate or transfer into the classroom? There is no straight answer to this. The idea that educators create particular environments through their teaching in which they demonstrate particular behaviours and lay the foundation for a culture for learning, is overlooked⁴ I would also add that the facilitator's voice is indeed overlooked and not often invited to be heard or encouraged to be expressed by the institutional structure(s). I am yet to see a policy that states "Higher Education teachers are encouraged to share their vulnerabilities and their growing edges with their students". Whilst this is perhaps taking place informally, I am wondering what impact that would have on educators. What I allude to is that the context/environment in which we work feeds back into us and influences and affects the way we teach. It is this very intimate self which, I argue, shapes too and influences our teaching practice. This involves past experiences in life as a child, alongside our experience as learners.

As Armstrong⁵ says "As teachers teaching, it is a commonplace awareness that we need to 'model good practice', which is visible, experienced and open to scrutiny and judgement. But to lay bare our innermost thoughts and concerns - part of our very self and the construction of our own identity as a teacher is a far more risky business"... but I would also add, is far more valuable and enlightening, which prepares the ground for fertile discussions and dialogue, as hierarchies dissipate and more equal relationships emerge. Surely this honest declaration of self facilitates the types of relationship and productive interaction in the ecology of the classroom if our goal as a teacher is to shift from a pedagogy that is didactic to a pedagogy that is dialogic and seeks to co-create rather than impose the making of meaning.

Multiple selves - multiple pedagogies

I believe that we have many selves...(many masks) that we use to meet our different needs according to the context or situation. As teachers we might apply this idea to argue we have many "teacher selves". I like the idea of multiple pedagogies and I feel I can represent myself in this way (only synthesised and integrated within my own self). But I

also believe that a particular version of our self can get in the way if we don't have deep awareness of our actions with our students. I use doubt and self-enquiry as my motivating force in my process... it allows me the space to hold any model loosely and question closely held assumptions. Because of the nature of what I teach, I not only need/ want to role-model congruence and authenticity I need (want) to fully embody it. I am learning to take more and more "educating and informed risks" with my students in an attempt to help them grow. I am allowing myself to be vulnerable and real, if that supports their learning.



In my teaching I often encourage moment to moment access to feelings and thoughts...responding very much in the here and now. **My mindfulness practice and ongoing personal development has helped me to become aware of intrapersonal responses I recognise during my teaching.** I can then use these responses to help me shift and change my delivery or engage in appropriate dialogue with students to deepen their learning . **I often invite my students to access their experience, "inner wisdom" and encourage them to share it. My students engage all aspects of themselves in order to learn. I see it as my professional duty to help them access and use all aspects of themselves in learning.** In that way I hope my students learn from the inside as opposed to the outside. I hope they learn to connect to aspects of themselves that encompass all aspects of their consciousness⁶ . **This is quite relevant in my field of practice which often calls upon students to trust their intuition.** Having said that, I argue that there is great value in our students' "inner experience", feelings and senses. Experience is pre-conceptual⁷ and comes in contrast with the over-emphasis on "cognition"; could we argue that the role of emotions in Higher Education teaching has been perhaps slightly overlooked. If we are to embrace this concept what will change in the way we deliver our classes ? and why?

An ecological concept of personal pedagogy

Having created this pedagogical synthesis I can see it is ecological in nature: it reflects my continuous development as a person and as a higher education teacher as I sense - observe, feel, think about and try to make sense of my material, social, psychological and intellectual world... Surely our students do too? If we agree with this, could we then argue that there is value in helping students to engage with all their senses in their learning and draw informed and explicit meanings through their involvement in learning in such a manner ?

These thoughts are very much “under construction”...and I look forward to engaging in further discussions with colleagues and anticipate to see how my arguments will shift and change through these interactions. One could draw from the above that if we indeed can't help but bring ourselves into our teaching maybe we need to also inform our research into teaching and learning in ways that includes our self/sense of self ?

ACKNOWLEDGEMENTS:

I want to say a big thanks to Norman Jackson for his ongoing enthusiasm and in helping me edit this article. As always my husband who has also afforded me with the time I needed in a busy life to formulate some of those ideas on a piece of digital-paper!

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#LTHE Chat Perspectives on Personal Pedagogies

Norman Jackson

Introduction

#LTHEchat (Learning and Teaching in Higher Education chat) was established by Chrissi Nerantzi and Sue Beckingham to provide opportunities for HE teachers and other educational professionals to discuss learning and teaching topics via the Twitter social media platform.

Inspired by the hugely successful #edchat, <https://ltthechat.com/>, the weekly 1 hour chat is open to anyone interested in sharing ideas, practices, perspectives, resources and problems or issues and their solutions. The open learning approaches facilitated through #ltthechat has made a significant contribution to the professional networking and social learning practices of higher education professionals and I was delighted to be invited to contribute a session on March 8th. I chose the theme of personal pedagogies as this was something I was exploring at the time and it could feed into Creative Academic's creative pedagogies project.



#ltthechat social pedagogy

The pedagogy of #ltthechat is simple. Prior to the session the person leading the conversation, let's call them the 'Chief Instigator (CI)', provides the facilitation team with a short introduction to provide a bit of context and outlines the scope of the conversation. This is posted on the #ltthechat blog ahead of the conversation. The CI also provides 6 questions around which the conversation is formed. The questions might also have images or links attached. During the one hour conversation a new question is posted every 10mins. Questions are labelled (A1-A6) so that participants and the CI can see what is being addressed in the response. All posts are tagged #ltthechat so that they can be assembled under the hashtag.

Given that there are lots of participants what emerges often feels quite chaotic and confusing with lots of parallel conversations as participants respond to things that interest them. It is most definitely a pedagogy for emergence, although the basic structure of the conversation is determined in advance through the questions posed. Once the conversation is set in motion the CI becomes a participant like anyone else responding to whatever emerges on a highly selective basis. The process is well supported by a facilitation team and also 'regular contributors' who help create an energetic environment and a culture that encourages and facilitates participation. After the conversation I spent some time going through the posts and responding to individuals - usually by asking more questions. After the event, one of the members of the community (Chris Jobling) storifies the content so that it is easier for users to examine what was discussed.

So this synthesis is my attempt to make sense of / create meaning from the conversation. It's also my way of honouring and partially curating the contributions for others to read. I include a small sample of the many hundreds of tweets to illustrate a number of emergent themes that I find interesting.

Q1 What concepts of pedagogy do you, and colleagues who you know hold?



Q1 What concepts of pedagogy do you, and colleagues who you know hold? [#LTHEchat](#)

Sample of responses

A1: I'm still an amateur pedagogic after 32 years in the job. Is that bad? Should I be admitting that here? [#ltthechat](#) Chris Jobling

A1 [@LTHEchat](#) no longer teaching under 18s, via androgogy and more recently heutagogy as better descriptions of self directed learning [#LTHEchat](#) Teresa MacKinnon

A1 I like the idea that the people learning should drive the teaching [#LTHEchat](#) Rober Jenkins

A1 Moi: Constructivism, enactivism, pragmatism Autres: everything from Steiner-Waldorf to fill-the-bucket [#LTHEchat](#) Rob Grant

A1 Bloody hell. *scratches head* [#LTHEchat](#) Elizabeth Ellis

A1 my mind has gone completely blank! I lack the vocabulary to construct a response [#LTHEchat](#) Katherine Haxton

A1 As a relative newbie to TEL and educational development related work I feel like I can't even answer this yet! [#LTHEchat](#) Rosie Hare

A1 Social constructivism main for online escapades. Diversified into a range of tutor-led and student-led pedagogies for blended [#LTHEchat](#) Matt Cornock

A1 Coming from a science teaching background, I have quite constructivist conceptions of pedagogy [#LTHEchat](#) Will Haywood

A1 [@cpjobling](#) 'Amateur' has etymological roots in "loving" something... which seems a very good way to approach pedagogy! [#LTHEchat](#) Jenny Lewin-Jones

A1 I take on many trends, be it behavioral, constructivist, etc. while my team is mostly about socio-constructivism [#LTHEchat](#) Jules Tardy

A1 [#lthechat](#) I guess my personal preferences are approaches with lots of interaction and building on students' knowledge (constructivist) Martin Rich

A1 [@LTHEchat](#) no longer teaching under 18s, via androgogy and more recently heutagogy as better descriptions of self directed learning [#LTHEchat](#) Teresa MacKinnon

A1 ummmm....pedagogy informing praxis... [#LTHEchat](#) Hilaire Graham

A1 Concepts of 'active learning' pushed at previous role, now scaffolding online courses with activity theory and social learning [#LTHEchat](#) Matt Corock

A1 [@LTHEchat](#) Rather taken with the Greek idea of the slave who accompanied the learner to the place where learning happened [#lthechat](#) Miles Berry

Etymology: < Middle French *pedagogue*, *pedagoge* schoolmaster (1370–2; French *pédagogue*), school (1421–30; also as *petagogue*) and its etymon classical Latin *paedagōgus* (also *pēdagōgus*) teacher, schoolmaster, slave who took children to and from school, in post-classical Latin also source of instruction or guidance (Vetus Latina, Vulgate) < ancient Greek *παιδαγωγός* slave who took children to and from school, in Hellenistic Greek also source of instruction or guidance (New Testament) < *παιδ-*, *παῖς* boy, child (see *PAEDO-* *comb. form*) + *ἀγωγός* leading (see *AGOGIC adj.*). Compare Old Occitan *pedagoc* (c1350; Occitan *pedagòg*), Catalan *pedagog* (1411), Spanish *pedagogo* (mid 13th cent.), German *Pädagoge* (a1446).

A1 was this perhaps about caring? like the idea of accompanying the learner on a journey [#lthechat](#) Creative Academic

A1 Inarticulately, I think it would include the co-creation of knowledge, experiential learning and authentic assessment. [#LTHEchat](#) Elizabeth Ellis

A1 I would even say social constructivism, a bit like what we are doing right now! [#LTHEchat](#) Sarah Ney

A1 Good question. If you hold to one concept of pedagogy then you are likely to make the same mistake time after time. [#LTHEchat](#) Clive Buckley

A1 I'm a big fan (being from humanities) of pedagogy which challenges the learner to challenge the perceived "right" answer [#LTHEchat](#) Josh Clare



k11013871 fotosearch.com ©

A1 Mix n match & keep an open mind.... lots of different influences and they just keep on expanding [#LTHEchat](#) Jenny Lewin-Jones [@LTHEchat](#)

A1. Wow look at serious answers to Q1 :-0 I was going to say 'I want to help develop well-rounded, responsible & fulfilled humans [#LTHEchat](#) Bev Gibbs

A1: I tend not to bother. Focus on the practice rather than theory (although they probably influence me subconsciously) [#LTHEchat](#) Lisa Kidger

A1 [@LisaKidger](#) [#LTHEchat](#) even if you do base your approach on theory it makes sense to adopt a practice which feels right for you Martin Rich

A1 Particularly use Conole et al 2004 "Mapping pedagogy & tools for effective learning design" 3D framework for mix of experience [#LTHEchat](#) Matt Cornock

A1 Ericsson's 'Deliberate Practice', Dreyfus & Dreyfus '5 Stages of Skill Acquisition', Vygotsky's 'Zone of Proximal Development' [#LTHEchat](#) Daniel Belton

A1 [@neilwithnell](#) [@willhaywood](#) my best&most painful experiences of teaching have been fail, fall get back up & try harder! [#LTHEchat](#) Haleh Moravej

A1 Whilst 'learning from experience/mistakes' is incredibly valuable, having a theoretical l&t framework allows you to step back [#LTHEchat](#) Matt Cornock

A1 possibly [#LTHEchat](#) My approach, for what it is worth, is to become the student in my class. Clive Buckley

A1 Kolb learning cycle, I usually try to design learning sessions moving student through the four quadrants, starting at theory [#LTHEchat](#) Ann Northcliffe

A1 doing, reflection, learning, doing,. [#lthechat](#) [@LTHEchat](#) Dr. Hala Mansour

Some impressions

Pedagogy is not a term that is commonly used by many academics and it can fall into the category of theoretical edu-speak that is rejected on the grounds that it is not part of my vocabulary. The words of 'I tend not to both-er', are probably true for most of us for most of the time. But, judging by the conversation, it's also probably the case that most of the #lthechat participants believe that 'pedagogy' is an idea worth trying to understand and co-create shared meanings as we were trying to do in the #LTHEchat. Later in the conversation I tried to show the conceptual value in the idea of pedagogy: it has different conceptual value to 'teaching'.

But pedagogy is certainly a word that we are not used to talking about and it's not easy to articulate a response to *what is pedagogy?* Many responses to this question were formed around constructivist or social constructivism views of learning and educational practices that honoured and engaged with this concept of learning as a lived experience. For example, *my best& most painful experiences of teaching have been fail, fall, get back up & try harder!* Haleh Moravej

One respondent encouraged broadening the idea of pedagogy to connect it to androgogy and heutagogy (self-determined, self-motivated and self-directed learning) but the format does not encourage elaboration.

A few responses suggested that it might be 'wrong' to hold a single concept hinting at the importance of being open, fluid and agile in your thinking in order to respond (pedagogically) to new situations as they emerge. *'I take on many trends, be it behavioral, constructivist, etc. while my team is mostly about socio-constructivism'* Jules Tardy

Q2 How does this representation of the idea of pedagogy compare with your own concepts? #LTHEchat

I deliberately wanted to expose participants to the broadest conception of pedagogy that I could find so I used a paragraph from Thompson et al's study of signature pedagogies.

Sample of responses

A2 Too broad, but might be a cultural bias since we love to stick to strict definitions this side of the channel ;) #LTHEchat Jules Tardy

A2: Word "interaction" btwn everyone in the room is important I think. All very well if everyone is there but no interaction = bad #LTHEchat Kim Sum

A2 Most agree but not sure about policy regime. #LTHEchat Scott Turner

A2 pretty good....goes to process practice contexts... Hilaire Graham

A2 I like the idea of that representation but as colleagues differ in their pedagogies (I think) am struggling a bit with it #LTHEchat Katherine Haxton

A2 @LTHEchat cf 'it takes a village to raise a child?' #lthechat Miles Berry

A2 @LTHEchat this is a very broad definition, all encompassing. I'm less convinced about helpfulness of signature pedagogies #LTHEchat Teresa MacKinnon

A2 I like that but also think more a list of associated phenomena rather than my sense of 'pedagogy' itself? #LTHEchat Rob Grant

A2 learning environment, co-creation, relationships etc all vital #LTHEchat Neil Withnell

A2 Going to bleat about TEL - this definition doesn't include the crucial role of mediating learning and scholarship with tech #LTHEchat Elizabeth Ellis

A2. Where is values in that? Subject values as well as pedagogical values #LTHEchat

A2 #lthechat I like the sense in the definition that it includes many aspects of the educational process & not just teaching Martin Rich

A2 Thomson et al 2012 quote resonates with me since I first got my head around engestrom's representation of activity theory #LTHEchat Matt Cornock

A2 @WarwickLanguage @LTHEchat that could be about anything - you swap out pedagogies for any number of topics. #LTHEchat Charles Knight

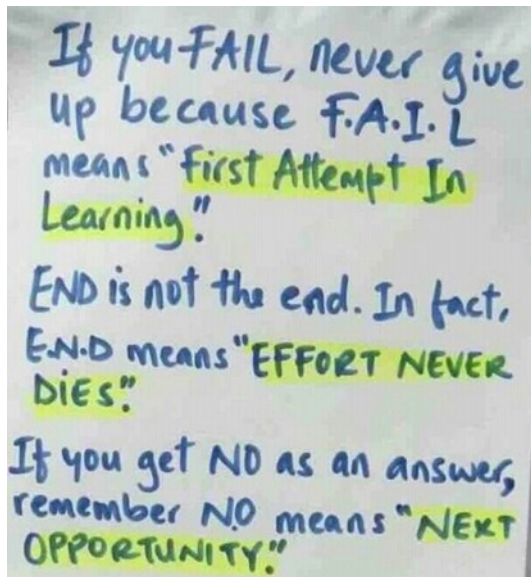
A2 I like Durkheim definition that is the reflexivity applied to educational objects > "a practical theory" <3 #LTHEchat Jules Tardy

The ecological affordance of pedagogy

Pedagogy is more than teaching method, more than curriculum, more than assessment practice. It is all these things, but it is also how they are made into patterns of actions, activities and interactions by a particular teacher, with a particular group of students [in a particular context]

The concept of pedagogy encompasses relationships, conversations, learning environments, rules, norms and culture within the wider social context and may extend beyond school to community and public settings. It takes in the ways in which what teachers and students do is framed and delimited within a specific site, a policy regime and the historical [cultural] context

Thomson, P., Hall, C., Jones, K. and Green, J.S (2012)
The Signature Pedagogies Project Final Report. Available at:
http://creativitycultureeducation.org/wp-content/uploads/Signature_Pedagogies_Final_Report_April_2012.pdf



A2 the description matches my Systems Eng' module with level 6 students been roller-coast one student's now seeing the benefits

[#LTHEchat](#) Ann Northcliffe

A2 We often don't attend to rules, norms and culture when considering pedagogy, but need to - important [#LTHEchat](#) Ellen Roberts

A2 I view learning within a social context - you learn with others/ environment/experience in/directly influencing you [#LTHEchat](#) Matt Cornack

A2 [#ltthechat](#) I like the sense in the definition that it includes many aspects of the educational process & not just teaching Martin Rich

A2. I like that it foregrounds relationships, so much of 'personal pedagogy' (?) stems from what people believe about students [#LTHEchat](#) Bev Gibbs

A2: It makes sense but do any of us really think that deeply and widely about our practice? Instinct and intuition are underrated!

[#LTHEchat](#) Theresa Nicholson

A2 Pedagogy's old definition of 'teaching-led' edu is not relevant now, new definitions of approaches, scaffolding more effective [#LTHEchat](#) Matt Cornock

A2 if, like all aspects of l&t, we say that pedagogy doesn't happen in a vacuum for learner or teacher then yes this seems to fit [#ltthechat](#) Josh Clare

A2: While it doesn't align with my understanding of pedagogy, I like it. Fits me better. [#LTHEchat](#) Lisa Kidger

A2 yup, fits quite well with the social aspect of learning Sarah Ney [#LTHEchat](#)

A2 Good alignment. Teaching approach depends on learners, teacher... and don't forget: subject! 'One size fits all' does not work. [#LTHEchat](#) Dr Daniel Belton

A2 it is a learning process? [#LTHEchat](#) [@LTHEchat](#) Dr. Hala Mansour

A2 I would agree with this definition, Pedagogy is very personal and the learning happens in someone not to them [#LTHEchat](#) Santanu Vasant

Some impressions

I chose this quotation, the most comprehensive I could find, to try an open up thinking about the scope of pedagogy and to link the abstract idea to the concrete making of practices, in particular contexts, situations and environments. I was interested in discovering the extent to which this holistic ecological set of ideas was generally accepted within the group of participants.

On balance more participants seemed to view this comprehensive way of seeing pedagogy positively and a few connected to the idea of a person's pedagogy engaging with the whole system (or in my words the whole institutional ecosystem).

A few participants felt the definition was too broad or expressed some other form of disagreement.

One participant said it didn't fit his current understandings but it was an actually better fit.

One telling comment by Theresa Nicholson was of the so what type. *'It makes sense but do any of us really think that deeply and widely about our practice? Instinct and intuition are underrated!'* While not denying that we do not think deeply on this matter - that was the purpose of the conversation! I guess the follow-up question would be and where do these come from if not by being immersed in and in tune with the whole as the definition suggests.?

Q3 Does the idea of 'personal pedagogy' have meaning for you? If yes, how would you define or describe it?

A3 Yes because it sounds like I can get away with making it all up as I go along. [#LTHEchat](#) Katherine Haxton

A3 experiential learning... Hillaire Graham [#LTHEchat](#)

A3 all the talk about the inclusion of values strikes me as being very important and that's definitely personal [#LTHEchat](#) Katherine Haxton

A3: from a cognitive psychology perspective there are strategies that work for a range of individuals so no differentiation needed [#LTHEchat](#) Dr C Kuepper-Tetzel

A3 personal implies own approach, not a bad thing but collaboration key - recognising learning in others [#LTHEchat](#) Neil Withnell

A3 Personal pedagogy: recognising the assumptions that we bring to teaching and learning [#LTHEchat](#) Ellen Roberts

A3 #ltthechat comes back to 'what's right for me (and my students)' and can change over time and with context Martin Rich

A3 @MartinRich106 yep...everyone is different & things should be targeted for both sides & not replicating same thing over & over? #LTHEchat Kiu Sum

A3 As a student soon-to-be graduate, is scary. Thinking about #pedagogy is another chapter. Our views differ from academics? #LTHEchat Kim Sur

A3 a way of approaching learning that is relevant to a person's own background, values, systems, etc? Sarah Ney #LTHEchat

A3 As someone who doesn't teach, but supports L&T and TEL, is it wrong to think of personal pedagogy as personal L&T strategy? #LTHEchat Elizabeth Ellis

A3 @liz_isabella Oh, I like that way of thinking of it. More comfortable with word strategy than pedagogy #LTHEchat Katherine Haxton

A3 @rbrtjnkns we can make it personal... through 'living' it? #LTHEchat Chrissi Nerantzi

A3 @CliveBuckley I hope so because I've been making it up for a whole career! #LTHEchat Chris Jobling

A3 I have to admit to 'retrofitting' theory onto stuff I do after the fact..particularly when I realise it worked fairly well #LTHEchat Katherine Haxton

A3 @LTHEchat teaching as craft - we learn from how others do this, but then develop our own approach / style? #ltthechat

A3 At first 'personal pedagogy' made me think of personal learning environment, then I tutted to myself. An attitude to learning? #LTHEchat Matt Cornock

A3 aren't they all personal? #LTHEchat Robert Jenkins

@LTHEchat A3 personal approaches to teaching does, I'm just not in love with the P word any more Teresa MacKinnon <https://www.slideshare.net/teresamac/sharing-practice-in-the-open-telecollab2016> ... #LTHEchat

A3 so much of what passes for learning theory has been dreamt up by well-meaning but deluded enthusiasts anyway. #LTHEchat Simon Lancaster

A3: does it depend on POV? Who's the subject for whom the "pedagogy" is being made "personal" ... the teacher or learner? #LTHEchat

A3: If we adopt an ecological pedagogy then it will almost certainly be personal as well because we (our 'self') are IN it. #LTHEchat Theresa Nicholson

A3 Is the whole holistic approach & not just focusing on #education. Is all #emotional + physiological + education knowledge #LTHEchat Kiu Sum

A3 #LTHEchat Just asking. Is it possible to be a good teacher without knowing classic texts on pedagogy? Clive Buckley

A3 Actually no, because pedagogy is a theoretical framework, different from personal praxis #LTHEchat Jules Tardy

@LisaKidger @chrissinerantzi @MartinRich106 Beliefs rather than knowledge of theory can be a more significant influence on practice #LTHEchat Will Haywood

A3 Yes. Reflection on action. Reflection in action. Reflective practice. Kolb's learning cycle. Daniel Belton #LTHEchat

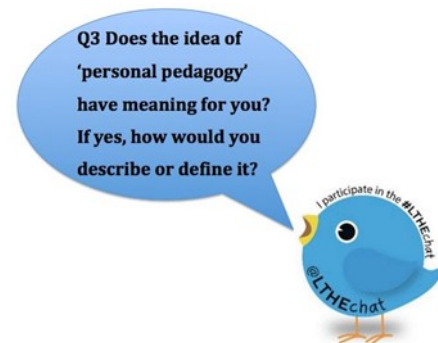
A3 @mattcornock perhaps we move from abstract concepts of pedagogy to personal interpretations when we include ourselves #ltthechat

A3 bringing alive the theory has its personal touch #LTHEchat

A3 @cpjobling @KiuSum I guess it is all about the dance of learning let it be tango, line dancing or dad dancing! #LTHEchat Haleh Moravej

A3 @KiuSum I was just about to put something about emotions, and you got in first! Agree that this is important to know #LTHEchat Jenny Lewin-Jones

A3 How closely does 'personal pedagogies' map to 'meta-learning' @LTHEchat #LTHEchat Matt Cornock

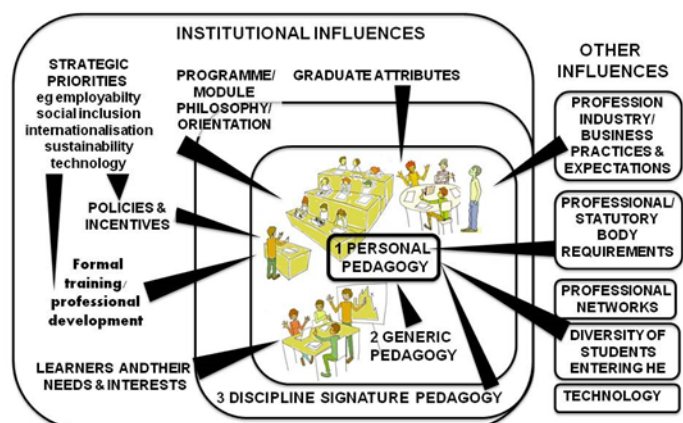


Some impressions

Jules Tardy thought it was not meaningful because 'pedagogy is a theoretical framework, different from personal praxis'. To counterbalance this view Matt Cornock suggested that 'perhaps we move from abstract concepts of pedagogy to personal interpretations when we include ourselves'.

Most participants do not say directly that the concept has value, rather they pick up on what sorts of things would make the idea meaningful implicitly suggesting that it did have value as a concept. The sorts of things they recognised in a personal pedagogy included: experiential learning, personal approach, involves collaboration, recognising the assumptions that we bring to teaching and learning, what you believe & value, as well as what you're aiming to achieve, decoding and demystifying, 'what's right for me (and my students)' and can change over time and with context, approaching learning that is relevant to a person's own background, values, systems, we can make it personal... through 'living' it, we learn from how others do this, but then develop our own approach, Reflection on action. Reflection in action. Reflective practice, emotions, the whole holistic approach

Q4 The diagram shows a personal pedagogy in relation to various influences. Does it make sense? How might it be developed? [#LTHEchat](#)



Complexity of influences on a higher education teacher's pedagogical thinking & practices

I used a diagram to help stimulate thinking about the influences on a person's pedagogy.

Sample of participants responses

A4 @dawnitoes You got there before me, I was still trying to work out why I couldn't relate to it very easily!! :). [#LTHEchat](#) Bev Gibbs

A4. My 1st assessment on PGCertinHe looked like that diagram as I planned whole module LTA around a deaf student, I was told off [#LTHEchat](#) Ann Northcliffe
A4 Reasonable list of stuff, could add more but devil in detail of how stuff interacts & changes in diff contexts.? [#LTHEchat](#) Rob Grant

A4 *so* many diagrams like this in Int. Development - google 'sustainable livelihoods'. OK checklists, limited analytical value [#LTHEchat](#) Rob Grant

A4 YES @drrwgrant agree devil and craftsmanship in

the detail of how situations are interpreted and acted upon [#ltthechat](#) Noman Jackson

A4 [#ltthechat](#) would expect to see personal preferences in there, also level of course and motivation for doing it Martin Rich

A4 @LTHEchat seems quite, well, institutional. Much of 'personal pedagogy' may be more cultural? [#ltthechat](#) Miles Berry

A4 @dawnitoes @HalaMansour I agree. Our culture and our values play a big part. [#LTHEchat](#) Alic Lau

A4 @neilwithnell Merci Neil! Looks like it's more about pedagogy in practice than proper pedagogy but need to read more! [#LTHEchat](#) Jules Tardy

A4 the trouble with big diagrams is that there are always important things missing. I like small diagrams!! Phil Race @RacePhil

A4: wondering if there is enough breathing space in this model? Where is the individual and their own personal ecology? [#LTHEchat](#) Chrissi Nerantzi

A4. Also seems to treat teaching in isolation and doesn't acknowledge individual drivers to research first (which impacts T&L).

A4 Reasonable list of stuff, could add more but devil in detail of how stuff interacts & changes in diff contexts.? [#LTHEchat](#) Rob Grant

A4 It's a bit mixed up to me: individuals, professional bodies, materiel (tech); it'd be more readable in several diagrams [#LTHEchat](#)

A4 I would like to see a bit more partnership between pedagogy and student exp, although I like the central influences very much [#LTHEchat](#) Elizabeth Ellis

A4. Extraordinary absence of the educator, whats shaped them and what they bring [#LTHEchat](#) Bev Gibbs

A4 @LTHEchat Is this missing sth about own past learning experiences/ background/ cultural upbringing? [#LTHEchat](#)

A4 I would be tempted to reverse the whole thing and have box 1 encompassing everything else [#LTHEchat](#) Robert Jenkins

A4 then again those under "Other Influences" are becoming more important, is it not? Is all about getting employed once graduated [#LTHEchat](#) Kiu Sum

A4 Strategic influences are due to HE global strategy, professional bodies > they influence institutional influences [#LTHEchat](#) Jules Tardy

A4. I don't understand what 3 Signature pedagogy is? Anyone? Charles Knight

A4 Neil Withnell provided this link @Charlesknight <https://www.heacademy.ac.uk/enhancement/definitions/signature-pedagogies> ... [#LTHEchat](#)

A4 focus on influences, no mention there of assessment practices etc [#LTHEchat](#) Neil Withnell

A4 makes sense to me, deals with the complex maze of influences in which we act as teachers [#LTHEchat](#) Katherine Haxton

A4 The model covers a lot, but I'm not sure it accounts for the after lunch / late afternoon slump ;-) [#LTHEchat](#) Will Haywood

A4: The missing, and in my view, vital element, is US. Our values, skills, personalities, style - have a huge effect on pedagogy [#LTHEchat](#) Theresa Nicholson

A4 @drrwgrant indeed! I'd like to remix the diagram :) [#LTHEchat](#) Teresa MacKinnon

A4 doesn't make sense to me. How would you extract concrete learning and teaching strategies from this. It's just big words. [#LTHEchat](#) Dr C Kuepper-Tetzel

A4 I'd include attainment of learners in there, not sure if it's covered in needs/interests #LTHEchat Katherine Haxton

A4: found that difficult to follow. Cognitive overload. #LTHEchat Lisa Kidger

A4 Why is generic a subset of discipline in the diagram? #LTHEchat Rob Grant

A4 Makes sense all right. #Graduate #Attributes stood out...but then again that is the main thing in my head these days! #LTHEchat

A4 seems to imply that institution has greatest influence, in my experience more the case in schools than HE #LTHEchat teresa MacKinnon

A4 Where does 'how teacher was themselves taught?' feature in diagram? #LTHEchat Rob Grant

A4 haven't heard about signature pedagogy before, any info please? #LTHEchat Jules Tardy

A4 Neil Withnell Retweeted Jules Tardy and added the link <https://www.heacademy.ac.uk/enhancement/definitions/signature-pedagogies...> #LTHEchat

A4 is this complex enough? #LTHEchat @LTHEchat Hala Mansour

A4: first reaction ... when shown like that, there doesn't seem much scope for the learner to have agency. #LTHEchat Chris Jobling

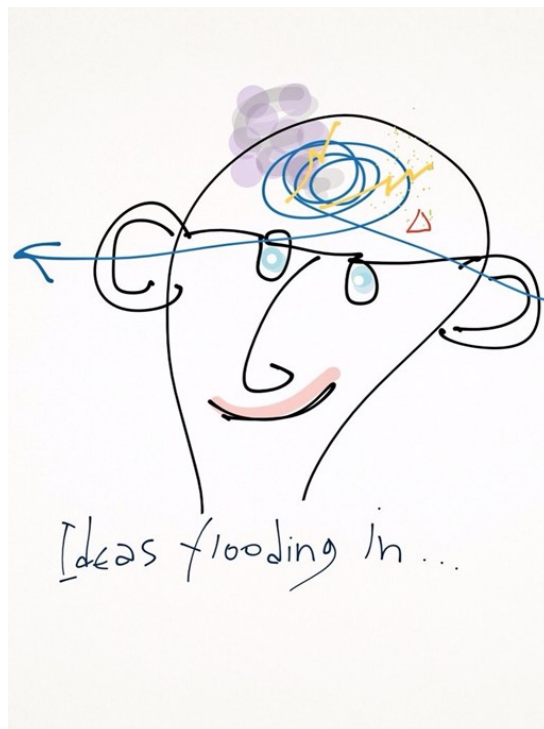
A4 Arrows could be two way? Esp in institutions where the personal pedagogy of the instructor influences curricula/dept approach #LTHEchat Matt Cornock

A4 Similarly arrows could be two-way if the personal pedagogy of the student is influencing curricula/strategy - partnership model #LTHEchat Matt Cornock added,

A4 Does the word pedagogy need replacing with something more intuitive? #LTHEchat Sue Watling

A4 It looks great! And complicated. Could you add references, hyperlinks to further info? More explanations to allow reflection? #LTHEchat Daniel Belton

A4 Yes, I think so but would need examples of each (case studies?) #LTHEchat Santanu Vasant



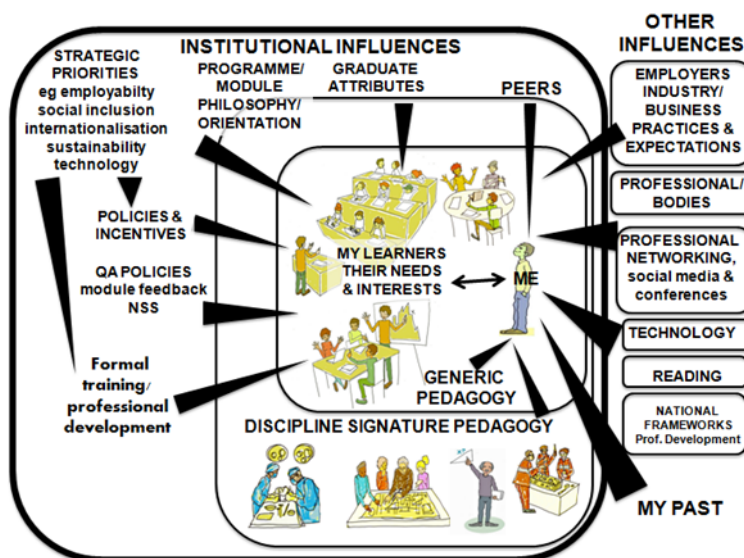
Some impressions

The diagram looks complicated and I knew it would put some people off. But I think in pictures and as a former geologist (an field of pedagogical practice long before I moved into the field of education) my learning process is to create a map so I can begin to comprehend not only the components of complexity but their relationships. What I didn't do was provide any explanation so it was deficient in a number of ways that some of the respondents highlighted.

Is this complex enough? commented Dr Hala Mansour. Well it is complex and pedagogical thinking is about thinking with complexity at all the things that need to be thought about in order frame learning in the most appropriate way (given all the influences and requirements) to teach in a way that engages and achieves what the teacher wants to achieve. Others felt it would be better to develop several diagrams to represent the complexity 'bit mixed up to me: individuals, professional bodies, materiel (tech); it'd be more readable in several diagrams'.

A few participants felt that the influences that had been identified were the sorts of things that might be involved in a personal pedagogy. *'Reasonable list of stuff, could add more but devil in detail of how stuff interacts & changes in diff contexts? Rob Grant*

One general comment was that there needed to be more emphasis on the partnership between teacher and students and the teacher's own past experience. *Robert Jenkins* provided an observation that I found particularly helpful, 'I would be tempted to reverse the whole thing and have box 1 encompassing everything else'. In fact I used his insight to create a better representation (right). Similarly, *Theresa Nicholson* felt that 'The missing, and in my view, vital element, is US. Our values, skills, personalities, style - have a huge effect on pedagogy'. This element is embodied in the ME in the updated version of the diagram.



Matt Cornock made another useful observation. 'Arrows could be two way? Esp in institutions where the personal pedagogy of the instructor influences curricula/dept approach' and 'Similarly arrows could be two-way if the personal pedagogy of the student is influencing curricula/strategy - partnership model'

Q5 What have been the most important influences on your pedagogical thinking and practices throughout your career?



Q5 What have been the most important influences on your pedagogical thinking and practices throughout your career? [#LTHEchat](#)

Sample of responses

A5 concepts of usability design .. put yourself in the perspective of the user (i.e. the learner) [#LTHEchat](#) TELmenot

A5 Kolb learning cycles, Boyd students teaching & supplementary teaching, flipped, patchwork assessment, assessment for learning [#LTHEchat](#) Ann Northcliffe

A5 [#ltthechat](#) lots of my influences comes from studying reflective practice Martin Rich

A5 meeting [@chrisinerantzi](#) being pushed by [@MetMunch](#) students to do better, being invited to [@UniWestminster](#) to meet [@KiuSum](#) [#LTHEchat](#) Haleh Moravej

A5 I have met colleagues who have hated PGCAP - but if done right and value explained/demonstrated, it's invaluable. [#LTHEchat](#) Rebecca J

A5 The feedback from student and assessments going well or not [#LTHEchat](#) Santanu Vasant

A5 Increasingly important for me to keep in touch with case studies, journals and blog posts from [#LTHEchat](#) types Matt Cornock

A5: Royce Sadler's work on assessment, about needing to develop students' capacity to assess their own work [#LTHEchat](#) Ellen Roberts

A5 Freire and visual impairment introduced me to education as social justice [#LTHEchat](#) Sue Watling

A5 I wonder if anyone would say it is their PGCert in HE! [#LTHEchat](#) Alice Lau

A5 [@amslau](#) to a point I probably would, but didn't appreciate it at the time, only now. [#LTHEchat](#) Katherine Haxton

A5 Reading T&L papers. Writing. Conferences, workshops, staff dev. Running T&L workshops. Evaluating my practice & publishing. PLN [#LTHEchat](#) Dr Daniel Belton

A5 [@dawnitoes](#) yes, agree with this. I teach in a way that would suit me very much as a learner, but never realised how much till now! [#LTHEchat](#) Katherine Haxton

A5 [@WarwickLanguage](#) spent the last decade removing barriers from maths learning, words like "we" can distance students so easily [#LTHEchat](#) Robert Jenkins

A5. Increasingly, social media playing a big role. Always someone with an idea, or who's tried it or to make me think [#LTHEchat](#) Bev Gibbs

A5 Lest not forget opportunities & experiences gained & (finally) meeting professionals e.g. [@HalehMoravej](#) from here! [#LTHEchat](#) Kiu Sum

A5: Theories, training and conferences all useful, but personal experience of being a learner is probably more influential [#LTHEchat](#) Theresa Nicholson

A5 a talk I saw about peer instruction: cut content, cover the basics better, build difficulty. Took me 8 years to 'get the idea' [#LTHEchat](#)

A5 Professional over passion. [#LTHEchat](#) Charles Knight

A5 [@LTHEchat](#) Default is that I teach how I was taught. Papert. Mayer. The shift to evidence based practice. [#ltthechat](#) Miles Berry

A5 [@kjhaxton](#) I love conferences. I especially love conference backchannels. So useful [#LTHEchat](#) Elizabeth Ellis

A5 [#LTHEchat](#) it's a good example of learning from practice...becoming aware of different perspectives Hilaire Graham

A5. All the artists I have worked with in HE - no formal pedagogical 'training' but an innate ability to inspire & communicate [#LTHEchat](#) music dance academy

A5: most important influence for me and my personal hero: Hermann Ebbinghaus (1850-1909) [#LTHEchat](#)

A5, my PhD supervisors, experiencing L&T in different countries, working with colleagues from different disciplines and culture. [#ltthechat](#) Alic lau

A5 Awesome Laurinda Brown of Bristol Uni School of Edu [#LTHEchat](#) Rob Grant

A5 Biggest influences: Working with awesome colleagues at [@spswonlineyork](#) [@spsw](#) [@UoY_Yorkshire](#), students I spoke to, OU course [#LTHEchat](#)

A5: my experience as a teacher and learner, and listening to students [#LTHEchat](#) Lisa Kidger

A5 especially learning about learning theories from antiquity > now, and a course on the theory of action & activity [#LTHEchat](#) Jules Tardy

A5 seeing people struggle to understand what the hell maths is has been driving force [#LTHEchat](#) Robert Jenkins

A5 [@rbrtjnks](#) [@Irene_Biza](#) I agree its who. And I nominate [@tinaoverton](#) and [@RossKGalloway](#) latterly [@Anna-kwood](#) [@anortcliffe](#) [#LTHEchat](#)

A5 attending conferences and seeing what others are up to, particularly the presentations that spell out the pedagogy [#LTHEchat](#) Katherine Haxton

A5 my action research with students and colleagues that helped us all to reflect on our practices [#LTHEchat](#) @LTHEchat Dr. Hala Mansour added,

A5 A hodgepodge of praxis, social learning, networked practice, learning environments and tech, human centred design, engagement [#LTHEchat](#) Elizabeth Ellis

A5 @HEreflections1 now that I understand :) [#LTHEchat](#) a melting pot with lots of external influences, pulsing away - needs a gif! Teresa MacKinnon

A5 Way to start a twitterstorm! Jane Donaldson 'Childrens Minds', Brenda Crows 'Play is a Feeling', William James, Wittgenstein [#LTHEchat](#) Rob Grant

A5 to make it simple: own experience as learner. Trying to put myself in the shoes of my students made me + aware of own approach Sarah Ney

A5 [#LTHEchat](#) influences come from a range of sources - pick n mix of the best bits - delivery styles, topic, student group so on.. Claire Ashworth

A5 Funny enough, writing a presentation sharing my co-create experience for Monday. Is emotional to met so many at uni [#LTHEchat](#) Kiu Sum

A5 Therefore, important influences are the people within a H.E institution from academics to students. Is a lasting memory. [#LTHEchat](#) Kiu Sum

A5 My 2nd year of Master in Ed sciences. Loved it and acquired many theoretical tools to inform my praxis (and play around) [#LTHEchat](#) Jules Tardy

A5 Finding out what works and doesn't work for students who are combining work and study [#LTHEchat](#) Ellen Roberts

A5 working memory theory, screwing up & figuring out how to do better, remembering that students are human beings, being respectful [#LTHEchat](#) Katherine Haxton

A5 who not what: @S_J_Lancaster and @Irene_Biza made me realise what I do was actually something worth sharing [#LTHEchat](#) Robert Jenkins

A5 own experience and student feedback, [#LTHEchat](#) Neil Withnell

A5: Is it too sycophantic to state that [#LTHEChat](#) has been my biggest and best influence? (Long may it continue.)

A5 Are we guilty of debating whether baking powder is better than self-raising flour or not, when there are people waiting to eat? Clive Buckley

[#LTHEchat](#) A5 just listening to students, and watching them learning, and learning from them. For a very long time now!! Phil Race

A5. (1) My own education (2) Experience good & bad (3) @ElenaRF!! (4) talking to - and getting to know - students (5) space to try [#LTHEchat](#) Bev Gibbs

A5 The students, colleagues, the curriculum, my training, personal experiences as a learner [#LTHEchat](#) Will Haywood

A5 experience (so old!) critical incidents (teaching business folk), raising son with communication disorder, and lit! [#LTHEchat](#) Teresa MacKinnon

A5: Research in cognitive psychology: understanding how human memory and learning works. [#ltthechat](#)

A5: Having a hearing impairment and ADHD has made me much more aware of the role of inclusive practice for effective engagement [#LTHEchat](#)

Some impressions

What is interesting is the enormous variation in responses to this question. It includes

- 1) Own learning experiences/education
- 2) Family
- 3) Students - and their feedback
- 4) Colleagues
- 5) Training eg PgCert / further study eg Masters, PhD
- 6) Curriculum
- 7) [#ltthechat](#)
- 8) 'I teach how I was taught'
- 9) experimenting - finding out what works/doesn't work
- 10) action research
- 11) social learning/ networked practice
- 12) 'not what but who' - specific people
- 13) theorists
- 14) attending conferences/presentations



This feedback helped me construct an on-line questionnaire which was then used in the [#creativeHE](#) conversation at the end of March.

Q6 What have been the most important influences on your pedagogical thinking and practices in the last 12 months? [#LTHEchat](#)

Q6 What have been the most important influences on your pedagogical thinking and practices in the last 12 months?



Sample of responses

A6 [@WarwickLanguage](#) [@LTHEchat](#) schools & [#FE](#) perhaps the biggest influence is the Government and their agencies e.g. OFSTED [#LTHEchat](#) Chris Sweetman

A6 [@patlockley](#) and the pedagogy of the o-GiFfed [#LTHEchat](#) Peter Matthews <https://twitter.com/LTHEchat/status/839579226659516416> ...

A6 [@patlockley](#) and the pedagogy of the o-GiFfed [#LTHEchat](#) Peter Matthews

A6 Research by [@john_hattie](#) and reading [@RacePhil](#) books, plus taking risks in workshops I run, not all staff can/do [#LTHEchat](#) Santanu Vasant

A6 Research by [@john_hattie](#) and reading [@RacePhil](#) books, plus taking risks in workshops I run, not all staff can/do [#LTHEchat](#) Santanu Vasant

A6 use of complexity theory & process philosophy have become v important to conceptualising practice Phil Wood

A6 TBH probably the skeptics like Birbalsingh who made me question & defend what could be easy adherence to 'progressive' pedagogy [#LTHEchat](#) Rob Grant

A6 More recently, reviewing online courses - helps assess my approach against others, reflect on what works/ doesn't [#LTHEchat](#) Matt Cornock

A6 [#ltthechat](#) revisiting the need to personalise learning and thinking how this could happen in a large-scale course Martin Rich

A6 [#LTHEchat](#) [@LTHEchat](#) Not doing any f2f now... But I guess [#Brexit](#) must feature large? Not to mention [#fake-news](#) & austerity cuts? Simon Rae

A6: Working with distance learning students, as it brings communication into sharp relief [#LTHEchat](#) Ellen Roberts

A6. First graduating cohort of mature online learners who refused to stand on the shoulders of giants and challenged everything! [#ltthechat](#) music dance academic

A6 [#LTHEchat](#) that a lot of good learning design is a lot like user experience design

((@patlockley))) added,

A6 nobody mentioned TEF yet... [#LTHEchat](#) Neil Withnell

A6 [@neilwithnell](#) surely TEF is not worth mentioning in this context. A bad influence at best. [#LTHEchat](#)

A6 [@cpjobling](#) but [TEL] an influence ?? [#LTHEchat](#) Neil Withnell

A6 sharing in [@LTHEchat](#), initiating MOOC for DBA students all over the world, do, reflect, learn, reflect ...

[#LTHEchat](#) Dr. Hala Mansour added,

A6 replacing "model answers" with plainly written "commentaries" hard work but worthwhile [@Tommybiscuits](#) [#LTHEchat](#) Robert Jenkins

A6 Always welcome for future project collaborations [@HalehMoravej](#) :) [#LTHEchat](#) *seeking opportunities here and there...*

A6 Also new approaches to student partnership in curriculum design and edtech development. #

A6 being reminded by [@ArmenianJames](#) that learning should be fun, and can be fun. Phil Race

A6 Spending time talking to lecturers and students about learning and teaching in their discipline (what works for their subject) [#LTHEchat](#) Matt Cornock

A6 Very honourable mention to Prof Carol Evans, who tries to clarify the muddiest pools in Higher Education. [#LTHEchat](#) Simon Lancaster

A6 Also new approaches to student partnership in curriculum design and edtech development. Elisabeth Ellis

A6 [@cpjobling](#) [@LTHEchat](#) haha answered to the "who" question, and realised afterwards it was a "what" ;))

[#LTHEchat](#) Jules Tardy

A6 Being asked to trail SCALE-UP & agreeing & my aero' team also volunteered to use SCALE-UP, after 6mths we had breakthrough [#LTHEchat](#) Ann Northcliffe

A6 [@LTHEchat](#) Principles of learner autonomy+implementation of peer feedback strategies. (Hi, joining your cool chat from Johanna Vaatovaara

A6 flexible learning, creativity, risk taking, students (and [#ltthechat](#)) [#LTHEchat](#) Neil Withnell

A6 realising that questions asked need to be clear and understandable and that replacing "we" with "you" is simply amazing [#LTHEchat](#) Robert Jenkins

A6 Last twelve months specifically? [@FabioArico](#) [#LTHEchat](#) I've started to think about self-efficacy. [#LTHEchat](#) Simon Lancaster

A6. I think the emergence of the concept of Scholarship of Teaching & Learning is important [#LTHEchat](#) Paul Taylor

A6 actually some negative influences, seeing how others do stuff and being repelled so trying to find another way [#LTHEchat](#) Katherine Haxton

A6 Undoubtedly the amazing [#codesign16](#) and [#codesign17](#) consultations on [#ngdles](#) by Jisc. Helped me synthesise a whole approach [#LTHEchat](#) Elizabeth Ellis

A6 Colleagues trying new activities when they could've stick to their routine, spending time doing so and sharing their experience [#LTHEchat](#) Jules Tardy

A6 discussions, mostly informal w/ fellow LTs, also teachers, ed devs, students. On the + formal side case studies, reports, etc. [#LTHEchat](#) Sarah Ney

A6 I shared [#LTHEchat](#) on our PGCert tonight. I wish someone from my cohort is on here and say it is the course. I wonder... [@Turing2014?](#) Alice Lau

A6: [@chrisinerantzi](#) [@suebecks](#) [@anortcliffe](#) [@RacePhil](#) [@ProfSallyBrown](#) and [@bonni208](#)'s excellent "Teaching in HE" podcast ... and [#LTHEchat](#) Chris Jobling

A6: A desire to make learning more relevant to students' experience and aspirations, to make it more personal to them [#LTHEchat](#) Theresa Nicholson

A6 Student feedback. MOOCs. Reading more about assessment theory. [#ltthechat](#) Miles Berry

A6: [#ltthechat](#) in the last 12 months, the best resource for pedagogical practice is <http://www.learningscientists.org> [@AceThatTest](#) Dr C Kuepper-Tetzel

A6. Thinking -> [@Jessifer](#) [@DigPedLab](#) for an emerging fundamental re-think Practice -> Sheffield [@TELShef](#) team and annual TELFest [#LTHEchat](#) Bev Gibbs

A6 [@pimpmymemory](#) [#LTHEchat](#) personal preference = eg learning in depth v last minute cramming, active v passive participation in lectures Martin Rich

A6 changing institutions! [#LTHEchat](#) Sue Wattling

A6 - disasters! Trying things, and learning from my failures - has been a big factor: and observing colleagues practice! [@LTHEchat](#) [#LTHEchat](#) david webster

A6 this one is simple. My students! [#LTHEchat](#) Claire Ashworth

A6 teaching via distance learning methods to students in China and UK, supporting students without face-to-face contact [#LTHEchat](#) Katherine Haxton

A6 [#LTHEchat](#) certainly use of lesson study to understand learning and adjust approaches Phil Wood

A6 It's got to be [@LTHEchat](#) [#LTHEchat](#) , reading more papers/studying for my MSc and being more reflective in my own practice Will Haywood

A6 Being involved in student led projects has opened heart + eyes + experiences + opportunities + finding identity [#LTHEchat](#) [@LTHEchat](#) Kiu Sum

A6 without doubt the changing political climate and thinking on open educational practices [#oep](#) [#LTHEchat](#) Teresa MacKinnon

A6 [@LTHEchat](#) can we have a "who" rather than a "what"? [#LTHEchat](#) Chris Jobbing

Some impressions

Again what is interesting is the enormous variation in responses to this question. Responses clearly represent the particular things that individuals are doing while recognising some of the changes that are taking place in the system including:

- 1) Changing political climate, changing institutions
- 2) Trends in education like OER and OEP
- 3) Being involved in projects
- 4) Reading
- 5) Studying for MSc
- 6) Use of particular techniques eg distance learning, lesson study, flexible learning,
- 7) My students - student feedback, new approaches to partnership, desire to make learning more relevant to students' experience and aspirations,
- 8) discussions, mostly informal with colleagues
- 9) MOOCs
- 10) reviewing online courses
- 11) negative influences - trying to avoid and find a better way
- 12) experimenting - trying things out and learning from failures, plus taking risks in workshops I run, asking clearer questions,
- 13) certain people



Concluding remarks

#LTHEchats are a great way to gain quick feedback from many participants about an idea and this was why I took on the challenge. From the responses above you can see that participants engaged with the ideas and I am really grateful for the thoughts and perspectives they shared. My brief synthesis cannot do justice to the conversation but I hope it captures a sense of what unfolded. The feedback I gained enabled me to create a better version of my visual aid for explaining the potential influences on a personal pedagogy. It also enabled me to design a questionnaire that reflects the diversity of influences on individuals pedagogical thinking and practices which I used a few weeks later in the #creativeHE chat.

Such conversations are a way we can develop new relationships the most important outcome for me was forming an on-line relationship with two of the participants (Will Haywood and Rachel Jackson) who then made significant contributions to the next stage of our exploration. Their articles on what a personal pedagogy means to them are included in this issue.

The idea of pedagogy not easy to elaborate and I was not surprised that some participants admitted to struggling with the vocabulary, or admitting that they lacked an appropriate vocabulary to describe the ideas. This was articulated by Ann Northcliffe *'Think I need a glossary of terms from this thread, lots of new ones for me already!'* To which Chrissi Nerantzi replied *'perhaps a group would like to work on such a glossary for the website?'* And that is the way new things emerge from such conversations.

Finally, I will leave the last word to Paul Taylor

pedagogy would be a fine word if we actually espoused what it means [#LTHEChat](#)

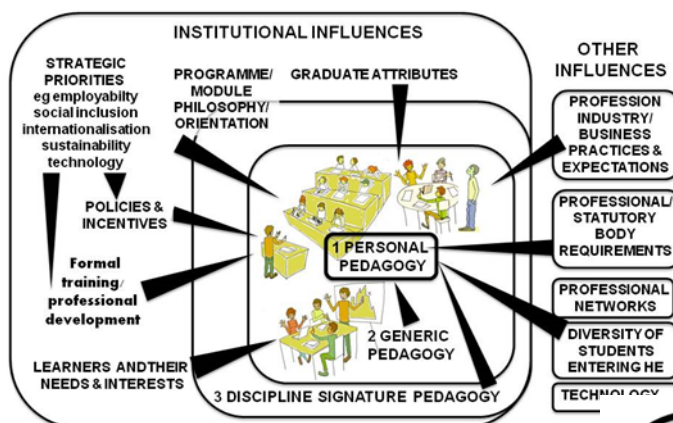
Acknowledgement

A sincere thank you to the organisers of #lthechat for the opportunity to lead a conversation and to all the participants who generously shared their time and opinions.

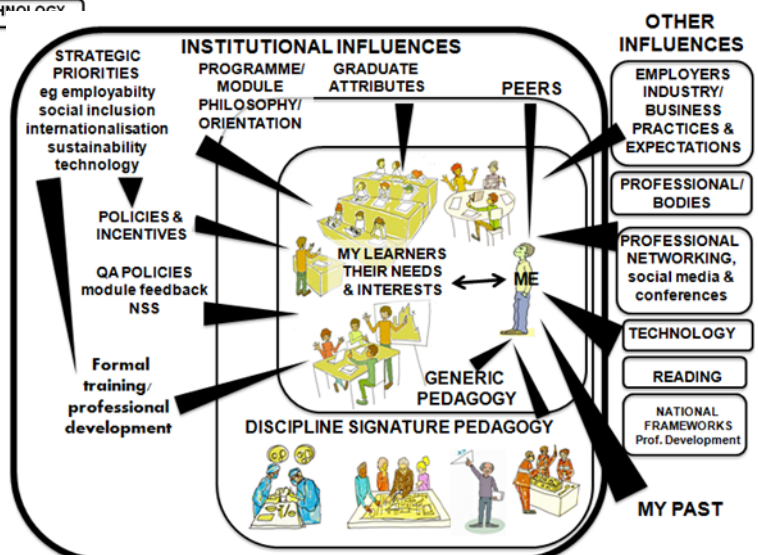
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My evolving conceptualisation of pedagogical practice





APRIL

April 2017

What does it mean to use Creativity in Problem solving?

Have your say

Email from Marci Segal

April 21st was designated World Creativity and Innovation Day by the UN following representations by Marci Segal (right) who leads World Creativity and Innovation Week which Creative Academic has been involved in for the last two years. In this email Marci invites Creative Academic to help show how creative problem solving might be used to help advance the UN's sustainable development goals.



It was an honour and a privilege to meet with Ambassador I. Rhonda King, Permanent Representative to the United Nations from St. Vincent and the Grenadines last week, on Thursday, April 20, 2017, to discuss the upcoming resolution to include World Creativity and Innovation Day among the UN Days of Observance. Ambassador King is the champion of this resolution.

Ambassador I. Rhonda King. Permanent Representative to the United Nations from St. Vincent and the Grenadines with Marci Segal, Founder, World Creativity and Innovation Day, April 21. 4/20/2017 Ambassador King is championing that all levels - government, public sector, and civil society - use creativity in problem-solving to make the world a better place and to make our place in the world better too, to reach the 2030 Sustainable Development Goals. [Please use the comment section below to include the questions you have.] A fuller report on the journey to the United Nations will follow in the next few weeks.

What does it mean to use creativity in problem-solving?

Would you like to contribute to the understanding of what it means to use creativity in problem-solving? I am preparing a document to submit to the UN describing what to expect when creativity is used in problem-solving at the government, private sector, and civil society, and welcome your voice, your additions. You will, of course, be given credit for your contribution and will receive a copy of the document for your files.

Marci Segal

marci@wciw.org

What influences the Pedagogical Practices and Thinking of Teachers?

Jenny Willis

Jenny Willis' career has involved many dimensions of teaching, educational management and research. She first worked with Norman on aspects of professional and personal development, creativity and lifewide learning as a Fellow at the Surrey Centre for Excellence in Teaching and Learning. She is a founder member of Lifewide Learning, conducts research and writes for its publications. She edits Lifewide's quarterly magazine and is also executive editor for CAM. Jenny has a PhD in socio-linguistics and is a Fellow of the Royal Society of Arts. For more information about her go to <http://no2stigma.weebly.com>.



Introduction

Context of the survey

In March 2017, Creative Academic hosted a 5-day google community exploration of personal pedagogies¹. A preliminary on-line survey led participants into reflection upon their own development. It posed the question

'Who or what has influenced your thinking, your beliefs and your values, so that you help other people to learn, develop, create and achieve in a particular way?'²

The aim was to develop the 'big picture' of participants' influences, but simultaneously began the process of targeted individual reflection.

This article examines the findings to date. The survey remains open and anyone who has not yet responded is welcome to do so at <https://www.surveymonkey.co.uk/r/personalpedagogy>.

Structure

The questionnaire began with an open-ended question, inviting respondents to list the 3 most significant influences on their development as a teacher. This was followed by 4 questions which asked them to rate a series of factors on various scales of influence: these included people and experiences, the contribution to individual thinking and practice, the focus of recent professional development and the influence of social media.

Respondents

Minimal biographical data were collected, simply the role of participants, their years of experience and gender.

As noted above, the survey remains open. To date, there have been 60 responses, of whom 60% are female (figure 1).

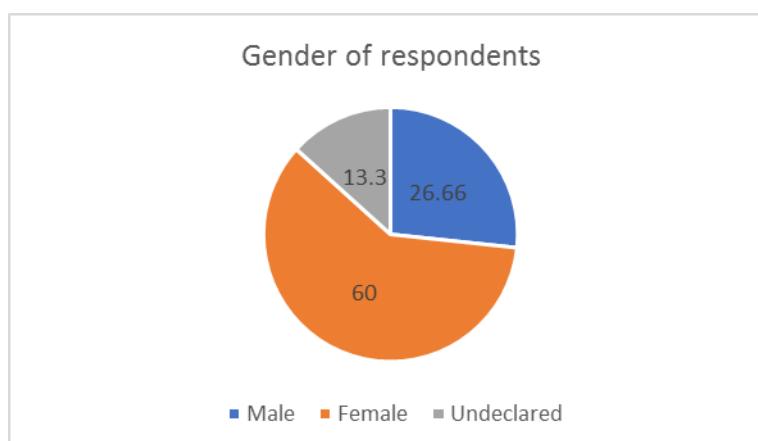


Figure 1, Respondents by gender

It was anticipated that most, but not all, would have experience of working in Higher Education. Responses (figure 2, overleaf) confirm that the highest proportion (38%) were teaching in this sector, followed by 19% who had a developmental role in HE.

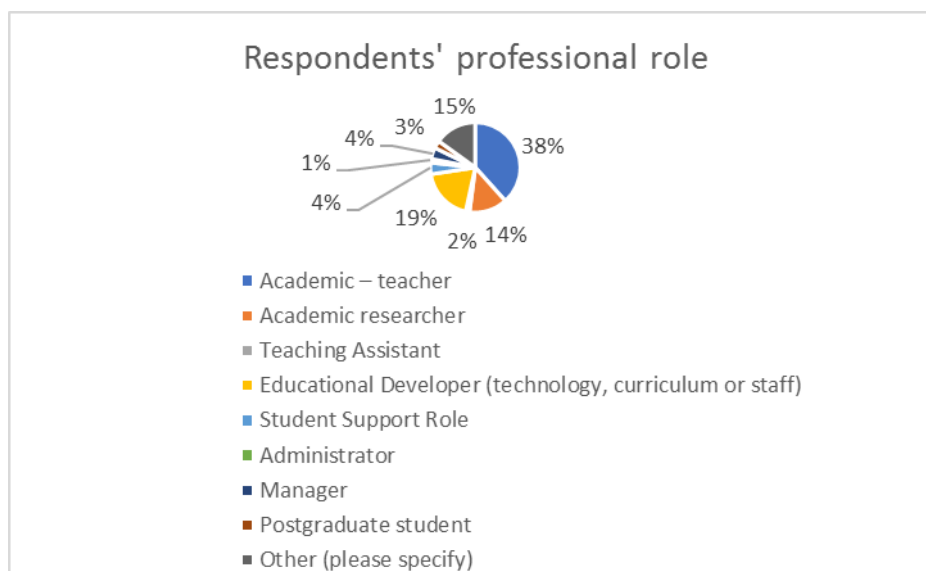


Figure 2, Respondents' roles in Higher Education

In addition to the specified roles, 15% of respondents offered a narrative description of their role. These included:

- I am a university ESP teacher and teacher trainer involved in EFL teachers' CPD
- Librarian
- Creative practitioner
- Facilitator (on-line and face to face); assessor, coach
- I am currently in the process of seeking a doctorate; my teaching is offered in other venues and it is not yet formally in an academic setting
- Retired academic
- Independent educational consultant (x2)
- Higher Education facilitator
- Teacher and researcher

The final biographical question asked how long respondents had been working in Higher Education. As figure 3 shows, nearly half (43.3%) had more than 15 years' experience, whilst 25% were in the first 5 years of their career. 13.3% were not currently employed in the sector. From responses to the previous question, we can assume that these were a mixture of retired people and others working in a different educational sector.

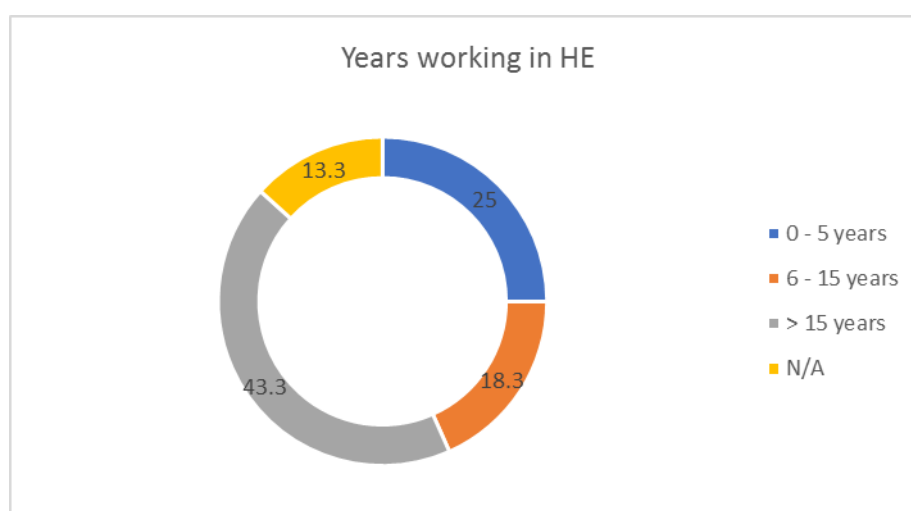


Figure 3, Respondents' experience of working in HE, by years

Findings

Question 1, What have been the three most important influences on your formation and development as a teacher?

This question preceded examination of specific potential sources of influence, thereby producing a picture of participants' own views which could subsequently be compared with their assessment of the influence of specific people or contexts.

Each respondent's replies were given in 3 separate lists to this question. Responses they identified in list 1 were:

- Personal/professional experience
- Role models
- Experience as a learner
- Family
- Students' responses
- A mentor
- Formal training
- A personal characteristic or disposition

Some sample comments relating to these were:

My own experiences as a student on creative courses(R25)³

Lifelong experience of observing teachers (R50)

Being allowed to try something different (R57)

Newspaper article about a teacher in a short list for a prestigious award - his approach (R31)

My international on-line peer group (R59)

Remembering kind teachers who made me feel valued and wanted (R19)

Burning curiosity (R44)

My faith (R43)

My own passion for learning (R58)

Interaction with students across sectors in 30 years career (R33)

Grounded cognition (R53)

Despite the diversity of these comments, they nevertheless cluster around some key themes: self-motivation and personal experience are highly significant, as is the impact of a role model, who might be someone known personally, or a leader in the field of education who has inspired the individual. Commonly cited names were Ken Robinson, Paulo Freire and John Dewey.

Responses in the second list of influences mirror those already mentioned, though in differing proportions as we shall see (figure 4):

- Role models
- Personal characteristic or disposition
- Student response
- Formal training
- Experience
- Family
- Experience as a learner

Some typical comments here were:

Motivation from a passionate educator (R15)

Someone I worked with who saw something in me, passion that I hadn't recognised in myself when I took time out of teaching (R37)

My CPD both formal and informal (R30)

Continual self-reflective practice and the chance to discuss ideas with colleagues, including through observations (R31)

Unlearning (R42)

In this second list of influences, the importance of formal, pedagogical training scores highest, followed closely by personal experience, role models and personal disposition.

The third list of influences cited in response to question 1 is largely similar to the first two, but there is evidence of respondents having to think more widely, hence we find the inclusion of ‘technology’, ‘sharing ideas’ and ‘subject’. The sources were:

- Personal characteristic or disposition
- Experience
- Formal training
- Role models
- Technology
- Sharing ideas
- Student response
- Experience as a learner
- Subject

These themes are illustrated by comments such as:

The positive feeling to help others learn (R4)

My own satisfaction and expectations (R27)

My talent to motivate others (R44)

Personal experience of connected learning online (heutagogy) (R33)

Literature, blogs, news (R22)

My peers and colleagues with whom I can discuss ideas (R25)

The subject that I am teaching at the time (R26)

The three subsets clearly focus on a small number of themes. Figure 4 compares the responses in each list, to highlight those that are dominant.

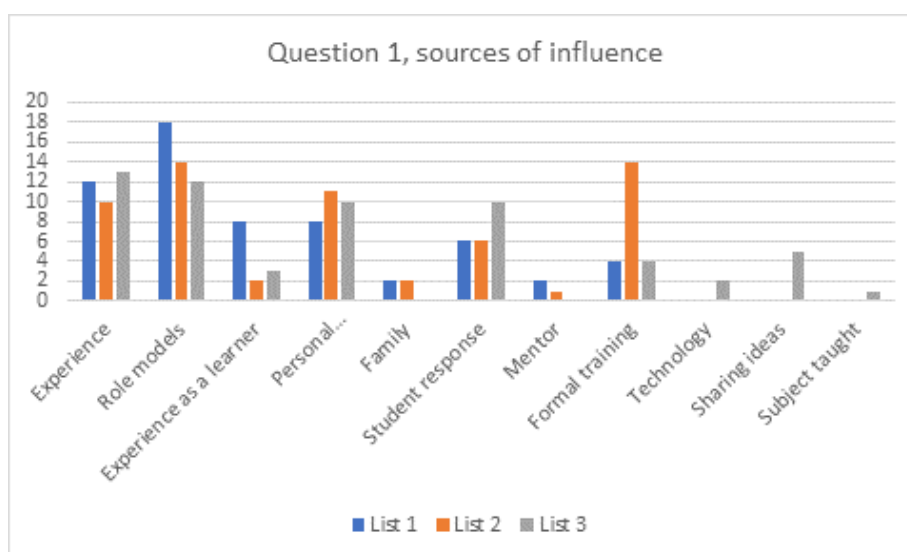


Figure 4, Sources of influence by subset

If we combine the sets of answers, we can see which influences are most important. The total number of responses given by the 60 respondents was 180. Figure 5 shows the overview for each of the identified 11 themes. We find that the greatest influence comes from role models (44 mentions), people both personally known as practitioners and others known only through their work as theorists or academics.

The second most significant influence on respondents is their personal life and professional experience (35 mentions).

Individual disposition such as motivation or the desire to help others comes third, with a score of 29, implying that teaching continues to be a vocation of choice.

Joint fourth in importance, with a score each of 22, are student response and formal training. So, whilst teachers are alert to the impact they are having on their students, and are responsive to this, they are also cognisant of the need for them to have formal instruction, both initially and as ongoing CPD, to maximise their pedagogical skills.

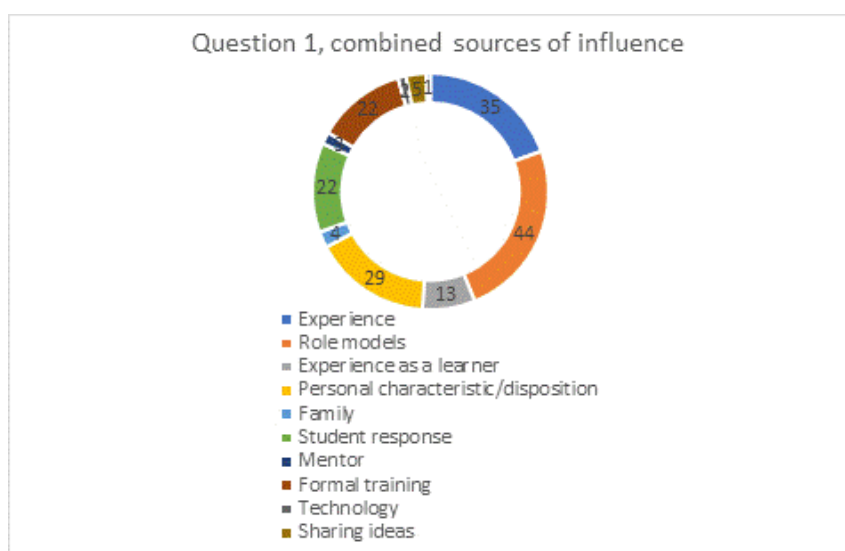


Figure 5, Overview of perceived sources of influence

This, then, is respondents' instinctive view of the influences on their development and thinking as teachers. We turn now to their responses to the remaining questions to see how consistent their perceptions are.

Question 2, Which of these people or experiences have made a significant or very important contribution to your formation and development as a higher education teacher over the course of your career?

Question 2 offered a set of 18 potential sources of influence, and asked respondents to rate these on a 4-point scale No contribution/Small contribution/Significant contribution/Very important contribution. The set includes the themes already identified by respondents, but is more wide-ranging. Totals for each theme vary between 58 and 60 as some respondents did not score all themes. The results are set out in figure 6 on the next page.

According to these responses, the most significant influence is L, Experimenting with your own teaching, with a mean score of 3.6. R, Own experience as a learner is fractionally less, at 3.59.

Gaining and using student feedback scores 3.32, teachers worked with in the past score 3.29, and reading about teaching and learning scores 3.27.

These influences are all consistent with high scorers in question 1, with the exception of personal disposition which was not included in question 2.

It must also be noted that all 18 potential influences were recognised as significant, with none scoring less than 2.22. This, the lowest score, was awarded to the influence of people outside education, suggesting that such sources of influence may be under-valued.

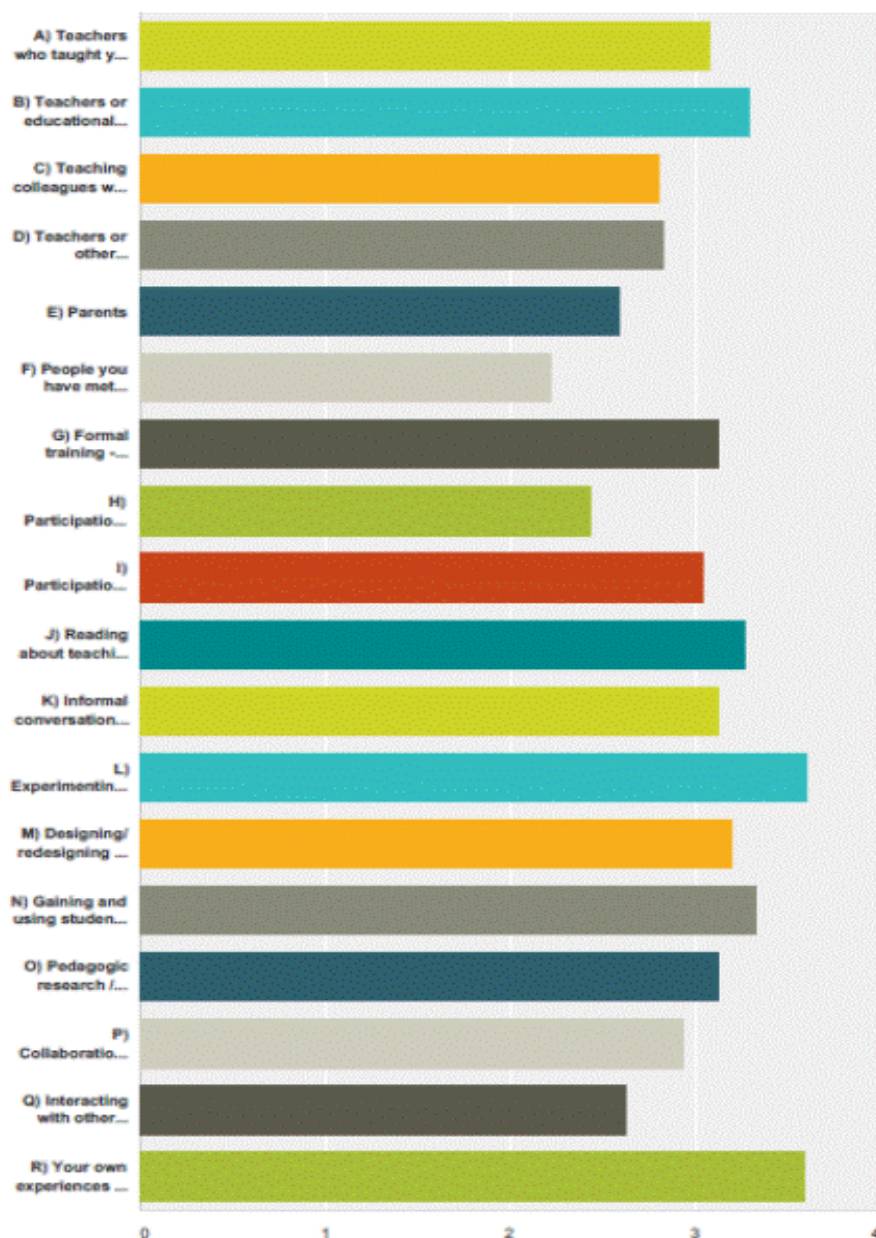


Figure 6, Question 2, Comparative significance of pedagogical influences

Quantitative data were complemented with some narrative responses which seem to allow individuals to ‘let off steam’ e.g.

I could gain much more from student feedback were it not based in a consumerist model. The current surveys offered students online at the end of a term provide little worth knowing for a true teacher. I make it my business to ask students periodically how they are doing in my classes. I find they are quick to identify areas where they are having problems. But by discussing it with them personally, it is possible to ferret out where their own behaviors play a role in those problems rather than merely seeing this from a supply-side ideological beginning point and presuming that the producer must somehow satisfy the consumer. I see the current practices of student consumer surveys as a squandered opportunity.

I've learned from other innovation professionals inside and outside of academia (like Jeanne Liedtka at the Darden School at UVA, folks at Stanford's d.school, local start-ups, and people employed as innovation managers in corporations), my own reading on how to promote creative confidence, books and articles on creating an innovation-centric culture in organizations, and my friend David Helfand who invited me Quest University in Canada while he was president after I watched his TED talk on Designing a University for the New Millennium.

Question 3, For each item please indicate the contribution it has made to your thinking and practice as a teacher during the last 12 months.

Question 3 listed 21 possible experiential contributors to respondents' thinking and practice, and asked them to rate each one using the same scale as for question 2. Most of the descriptors are lengthy, so the results do not easily lend themselves to graphic representation. Instead, the scores are shown numerically, in Table 1.

As previously, some respondents did not answer this question, presumably because they may no longer be teaching or practising. Even those who did respond sometimes omitted certain responses, hence totals vary from 51 to 53.

Table 1, Question 3

	No contribution	Small contribution	Significant contribution	Very important contribution	Total	Weighted Average
A) Participation in a formal face to face or blended learning professional development programme ie for a qualification like a PGCert or Masters qualification	35.29% 18	21.57% 11	13.73% 7	29.41% 15	51	2.37
B) Participation in on-line courses	28.30% 15	37.74% 20	22.64% 12	11.32% 6	53	2.17
C) Participation in teaching and learning events/ workshops/ conferences	13.21% 7	32.08% 17	37.74% 20	16.98% 9	53	2.58
D) Participation in research-related conferences	23.08% 12	28.85% 15	26.92% 14	21.15% 11	52	2.46
E) As a contributor (eg presenter or facilitator) to a professional development event	24.53% 13	13.21% 7	47.17% 25	15.09% 8	53	2.53
F) Reading (any sources)	1.89% 1	7.55% 4	41.51% 22	49.06% 26	53	3.38
G) Informal conversations with colleagues	1.92% 1	30.77% 16	30.77% 16	36.54% 19	52	3.02
H) Experimenting within own teaching / student development practices	5.66% 3	7.55% 4	30.19% 16	56.60% 30	53	3.38
I) Designing/ redesigning a module, programme or support service	13.21% 7	18.87% 10	33.96% 18	33.96% 18	53	2.89
J) Disciplinary research	23.08% 12	21.15% 11	44.23% 23	11.54% 6	52	2.44
K) Pedagogic research focused on teaching and learning	15.09% 8	26.42% 14	41.51% 22	16.98% 9	53	2.60
L) Collaboration with one or more colleagues on a teaching and learning project	17.65% 9	23.53% 12	31.37% 16	27.45% 14	51	2.69
M) Participation in an on-line forum or special interest group mail list	11.32% 6	41.51% 22	28.30% 15	18.87% 10	53	2.55
N) Use of social media like Twitter, YouTube, Blogs	16.98% 9	28.30% 15	24.53% 13	30.19% 16	53	2.68
O) As a member of a project team	30.77% 16	25.00% 13	26.92% 14	17.31% 9	52	2.31
P) Working with people from business, industry or local community	40.38% 21	28.85% 15	21.15% 11	9.62% 5	52	2.00
Q) Receiving and using student feedback	9.62% 5	25.00% 13	36.54% 19	28.85% 15	52	2.85
R) Completing an annual or periodic review of a module, programme or support service	40.38% 21	26.92% 14	25.00% 13	7.69% 4	52	2.00
S) Participation in external examining or other peer review process	38.46% 20	28.85% 15	25.00% 13	7.69% 4	52	2.02
T) Applying for a teaching fellowship or other form of recognition	49.02% 25	25.49% 13	15.69% 8	9.80% 5	51	1.86
U) Responding to institutional policies or priorities (eg employability or internationalisation)	39.22% 20	35.29% 18	19.61% 10	5.88% 3	51	1.92

An immediate observation is that the mean scores for this question are lower than those for question 2, implying that the contributors were less significant than those included in question 2. They range from 1.86, Applying for a fellowship, to 3.38. Two experiences shared this top place, Reading and Experimenting with own teaching.

A few complementary comments were added, e.g.

For the record, while I teach three courses per semester for the local state college, I am retired from the university system and teach part-time. Hence the lack of participation in conferences, training et al.

These was also my first year and the UK (sic), and I must say that institutional and market pressure on teaching and research is utterly ridiculous. Were this to happen in Italy, the least that could happen would be mass civil resistance, if not actual riots (like happened a few years ago when Berlusconi tried to fully marketise Higher Education)

Once again, some respondents use this opportunity to express their political views on educational issues.

Question 4, Over the last 12 months, what areas of your work have provided the focus for your professional development? Please tick all the boxes that apply.

In question 4, respondents were asked to rate 16 possible areas of professional development, using the scale 1 = small to moderate focus, 2 = significant focus, 3 = major focus. 53 people answered the question, but were asked to tick only those boxes which applied to them, hence totals vary from 48 to 52 checks. The results are collated in figure 7.

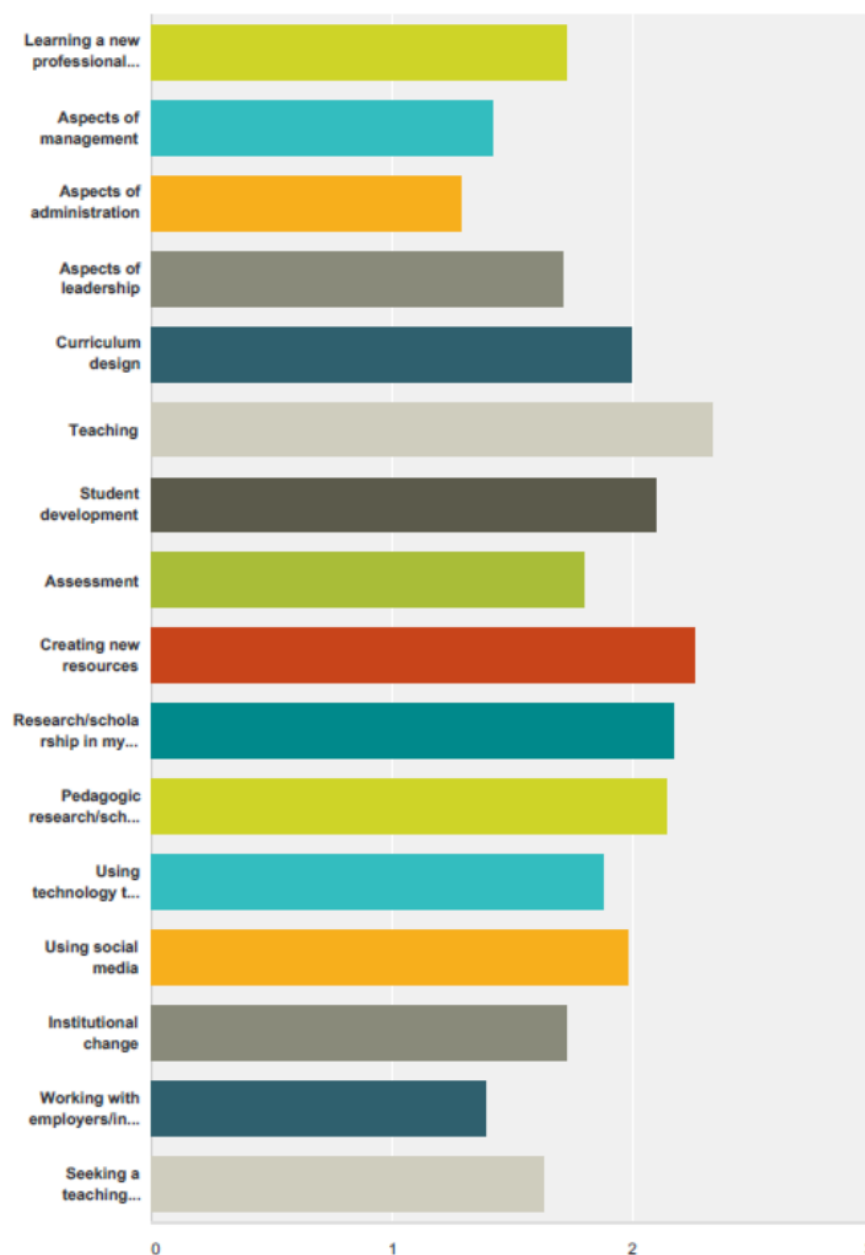


Figure 7, Question 4, Recent focus of personal CPD

The dimension which had greatest CPD activity was teaching (mean score 2.33). Given that the survey was completed mainly by members of Creative Academic, it is not surprising to find that creativity was a major focus. Creating new resources scored 2.26. The third most active area was disciplinary research (mean 2.17) followed by pedagogic research (2.14). This would indicate that CPD is closely related to respondents' everyday roles.

As before, respondents do not reveal an interest in business, which scored 1.39, nor in management (mean 1.42) or administration (1.29). These findings do not bode well for future administration of HE institutions by experienced academics.

A small number of narrative comments expand on the quantitative data, all of which centre on the disciplinary interests of the writer and show the personal initiative taken:

I constantly seek to inform myself about both discipline-related scholarship and pedagogical scholarship. I seek it out on my own using library resources and online sites. I do participate in some online sites discussing these subjects as well. I have successfully competed for a week long seminar at the US Holocaust Museum and Memorial this summer, as preparation to teach two new classes next fall in peace and justice studies and Genocide studies.

My own continuing professional development in my specialist area of interest (theatre and performance)

Disciplinary and pedagogic research is the same in my case

So, whilst no explicit mention is made of the individual qualities revealed as significant in question 1, these words demonstrate those same qualities of motivation and dedication.

Question 5, What forms of social media help you learn and develop your thinking and practice as a higher education teacher?

The final investigative question asked respondents to report on their use of different forms of social media. There was no attempt to quantify the degree to which they used these so the findings are mere indicators of resources used. 49 people replied to this question. The results are summarised in figure 8.

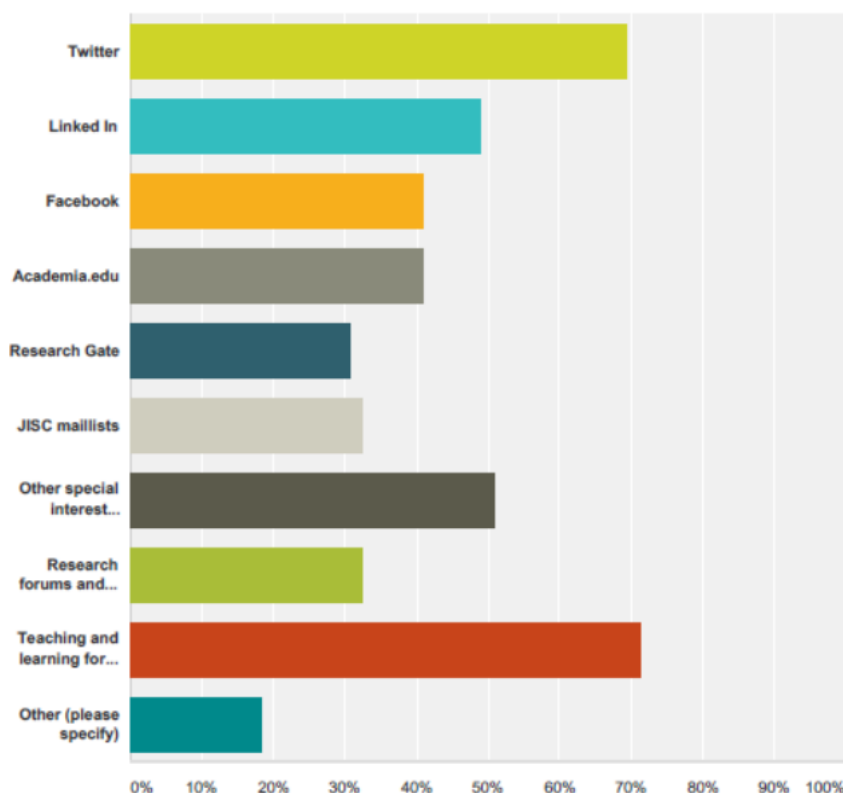


Figure 8, Question 5, developmental use of social media

The figure shows us that Teaching and learning forums and networks are utilised most (score of 35) but Twitter is employed almost equally (score 34).

Other special interest mail lists and Linked in come next, reinforcing the disciplinary focus of respondents.

9 respondents added alternative media. These were:

Discussing with others

Blogs

#creativeHE Google+ Community; MMU_TicWebinars; ALDinHE International Webinar

Tutor public blog

I'm a creative practitioner rather than an HE teacher, so I find Pinterest and other creativity blogs useful. Also reading around the subject has helped develop my understanding, both personally and for my work.

G+Community - CreativeHE and the ones from my alma mater which include larger public group and private smaller groups

Teacher/teaching blogs

I have an account with Mendeley which often suggests further readings according to the articles I have saved offering pointers to new research produced. Google online discussion forums, in conversations I recently engaged with (e.g. creative academic!); such inspiring areas and my thanks goes to Prof Norman Jackson, Jenny Willis, Chrissi Nerantzi and all involved.

Comes under twitter but specifically #LTHEchat Google+ communities Slack communities Google+ hangouts, interactive webinars

These detailed responses show that media are a significant part of respondents' professional lives, so it is surprising that they did not feature more prominently in replies to question 1.

It is encouraging to read that some of the work Creative Academic has been leading is having an impact on current, and hopefully future, generations of teachers.

Towards an interim conclusion

If the responses to this survey are typical of teachers in HE, we can begin to identify the areas which they perceive to be of significance to their professional development (question 1). Detailed disaggregation of themes in questions 2-4 enabled us to compare responses, and we found a high degree of consistency, allowing us to consider the responses reliable.

I have found that role models are very important sources of professional development. This may be colleagues or others observed teaching, or may be renowned educationalists or theorists. Those mentioned by name span over a century, dating back to Dewey and Vygotsky. Given the importance of such models, we can understand the popularity of modern media as a means of sharing views and learning from like-minded professionals.

Second to this, personal and lifewide experience is recognised as helping professional development. Closely related to this is personal disposition, including the motivation to enquire and persevere. I have suggested that teaching continues to be a vocation for most of our respondents. Perhaps for this reason, they are discipline and pedagogy focused, showing little interest in moving into administrative or managerial roles.

Responses will also be reassuring to those involved in the formal training or CPD of teachers. They clearly appreciate having had a sound formation and are enthusiastic about sustaining their professional skills.

Finally, respondents demonstrate that, with experience and training, they are responsive to their learners and rely greatly on the feedback received, whether informal or formal.

Together, these findings reflect the complex process by which teachers are inspired, trained and ever-evolving in their practice as the environment changes or individual contexts demand.

Acknowledgement

I am most grateful to Norman Jackson for allowing me to make this analysis of the survey he devised for the Google community event.

References

1 <https://plus.google.com/communities/110898703741307769041>

2 <https://www.surveymonkey.co.uk/r/personalpedagogy>

3 R1, R2 etc refers to Respondent 1, 2 etc. They are named in the sequence in which they responded.

Some personal reflections on the #creativeHE conversation

'Who have been the biggest influences on your pedagogical thinking and practice and why? #creativeHE conversation

The question on DAY 1 Monday March 27, was 'Who have been the biggest influences on your pedagogical thinking and practice and why? Participants' responses reveal the complex and personal ways in which they have been influenced as a teacher and a person. Teaching experiences and interacting with learners, and being taught by particular teachers who inspire seem to be the main influences, together with upbringing.

David Andrew

Influences (possibly too revealing :-))
Having to understand why I was underachieving at school
teaching myself in context of that
Engaging with learning communities ie WEA when at school
being a yippie
independent study while at university
thinking a lot
playing a lot - pranks
The 1924 Congress of Soviet Psychologists
More fun
Barrie Stevens, gestalt and radical/humanistic psychology
Anthony Wilden
Physical - embodied learning and exploration

Dee Vyas

Who influenced my pedagogy is a good question to start with. I was not a teacher or having taught until the Dean of my old faculty informed me I would be training him and the Faculty Sec. Wow?? How do you teach, what even was pedagogy? As I taught more I realised that the best way to help people learn was how I wanted to be taught. By doing and not as had been in my experience just told to learn. The second person to influence me mostly was my mother. She believed that being honest and open when talking to others and trying to understand others was important. This was an important part of my belief to develop as a teacher

Helen A

There have been some vignettes or pivotal moments for me throughout my career but the one that has stayed with me and influenced me as a learner as well as a teacher is this one. When I began working in a Conservatoire with dance students, I took on responsibility for revising and then convening the final undergraduate dissertation module, which could take a number of forms as is typical at many institutions (e.g. wholly written, practice-based etc).

What most surprised and excited me was the way in which the young artists engaged with theoretical ideas and used them as a springboard from which to develop new work, new knowledge, new ways of thinking and knowing. It was refreshing to see such playful minds demonstrating a degree of disregard for the rules and norms of what I considered to be 'traditional' academic and practice, and having the confidence to challenge and critique long-held ideas without agonising for too long about justifying their thinking before actually starting to handle and work with the materials. Many new understandings and mis-understandings were stumbled upon from this very 'hands on' approach to artistic practice and it occurred to me that at times the reverence with which I approached my scholarly research and teaching held me back, whereas swapping to my other hat of 'practitioner' actually freed me.

I have always been in awe of that cohort of students - instead of standing on the shoulders of giants, they clambered all over them, and often leapt off to reach new places above, behind and adjacent. It has significantly influenced the way in which I think about hierarchies and ownership of knowledge since.

Paul Kleiman

I had plenty of time, on a long train journey, to think about this question: "Who or what has influenced your thinking, your beliefs and your values, so that you help other people to learn, develop, create and achieve in a particular way?" So here goes....though it's more in the form of a set of postcards or vignettes rather than a neat linear narrative (I can already hear "there's no such thing as a neat linear narrative when it comes to learning!". I can think of many really important influences and instances...so here's just a couple of early ones.

Vignette 1

Studying theatre design at a UK art school in the 1970's (a time of genuine 'edge of chaos' learning). I was having a tutorial with the Head of Department Richard Negri - a wonderful designer and teacher (he designed the Royal Exchange Theatre in Manchester). Engraved in my memory bank is Richard saying to me "The trouble with you, Paul, with all your various talents, is that you do this..." And he walked his fingers to the edge of the large table that served as his desk and work space. "But when you get to the edge, you look down and around, and you do this..." And he walked his fingers gingerly back from the edge. "...when what you really need to do is jump!" And his fingers ran up the edge and jumped off...and he started flying them around the room. "You're afraid of falling - which is natural - but what if it means you actually can fly creatively?"

I took that lesson to heart.

Vignette 2

Also involving Richard, but this time he was assessing a scale model I'd made for the musical Hair. I had decided to set it on and around a gigantic scrap heap of Americana, and had spent weeks making 1:25 scale models of cars, jukeboxes, telephone booths, old neon signs, etc. Above the scrap heap I'd placed a giant swing with a Stars and Stripes seat.

The 'assessment' consisted of Richard pacing around my model muttering "You don't need this, and you don't need that..." and pulling out and chucking at me to catch virtually every piece I'd made....except the swing. At which point he stopped and said "Ah, you DO need THAT!".

What he was trying to show in his inimitable way, was that creative design (and, as I was to discover much later, undertaking research or designing a curriculum) always starts with identifying the essential element, question or problem. You can't really start designing anything properly until you do that. That's another lesson I've tried to put into practice **my whole working life**.

Simon Rae

...influences.. I've had to think about this.

One primary teacher I remember used to carve faces out of big bars of carbolic soap, but that's not a pedagogy really is it? (Although innovative use of available resources is good practice!) One teacher taught me to hate favouritism; all the kids knew he had favourites to whom he gave more stars than other kids, which counted towards the house prize. His house usually won. And at the same school I did learn (the hard way) that recourse to the cane is not good pedagogy.

I had an art teacher who I admired, and at Art College I was lucky enough to have a week with Bruce Lacey (https://en.m.wikipedia.org/wiki/Bruce_Lacey). His personal pedagogy seemed to be 'Anything goes', a 'Just do it' approach to life that is very attractive for the few it works for but one that can leave a wake of broken dreams for those for whom it doesn't.

That was all before I, or most people I suspect, had heard of pedagogy. Even in the 70s doing Teacher Training I never heard the word, although I did pick up a couple of tricks-of-the-trade (Start hard, you can always soften up...but you can never go from soft to hard). (That one kept me out of face to face teaching...I couldn't do it.)

By the time I got into online teaching I was at the Open University. The pedagogy I picked up was largely from the Masters in Open and Distance Education (MAODE) I did, the EU projects I was involved with researching into Networked Learning, and OU colleagues. Conversational Frameworks, Formative Feedback and Assessment for Learning featured large.

My own personal pedagogy is to do with helping learners know what they really, really want to learn and helping them to understand that unless they really, really want to learn something then even the best teachers in the world can't help them ... and that learning isn't everything.

Mike Wride

My personal pedagogy is influenced greatly by two things; growing up in Somerset in the 1970s and 1980s and being immersed in nature and a rural community, in which the processes and cycles of nature were appreciated and participated in.

And secondly, my training as a developmental biologist. To study embryonic development one has to have a great appreciation of movement and change and processes including transformation and differentiation and the relationship between parts and wholes (incidentally, I am now using this way of thinking (and feeling) in my new role as an academic developer).

In an embryo, the genome is present in the fertilized egg. Thus, the idea of the fully formed organism is already there. Similarly, the potential for creative development remains in all of us; staff and students alike.

Relating this to teaching (and learning), I realise that I have always preferred a process orientated, iterative approach in my teaching. I've never been as 'hung up' on purveying the 'hard facts' to the students as I have been of trying to reveal the creative processes involved - whether it is a scientific discovery or indeed the development of form.

In terms of curriculum, I've always felt it good to have an idea of where we are going at the beginning. The idea of the whole curriculum should be there in the first lecture - not so much in an outcomes-orientated way but in trying to get across a feeling of what it means to be led by the whole from within the parts. Where the parts are both the students and the fragments of knowledge we are trying to imbue in them; to help them see the whole. Isn't this, after all, the idea of a coherent curriculum?

I had the pleasure of teaching on the MSc in holistic science at Schumacher College and tried out an experiment where I asked the MSc students to imagine themselves as cells in the organism of their class departing on a journey at the beginning of the period of teaching. It was cell biology as social constructivism! We all grew as the two weeks of the teaching period advanced, but it was an organic and creative developmental process.

I feel that this process-orientated and organismic approach is truly creative and truly transformative. It moves our thinking away from mechanistic, linear and reductionist thinking. And the feeling of wholeness is also associated with creativity.

However, challenges remain. As Charles Birch said in 1988 in a pivotal article about Whitehead and Science Education "It is one thing to call for a science and its teaching that is organic, ecological and relational rather than mechanistic and compositional. It is quite another to put it into practice"

Russ Law

Two themes seem to run through a journey through my "personal pedagogies", as I reflect on how things have developed in the course of my career as a teacher, then school leader, then tutor, facilitator and coach. The themes are, first, the changing professional emphasis in teaching, in which learners who engage in their own improvement make better progress; and, second, the pathway of my career from fairly directive teaching to roles in supporting others in their own learning and development.

Early in my teaching career, I noticed with interest that a class I "inherited" from a colleague with severe restrictions on his own mobility came with a whole set of independent skills, habits and competencies. These included routinely dealing with classroom organisation, such as handing out and collecting up books, or cleaning up after artistic activities, as well as wider responsibilities, especially during physical education activities. I see now that this sowed a seed in my pedagogical thinking about the capacity of learners to manage themselves and each other.

Over the years, there has also been a growing realisation, supported by research and practice, that self-driven, self-managed improvement such as feedback, self-assessment and pupil reflection and ownership of strategies, is the most effective factor in learning and progress.

Later, as I stepped into leadership and away from the classroom, I had no option but to rely on the abilities of other adults, as well as children, to bring their own creativity and skills to bear, within a framework of expectations, curricular materials and a sharing ethos, in a system with several parallel classes in each year-group. This provided very good conditions for shared learning by adults, with the exchange of numerous ideas, practices and values. Although we didn't know the term then, we were using strong professional learning communities that were highly self-motivated.

Fast forward to the present, and I have found myself able to embrace the concept and practice of facilitation, with no expectation of having all the right answers (although some background knowledge of the relevant topics and fields is a must). In parallel, as a coach on different school leadership programmes, I've discovered the amazing power and satisfaction of supporting others by eliciting from them their own capacity to address internal and external challenges, issues and aspirations.

Isobel Gowers

Personal pedagogy - who or what has influenced me?

My first memory of thinking about teaching was when I was doing my A levels and comparing my two maths teachers. My mechanics teacher was undoubtedly an excellent mathematician but he could never get why I couldn't understand new concepts so he couldn't help me to learn. In contrast, my pure maths teacher didn't seem so mystical, took it in his stride when I couldn't understand explained things in multiple ways with endless patience and hence I learnt a lot more pure maths than mechanics. I think back to this when students are struggling, I try to be patient and find alternative ways to explain things but I do sometimes have sympathy for my mechanics teacher when students ask me about something I cannot remember not understanding and I struggle to connect it to something they can understand.

Another person who has influenced me is Professor Neil Jones who taught me genetics at Aberystwyth. His teaching certainly had an effect on me as I went on to do genetics in my PhD and for 5 years as a post-doc. There are a few things that I remember positively, one thing was how he made it relevant, I was doing equine science and he included horse examples in his lectures. I think there were about 200 in the cohort and we are talking in the time before clickers, in fact it was acetates not PowerPoint but those lectures were great, they made me think for myself and problem solve, I spent much of the lecture confused but by the end of it I had understood, but not only that it seemed to stick.

I suppose some of my negative experiences also have influenced me. I have no idea what I studied in the ecology module, this a topic I am interested in but the lecturer used to turn the lights down to show slides, I vaguely remember pretty woodlands and a slightly monotone voice and then I dozed off. Equally during my MSc I remember being taught by two internationally recognised cardiologists who used their paper photocopied onto acetate as their visual element, I cannot remember much about cardiology either. Both these experiences have altered how I teach, I paid particular attention to my voice coach whilst doing my PG Cert (and have now followed her example and introduced many of my students to Hairy MacLary) and also to the visual resources that I use.

More recently I have been more interested in the social aspects of learning, everything from learning in a group during my PhD, discussing ideas with my peers and post-docs to seeing my students learning whilst developing their own communities. This has been further emphasised as I have got involved with initiatives like #BYOD4L and #CreativeHE, I have taken part of that sense of community and tried to encourage the same ideas within my own institution as well as networking beyond the institution.

Chrissi Nerantzi

Who or what has influenced your thinking, your beliefs and your values, so that you help other people to learn, develop, create and achieve in a particular way?

I have been a foreigner all my life. I am Greek, born in Germany, living in the UK. In between I was living in Greece. I suspect that this life adventure has somehow influenced who I am, how I have become who I am and who I am becoming, if that makes any sense.

Learning to survive, learning to adapt, learning to be resourceful, learning to connect with others, learning to thrive has always been part of my journey and still are. Often it has been and is a struggle, a struggle of a creative spirit that sees opportunities in obstacles and is positive about the future.

To love learning is fundamental. The desire and passion to learn will help us see the world around us and within us in a fresh light. Sharing this passion with others is so valuable for our personal and collective growth, to inspire and be inspired. My children have that bug for learning and I have managed to infect others too, people I work with, just through being me.

REMEMBER If you have not already taken part in the survey, you are still welcome to do so.

Just go to <https://www.surveymonkey.co.uk/r/personalpedagogy> and follow the instructions. All responses are anonymous and no-one will be identified in our analyses.

How Does 'MediaWorks' Work?

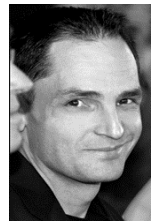
Tony Dias and Jullus Dobos interviewed by Norman Jackson



Anthony Dias is an Instructor in the Digital Audio Technology (DAT) department at Cogswell College and serves as the Visual Director for Cogswell MediaWorks. He is a DAT Cogswell Alumnus. Before transferring to Cogswell, he studied computer arts and animation at West Valley College.

Since 2001, Anthony has produced work for clients largely in the Hispanic market. Early in his career, he gained experience at SpanishMasters Creative Studios, where he contributed to advertising campaigns and edited local and nationally broadcast television commercials. Later, he was production manager for IDIAS Production where he helped produce a beginner's English learning program.

Gyula Julius Dobos is an award-winning film- and music industry professional-turned-educator, active in the fields of music- and audio production. As a speaker, Dobos' interests include technology's effect on society and culture, and the relationship between creativity, art, culture and technology. As a consultant, his focus is on bridging industry and education, creating professional learning opportunities in education, and building collaborative learning environments. As a Distinguished Professor, Dobos teaches courses ranging from electronic music production to sound design, and advises large media projects and student portfolio projects at Cogswell College in Silicon Valley, California. He also serves as the Music and Audio Director for MediaWorks, a 2013 initiative, created to fill the gap between professional- and soft-skill development in collaborative environments in education.



Interviewer: What's your background? What was your journey to become a teacher at Cogswell Polytechnic?

Tony: I coasted through the American educational system and after high school I took off to North Africa for a year. I lived with my parents who started a school out there. Then I came back to study in the United States again. I went to a Junior College and I took a bunch of art and animation classes. There was a period during which I worked retail followed by a stint as a security guard which convinced me that I needed to finish my degree and I ended up a transfer student at Cogswell College.

It took me roughly 10 years to graduate from college (from start to finish) but all along, I was working doing things like graphic design, video production and some audio. They used to call it multimedia when I was a teenager and I was doing it in what's known out here as the Hispanic market, which is fairly large. I got quite a bit of experience editing commercials and adding motion graphics titles, doing advertising stuff that got on a local TV and some on national television.

As soon as I graduated with my Bachelors of Science, I started teaching a Freshman level class where I introduced Desktop Production Fundamentals for Audio and Video. Even though I did not go through any formal training to become a teacher, I was able to draw from many sources to inform my teaching such as; my industry experience, having grown up in an educator's household, youth work, retail sales, and having gone through the same program as my students.

Julius: I was born and grew up in Hungary. I studied film score composition in Germany, I studied classical composition in Hungary. I ended up getting a degree in electrical engineering which I didn't do anything with. As a matter of fact, I had a pretty bad opinion about education in general. I was studying piano from quite an early age of five and by 14 I was composing, and soon after I was running my own business working on radio commercials, TV commercials for different markets in several countries in Europe. I got more and more interested in scoring. I started scoring TV shows, then movies and also released several albums. I ran a music production businesses and when I was 24 I ended up moving to the United States: I felt that the market wasn't big enough in Europe. I had to re-start everything in the US, but throughout the whole experience I felt like I wasn't using much of what I had learned in school, despite of having studied at several institutions. But I wasn't really using much of that. However, what gave me an advantage was that I was 24, still very young but I already had 10 years of experience of doing practical, professional work.

THE PROBLEM WITH HIGHER EDUCATION

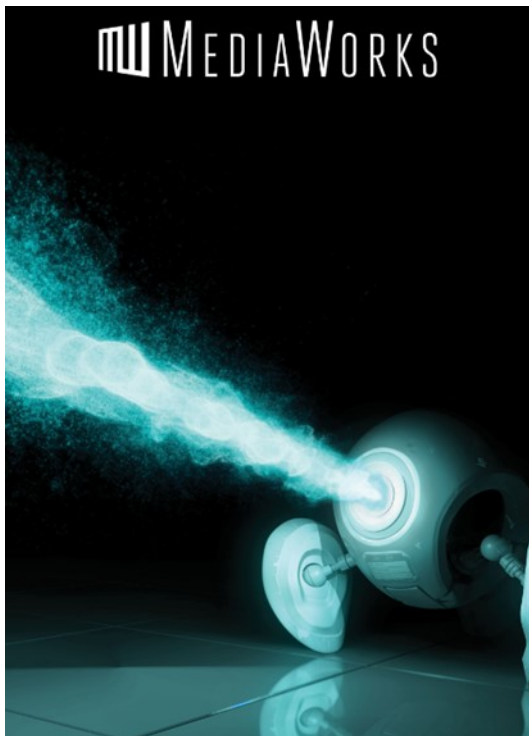
Julius: When I was studying in general education classes, I felt it was really a one-way information stream, like pushing past experience-based information on to students... in ways that was either black or white: you are right or you are wrong, so if you memorise things and then recite what's in the book, you must be correct... This is seriously limiting. I also felt that not enough of "what's happening today in the real world" was taught. There was a disconnect between what I learned in the classroom and what I needed to know in the real world outside. I learned music theory, music composition, I learned how to write music for movies, but when I got my first serious feature film scoring project with an even more serious deadline, not much of that knowledge was useful, aside from knowing the history, the standards and the specs. But how to get in contact with the producers, how to actually be selected for the movie, how to invent new approaches... how to deal with people, work under pressure, how to use soft skills... no one taught me that. These are things I had to learn on my own over the years.

I had to re-start everything from scratch and I grew my business in the US again from nothing, to working with Grammy-award winning artists in the studio and becoming a freelance composer and audio producer. I was based in Dallas, Texas but I travelled to everywhere from New York to Hollywood - wherever I had to work.

After a while I felt that it became a bit of an assembly-line type of work, where every day is the same: even though the projects were different but the expectations from directors and from the industry were pretty much the same, especially in the areas that I specialize in, which is film scoring and electronic music production. In a way, the industry kills true creativity. Then I saw a posting on a bulletin board of the Audio Engineering Society from Dr. Timothy Duncan, the Program Director of Digital Audio Technology at Cogswell. It said the college is looking for someone with an industry background and not so much with an academic background. I thought that it could be interesting, if I could sort of disrupt the system and change the way things are taught, and teach students based on my experience, instead of based on text books and theory. So I went to give a master class, we connected well... this was four and a half years ago.

Interviewer: *It looks as if you were both attracted to Cogswell and Cogswell found you attractive as teachers because of your practical experiences. Can we move on to Cogswell College - what type of institution is it?*

Tony: The school was founded in 1887. It came from a trade school tradition and along the way it became very much an engineering school. However, it still maintained the practical trade side of things. Because of this, students are highly employable and one of our problems is our best students get snatched away straight into the industry because of their skill set and their ability to work on teams.



One of the things that's been true, at least since I started as a student in 2006, is that there's a huge emphasis on projects. They aren't always formal and they are almost always messy, but we are small enough as a college, and our leadership is flexible enough that we can try lots of things and still get some support. Some are projects fully envisioned and executed by students and other projects are led by us, the faculty.

Project based learning is such an integral part of the way we do things at Cogswell that faculty are expected to use these sorts of practices in the classroom as much possible. We're a digital media college and the emphasis for these projects is bring students together from the different disciplines to produce great work.

Julius: In our fields, we need audio professionals to work with somebody who is creating an animation, a film or a video game. With MediaWorks, we try to erase some of the disciplinary lines to make this collaboration seamless. One might think "I have to draw this picture", or "I have to play this note" - but how do those two things fit together? Through real projects for real clients with actual needs, we can take students coming from our visual and audio disciplines, and have them work together to generate the concepts, develop ideas and interact with the clients.

Interviewer: *So how did MediaWorks begin?*

Julius: I was teaching a Summer class in digital sound design where we build sound effects for film and television, and work with them. That was my first sound design class I taught in my life since I hadn't had any previous experience in education. I did some research online and I found a media library for education: movie clips that teachers can use in their classes, and students can replace the sound effects of a movie.

This is all great, but I felt it was only one slice of the real process. It was only the production slice. It didn't take it into consideration how you actually get the audio job, how you work with a client, how you interpret a director's vision, how you critically and creatively think at the same time, distilling all the available information, how you present your work, etc. Not to mention, if students watch a movie clip for Star Wars and they want to replace the sound effects, they already know what it sounds like because they have heard it before. I felt it was important not to just reuse existing assets but to create brand new ones from scratch.

That's when I told Tony, "we have to put something together because it would be more fun for everyone, and most importantly, that's how things are actually done in the professional world!". He also understood the need and the potential impact of the idea for students.

We tested many different approaches during the first couple of projects, and the idea worked out really well. The students had to develop the concept and of course they had to work together. We created one piece which was the final project in my Digital Sound Design class, and the students delivered a nice presentation, just like you would in a business situation for your client - all this were the part of the original concept - all that I was missing from traditional classes. The College's President and the Chief Academic Officer at that time saw the presentation, the results, and loved the concept. They said, "This is really great, let's do this more formally!" - and that's how MediaWorks was born.

Initially, MediaWorks wasn't in the curriculum, it was just a project that students could choose to participate in, so for a while we had many volunteer students in the teams. Then we started working with external clients because that was the whole point of the idea, as I call it, "the real deal". The program became an elective course, it was added to the degree plan, and a year later it was offered for all students as a required class; now it's not even an elective but a mandatory class for most audio students.

Tony: One of the things that it points to I think is flexibility. In a small organization there is a willingness to try things and that can also have its drawbacks because we're not the only ones that are trying to do new things. So one of the problems is when too many people are trying to too many new things at the same time, then I guess in an organization would be human capital and here it's a student capital, the number of humans that can physically participate in all these different programs is reduced and that has become an issue.

Interviewer: *What do you do as teachers to facilitate MediaWorks? What are your roles?*

Tony: My title is Visual Director and Julius is the Audio and Music Director. We like to try to operate as equals and we tend to defer to each other's direction decisions based on our respective areas of expertise, and often, which of us has the closer connection to the client.

I will generally have the visual students in one classroom and Julius will be with the audio students in one of the sound studios. However, at the start of each project we always start together for the research, concept and script generating sessions. We try to keep as much of the process as organic as possible. We're bringing our own experience, and the greenness of the students and letting them discover as much as possible with as little hand-holding as we can get away with. One of the nice things about MediaWorks is that because of their lack of experience, they don't know what's not possible, and they can come up with some crazy but good ideas and things that can lead on to other things that Julius and I would have never come up with on our own.

In large part, I see myself as a facilitator. Hopefully I'm not misunderstanding the word, but *facil*, in Spanish means *easy*, and that's what I tell myself it means. I try to make things *easier* for my students, but I don't necessarily give them the answers. In certain cases, there might be an issue they are faced with where even if I don't know the exact answer, I might be able to give them hints on what to type into a Google query so that they can then find the answer themselves.

I think in the old days it might have been the job of a librarian to help a student researcher figure what to look up given a certain topic. But in our world, new apps or even new features come and go in the blink of an eye and our students need to be able to find the information they need and filter out that which they don't, quickly, so they can focus on finishing the project and not get lost looking for the proverbial needle.

Julius: I think facilitator is a good word, but the way I like to see myself is more of a 'challenger' or a 'disrupter'. I tend to push students outside their comfort zones. I try to make them do things that they would never think of trying, they're hesitant to do or they don't know if it's even possible. I like to initiate things that are very unexpected and watch what happens. Like putting students in situations in which they are forced to come up with a solution on their own, not a technical answer that's easy to find on Google or learn from YouTube. I don't pose "how has it been done before?" kind of questions, rather generate situations that even I might have not encountered during my professional career. And then I wait and see what happens, see what they do with that situation, see how they approach it and come out of it on top. Of course, I offer approaches, points of view, feedback and guidance during this process. So, as a teacher, I tend to push them outside of the comfortable envelope.

RELEVANT
EFFICIENT
EFFECTIVE

My other role in MediaWorks is to keep things relevant to the client. We apply an REE philosophy, which stands for relevant, efficient than effective. Everything that we do has to be relevant. I think relevance is most important for students. Everything that they do has to be done towards the completion of the project goal: the requirements of the client. It has to express what the client wants not what they feel like doing.

This isn't an easy task for anyone, as students aren't allowed to come up with just any solution that doesn't obey the rules of the game play. For example, if you're in a difficult situation in a universe of Jurassic Park, and want to escape, what would be your solution? A student might say, "well, to get away from this place, I'm going to use magic and vanish". But, this doesn't work in Jurassic Park because there's no magic in that movie universe; you can't just disappear like that. It would be easy for students to come up with solutions that don't really play by the rules of that situation, but just like in real life, they will start thinking in terms of client expectations, and find the solutions that are not necessarily the easiest for them, but the most effective for the project.

When students are immersed in these really hard-to-solve or manage challenges, it's not enough that they come up with a solution that solves the problem. The solution has to work for the project, for the client, for the other MediaWorks team. It's difficult to explain but there are two pulling forces. On one hand, it has to relate to exactly what we need to accomplish, but on the other hand, we try to not follow the traditional ways but work in a very different way every time. Basically we try to be practical yet inventive at the same time.

Tony: A classic example is, just because you create an amazing looking and sounding dragon, doesn't mean you should put it (or even consider putting it) into the story or project. What's more you've wasted a ton of time by going off in that direction. So we have to guide the students to stick to getting the stuff done for the project at hand. How do we teach them to stay focused? I guess we don't really tell them how, we just give them the expectation: "This is what you need to do, this is how it's going to be in the real world!" and a high percentage of them take it to heart.

Other than facilitator, some of my roles as a teacher are those of being a broker and a coach. Sometimes, I have to deal with intense emotions and get students to understand that what we're doing is almost like the difference (to an English Literature Major) between writing a book that you consider to be your life's work and writing an article for a journal that has a tight deadline. In this case for my animation students, MediaWorks is the journal article, it's very practical and deadline driven. You can't fall in love with what you're creating, or invest an enormous amount of time doing it, because it might get cut out or changed drastically.

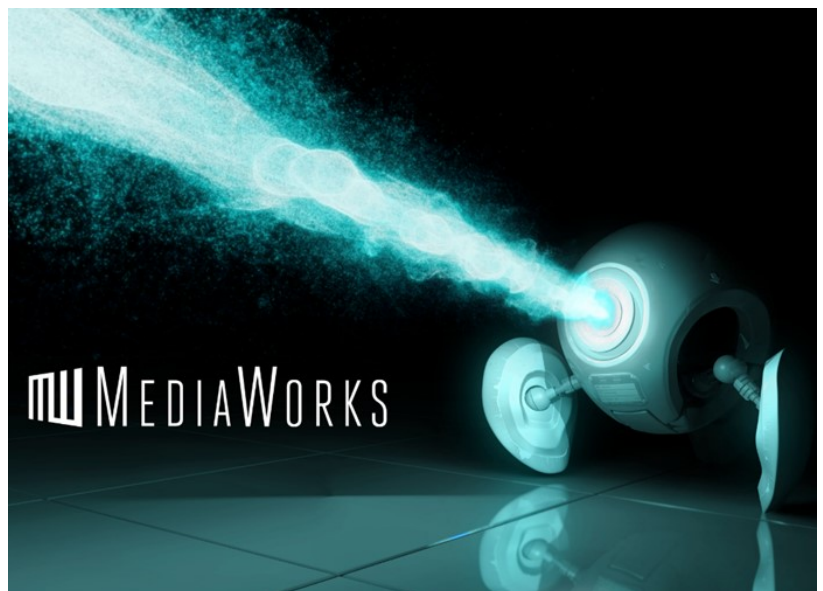
As a coach, I encourage the students to truly work as a team and always be ready to help each other out, especially when a team member gets discouraged or the unexpected happens. As cliché as it might be, communication is key and it is often one of their biggest takeaways at the end of the semester.

Going back to the book vs. article idea, I believe that the fact that our students start completing portfolio pieces almost immediately, is extremely valuable! The finished piece might not be the most amazing looking, most beautiful, pixel-perfect animation that you've ever seen, but it is a collaborative project, finished under a tight deadline, and it was made for a client.

Julius: For both the visual and the audio students, we're not trying to grow software users or specialists. The most important and valuable skill that students get from MediaWorks is actually the ability to adapt. When they're given different expectations, not something that they know how to reach, but something they're not used to work with, or for that matter, have never done before, they must figure out a way through the "process of figuring out" itself to succeed. Each semester they pick up a different set of unique skills that they need in that semester's unique situation. This is the kind of adaptability that MediaWorks students develop, and they will apply this 'figuring out' process in future unexpected situations.

Interviewer: *You mentioned that you have old students and younger students working side by side. I wondered whether there any sense of apprenticeship in your project-based approach?*

Tony: On the visual team, currently I also have two senior level students who are employees. We also have a student who helps on our projects as our official tutor. She comes in and helps them set up some of the organizational stuff. To that extent, I would say that we have apprentices but it's been more of been a happy accident than an intended outcome from the beginning. However, it's something that definitely works. Those students that we hire, are usually the ones that have helped us and are the most experienced. Their job is not to do the projects. Their job is to help and make sure that the students in the class can finish the projects.



Interviewer: That sounds very interesting. You pay them and do they get any more training from you to fulfil their role?

Tony: Our approach to project-based learning involves creating two teams. The first role that I try to fill in my team is that of a student project manager. I've had one semester where I had a project manager who was a student in the class. But all the other semesters, it's been a student worker. They're still students. They're still learning. I guess the fact that we were paying them is a little bit different than giving somebody a grade. Beyond the grade I am able to fire them if necessary. The project manager basically helps to make sure that everything is running smoothly. It takes some of the burden off me. That allows me to worry about higher order things as opposed to the daily- who's going to do what -part of the pipeline.

That said, the project manager is also tasked with making sure that the visual team is communicating with the audio team; that they're giving them the right files and updates on a regular basis, that sort of thing. In terms of other roles, I try to look for what we call 3D generalist who is someone that knows a little bit about all the different aspects of 3D. A sort of jack of all trades. Then there are a few specialized roles. I guess you could call them the finishers. People who help with the finishing touches. Because most of our students are not coming in to MediaWorks with Senior level experience. They potentially haven't taken the classes or haven't just enough experience to be able to produce a visual that's got the final touch.

Interviewer: Can you tell me about the typical process you go through with MediaWorks?

Tony: The first step in any project is the concept stage. The students have to do research on the client. Most clients that we work with will have a website where there's usually an abundance of information on what they do. We want to make sure that the client feels like the students already know them to a certain degree. We typically have really good results where the clients will be happily surprised that the students know so much about what they do.

In that first stage, we prep our students and we tell them once you're with the client we want you to ask good questions. The main point there is they need to figure what the client needs and how we can fulfil it.



Even though we are told growing up that there's no such thing as a dumb question, we don't want students to ask questions that they could easily answer by going through the client's website or reading the material. Our role as teachers at that stage is to make sure they're properly prepared for what to expect when they meet face to face with the client.

A concept can be executed a thousand different ways but the important thing is that the client is going to choose one. We send these concepts along with short scripts to the client and they pick the one that they like the best. Sometimes the client will merge one idea from one thing to the other and we have to go back and forth a little bit to make sure that we are on the same page.

Speaking of being on the same page, one of the biggest outcomes for students is that they learn how important communication is because in MediaWorks, communication is essential to a successful, finished piece.

Another part of the process is that we often introduce competition between sub-groups in the team. We might say, "here are the teams, generate different concepts and the client is going to pick the best one."

Sometimes we might tell students, "Each group can go off and do their own thing secretly without letting anyone know." Other times we might say, "Everyone needs to share all the information and work from each other's ideas."

Because MediaWorks is not necessarily following any pattern that was laid out for us, we do feel that we can experiment quite a bit. Each semester Julius will throw in some surprise for the audio students, some experimental element where one semester it might be, "For this project, we're going to break up into three teams and each team is responsible for their own audio." Then for the next project, everybody is an individual and everybody is competing against each other.

Once the client has picked a concept we develop a full script with actual ideas of how things are going to sound and look and we try to get that approved as quickly as possible. And at the same time the visual students start developing a story board. The audio students start coming up with questions like, "Does this thing need music? or a voice over?" Our response, and what we want them to think about before committing to any work is, "Does my idea support the concept? Is it necessary?". And if it's not necessary, we try to avoid it.

Interviewer: *So during this stage now - formulation of concepts, and this moving to a full script and story board, and so on - you're acting as a facilitator then, is that your role?*

Tony: Yes. I guess in some ways we act as the sounding board. We will pretend to be the client. We will play devil's advocate in some cases. But I guess we're also like referee and coach at the same time. Making sure that the students are staying on task and I hear Julius all the time asking "Why?". And a lot of times it will put students in a very nervous position because they have to explain themselves, "Why am I doing this? Why did I choose to use this thing, or to take this approach?" I think we're constantly trying to remind our students to stay relevant, effective, and efficient.

Another important thing we do is emphasize how important it is to manage time. I often say to my students, "It's a nice idea, but can you do this in six weeks?" Because a lot of artists are very optimistic in the amount of work that they can do, when it usually takes them two or three times longer than they thought it would. They'll get these grandiose ideas of how to create the next *Pixar* animated film. And, I don't know if you've ever seen the behind the scenes for these films, but, they take years to finish. And we have six weeks or so with only a small group. So, I guess one of the hardest things I have to deal with in project-based work is maintaining a high level of expectation but then also trying to be realistic about what can be achieved in the time available.

Interviewer: *So coming back to the project manager then. I guess they're critical at this stage - keeping people focused to task.*

Tony: Yes, we give the project manager a timeline. Basically, milestones that they should hit. They know the amount of time that they have to complete the project. So yes, the project manager becomes vital in ensuring a rapid information exchange between the directors and the team members, and between our two teams.

I don't think I ever learned about working relationships in a class. Typically, if I worked in a group of five people, there was always one person that didn't do any work. There are always two people that had good intentions but, you know, something happened, or they had to go somewhere else, so they did a little bit of work. And there is usually myself or one other person that really did 90% of the work. And in a project like MediaWorks that just can't happen or things will get really bad, really fast.

Interviewer: *So how do you make people accountable?*

Tony: By having these deadlines and by having people have specific things that they're supposed to be working on. I think there's an intrinsic value of trying to get things done and that's part of the reason why I try to vet students ahead of time. I warn them that this is going to be a project that's going to consume a large portion of their life. And I try to get their buy-in before they sign on the dotted line that says, "I'm going to enrol in this class." Because nobody's compelling them to join the class. But conflict does happen and I might have two students who hate each other. So, I have to deal with some of those things.

I think at that point there's no formula. It's communication, and talking, and trying to be understanding and empathetic. I don't know how much of this happens in the real world where you can fire people. I try to have students, "Think of it as a family dynamic, where you're on the same team and everybody has different temperament." Sometimes it's literally it's just conflict management. I think that might be one of the key differences compared to a typical class project where some students can be irresponsible while others pick up the slack. There are no real consequences to the outcome of the project because if somebody stops doing their work, others will fill in the gaps.

In MediaWorks, we try to scope out the work so that it's possible and doable only as long as all cylinders are firing. We try to also make some space, so for example there have been times where a student had to come to me and say I'm having some family issues or something, you know tragedies happen and we make sure to make space for that sort of thing. But we try to minimize just regular classic student excuses and not allow those to - we really don't validate those types of excuses and while we don't shame people in front of the whole group or anything like that, I think it's clear that you don't want to be the person that causes something to break.

Interviewer: *Media Works is clearly more like work than a typical academic study environment and you're obviously working to tight schedules. How do you encourage students to be aware of what they are learning as they are learning it? Is part of role as a facilitator to try and draw this out?*

Tony: Yes, we constantly have a white board in the classroom, so as we are learning certain lessons I'll start writing things up on the board. But every team for every project (and when I say team right now I mean the whole team in general, the whole large group), is required to present to a larger body, a group of students or faculty, not only the projects that they completed but also what they learned in the process. We also debrief at the end of each project, sometimes at the end of the semester.

But basically we sit down with the students and we ask the students what did we learn that we could do better for the following semester? as a part of the process. One of the things that came out recently was; "Wouldn't it be nice if we did a mini project before we tackled the big ones?" So we did that this semester; sort of throwing them in the water without a flotation device but only for a one weekend project, so trying to get them to do as

much as they can in one weekend. And then out of that a lot of the dynamics and a lot of the things that would normally happen over course of the semester can be forced to happen right away, week one. I think it has been really nice because for this semester we've avoided certain headaches.

But we encourage students to reflect on their experience and to present their reflections at the end of the semester. They outline the process of what we did from start to finish but also what they call their takeaways. The biggest takeaway is always communication. Again I think it's one of those things where once you are in the professional world, once you are doing things and getting paid to do them, you take communication for granted, especially when there is good communication and things are clear and there is good understanding between you and your collaborators. But I'm sure at some point we all come back to a point where something gets miscommunicated and it becomes a big deal, but hopefully at this point we've learned how to handle it.

Media Works Team



Interviewer: *Our Creative Pedagogies project is trying to explore how higher education teachers encourage students to use their creativity. Our readers will be interested in your perspectives on what it means to be creative in your project-based learning environment and how you encourage your students to use their creativity effectively.*

Tony: I believe that humans are inherently creative and at a digital media college, you will find a higher concentration of people who tap in to their creativity on a regular basis. I think one of the selling points for MediaWorks is that it allows people in the “real world” to take a chance with students is that they are roughly 22 years old and they're going to naturally bring a bunch of new ideas or creativity or just trying things that those of us that have done this before will not try because we think it's not going to work.

So it's not so much that we're trying to get the students to be creative, it's more about trying to get them to use their creativity in a way that is useful. One of the first things we really try to get across to our student is what Julius and I call the REE method.

Julius: The REE idea came from the Chief Marketing Officer of Bank of America. I got to work with her in 2007 and I learned a lot of cool approaches. But my most practical takeaway from that collaboration was that when there's a client, if there's a task at hand to accomplish that requires creativity in order to achieve the goal, then you have to follow these three things: the relevance, the efficiency, and the effectiveness. She was applying this thinking on a multi, multi-billion dollar business and when I thought about it I realized that was the exact same thing that I was doing with my small business. Counter-intuitively, the REE philosophy actually makes people better creative thinkers, but this is a lengthy subject that's probably outside of the scope of this interview.

Tony: So how do we apply the REE criteria? Well we spend a lot of time focusing on the concept, because if we can nail the concept, then we can always take any idea that comes up and compare it to the concept and the student will have to justify how their submission is relevant, effective and efficient or else it gets thrown out.

Let's say we have a concept that is *world peace*. If a student comes up with the idea of including a fire breathing dragon as a part of their execution, they might be able to explain why it fits, we can maybe accept, "Okay, it might be relevant because it's representing bad people or the bad guy who is transformed. However, is it effective? Maybe if the story line is good, or maybe it catches people's attention. But is it efficient based on the time and resources we have available?" No it's not efficient, In our context, to produce a fire breathing dragon, which might take 12 months when we only have 6-8 weeks. So, the answer is pretty much no fire-breathing dragons, so far.

As facilitators, our role is to challenge the students to keep thinking and keep refining everything they're doing. But a large part of what we do ends up just becoming training students to work. Because once you have the concept and once you have the storyboards approved, then everything is based on those storyboards. I don't think it's so much creativity anymore. At that point, it's execution. We have accomplished the 5% creative inspiration and the other 95% is the perspiration as they say.

Julius: The way I look at creativity in the context of MediaWorks is not the same as the way artists think of creativity: they use their imagination to just think outside the box, try something that hasn't been tried before, even though usually end up building on previous works. In traditional classes, teachers often come up with exercises and assignments for students to do just that.

For the kind of work we do in MediaWorks this approach doesn't work. I like to think of the problem as if there were two boxes, one box within the other box. The small box, the inside box is what you have to think outside of. But the large box around it is what we would like to stay inside of. That's basically what the client defines, and is the message for the piece. That's the universe of the project, to refer back to the Jurassic Park example.

Students have the advantage that they do not take the same approach as an experienced professional would; they do not use the cookie cutter solutions that everybody in the industry sooner or later defaults to – simply because they don't have that past experience. So it's actually quite easy to work with creativity as these students are naturally creative in the traditional sense of the word. What I found was hard, at least on the audio and music side of MediaWorks is to stay inside of the big box which is where the REE criteria are very helpful.



That's really hard to do with students. So I let them loose basically so they can come up with anything they want to, but I always tell them they have to stay with the message. Then we have a review session the next class or the next week, and they bring in their sound design work or compositions or whatever the case is. We do this with the Visual Team too, with animators and arts people when they come with certain cool ideas, we always give them a chance to present.

But at the end of these presentations, we challenge them, "Explain how this is relevant to what the client wants!" If they come up with really good connections between their piece and the client's work, then that's great and I let them proceed.

There have been a few times we have been surprised, not very often to be honest, but a few times we have been surprised about the relevancy that was working in their minds, and we didn't even realize it during their presentation, how that was relevant to the client. But at the end, when they explained, it actually made sense.

Most of the time, the student idea is outside of the small box but inside of the big box. But in some cases they just go too far, and so we have to kind of pull them back into the reality of the client. I would say this is at the heart of the MediaWorks philosophy on creativity and it is different from your typical arts school where you do whatever you want to do or a technical school where students learn to apply the technology but they are told what to do and they are basically only applying blueprints or using software to get from point A to point B, with both points given to them. What we do is, we say: "We're standing at point A. Now you come up with *how* you will walk from point A to any point that *you* define between points F and P." But not beyond that and it shouldn't be too close either, because anyone can get from point A to point B or C. So we push them far but not too far. I hope that makes sense.

Interviewer: *It looks like not only are the students creating meaning for themselves but they're creating meaning that is relevant to the client. It's all about meaning making but meaning making as you say with-in constraints.*

Julius: Absolutely. It's very true that the students are creating meaning and sometimes even our clients are finding additional layers to the meaning or brand of their own business, which is pretty astonishing.

The other part of this process of finding and creating new meaning is that students have to also understand the meaning behind a business or a brand, what that really stands for. Sometimes it's not easy for them to gain this understanding about a field they know nothing about. Students have to learn to ask the right questions so it's really important that they do the research to come up with those questions to ask. These are not just any questions but the kind of questions that they can't find an answer for on the client's website, or questions that promise not just nice-to-know answers, but answers that actually matter and can be applied to the production work. I believe this process is a really good brain exercise for them, as a matter of fact for us directors as well.

Interviewer: *Julius, do the students see this as a meaning making process and a process for understanding other people's other organizations' meaning?*

Julius: I think they see the first phase of the process as meaning-making: let's make some sense out of all this, the client and the project, and come up with a way to tell this story to the audiences. I believe that's what they see as the meaning making process, they become interpreters between a brand and its audience.

During the middle phase of their MediaWorks experience, students see the process as a "let's take the meaning that we've just created, let's use our skills and do what we studied to do, let's have fun with it and with what we enjoy doing in our life: art". The third part is the business practices putting all this to work. This puts the whole experience into a different type of game for them and it has consequences and expectations and deadlines and standards. I think when you merge all this, part of it is the meaning that they see but part of it is also the professional work that satisfies the client - and most of the students embrace each element of the whole experience.

Interviewer: *This has been a fascinating interview, by way of a conclusion, what are the most important things that you have learned through your experiences of facilitating MediaWorks?*

Julius: What I have learned is something that I always knew was important, but I didn't realize the extent of: the huge gap we have to bridge between students' preparedness to communicate in a professional way when they interact with clients. I would put communication as the number one issue. You can have the best skills, you can be super talented, but you won't even get your first client if you can't communicate and present yourself properly. It all goes back to the basics, to general education, and that's what I see as the main challenge and takeaway from MediaWorks: soft skills.

Tony: One thing I've learned is to remember every semester that not all the students have worked this way before. I've learned to start each class without making assumptions. I have to reiterate some of the same lessons every semester. In a normal class you might have an outline of every lecture showing "this is what we're going to do", but in MediaWorks, because of the experimental nature of it, the client's needs, and the varied experience of the students coming in, I have to remember that I may have to have to teach them a lot of things they've probably never done before and quite frankly, things I haven't done before either.

Julius: We have also learned how big of a difference we can make with MediaWorks because it's such a different way of working with students. The reason I'm saying this is because we have graduates who have let us know that they got the interview or they got the job because of their portfolio, which featured several MediaWorks pieces. That's the experience they talk about the most in interviews, and those are the aspects which make them stand out from other applicants. In some cases we can actually say that that's the main reason why they're getting hired. It's not just because these productions look and sound good, it's also their experience of working with clients, their professional experience that counts most for employers.

20 years ago what mattered to getting a job was the diploma and the GPA, 10 years ago the question was whether an applicant has had any hands-on training, and today employers want to see and hear the evidence of professional experience even from a fresh graduate. MediaWorks students have shown that not only they have the skills, creative ideas and technical expertise, but they can put these things together with soft skills and the ability to work with others, to satisfy even a demanding client or employer. They have been properly prepared to face the challenges of the professional world.

In the following complementary article, Jenny Willis examines one recent MediaWorks project

A 'Real World Challenge': A Project-based Ecology for Learning, Creativity & Achievement of Commerical & Education Goals, from Cogswell College, USA

Jenny Willis

CAM 7 is exploring the idea of creative pedagogies for creative learning ecologies and we are always on the lookout for examples to inform our understanding of the ways in which students' creativity is encouraged and enabled to flourish. In January, as I was editing an issue of Lifewide Magazine, my attention was drawn, by one of the contributors - John During, to the project-based learning being undertaken at Cogswell College, in California,

While fostering creative thinking is at the core of what happens at Cogswell (see <http://www.cogswell.edu/about/about.php>), creativity itself is often driven by constraints, such as time, talent, tools or other resources. So, we try to design courses that include real-world constraints.

John helpfully included several links to his college and their projects and suggested that one, MediaWorks (<http://www.cogswell.edu/student-work/mediaworks.php>), might be of particular interest in terms of learning ecologies. I duly logged on and found myself instantly revising my previous perceptions of creativity in the context of group projects.

In this article, I shall outline the nature of a MediaWorks project focusing on the activities undertaken by students and the outcomes they achieved. Companion articles will consider the pedagogy used to encourage and facilitate learning and achievement (see Norman Jackson's interview, above) and an interpretation of this example from a learning ecology perspective.

Cogswell College: a living laboratory

Cogswell College is proud of its historical roots:

Dr. Henry Daniel Cogswell, born in Tolland, Connecticut, March 3, 1820, was a man of both vision and distinguished heritage. The Cogswell family was descended from Alfred the Great and Charlemagne and immigrated to America in 1635 from England. Dr. Cogswell cherished his family crest and motto, "Nec Sperno Nec Timeo," which means, "I neither despise nor fear."¹



The sense of adventure and cutting-edge development is captured in a recent newspaper account of Cogswell:

Designed as a "fiercely collaborative, living laboratory," Cogswell College is located in the heart of the legendary Silicon Valley in San Jose, California. The school is a WASC accredited, four-year institution of higher education with a specialized curriculum that fuses digital arts, audio technology, game design, engineering and entrepreneurship.²

The college's vision explicitly links the use of new technologies to preparation for the workplace:

Cogswell Polytechnical College's mission is to be a leader in providing practical education in the combined disciplines of technology and entrepreneurship with an emphasis on leadership, and a strong focus on new technologies and business models to prepare graduates for careers in the global economy¹.

So how does it achieve these educational goals. This article focuses on one of its projects, MediaWorks.

What is MediaWorks?

Through media works, students work with a 'real' client on a 'real' project, in order to develop the experience, skills and competences and understanding they will need to work in the media industry after graduation.

The ways in which students experience this form of real world project-working is captured in a series of You Tube videos created and presented by the students at the conclusion of one such project, their work with AC Transit to produce promotional material designed to 'sell' their new concept to the public.

TRUE INDUSTRY EXPERIENCE IN COLLEGE

The team-oriented, project-based and collaborative environment of MediaWorks offers its students a production experience that mirrors actual industry pipelines, decisions, challenges and problem solving scenarios. Teams consist of 4-8 digital audio technology students and 4-8 digital art and animation students with a goal of completing one full production, from concept to delivery, in a deadline-driven 8-week period. The finished logo-, promotional or corporate communication films, animations run anywhere from 10 seconds to 1 minute in duration.

The class exposes students to the full production cycle, the chance to directly work with industry professionals, an actual client, build client relationship management and communication skills and develop very strong pieces for immediate use in students' portfolios - which gives our students an enormous advantage on their employment interviews. <http://cogswell.edu/student-projects/mediaworks/>

MediaWorks AC Transit project

Just watching their slick, 42 minute video³, I was impressed by the professionalism of the students. They each spoke confidently about their individual role and team, illustrating their work with enthusiasm and immaculate slides of the processes involved, followed by insightful 'take aways' from their learning experience. The presenters were inclusive but sensitive to the different competences of their team members: whilst 6 spoke live, others, such as Tyce, who has a speech impediment, was able to contribute through a recorded piece.

No wonder this project won the annual award for excellence!

But what was the AC Transit project all about?

The student team explain how, in June 2016, AC Transit announced that it planned to construct a Bus Rapid system (BRT) in East Bay, California. This would revolutionise public transport, but naturally have some opponents: as one of the students explained frankly, there were fears of 'gentrification' of a traditional working class area. AC Transit is California's third largest bus company, and carries a daily average of 200,000 passenger trips, using 151 bus routes across an area of 364 square miles. The company researched potential organisations who could work with them on this important project and gave 'overwhelming approval' to Cogswell College's Media Works programme. A team of 25 students worked closely with AC Transit staff, under the guidance of two tutors, one in the digital art and animation department, the other in the audio department, to produce the promotional material.

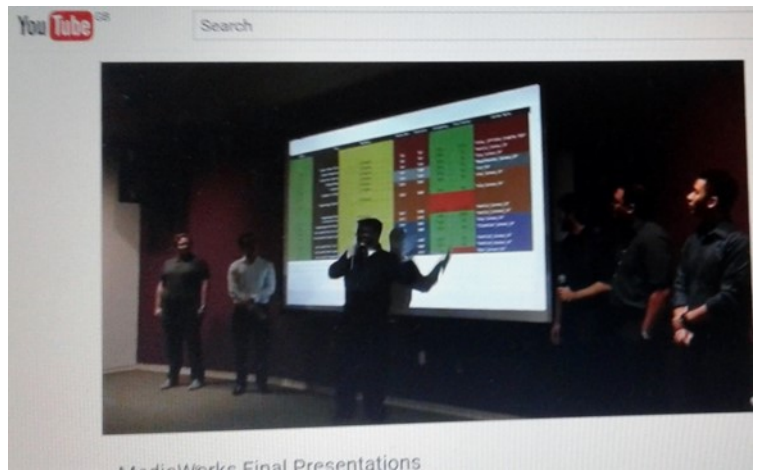


Figure 1: Students presenting MediaWorks project



Figure 2 (left): The winning Media Works project

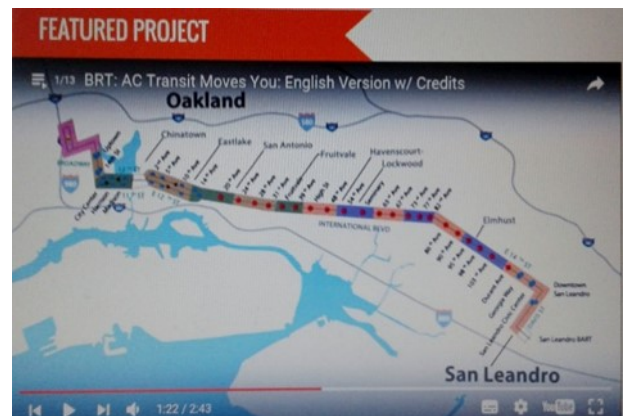


Figure 3 (right): Students' depiction of the new bus route

The students' presentation <https://www.youtube.com/watch?v=860LqtknBx4> describes in detail how they had only two months from start to finish to produce the material for what was an 80 million dollar construction project for AC Transit.

They explain how they met with the client in order to fully understand their brief, then divided into subgroups to identify key elements for potential inclusion in their product. They repeatedly interacted with the client, asking questions, sharing and pitching ideas until they were both clear what was required. One of the team summarises this as *"Be experimental, be realistic, be true."*

Their video presentation teases out key learning points at each stage and in each domain of the project. Here we find:

- Working as a team member
- Recognising the abilities of individuals
- Communication skills
- Listening carefully to the brief
- Analysing what it required
- A 'real life' task has real life constraints

Next, they devised a story board, into which they built the specific scenes, sounds etc that would need to be researched and created. Producing these was not always straightforward, and they quickly found that what might have appeared the perfect element fell way short of the standards anticipated. One of the composers, Nick, describes how he had to rethink his composition, comparing it to when you have your first boy or girl-friend, and “*you think they’re awesome*” until you are disillusioned by your friends! Another warns “*Expect the unexpected!*”



Figure 4: Starting the project

Key learning points from this stage:

- Organisation
- Resilience, willingness to start afresh
- Experimenting with new ideas and resources
- Perfectionism, always seeking to improve the product



Figure 5: A conceptual map of the project

The audio and video sub-teams each had their own tasks to complete, and two project managers were responsible for keeping everyone on schedule and informed of each other's progress. The planning was meticulous; each member of a team knew precisely what was expected of them and when. Sometimes they had to apply their creativity to problem solving, as happened when they realised that they could not achieve the technical requirements in the time allocated without subdividing their work further as illustrated in the adjoining slide.

One person explains how he went into a meeting as a sound manager, but had to learn on the spot how to be a tactful script adviser as he led the writer of the voice-over script through a process of condensing his text to meet the time limit.

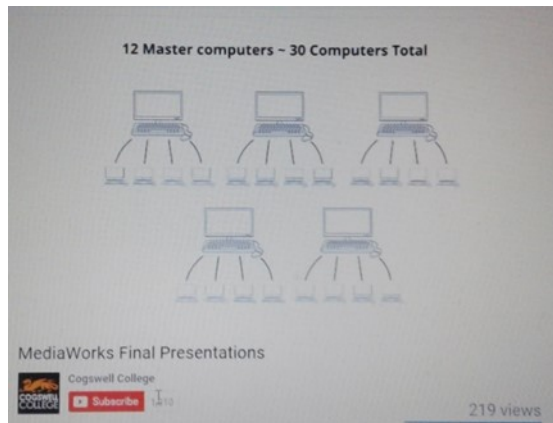
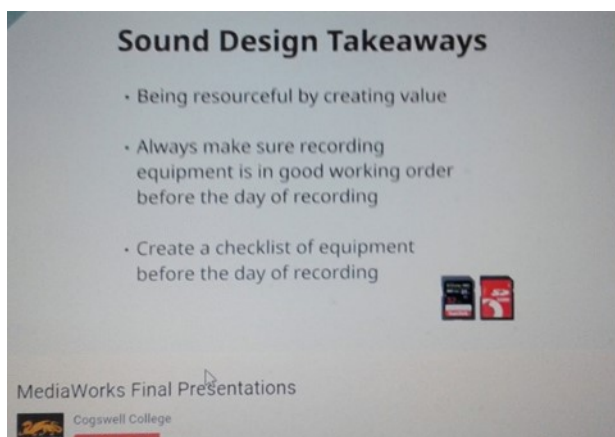


Figure 6: Solving a time management problem relating to rendering media

These were all relevant experiences for professional development and would have been difficult to simulate in a classroom, let alone anticipate. Key learning points the students cite here are:

- Time management
- Efficiency
- Team work, liaison with sub-teams
- Versatility
- Learning on the job

By the end of the 2 months, the students had produced a 3-4 minute video, with bespoke music and sounds to accompany bespoke animations. In their YouTube presentation, they summarised their learning as 'takeaways'. The following two slides reproduce those for sound and composition.



Figures 7 & 8: Students record their learning

In addition, the students articulate in turn aspects of the project that have impacted on them personally. Their comments include:

Everyone in the team is different so you have to get to know everyone. (Lindlay)

It's very hands-on and it's intensive. Everyone's relying on each other. (Kiefer)

It's the closest to real life experience that you can get. (Nguyen)

It's kinda like a footstep into the real world ... You're reacting ... a feeling of like I'm part of this company and everyone's working together. (Taylor)

Where deadlines are involved, I find myself making critical decisions a lot faster. (Kiefer)

It challenges all of us; it gives us all something that we can take away. (Taylor)

And it is not only the students who have gained from this MediaWorks project: the client has supported a learning experience for a team of 25 students and their 2 tutors without paying a cent for their work, but knows that they have offered a unique experience to these undergraduates. Robert, AC Transit's representative, is fulsome in his praise. In response to a question from the audience, he says that, 9 years previously, they engaged an outside agency to produce a media resource. It cost them \$65,000 dollars, nevertheless, he continues:

I have to be honest: this (MediaWorks) project is leaps and bounds ahead of the original project we put together.

The third prong of the team, the college tutors, are equally euphoric about their collective creativity. One of them sums up the qualities that underpin the whole concept, and that reflect his flattened role:

I like to learn. We can learn together. I'm thankful for the opportunity here, at Cogswell.

References

- 1 <http://www.cogswell.edu/about/about.php>
- 2 <https://www.youtube.com/watch?v=860LqtKnBx4>
- 3 <https://www.youtube.com/watch?v=860LqtKnBx4>
- 4 <http://www.actransit.org/brt/>

#101openstories: Sharing learner, practitioner and researcher stories about openness



Dear colleagues,

We recently launched the #101openstories project to celebrate openness together. Members of the team are from six different continents with a shared vision to collect 101 open stories from around the world that illuminate how open learners, practitioners and researchers have discovered openness and what this means to them and their communities. We welcome open stories in any format or medium, in any language. To find out more about #101openstories and submit your story, visit <http://www.101openstories.org/add-your-story/>.

We are really looking forward to your contribution.

The #101openstories team
<http://www.101openstories.org/>



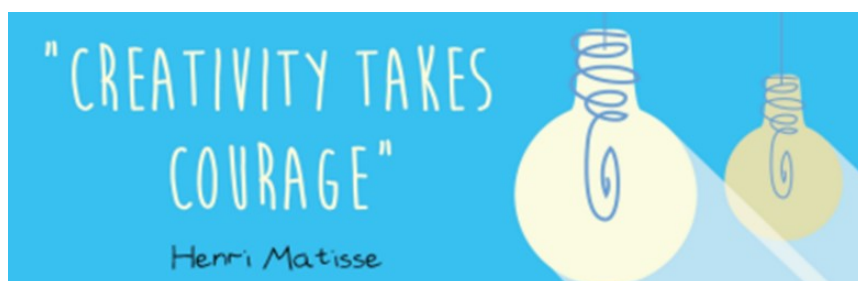
The #101creativeideas project is a fantastic opportunity for YOU to share your creative ideas on how to encourage, support and/or assess students' creativity. Ideas can be big or small but we are looking for concise descriptions of no more than 50-80 words.

It is envisaged that the #101creativeideas will be a valuable resource to refresh teaching and support further creative projects. Have a look at the contributions so far at <https://101creativeideas.wordpress.com/>. So if you are doing something that is interesting or novel in your practice, **please click here** and share your idea.

All ideas will be credited and made available through an online OER collection under a CC BY NC 4.0 licence.

Thank you for your contributions,
Eleanor Hannan, Chrissi Nerantzi and Elizabeth Walshaw
 #101creativeideas team 2016/17

NEXT #CREATIVEHE COURSE 22- 26 May 17



The next #creativeHE course will be run by Chrissi Nerantzi in partnership with Sandra between May 22-26 2017.

The unit is offered free as an online 5-day block using the Playground model (Nerantzi, 2015). The daily topics are:

- Day 1: Introduction to creativity in HE, enablers and barriers, theory and practice
- Day 2: Learning through play and making
- Day 3: Using story for learning and teaching
- Day 4: Learning through making
- Day 5: Sharing learning and next steps

Within this unit, enablers and barriers to creativity in higher education will be explored together with related pedagogical theory and literature. Participants will experience learning through play, games, models and stories and actively experiment with such approaches. This will help participants to further develop their understanding, knowledge, skills and practices in these areas and become more adventurous in their teaching. Participants will be able to critically reflect on their practice and identify opportunities to design, implement and evaluate an imaginative and creative innovation that fosters curiosity, maximises motivation and meaningful active engagement and discovery learning. The teacher is challenged to be creative in order for creativity to be developed in the students.

The unit is available for free to all practitioners who would like to participate informally in the open online version of this course. You can join the #creativeHE community at <https://plus.google.com/u/0/communities/110898703741307769041/>

The open #creativeHE course is directly linked to the MA unit FLEX [Creativity for Learning] at Manchester Metropolitan University and credit can be gained towards this qualification. To find out more visit <https://celtmmu.wordpress.com/2016/09/20/flex-1530-creativity-for-learning-201617-join-us-creativehe/>



MAY 2017

'Sydney' by Elizabeth Chapman
<http://melizabethchapman.blogspot.co.uk/2017/05/modern-abstract-painting-sydney-by.html>

Editor: *one of the things I constantly hear when visiting universities is "we just don't have the spaces or resources to encourage creativity". This is certainly at least partly true in the sense that some spaces and the resources they contain provide a more favourable environment for encouraging and facilitating certain forms of creativity. Creative Academic is always on the look-out for the imaginative ways that universities create particular spaces that encourage students to use their creativity and value their creative achievements, and encourage their staff to develop the pedagogical thinking and practices that enable students to not only use but develop their creativity. One such space - the Hive Centre has been created by The Claremont Colleges: a consortium of five undergraduate liberal arts and two graduate institutions in California. The following articles describe the Hive Centre and its educational philosophy.*

THE HIVE CENTRE for students' creativity

<http://creativity.claremont.edu/>



Rick and Susan Sontag
Center for Collaborative Creativity

The purpose of the Rick and Susan Sontag Center for Collaborative Creativity (the Hive) is to accelerate the creative development of students across the 5C's (box right). The Centre achieves this by creating an environment and culture for **Exploration** - by creating a safe space to experiment and play, **Collaboration** - by bringing people with diverse backgrounds and perspectives together to be in the "intellectual muck" together, and through **Experiential Learning** - thinking by doing. They do these through a range of curricular and co-curricular activities from one-hour mini-workshops that may give students a taste of a particular topic area to class activities that allow students to interact with outside partners on real world challenges.

Commitment to exploration

The Centre provides a space and a culture for people to take chances, mix things up, make some mistakes and come out the better for it. A space in which students and faculty can feel free to explore new ways of solving our most urgent, challenging problems.

Commitment to experiential learning

The Centre encourages students to 'get their hands dirty' by making things. Making is a form of thinking and the Centre has spaces that are rich in materials and tools for making things to enable students to forge deep ties between theory and practice and learn with real hands on projects.

Commitment to collaborative creativity

The centre believes in encouraging collaboration in creativity projects because the interconnected nature of our world offers

HIVE CENTRE CORE PRINCIPLES

Show everyone how they can fit in

Develop ways to engage a wide variety of potential participants. This initiative will not be for everyone, but anyone who wants to participate should be able to find a way to easily plug in - the history major should feel as much a part of this as the engineer, the artist, the entrepreneur, and the activist.

Create permission to experiment and play

Support the expression of new and different ways of thinking, even those that don't have a clear path to success. Develop structures to protect unusual ideas and mindsets. Create ways to compost a large volume of failed experiments.

Nurture connections

Bring people, ideas, and disciplines together. Support those collaborations. Creativity is strongest when unusual pairings come together.

Present ambitious challenges

Push participants to go beyond conventional boundaries - whether personal, disciplinary, institutional, or community. Tackle the seemingly unsolvable challenges, and get participants to try things that can't seem to be done.



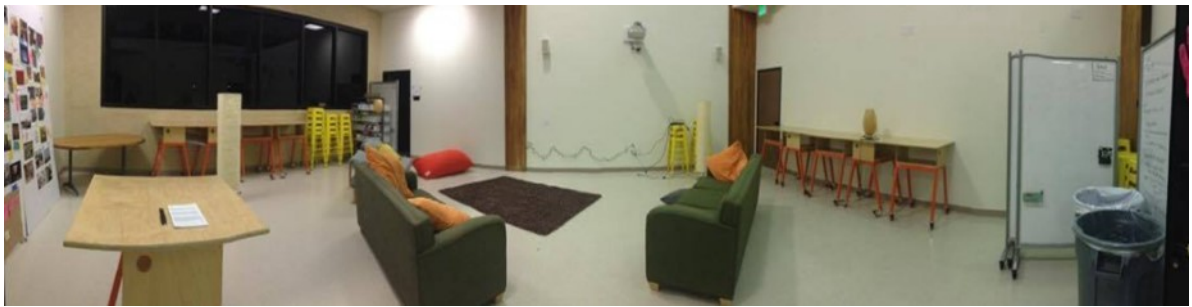
tremendous opportunities for problem solving, and the most significant challenges before us are so complex that no single discipline, mindset, or skill set will be able to solve them. The complexities that lie before us will require more than creative individuals acting on their own - it will demand that we refashion the way we bring individual skills and approaches to a vast, varied, and often distributed set of potential collaborators. While working together as a team is tough, the individuals - and groups - who can do that best are the ones who will have the greatest impact on our future.

Collaborative Creativity is a way of approaching creativity (bringing new ideas, objects, or ways of

thinking into the world) that recognizes how critical diversity, interconnection, and exchange are to the endeavour. Traditionally, the assumption has been that creativity is an individual pursuit, the bastion of the lone genius or the cloistered artist, yet many of the most effective creative efforts are collaborative. We work to accelerate the creative development of individuals while emphasizing the ways in which they cooperatively contribute that talent to a wide and diverse range of partners

Spaces and Resources

The Hive is rich in resources that students can use in their creativity projects and different spaces contain different sorts of resources. The Centre's spaces and resources encourage a 'maker' mentality and a way of being that involves working with tools and materials.



The Toolbox is a place where students can put their big ideas into actions. It contains the tools such as sewing machines, different types of saws, and a plethora of handheld tools.

The Scrapyard is a place where students can utilize the Centre's resources to create their own personal projects, such as paint, feathers, X-Acto blades, and many other miscellaneous tool and items. The room also features a paper cutter, a large roll of butcher paper, and a button maker.

The Vault is ideal for studying - it's dark, cozy, and comfortable. In this space, students can get away from the distractions of student life.



The Commons: This space is the centre of the Hive, which has high ceilings and an open plan that encourages collaboration and team-working across the space.



The Shed: This is a smaller space next to the Vault that is also open for student use. This room is equipped with three desktop computers and two full-size chalkboards.

Studio 1: This space is mostly used to host workshops because it is a very fluid and dynamic space. This room is equipped with a projector and many movable white boards. It also features movable desks and stools that can be configured in an endless amount of combinations.

Studio 2: Also supplied with a projector, this is another space that is commonly used to hold workshops or team meetings. Studio 2 is different from Studio 1 in the way that it more closely resembles a classroom, with circle tables and chairs.

The Nook: This is a tucked-away corner under the bottom of the stairs on the west entrance of the Hive, equipped with extra-large pillows and a low desk that's perfect for studying or just relaxing. A few lights under the stairs help light the space.



Adisa Studios: This room currently houses a kitchen filled with cups, utensils, a sink, and an espresso machine. It will also have a screen printer that is open to all students. It is still in the process of being assembled, so keep your eye out for when the screen printer is ready to use!

Scandinavia & Mess O'Potamia: These are the balconies upstairs, overlooking The Commons and Studio 1. They're great places for students to hang out, do homework, or brainstorm with friends.



Learn at the Hive

The Hive has a great philosophy of learning - they invite students to bring the things that they are interested in.

*Is there something you've always been interested in learning more about, but haven't had the time or opportunity to do so? Is there something you've always wanted to do – sing, act, draw/paint, connect with others, tell a story, build, code – but find that even beginner-level opportunities at the 5Cs require more than your current expertise? **We want to hear from you!** Here at the Hive we want to encourage exploration, which means providing a space to try new things in a low-stakes, low-barrier-to-entry kind of way AND making that a safe space to experiment and play – which really means, offering a supportive environment where you can fail, pick yourself up, learn from mistakes, and push on.*



Creative Academic believes that all universities should have these sorts of facilities, pedagogical expertise and cultures for learning so that all students can experience the joy and motivation of their own creativity and the excitement and potential for learning through working collaboratively with others.

To find out more about the Hive Centre visit <http://creativity.claremont.edu/> and take a look at the video clip on the home page.

Editor: In the following article Maria Klawe interviews Frederick S. Leichter, a design innovator and the founding director of The Claremont Colleges' Rick and Susan Sontag Centre for Collaborative Creativity known as "the Hive."

Teaching Creativity Is a Necessary Part of Undergraduate Education

Maria Klawe



Maria's life goal is to enhance the diversity of science and engineering. She is a mathematician, computer scientist, artist, mother and wife and is the president of Harvey Mudd College one of the leading engineering, science and mathematics colleges in the United States. Her passion is to improve and diversify science and engineering education at all levels. Her academic career spans Princeton, the University of British Columbia, and the University of Toronto and she also worked for IBM Research. 'The best solutions to the world's toughest problems are found when people from diverse backgrounds and perspectives work together'.

Klawe: *What approaches to creativity do you foster?*

Leichter: One of our core principles is to nurture connections – to bring people together from different disciplines. When we run a class or workshop, we want to have engineers and biologists and philosophy students and literature students working together on a project, bringing different approaches and perspectives. We try to mix people from different backgrounds.

We also aim to cultivate generative mindsets – to teach people to brainstorm a lot of ideas. It's a Linus Pauling quote, "It takes a lot of ideas to get a good idea," and a lot of ideas means hundreds of ideas. And they can be crazy ideas. There's another expression that says it's easier to take your crazy idea and make it viable than it is to take a mundane idea and make it worthwhile. So we teach people to ask, "how might we?" and then generate ideas, throw things out that won't work, and keep ones that might.



Hive Director Fred Leichter teaches a workshop on design thinking and sustainability

Klawe: *How are you trying to expand the teaching of creativity on campus beyond The Hive?*

Leichter: There is creativity happening in many, many classrooms around The Claremont Colleges. We're working with existing courses to help students and faculty bring creative problem solving and framing into their existing classes as well as supporting the development of new courses

through course grants. The course grant supports faculty who just need either time or resources to add creative elements or experiential elements to the courses they already teach or the new things they want to teach.

We supported a new class last year taught by an engineering professor from Harvey Mudd and an art professor from Pitzer on materials and sculpture. The students learned the engineering behind different materials and then worked together to create sculpture. From what I'm told and what I saw not too far into that class, it was no longer obvious who the engineers were and who the art students were. So we aim to have more classes like that happen where it's the integration across disciplines that causes that spark and magic.

Klawe: *How do you teach divergent thinking?*

Leichter: At the Hive, we provide a space where students can experiment and play. Up until this point in their studies, students have usually learned to play it safe and get to the right answer, and so we seek to put them into modes where, as is the case in more problems than not, there's not a right answer. There are many possible answers. For example, one of the exercises we do sometimes is set students up to have them working in groups on jigsaw puzzles. That's a complicated problem but there's a right answer. Everybody knows what it is, and everybody's really comfortable. They divide up, and somebody wins. But then we take them into another room where there are scraps of fabric laid out all over the floor and say, "Okay, now make a quilt." So what's the difference between the jigsaw puzzle with the right answer, and the quilt with infinite answers and no right answer? How do you form as a creative team and what do you observe about your behaviors in both of those situations? Our argument is there are more quilts in the world than there are jigsaw puzzles, and so we want to teach people to put things together in ways that haven't been done before.

Klawe: *Why do you think higher education needs to focus more on developing students' creativity?*

Leichter: In higher ed, and even in the liberal arts context, we allow students to silo. They pick a major and a minor and focus on those areas; if they go on to graduate school they focus further on one small area. There's nothing wrong with that, but in a world where there are ambiguous uncertain challenges and problems — and boy, are there ever a lot of those — people need tools to practice empathy and see things across different perspectives.

For example, think about health care reform. Part of the problem is that half the population is fighting for it and half against, but we've lost track of what the problems actually are and how we can know if we are solving them. We need to create a mode where we can do more experimenting, and where people rally behind the objective rather than the method. So that's another reason why I think higher ed needs to teach more creative thinking — because the world needs it.

Also, we can overly prepare students for fields that exist today but that will change or disappear, especially through automation. Even fields like medicine and law are becoming automated. Processes can be automated, but creativity is really hard to automate. The people who can think about how to automate processes, what design is needed — those will be the people in demand. Many jobs will disappear, but they will be replaced by better jobs. People who are equipped to do the things in fields that don't exist yet are going to be the most satisfied and successful.

We're already starting to see students who are changing their plans for post-graduation, very much shaped by the methods they've learned at the Hive. They are pursuing careers, ideas and dreams that were triggered by something they did here. Teaching creativity should be a necessary part of an undergraduate experience.

Acknowledgement

We are grateful to Maria Klawe and Forbes Magazine for giving their permission for Creative Academic Magazine to publish this article which was first published in [Forbes Magazine](#)

THINKING CREATIVELY OUTSIDE & INSIDE BOXES!

Creative Academic recently interviewed Tony Dias and Julius Dobos two experienced teachers working at Cosgrove College in California. Over the last few years they have developed an approach called MediaWorks through which digital media students work with business and industry clients on a significant project with commercial value. The interview is published in the latest issue of Creative Academic Magazine (CAM7 April) and it's well worth a read.

<http://www.creativeacademic.uk/magazine.html>

One of the points Julius made was that it's no good encouraging students to think outside the box (whatever that is).. when working for clients they have to use their imaginations to think inside the boxes that the client defines. Seems like an important principle to master before we can change the box that the client (or institutional manager for that matter) wants us to think inside.

We wondered how other teachers interpret and work with this principle.



Commissioning Editor

'Imagination' is one of those things that we don't often talk about in higher education, where learning discourses are dominated by critical thinking and analysis, yet without imagination we cannot begin to tackle the complex problems that beset the world or the challenges that we encounter in everyday life. So Creative Academic was delighted to discover a social learning enterprise that is similar to our own, formed around the wonderful idea of imaginative education. Even better, Gillian Judson, who co-directs Imaginative Education, has made some great contributions to our magazines (see also CAM8) and our #creativeHE forum. Gillian cares deeply about the use of imagination in all phases of education and is a passionate advocate for teaching practices that encourage students to use their creativity. We look forward very much to working collaboratively with Gillian as we also explore how higher education encourages students to use their imagination.

The **Imaginative Education Research** Group in the Faculty of Education at Simon Fraser University is dedicated to improving the quality of education by providing a conceptual framework, information, and practical materials designed to stimulate the imagination of teachers and learners.

Imaginative Education is a way of teaching and learning that is based on engaging learners' imaginations. Imagination is the ability to think of what might be possible, in a manner that is not tightly constrained by the actual or taken-for-granted. It is the "reaching out" feature of the mind, enabling us to go beyond what we have mastered so far.

The **imaginative educator** seeks to value and build upon the way the [learner] understands her or his experiences.... To do this, educators themselves must be imaginative and sensitive to dimensions of learning that they may have never thought of as relevant to education.

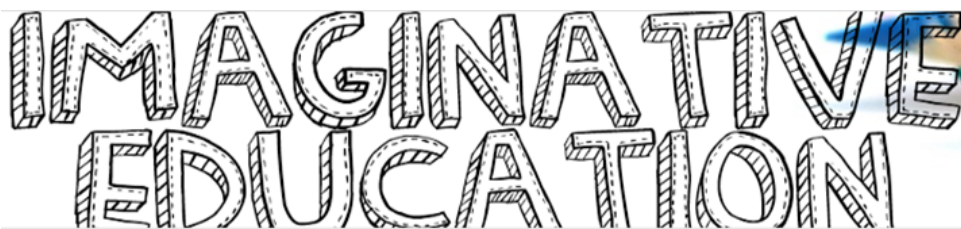
<http://ierg.ca/>

Engaging The Philosophic Imagination: What's In Your Toolkit?

Gillian Judson



*Gillian is one of the Directors of the Imaginative Education Research Group and a Lecturer in the Faculty of Education at Simon Fraser University Canada. Her published work and teaching show how we can routinely engage students' imaginations (pre-K through graduate school) to ensure effective learning across the curriculum. She is particularly interested in sustainability and how an imaginative and ecologically sensitive approach to education can lead to a sophisticated ecological consciousness. Her recent books include *Engaging Imagination in Ecological Education: Practical Strategies For Teaching* (UBC Press, 2015) and *Imagination and the Engaged Learner: Cognitive Tools for the Classroom* (Teachers' College Press, 2015).*



Great teachers inspire

Great teaching inspires learners; it leaves them *feeling* emotionally engaged or connected with the content knowledge. Emotional engagement matters as much in primary school as it does in graduate school. It matters as much in K-12 Art, History, Mathematics, Science or Languages classrooms as it does in institutions of Higher Education. Whatever the discipline—Linguistics? Molecular Biology? Electrical Engineering? Commerce? MicroEconomics? Curriculum Theory? (you name it)—effective teaching engages the emotional and imaginative lives of students.

This short article outlines four aspects of the philosophical or theoretical imagination—four strategies for engaging the imagination in teaching developed by the **Imaginative Education** approach to teaching.

Different Learners Require Different Tools of Engagement

The **Tools of Imagination Series** on **imaginED** indicates the wide range of **cognitive tools** educators in all contexts can use to engage their students. If you have been following the series, you know that cognitive tools tie up content knowledge (*any* content knowledge) with thinking and feeling. You also know, that depending on who your students are, different cognitive tools will have the different impacts on their learning.

Have you ever noticed that children's imaginations are alive with stories? They envision the world in ways that are ripe with dramatic images and fantasy, rhythmic with patterns, rippled with mystery and awe. Our youngest students make meaning of their experiences—of your curriculum—through the tools oral language provides. These include story, dramatic oppositions, rhyme/rhythm/pattern, engagement of the body, and a sense of mystery. Their worlds are shaped by the richness oral language offers them.



Have you ever noticed that learning to read often coincides with a shift in the kinds of things that emotionally and imaginatively engage children? When children learn to read a whole new set of tools functionally “rewires” the brain—now, the stories that engage children tend to have dramatic extremes and limits within them, they have strong heroic and human dimensions, they evoke a sense of wonder. Our literate students are less likely to believe in the fantasy of, say, Santa Claus, because they are now fascinated with reality and its fantastic dimensions. Our literate students make emotional meaning of their experiences through the tools of literacy. These include story, extremes and limits of reality, heroic qualities, humanization of meaning, sense of wonder, revolt and idealism, and change of context. Outside of “school”—whether hanging out with friends, playing an online game or reading a favorite book—these “tools” are the features of the world reading students find most engaging.

If you teach adults, you will know that many of the tools that engage younger learners continue to work for adults. For example, **the story-form** is one of humankind’s most powerful learning tools. You will know that evoking vivid mental images with words or using metaphor/analogy helps learning. You will know that the sense of wonder is a powerful means to ignite emotion. So never ignore these tools. However, these tools may not be as effective for engaging adults. Why? Because many adults have discovered the world of theoretical ideas—there are now powerful tools of philosophic engagement that you will want to employ in your teaching to tie up their emotions and imaginations with the subject matter.

Have you noticed that in late high school—or perhaps later, or earlier, depending on the learning opportunities they have—teens may begin to ask theoretical or philosophical kinds of questions about the world? Older students (late teens/adults) often realize that a world of theory exists to explain the immediate experiences they have had and all of the events they have studied in school. As part of their developing theoretical thinking skills, learners enjoy exploring abstract ideas and finding certainty and “Truth” in big ideas. As teens, the big ideas or theories that explain how society, government, culture, or nature work (or indeed these very concepts—society, culture, nature etc.) begin to contribute to their own identity. Theory now feeds an interest in gaining a sense of intellectual security and expressing personal agency.

Four Tools Every Educator In Higher Education Needs In Their Toolkit

Here are 4 power tools for philosophic engagement that all educators in Higher Education contexts can employ to maximize engagement and learning in their classrooms.

- ◆ **Take Them Out Of This World**
- ◆ **Employ A Meta-Narrative Structure**
- ◆ **Introduce General Theories & Anomalies**
- ◆ **Stimulate A Sense Of Agency**

How do *you* employ these tools with you students? How do you employ other powerful learning tools of the imagination in your teaching such as story, mental imagery, change of context, or sense of wonder?

You can find a summary of different cognitive toolkits here:

[How To Engage Young Learners: 7 Tools of the Imagination You Need To Use](#)

[Teach Readers? Use These Tools To Fulfill Their Need For Adventure](#)

Congratulations to Gillian Judson who co-leads Imaginative Education and a great supporter of Creative Academic & #creativeHE. Gillian is one of the speakers at TEDxWestVancouverED on September 23rd



TEDx WestVancouverED
an independently organized TED event

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CAM7C June 2017 A flavour of Ireland

Cover picture 'Everything in Motion' by Deborah Watkins studied ceramics at the National College of Art and Design where she was awarded a first class honours degree in craft design. She moved to Connemara in the early 1990's. Deborah's work attempts to describe the drama and ever-changing atmosphere that is present in the landscape and coastline of Connemara.

Introduction to CAM7C June 2017

This issue of CAM7C has an Irish flavour to it. By that I mean, thanks to a coincidence of factors, the content of this magazine has been entirely derived from teachers and experiences in Ireland.

The main feature is a fascinating description and evaluation of educational practice that has been developed in the Civil Engineering Department at the University of Limerick. One of the members of Creative Academic's team, Professor John Cowan, who is also a Civil Engineer, has been working with members of the department on a module called Design Studio. John suggested that the approach being used by the module teaching team to engage students in creative problem solving, would make an interesting article for the magazine and we are delighted that the teaching team - Tom Cosgrove, Michael Quilligan and Declan Phillips kindly agreed to write it.

It so happened that in June I was also in the west of Ireland contributing to professional development events at three different institutions including the University of Limerick. During my visit I managed to meet Tom and Michael for a delightful lunch. Furthermore, Declan was one of the participants in the CPD module I was helping to facilitate and during a quiet moment I was able to interview him to try to find out how his pedagogical beliefs and knowledge had helped shape the undergraduate curriculum in Civil Engineering.

So that is the story of how this particular issue of the magazine came about and we are indebted to the authors for the generous and creative way they have shared their practices and insights. So we would like to dedicate this issue to all the creative higher education teachers in Ireland who I met on my visit who are committed to enabling their students to use and develop their creativity in the challenges they create for them.

Norman Jackson

Commissioning Editor

Commissioning Editor: One of the goals of Creative Academic is to understand not just the what? and the how? of educational ideas and practices but also the why? But why particular educational practices came into being in the way they have is often very difficult to ascertain. As our year long creative pedagogies project has progressed perhaps the most significant learning we have gained is the insight that in order to really understand complex educational practices we also need to understand the teacher(s) who create such practices. It's not surprising that teachers, with unique histories of experiences through which they develop their beliefs, values and knowledges, create highly personal and unique pedagogical practices. Teachers create rich ecologies in which students' learning and creativity can flourish because of who they are and who they are trying to become. This reflects their accumulated past experiences and situations and events that have shaped their lives, and their interactions and relationships with people, ideas and problems in their real and imagined worlds.

The following article offers a way of engaging with the minds of teachers as they perceive, reason and imagine the sorts of education they want to provide and the steps they have taken on their pedagogical journey. Tom, Declan and Michael create a wonderfully rich professional conversation that we can all learn from, full of insights and a creative artefact in its own right.

Encouraging and Facilitating Students' Creativity in Problem Solving in Civil Engineering at the University of Limerick

Michael Quilligan, Declan Phillips and Tom Cosgrove



Michael is a civil engineer, lecturer and Course Director for the Civil Engineering programme at the University of Limerick. Following post graduate degrees in structural engineering in Ireland and Sweden, Michael worked as an engineer in London and Limerick on a wide variety of projects before joining the Civil Engineering programme team in 2008.



Declan is a civil engineer and senior lecturer at the University of Limerick. He holds PhD and MSc degrees from Trinity College Dublin and teaches courses in soil mechanics, forensic engineering & ethics and is the module leader for the Design Studio module discussed in this paper. As the inaugural Course Director for the civil engineering programme, he was instrumental in establishing the programme's student centred pedagogy.



Tom Cosgrove is founding professor of the problem-based programme in Civil Engineering at the University of Limerick. He practised as a structural engineer for 28 years. He is a Fellow of Engineers Ireland and of the Institution of Structural Engineers. As well as his research in structural engineering, he is currently pursuing action research on reflective writing in engineering education.

Preamble

This article describes one of the educational experiences in the University of Limerick's (Ireland) undergraduate civil engineering programme. The module discussed is "Design Studio" which runs in the first semester of year 2 and focuses on creating the opportunity to enrich the formation of the next generation of civil engineers. At its core is the cultivation of *listening skills* so the young engineer is better equipped to respond to a client's brief in a creative and innovative way. The module sits within a programme that adopts a Problem Based Learning (PBL) pedagogy in which the problem solving 'process' has parity of esteem with the required 'technical' content. In adopting a conversational structure throughout the paper, the facilitators are acknowledging the individualistic and personal drivers of creativity. These include an openness to diverse and different views as essential and necessary components of a creative process. The article starts by presenting the context and culture for the module through the reflective lenses of the engineers that facilitate the module's implementation. Student reflections are interspersed throughout the dialogue as evidence of the challenges or dissonance they face when invited in to what for them are uncharted educational experiences.

TC: “Declan, I think it is fair to say that the main thing you and Michael were concerned about in the current iteration of the Design Studio module is connected to freedom and creativity. But before we get into that I think the context is important because modules like Design Studio don’t happen in a vacuum, especially not in engineering education. So maybe you can talk a little bit about your role in getting academic approval for our Civil Engineering programme. What stands out as important in your memory?”

TC: "Yes, and then the team was recruited with that problem based commitment up front and centre, starting with myself".

TC: "What do you think led you to insist on a problem based approach?"

TC: "I think there are some echoes in my experience. My design ability was only unlocked when I crossed a threshold of *confidence*. One vivid threshold moment springs to mind when I realised quite suddenly one day during my first year in practice, that I had actually produced an original design solution. The Architect wanted to hang a very heavy marble-clad planter off a light slab. I realised I could invert the idea; reverse the load path: the planter wall could become the primary structure supporting the slab. I could say today that this was a moment of reflective self-awareness. The "Can I do it?" self-doubt that saps energy and kills imagination faded away. Analysis was useful, even enjoyable, but design ideas seemed to spring from somewhere beyond logic and analysis. As confidence grew, there was a tremendous sense of liberation, of imaginative freedom, and in fact it was this creative playfulness that drew Architects back to work with me: creativity sells! At the same time, I knew that fluency was acquired partly through the long labour of analysing many examples."



MQ: "I think that when the team began to design the programme we were more concerned with the actual process of enquiry and design than with the details of a specific calculation. The problem came first, then came imagined solutions: the rigorous checking was essential but that came last. Many of us felt that our formal education had placed more emphasis on the 'closed form' (one correct answer) type of analytical puzzles rather than on the process' of solving open-ended engineering problems. There was also a strong realisation that this problem solving must happen very early in the programme."

TC: "Yes, I think we were trying to orient our students towards real messy problems from the very start, with analysis in a supporting role. And I think we were all aware that computers and the internet were changing the game, shifting the role of the engineer from analysis to invention and synthesis."

We need creative problem solvers

DP: "The really valuable skills and attributes were not going to be code-based computational procedures. Both you and I had to teach ourselves many codes after graduation. Our education did give us the fundamentals to allow us to do that. It had considerable integrity in that respect. But the long-term need was going to be increasingly for creative thinkers who understood technical fundamentals but who could work creatively in teams often with non-technical people"

"computers and the internet [are] changing the game, shifting the role of the engineer from analysis to invention and synthesis."

TC: "Yes, creative thinkers who were technically literate, who understood the fundamental physics of the situation. In my experience concepts like equilibrium can be presented in University as really elementary, first year stuff but I believe they can be thoroughly grasped only through solving many problems. Then the concepts become part of an easily accessible repertoire, like a melody that is at a musician's fingertips, available on demand. I think fundamental ideas like equilibrium, stability and especially load path, ideas that integrate and unify are the most valuable. Academic specialisation tends to fragment, lose the bigger picture that should dominate design. Undergraduate students need to be formed in a process that gets them asking the right questions as a matter of habit. As educators, we are, or should be, involved in forming good habits, professionally speaking. I could suggest that good professional habits can't really be separated from good personal habits but talk of character might be considered old fashioned!"

MQ: "I agree that all design involves creativity, but we need to check in with ourselves and ask: to what extent are we being creative ourselves and enabling creativity in our students? "Do unto others..." I do think we have faced a dilemma that we have not fully solved yet in our programme design. Even though our core programme is problem based, I don't think any of us doubted that an engineer must still grasp the fundamentals of, say, mechanics or structural analysis. Therefore the journey we have mapped out in many of our projects is constrained, because we are leading them along a route where they must encounter rigorous knowledge and content. There isn't enough scope to deviate. Design Studio is an attempt to break away from that: as little structure as possible other than a deadline, briefing sessions to orient, liberate the mind so that creativity has free play, so the students can truly realise there is no right answer, no wrong answer."

"to what extent are we being creative ourselves and enabling creativity in our students?"

TC: "You are right. We always wanted to reach past the physics and pragmatics of a design problem, to stretch students into a more creative zone and we have struggled to do that. Still, notwithstanding the constraints that we felt we had to honour, we have managed to set problems that draw students through the whole design process in every year of the programme. In fact, Michael, your own "first year, first week, first day" project is the archetypal example. Your project gets students thinking, researching, imagining, designing, critiquing, calculating, procuring, making, testing and presenting, all in one week even before they have had a single lecture! And there is so much creativity demonstrated in that project. So we can be too hard on ourselves!

DP: "Tom, I think it was, back in 2011 when we were assembling material for our first web-site video that you told in the video the story of how students exercise the whole design process in every year but on increasingly complex projects. We were overturning the traditional sequential educational model built on incrementally acquired knowledge of science, then engineering science, then engineering procedures and then, in final year, eventually an overarching design project: a "you will understand one day why you are studying all this theory" so to speak theory of engineering education.

TC: "Yes, but I think we had actually done that overturning before we saw clearly what it was we were doing! It was when we stood back and considered what we had actually created that we were able to understand it explicitly. We were inculcating habits, a process of enquiry and creation, derived from the world of engineering practice".

DP: “And I agree that Michael’s “first year, first week, first day” project is, if you like, the proof of that pudding: the full design process exercised using prior knowledge from secondary school and on-the-spot research to complete a design , build it and test it. The traditional model is sequential and hierarchical. You can’t eat the full design pie until final year! Whereas our approach develops knowledge and process in unison: you can have your cake and eat it! The increasing diameter of the circles indicates that the students work through a full cycle of the design process in every project, but the problems increase in complexity as the students’ progress.”

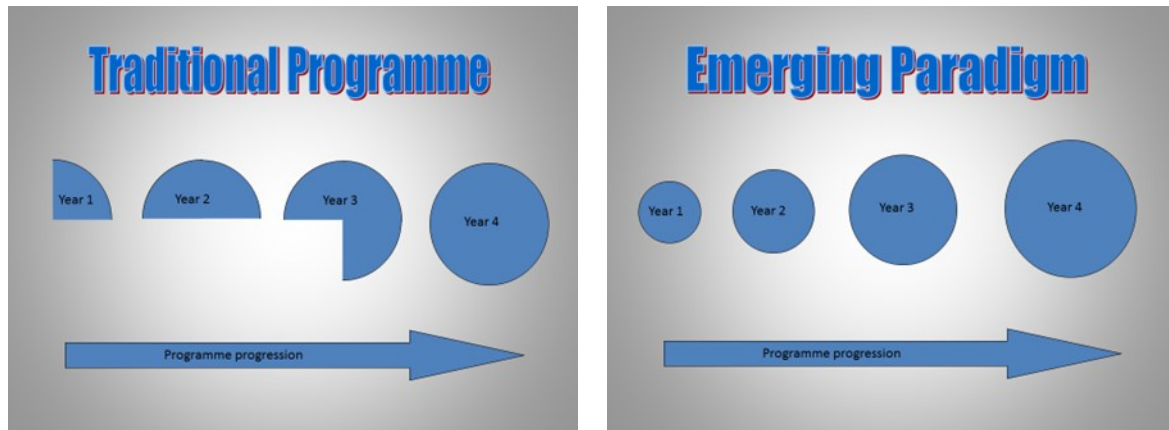


Figure 1 Traditional and emerging educational paradigms

DP: “getting back to creativity: creativity is involved in solving even simple problems in any discipline; I see creativity as an attribute that young children have in abundance but unfortunately they seem to lose it progressively as they move through formal education. One student reflected after Design Studio: *“I feel that my ability to be creative was hampered slightly by the school system”* and another writes *“I think that secondary school can drive creativity out of people by teaching that there is a single correct way to do something”*. For me, the current iteration of our “Design Studio” module in second year is an attempt to bring creativity front and centre by highlighting its central role in responding to a design challenge. This was partly to escape from the constraints that Michael refers to above even if we have partly put those constraints on ourselves!”

Creativity has many definitions, for the purposes of this paper we will use Ken Robinson’s definition ‘Creativity is the process of having original ideas that have value.’¹

MQ: “Yes, Declan, I agree that after all the iterations since 2008, the Design Studio module is now very much focussed on creativity. I remember one incident that occurred back in 2012 which was a significant ‘nudge’ towards its current form. The Ilan School was an educational initiative that uses boatbuilding as the vehicle for personal development. A director of Ilan had approached one of us to see if the Civil Engineering programme could get involved in their project to rebuild ‘the last of Ireland’s timber built ocean going sailing ships’. There were obvious parallels between our approaches: a merging of craft (Figure 2) and engineering in a raw and open learning environment. I think we shelved the idea at the time mostly due to the constraints we were operating under in trying to honour traditional technical learning outcomes. Paradoxically we seem to have arrived at a situation in our creative problem solving programme that we had no room for a really exciting creative project!”

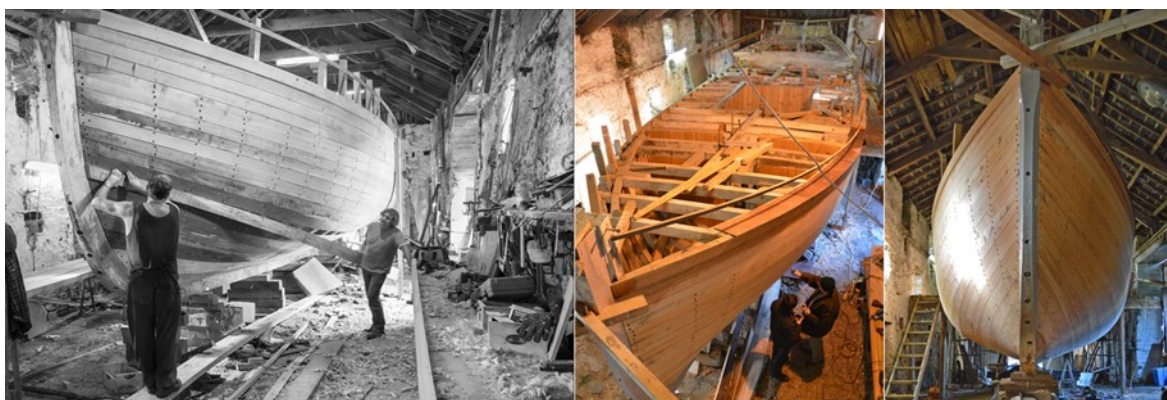


Figure 2 Rebuilding of the AK Ilan, ‘the last of Ireland’s timber built ocean going sailing ships’ (Image: www.ilan.ie)

DP: “Yes, Michael. The approach from the Ilen project leader definitely provided the spark for today’s Design Studio module. You and I decided that the students were well served with opportunities for exploring technical topics. Ilen highlighted the need to develop Design Studio as a space for autonomous learning and personal development with as few constraints as possible. Give students the autonomy to select a situation, environment, process or artefact they are passionate about and design some improvements. The topic does not have to relate to engineering in any way but comes with one caveat: the student must engage with the end-user of the product, process or service they are researching and incorporate the views and requirements of the end-user into their final proposals”.

MQ: “Actually Declan it wasn’t until we launched the new module format and you sailed into action that I realised your intention to decouple so completely from engineering!”

DP: “I think I was preoccupied with engagement, with getting energy flowing in the room. I had read a lot about the motivating power of pursuing topics for enquiry that are of personal interest, relevant and meaningful to the learner; Deci and Ryan² are very persuasive on this and on the importance of autonomy in the development of intrinsic motivation. Daniel Pink³ adds to this, looking at motive and purpose in undertaking meaningful work. Moreover, the accrediting bodies allow some flexibility to deviate from analytical topics. Most Engineering Institutions define Engineering as an art and a science. I think we wanted to embrace this flexibility in the Design Studio problem brief”.

TC: “Well, the creativity aspect of Engineering is honoured in the written word by the professional bodies, but I am afraid, with the capture of the old professional schools by the University system, the art has been severed from the educational process, in engineering at least.”

DP: “I was concerned that the students should understand that Design Studio would be different so I laid out some thoughts that I hoped would help them get into the “zone”:

- Individual diversity of experience and education brings “richness.... to the problem solving process.”
- The module is intended to provide an “open-minded and supportive environment” to facilitate individual creativity.
- The module seeks to “re-awaken.... childhood thought processes.” This requires the “unshackling [of] ... traditional linear thought processes” that result from “rigidly structured, highly prescribed problems that focus on closed form solutions”.
- In our view ‘creativity’ has to do with the development of ideas that have value, and ‘design’ is the iterative process through which we bring these ideas to fruition.”

Design brief

MQ: “Preparing the brief was therefore an important first step in trying to model this different approach in some small way.

First impressions endure. I came across the brief for the James Dyson Award⁴ around this time and its look and feel echoed much of our thinking, so it provided a timely insight”.

TC: “From the outset the team embraced PBL as an approach to learning that is *active and collaborative*. We were aware that all good engineering design is creative. Through reading the work of Professor John Cowan⁵ on reflective

writing, I came to see reflection as a core competence and wanted to

embed reflective writing within the programme⁶ and Declan was interested in reflective writing also. So, my educational value system became *learning that is active, collaborative, creative and reflective*. I came to appreciate reflection as a process of growing self-awareness, of examining experience to clarify where you are and where you should go next. I had experienced periods of taking stock as a kind of mental spring cleaning: freeing up mental space for the next step on the journey. Working with John Cowan has, I think, brought a critical edge into play: “What exactly do I need to learn? How will I learn it? Have I done so? What next?” It is interesting to compare how the values and abilities articulated here align with the UL Graduate Attributes”.

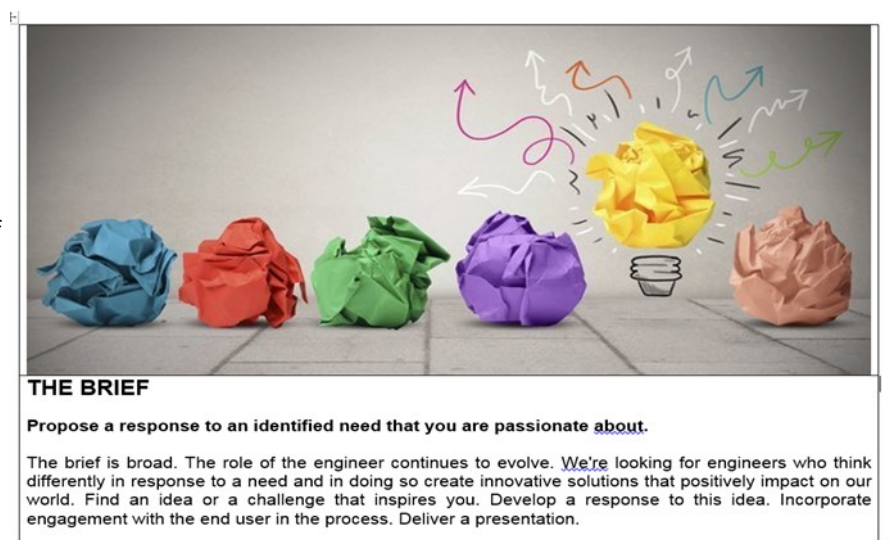


Figure 3 The brief as presented to students

Table 1 Design Studio Module Map

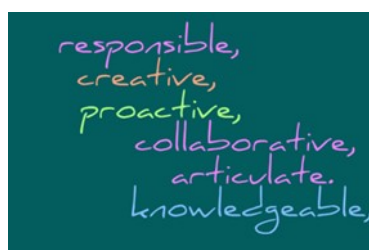
		Creative Challenge	Reflective Pauses
Phase I	Develop a Proposal (on campus) Weeks 2-5	Students choose 2 topics (artefact, process or situation) of personal interest, not necessarily linked to engineering. Research those topics and consider potential improvements. Tutors give guidance to the class, as well as meeting individually with each student on 2 or 3 occasions. Students develop two proposals before choosing one for further development	
Phase II	Off Campus Retreat Week 6	Module activity moves to a city centre venue. A research phase is followed by an interim presentation on Wednesday with peer and tutor feedback on process and content. Final presentations take place on Friday. Invited speakers address the students on 3 mornings.	<i>Workshop 1 & Reflective Task 1</i> “Based on your experience in the module to date, identify the skills/abilities or dispositions/ traits that you expect will be called for from you during the semester”
Phase II	Portfolio & Final Reflection (on campus) Weeks 7-11	Students create an e-portfolio detailing their problem, their enquiry and creative response.	<i>Workshop 2 & Reflective Task 2</i> “Complete your interim reflective self-assessment & seek peer feedback” <i>Workshop 3 & Reflective Task 3</i> “Update and submit your final Self-Assessment with future actions for improved effectiveness”

MQ: “The module map gives a good insight into the workings of the module. It flows along two parallel tracks, one focussed on the creative challenge (led by DP and MQ), the other a triplet of reflective pauses (led by TC) moving through anticipation and planning, awareness and consideration of current experience and action and retrospective self-assessment of achievement and future needs.

Scaffolding the creative process

DP: “I might just expand on that table. Supporting a diverse group of students in a creative endeavour is a significant challenge. The process and drivers of creativity for each of us are diverse and intensely personal. Still, I think there are some common factors. I’ve been thinking about the steps that we felt would help to create the right environment for creativity. The main ones are:

- Online videos of creative people discussing their creativity
- Trial Run
- Inspirational leaders
- A free and restful mind
- The right spaces
- One-to-one discussions



"The process and drivers of creativity for each of us are diverse and intensely personal."

Sharing online videos of people discussing their creativity

DP: "I picked some videos that I felt might provoke students to think about creativity. John Cleese, the star of Fawlty Towers and Monty Python, has a number of internet videos reflecting on the conditions that facilitate creativity⁷. Tens of millions have seen Sir Ken Robinson In his Ted talks, sharing his views on our education system and how it is killing creativity in young people⁸. I think he is witty and perceptive. The Design Studio students watched and discussed these videos in the first week of the module and were then asked to critically reflect on their own daily routines, habits and educational arrangements and to consider how these may be influencing their creative abilities."

MQ: "I think one thing we need to consider in picking thought leaders is our students' perspective: I agree John Cleese is highly creative and very funny and I certainly enjoyed listening to him, but I am not sure if our students relate to a comedian that was at his peak 30 year ago. They may be missing out from our point of view but it is tricky to figure out what they might be open to and who they might consider a credible role model."

TC: "Actually, I had a sinking feeling of disappointment last Autumn with third year when I showed them what I thought was a good ice-breaker: a short and very famous American comedy video [which I still find hilarious] from the 1950's. The audience included Irish and American students but it went down like the proverbial lead balloon! Apart from struggling to bridge the generation gap, once it started, I realised that the space, the sound and vision quality were all wanting."

Trial Run

DP: "I introduced a short 2 week project. The students were asked to design a short course that would both inspire and help them become better engineers. The purpose of this exercise was not so much about the students' products; rather, it was about bringing them to consider critically aspects of taken-for-granted familiar educational experiences. Every student offered a module traditionally structured as lectures, labs and tutorials. There was very little evidence of creativity or innovation in their thinking. The student output from this short exercise was intended to serve as a starting point for a discussion on what Design Studio was about and how our intentions [depicted in the following graphic] might be realised during the module, but I was disappointed with the results."

TC: "Actually, Declan, you may recall I dropped in and viewed the Trial Run posters on the presentation day and you shared your disappointment but I thought many of the proposals had evidence of some critical reflection on experience, even if they were not revolutionary. Actually in their written reflections, three students described their Trial Run proposals. Two used interactive digital resources and one used on-line delivery so perhaps their responses were not entirely traditional. Maybe you did better than you thought! It is true that most students (28) chose not to mention or reflect on either the videos or the Trial Run project. I think the positive impact of the off-campus week tended to concentrate attention there. This result could be judged a mark of success. Then again, the core project is usually about a useful object and even then they struggle to get

started. To think about education, is, I think, very demanding because it involves reflexive self-awareness that is rare in the young and scarce enough in the more mature. We struggle ourselves with that challenge."

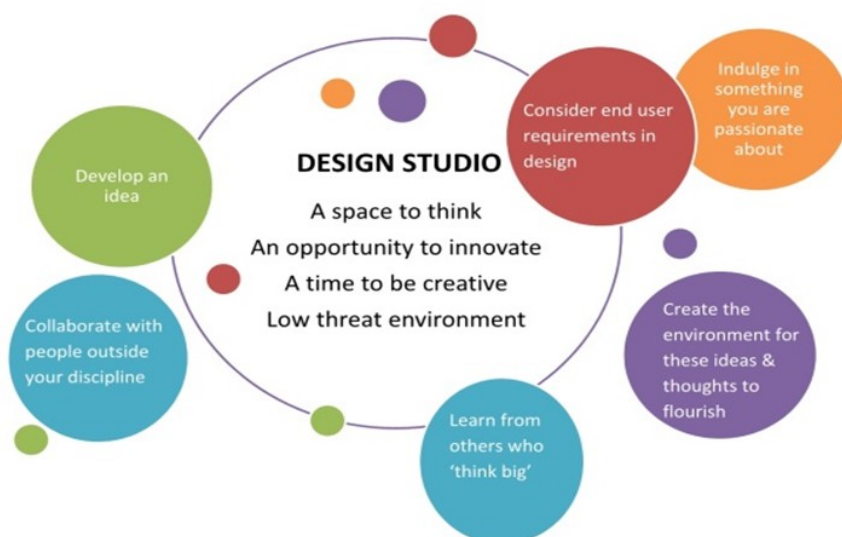


Figure 4 Key features of Design Studio

Inspiring speakers

DP: "I think personal encounter can be among the most powerful of human experiences moving us towards change. Fourteen years of a highly prescriptive and structured primary and secondary school education can leave the creative juices a little diluted. In an effort to concentrate the juices and loosen well-worn patterns of thinking, I invited a number of people to tell their stories to the students. I look to speakers who can deliver on the aspirations of the module: to encourage the students to think big, think differently and to believe in their own view as a valid and important starting point for learning, creating and presenting their ideas.

In his presentation, the founding president of the University of Limerick, Dr. Ed. Walsh (right) illustrated how, in 1972, his innovative approach of targeting niche courses, adopting a modular and semesterised structure and incorporating an 8 month cooperative education work placement in every university programme transformed university education in Ireland. The students were particularly enthralled by his passionate belief and determination which (against considerable inertia and political opposition) won the day and secured a university for Limerick.



TC: "It is interesting that, from your account it was his way of being, his spirit, that seems to have engaged the students rather than the details of his innovations."

DP: "We were all delighted by the inspirational story of a lead female dancer from the global phenomenon that is Riverdance. What is particularly inspiring for me about this young lady, is her absolute determination not to settle until she had found her passion in life. On route to this goal she successfully completed two primary degrees; one in business and the second in life sciences and two post-graduate degrees one to doctorate level. Her studies were punctuated by the seven years spent bringing the creative and energising spectacle that is Riverdance to the four corners of the globe. She now works in education where she is an inspirational role model for all who have the privilege to meet and work with her.

"I was very inspired by one particular talk given to us by a former Riverdance dancer who has worked in many different professions, focused on working only in fields which interest you. After the talk I personally vowed to try to follow in her footsteps in the future". Anon student

DP: "I believe when the timing is right the visiting speakers can allow the students to link bigger ideas with their own ideas"

"The guest speakers that came in were very good, especially the Irish dancer who taught me that there are many directions in life; and if you fail with one there is plenty of options." Anon student

TC: "Confirming Declan's intuition, this latter student then went on to connect this insight to their module activity":

"That was like this project, where if you get stuck there are plenty of options – you have only to discover them. Anon student

DP: "Other presentations included an entrepreneur who spoke about his career in property development and in particular how he survived the worst economic downturn in Irish history. We were also treated to a fascinating lecture on the brain and creativity from a cognitive scientist."

A free and restful mind

DP: "I am struck by how much the world of the Millennials is one of constant connectivity and bombardment with the latest news trending on the internet. Hardly the type of environment that is conducive to creative thinking. In an attempt to sever the digital umbilical cord, we held 'mobile free' Yoga sessions in the mornings of the week off campus (right photo). These sessions were popular with the students, they helped calm and de-clutter busy minds so they could function effectively in their creative endeavours"



The right spaces

MQ: " We have a campus that is very beautiful physically but timetabling that fragments time, no home base for students where they can explore and speculate. During the first cycle of the module, I was surprised at the effectiveness of being off campus: a rough and ready open space, a space that was somehow ready for new ideas, that needed new ideas that the students could make their own. To me Design Studio has two primary aims: firstly space and time for the students to explore something of personal interest to them. It is somehow amusing to consider that in so many documents we expect students to innovate when they are put through a system that does nothing to foster free exploration and choice. Secondly space and time outside the University environment."

DP: "I think a campus symbolises tradition, structure and familiarity. We wanted to break from this so in 2015 we secured a 'bohemian' loft space off campus in which the students would be comfortable, have a place to sit with plenty of wall space to display their work."



(a) Individual research and planning



(b) Recording the initial pitch of an idea

Figure 6 Uninterrupted week off campus

"I would attribute the reason for coming up [with] and solving the problem is the change in the place of work/studying which has had significant boost to my creativity." Anon student

We also needed a big enough space so people get away from one another and sit in a corner to think.

"I found that spending a few quiet minutes alone allowed me to relax and my mind could work naturally, rather than trying to force ideas to come to mind and becoming frustrated." Anon student

We are also keen to secure large chunks of un-interrupted time so students could explore and speculate on the myriad of ideas they generate on their project. We believe the 'lecture-tutorial-lab' framework, inhibits the freedom we were hoping to provide. Even if we had a full-dedicated week on campus, we believe it would not be congenial to the freedom of thought and imagination that we aspire to facilitate. Being off campus as a collective and with a collective goal is one of major successes of this module. The rough and ready open space in the centre of the bustling city was the perfect venue for developing and honing new ideas, a space that students could make their own."

One-to-one discussions

DP: "During the initial weeks of the module the students were considering their ideas for further study. This was an interesting process to observe – many students found the freedom to choose their own topic stressful and frustrating. They struggled even to identify a topic of personal interest when given the freedom to do so. The absence of downtime or even time to be bored seems to me to be impacting negatively on young people's opportunity to unearth the things that truly inspire them; the 'other interests' or passionate pursuits division are not being well served in our digitally connected world. This is not a fixed theory, more a concern that seems to be true of many students today. Would this have been different in the past? I don't know."

"I was very narrow minded to being afraid to commit to anything in fear it would be wrong." Anon student

"For the first time in my studying career I had been give complete independence to do what I want to do. ... At the start ... I was uncomfortable with the situation...." Anon student

"at first I found it difficult to take the freedom into my own hands but towards the end I understood taking something with interest in your life gives you a lot more enjoyment. Anon student

MQ: "The series of one-to-one sessions with the students where their ideas were explored helped to address this issue. They needed some encouragement to outline the reasons they were passionate about the topic and why they felt it was worthy of further study. This interaction was often sufficient to get the creative juices flowing.

"Even though at the beginning I struggled with the task, after engaging with it, and creating a good environment ... to think creatively, I found it... enormously satisfying ...I was undisturbed by distractions and my mind was free to wander as it pleased...." Anon student

"Looking back on the project ... the most hard-hitting insight which I gained was into the enjoyment and pleasure that can be gained from working on problems and topics which you find to be interesting" Anon student

In a number of cases multiple one-to-one sessions were required by some students before they realised they had our permission to think for themselves on this project.

Some students experienced the unstructured time as a challenge:

*To think creatively,I found it ...
enormously satisfying*

"At the beginning I found it difficult to be productive and motivated when there were no lecturers there to egg us along. There were many hours I found myself off topic or procrastinating. I quickly realised that ...I had to change my ways. In order to motivate myself I began to write out a plan each day of what I was going to do..." Anon student

TC: "There is an interesting dynamic apparent in the students' reflections linking freedom of choice, enjoyment and engagement [and discomfort] and creativity.

"We were allowed to be creative ..., at first I found it difficult to take the freedom into my own hands but towards the end I understood taking something with interest in your life gives you a lot more enjoyment" Anon student

"When we were given a free rein to study what we wanted it was brilliant, and when I was studying what I enjoyed it made me want to do the work" Anon student

TC: "I think Declan's suggestion about the lack of passionate pursuits raises important questions. Michael noted that our students are put through a system that does nothing to foster free exploration and choice. So I think there is an element of being other-determined rather than being self-determined at work here. They may have interests but it seems to me that the education system has engaged with students' interests as a way to promote student engagement with the system. They are long since conditioned to play the game of guessing what teacher wants and responding accordingly. The following quote I think illustrates that students are not so much without interests as habituated to disregard them when in a formal educational context. So, oddly, they have to ask themselves about themselves!"

"Automatically I thought to myself 'This brief is too vague, I'll never come up with a solution to it' so I thought what am I passionate about? Gaelic football! Then straight away the ideas started flowing through my head." Anon student

TC: "Not alone may students' creativity be obscured by didactic approaches (above) but their minds may become closed off from unconventional possibilities (below)"

"The idea of spending a week off campus, missing out on lectures and tutorials to do a poster that was completely unrelated to civil engineering baffled me. I found it hard to see the point ... I know I wasn't alone in this thinking, for some of my peers whom I spoke to felt the same way." Anon student

TC: "I think the "box" metaphor in the following quote reminds us how thinking can be compartmentalised: school learning is unconnected with life. The student never says in his reflection what the chosen project was!"

"At first I found this very challenging as it was such a broad brief and I found myself getting bogged down in finding an idea. I decided to look outside the box and choose something simple that I do in my spare time now and again." Anon student

DP: "I wanted to encourage students to engage with the end user of a product or service as an important mode of research to inform their design. This will be a core part of their professional life: to negotiate and cultivate diverse relationships so I was pleased that some embraced this opportunity",

"My confidence improved as the module forced me to get out and interact with experts in the field of basketball ...and pitch my idea. This meant that I was really putting myself out there I feel going forward if I carry on as I did in the module asking questions and trying to come up with new ideas that my confidence will improve further which will help me come up with even bolder ideas." Anon student

In week 6 there were interim and final presentations with peer and tutor feedback. Many students choose presentation skills as an important development:

"The tutors in week 6 gave me some advice on improving my presentation abilities. This allowed me to focus on specific ways to improve it such as getting used to keeping eye contact to engage the audience, referring to my poster, not turning my back on the audience, speaking clearly and loudly.... I found that I had prepared a lot more for the final pitch for this project than I had with presentations in the past." Anon student

MQ: "I am heartened by the range of topics that students have chosen over the last two years ranging from a 'pop-up home' for the homeless to form work systems for concrete shells, from improving the physical environment of an entire city centre to designing a "smart sliotar" or an unbreakable guitar string". [A sliotar is the small pig-skin ball used in the game of hurling].

TC: "The reflective pieces do tell the inner story of experience, struggle, frustration, and excitement. However, the reflective task was an invitation to plan, generalise from experiences and look ahead rather than narrate. However I think the following passages reflects the kind of progression that was happening:"

"Having identified the problem I was going to tackle, which in my case was the labour and time consuming job of covering silage pits on farms, I then had to assess the problem ..[to] ...find practical solutions. This process ... was completely new to me and although ... difficult it [was] enjoyable and rewarding. I ... had to identify what currently makes it impractical and then provide solutions for these impracticalities. Once you have ... solutions to the small problems then you can bring them together, which often involves making compromises. In my case in order to save farmers labour hours covering the pit with new sheeting and tyres each year, I proposed a reusable pit cover with which a farmer would have to compromise on cost as such a cover would be expensive to make. I feel that this project greatly improved my problem solving skills which I will certainly put to use when working as an engineer". Anon student

"I did a lot of initial research into the current methods of farming and how these could be improved and exploited in a better way. I collated a lot of relevant information from this research which gave me great insight into how we as a global population could go about increasing our food production. I concluded with three different ideas on how to sustain or increase food production: increase yields on farms; alter people's diets; and build sky farms. At the time I felt like I had so much research to compile and I was finding it very difficult to amalgamate my three very large ideas into one response to solve such a huge global problem. Through listening to the feedback after the initial presentation it became quite apparent to me that I really had to narrow my ideas down to one and focus solely on particular area of Limerick which could then act as a benchmark and serve as example to solve the global issue of providing enough food for the future. The reason of choosing the sky farm over the other solutions was that it had a closer appeal to me as my idea would regenerate an area of Limerick that has become dilapidated and run down." Anon student

TC: "And another farmer!"

This module showed the importance of research in any project you undertake

"At the start I had two ideas to choose from, my other was an adjustable arm support for welding. I decided to do some research into which would be more useful. I approached a friend who is a second year apprentice welder and a friend of my dad who is a professional welder, both said my idea had merit. I spoke to my dad and neighbours about the bale handler and they said it also was a good idea. I chose the bale handler as I had experience with it myself and more knowledge. Without this research I could have wasted time on an idea but both had merit so I had the luxury of choice. I researched to see if my idea had already been thought off and I approached end users for their opinions. I visited Rossmore engineering, who specialise in bale handlers, where I got constructive advice which I used to change my design. This module showed the importance of research in any project you undertake." Anon student

Scaffolding the reflective process

TC: "I ran three reflective writing workshops as noted above. Professor Cowan had kindly agreed to act as a "critical friend" for the students by reading their draft reflective accounts and provide independent and confidential feedback to students to feed into their forward thinking. Many students fed back anonymously that having somebody outside the system as a sounding board was very helpful. A majority accepted John Cowan's offer of feedback.

In the first Reflective Writing workshop during week 6 the students' understanding of the module and salient experiences were explored. Their responses were gathered anonymously on post-its, tabulated and shared online. Students highlighted the shift in physical environment, freedom from distracting pressures and freedom of choice based on personal interest or desire. Other responses included reference to social skills, researching, having an open mind."

In the final submissions some students reflected on the reflective activity:

"I'll ask a question to myself, can you include reflective writing as part of what you have learned to do in this module? ... last year ... I felt I didn't really grasp the whole concept ... These few sessions with Tom have really put a new side of what reflective writing can do for a person. ... if you don't think back on what you have done. How are you supposed to improve on next time or certain abilities or traits you never noticed about yourself? This in turn will lead yourself to better future planning or creating more skills/abilities. I feel I improved on this over the semester and will be able to improve this ability more in the future" Anon student

"Another thing I have been trying to improve is my reflective writing. ..initially it [was] nothing more than an essay on what had improved over the course of a semester. Maybe I'm doing nothing different here but I feel now that I am thinking about it more and I am writing it for a reason. Now I am writing it for my course and when I do write it allows me to see the progress I have made it gives me an overall viewpoint of where I am in college which I think is very important because sometime college can be very overwhelming. I also think reflective writing could benefit anyone in any stage of life because it really makes you think of what you have been doing and allows you to be slightly critical of yourself which could make improvement easier. This would be vital in my career because in my view nothing but the best is acceptable". Anon student

"This experience thought me that frequent reflection on my goals will allow me to maintain my focus on what the target of my efforts is. This process was therefore something which I practiced for the remainder of the module, to ensure that I was not drifting of theme for the remainder of the class." Anon student

Another summarised the impact for him:

"The Design Studio Module ...has had a profound impact on me. Both as a Civil Engineer and a person...I came away from this module believing that my creative side had been enhanced, and my love for problem solving, renewed". Anon student

Module leaders' reflections

DP: "I think designing and facilitating the module was a significant challenge for all of us. We believed that we would be able to stimulate students' creative engagement with problem solving, by engaging them in problems and issues that they believed were interesting, but we had to experience facilitating the module in order to develop our understanding of how it worked."

we had to experience facilitating the module in order to develop our understanding of how it worked.

TC: "Michael, suppose there were no physical or human resource constraints and you had full flexibility on timing, what changes spring to mind that might improve the module in some way? What would your ideal "Design Studio" module look like?

MQ: "What would an ideal module look like if there were no constraints? This sounds like an assignment!! It's hard in some ways to think in the absence of constraints."

TC: "So you agree with our students about that!"

MQ: "Definitely! Time to focus on an issue is paramount. The right space is critical. Everything else follows. It takes careful tutoring. I often feel we are out of our depth. I think I can offer valuable insights along the way. Sometimes they help. Sometimes they don't."

TC: "So perhaps some coaching for the tutors is called for?"

MQ: "I think so".

DP: "The space needs to be right. The "loft" space we had in 2015 was ideal to my mind but of course there were only 13 in that class. In 2016 we had what was, on the face of it, a good venue: a purpose designed educational suite in the heart of medieval Limerick beside King John's Castle. But we had 32 in the class and I found the space cramped at times and certainly no nooks and crannies where a student could withdraw to ponder, sketch or write. There was less of a community this year (2016), but the cohort was much bigger, and the mix was different.

TC: "As an observer, involved only in the reflective aspect, it seems to me that Michael is right. It is time to think about what is required of us to help students to "get into the zone". I think there are people working on the mental and emotional state of "flow" in creative action. We could learn from them."

TC: "Do you think the module fulfilled your design intentions? What stands out for you as confirming that creativity did result from the module arrangements?"

DP: "Thinking about the products, I wouldn't be holding the artefact at the end out as being highly significant as products. But during the semester and during the off-campus week a head of energy and motivation builds up by being in this special space together and being free of a timetable and being with colleagues and listening to them and helping them: I know from the reflections the previous year you can feel the sense of accomplishment, they were excited, motivated, giddy in a positive way, one person said: in a reflection 'it saved the semester for us: it kept us engaged'. That is satisfying for me."

TC: "Any plans for changing/tweaking the module in the light of the experiences you have had ?- Can you risk going further?"

MQ: "It seems to me that our achievements are both fragile and vulnerable. I confess my reflex at times is to keep out of sight of the system rather than to try to influence it!"

TC: "Yes we have dialogue with like-minded souls and we present at teaching and learning events and find some affirmation there, but my own experience is that by and large the system drivers are pushing in the opposite direction both in terms of the "hidden curriculum" of 50 minute time slices of lecture-lab-tutorial pedagogy and in terms of what is valued for progression and promotion. At a strategic level our challenge is to translate our activity into a currency that is valued institutionally."

"It seems to me that our achievements are both fragile and vulnerable. I confess my reflex at times is to keep out of sight of the system rather than to try to influence it!"

A stirring end

TC: "Final thoughts? I think Design Studio has happened mostly in spite of the system than because of it. The machine with its habitual routines and unquestioned practices, left to itself, can so easily suffocate educational life. Being a reflective observer of Design Studio over two years has crystallised my educational concerns and strengthened my determination to continue looking for ways to configure our entire programme to vindicate those concerns on behalf of our students. I don't see that struggle ending anytime soon."

Acknowledgements

John Cowan has generously supported the reflective dimension across our entire programme including Design Studio for almost three years now. He has patiently given of his expertise and his time to both staff and students, engaging in voluminous correspondence and discussion with staff and providing feedback to students. These efforts are deeply appreciated by staff and by so many students. We look forward to his continued involvement and hope our modest achievements on behalf of our students justify his efforts.

Terence Ryan played a key role in the evolution of the Design Studio module into its current form of a week-long "retreat" off campus, and was part of the module team with Declan and Michael in 2015.

We acknowledge our past and present Heads of School, Prof. Conleth Hussey and Dr. Jeremy Robinson, both of whom financially supported the Design Studio module.



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O L L S C O I L L U I M N I G H

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Other work that has informed our thinking

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End Note

Millennials (also known as Generation Y) are the demographic cohort following Generation X. There are no precise dates for when this cohort starts or ends; demographers and researchers typically use the early 1980s as starting birth years and the mid-1990s to early 2000s as ending birth years.



Drawing by Andres Ayerbe

Meet the Teacher — Declan Phillips



Declan is a civil engineer and senior lecturer at the University of Limerick (UL). He holds MSc and PhD degrees from Trinity College Dublin and teaches courses in soil mechanics, forensic engineering & ethics and is the module leader for the Design Studio module discussed in an article featured in this issue of Creative Academic. As the inaugural Course Director for the civil engineering programme at UL, he was instrumental in establishing the programme's student centred pedagogy.

Introduction

Teachers embody their practices but how do these practices come about? In our meet the teacher interviews we try to understand how teachers whose practice we feature come to develop their thinking and practices, in other words their personal pedagogy. In this interview we talk to Declan Phillips, who, as the inaugural course director for the civil engineering programme, was instrumental in establishing the programme's student centred pedagogy. In this interview with CAM Commissioning Editor Norman Jackson, Declan describes some of his experiences of education and professional work that have impacted on his pedagogical thinking and practice as a teacher and through this helped shape the pedagogical approaches used on the BSc Civil Engineering programme.

Interviewer: *Creative Academic is interested in how higher education teachers develop their personalised pedagogical practices. We are interested in how you have come to believe in certain things about teaching and learning that impact on your pedagogical thinking and shape the way you practise. Can you say what have been the big influences on your beliefs and thinking that led to the pedagogical practices in Design Studio?*

Declan *Design Studio* has gone through quite a few iterations from about 2008. The idea, initially, was to provide a different sort of space in a demanding programme that has very little opportunity to deviate from the hard sciences, the discipline and rigor associated with being an engineer. How it has evolved has been, I guess, a combination of thinking and reflection on each iteration. Particularly, drawing from my own experiences and how I managed to learn in a deep and meaningful way.

I think one of the biggest influences on my thinking has been my own childhood education, which, frankly, was appalling. There was nothing of value in it, in terms of 'being switched on', there was nothing right through my primary school and almost to the end of my secondary school that had any meaning for me. Somehow or other, a light bulb came on, just before I left secondary school. To cut a long story short, I meandered through my initial third level education until I realized I wanted to be, and that was a structural engineer.

Interviewer: *You say you meandered through third level, but did you actually make a commitment to become a civil engineer while at school?*

Declan: No. My initial thoughts were to become an architect, it was something that I was intrigued by and I felt it would provide a rewarding career. I went to an engineering company in my hometown in search of summer work experience. There wasn't an architectural firm nearby and this was as close as I could get. While I was there, I was working with a Dublin based architect who was the designer for a large secondary school extension. This project also brought me into contact with a structural engineer. Looking back, these experiences were instrumental in my decision to become an engineer – I found no matter how much I tried to force myself back to where I thought I wanted to go, i.e. architecture, I was absolutely fascinated by the work of the structural engineer.

How you could make pages of numbers have meaning, so you can create a drawing that shows the assemblage of beams, columns and foundations required to support the building? That absolutely intrigued me, and I just thought, "Why fight it? This appears to be what I want to do." And it truly was. The minute I went into that environment at university, I just flourished. I have been permanently happy since that day!

Interviewer: *This structural engineer, was he charismatic in any sort of way? was there something special about him as a person? or was he influential in the way he worked that enthused you?*

Declan: I think what made our relationship special was he was very facilitatory towards me. If I had a question, I'd ring him, and he'd spend plenty of time explaining it until I understood. That just provoked my curiosity. Next time, he visited for a meeting at the engineers' office, I told him that this was something that I was interested in, but I was ill-equipped to engage with it, because I hadn't studied the right subjects in secondary school. I just had, in effect, lacked the guidance that, perhaps, I needed at critical stages in my secondary education, and ended up taking a mixture of subjects that had no particular direction or career focus.

He gave me a pathway along which I could pursue my ambition to be a structural engineer. It did take me longer, because of the deficit in my knowledge, but it was all worth it. Some people spend their lives working at jobs that they don't enjoy. I had a delayed start, in terms of identifying what I was truly passionate about. But once I identified that -- I was still only 19 so, I didn't lose out too much. I've had an absolutely wonderful experience, not only in my professional and academic life, but in the people I met along the way. I've met some wonderful people.

That goes back, I guess, to your original question about *Designed Studio*. All of those encounters and personal experiences have influenced the way I think and the values I hold dear. I suppose, in a sense, I'm trying to give the students the advice that I failed to get in my earlier career, to show them the opportunities and possibilities, and just open the door a little bit for them to peek through. Of course, they, like me, might not be ready to walk through that door, but some of them might, and maybe that's all they need to set them on their way.

Interviewer: *So how have these things influenced your practices as a higher education teacher of structural engineering? Specifically how have these influences resulted in the Design Studio module?*

Declan: What we are trying to do in the *Designed Studio* module has almost nothing to do with content. It has to do with thinking and creating the environment in which students can think for themselves. In a typical module, we tell the students what we want them to do. We have very specific technical outcomes, and rightly so, that students have to reach to become competent as engineers. But in the Design Studio space we say, "We would like you to work on a topic that you are passionate about." We want them to create a challenge that they find personally meaningful - which, by the way does not need to be about engineering!" There are however two caveats. The first, based on our experience in the industry, and reflecting on the deficits in our own education, was that you have to look at a problem from multiple perspectives. The second, is that in working with the problem you have set yourself you have interact with an end user. If you pick a device, or a service, or whatever it may be, you must engage with someone that is using that service, or is using that device, so that you can take on board the views of the end users, and incorporate those into making a better design. That's the module in a nutshell. We have a number of ice breaker activities, which, I think, are necessary in order to get the students to realize that they truly have the freedom to think for themselves, and that there is no hidden agenda.



University of Limerick

https://i.ytimg.com/vi/sp_6rg-j2Bg/hqdefault.jpg

Interviewer: So what sorts of things do you do to prepare them for this novel experience?

Declan: There are a number of things that we try to do to help them develop the right mindsets to work on this project. For example in the modern world we are acutely aware of the fact that students are absolutely inundated with information, and permanently connected to electronic devices, which are constantly buzzing in their pockets. The minute this happens, no matter how engaged they are with what is happening at that moment, they must address that pocket buzz. So, we take our students away for a week from this beautiful campus that we have in Limerick. We take them entirely out of this familiar environment, and we bring them to a 'bohemian' space, a space that's conducive to thinking. In the mornings, on this week,



<http://www.roadbridge.ie/media/19555/sky75.jpg>

we organize events such as yoga, or mindfulness, the choice between one or the other depends on the number of students we have, and the size of space available. Very often, this kind of encounter, for students, is a first. Many of them know about these things, but have absolutely no idea of the value they can bring to helping their minds rest, and get away from all the noise that surrounds them so that they are ready to think freely about their personal project.

Interviewer: This is unusual pedagogic feature, where did that come from in your life story?

Declan: As a highly sceptical engineer! I would once have thought, things like that would be the last thing that I would be doing. But a few years ago I gave it a go, and I found it very-very useful. And I thought, well, if it works for me, it

might work for others. Things that I know about myself now that I didn't know when I was 19 or 20, I feel that if you can bring this information to students' earlier, at least let them know that there are ways to get inside your own head, that will help them allow them to be more than just anchored in the content side of engineering. Which is by the way, is absolutely essential for solving problems. But they also have to develop other skills that will help them flourish as engineers.

The big difference in what we do (compared to when I was in college) is, working through a pedagogical model where you are solving problems in situations where you're not yet equipped with all of the knowledge, the problem drives the knowledge, then that imposes upon you other demands around things like group work, and an ability to communicate and undertake research, and so on. These things happen in everyone's career, but only after they have graduated.

So if you can get a fundamentally rigorous grounding in the sciences, but, at the same time, get that grounding through solving open-ended problems that require you to examine them from different perspectives, then, I think, you graduate well ahead of where at least I was when I graduated. Such problems and contexts make you think about the language you use when you're engaging with people. They force you to think more clearly about what you have to communicate effectively, in order to solve the problem you're working on. All of this is going on in my mind when we run this module, and every time we do it, we change something else. We change it, because we learn a little more ourselves, and we change it because we learn a tremendous amount from the students who buy into what we're doing, and engage with the full spirit of the module.

Other things we do that, I think, are influential is, we seek people who have, in their careers, made an impact. We bring those people in to speak to our students about their lives, and what they've done, and why they did it. Each of these people are very different, but they all possess this terrific drive and determination, even in all the adversity that they face, things that blocked their progress, they managed to find ways around these blockages, and ultimately succeed. I think that's incredibly empowering and inspiring for students.

Interviewer: So you are now painting a bigger picture that shows some of the other things you are doing in a student's programme that prepares them for the challenge of this second year Design.

Declan: From day one of our program, the very first day, the students are left in no doubt as to what we're about, and we provide them with the background context, I think, context was one of the things that was missing from my own education. You got the knowledge, but it wasn't contextualized. I think one of the predominant features of our pedagogical approach relates to the quality of the problem: it has to be such that it provides a context that students find relevant and meaningful in order to learn about these important topics.

On day one, the students are told that, they are going to spend their entire week working on a particular problem, whether it has to do with understanding how arches work, for example, or whether it is the designing of the roller-coaster, which they have to build and test, or the design of a vehicle that moves a certain distance without any source of battery power. These are just some examples of projects we use in week one and they convey a sense of what the whole programme is about. It starts the process of freeing up their minds, it also gets them thinking about presenting and articulating their ideas through different media.

The articulation might be a verbal presentation, it might be a one-to-one discussion, it might be a poster, it might be something at the white board that they illustrate, but they have to present and defend their idea. What's important in this, is that the problem you set for the students who have just come out of second level school, which, at least, up until now, has been a very linear process. They are coming from a model where they are told what the syllabus is, they study the syllabus, and then they get an examination to see how much they remember.



https://www.youtube.com/watch?v=ww6NjQx_Pw8

In contrast we are looking at the process of solving a problem, so process is at the heart of what we do, context provides the reason why we do what we do. It makes the problem relevant and worth solving. We draw on the student's prior knowledge, the initial problem always draws from something that we're quite confident the students have familiarity with. And then as we move through the program, our process of addressing and approaching unfamiliar problems stays the same, but the problems get more complex. That goes right through our programme.

There's a lot of evidence, and there's a lot of research out there, charting or forecasting the skills that society will need in the future to be able to manage the rate of change that's taking place. I certainly believe that the things that we do in the civil engineering program here, goes some way towards addressing this uncertain future, of course, we don't know what it is, but we do think that the things we're doing will allow our students to face it with some level of confidence.

Interviewer: How does what you're doing now, pedagogically, compare to your own tertiary education?

Declan: There is no comparison, my education was entirely traditional. I sat in lectures, attended tutorials and I did labs that had no meaning, in other words, they were not in any way connected to what was being presented in lectures at that time, they were just a set of labs that you would go into week-on-week. They just ran in sequence and were not connected in any way to a given problem. The problems that we give the students on the other hand drives their learning in every year. In one module that I teach, the students are asked to design a flood embankment to protect some structures that are vulnerable to flooding. Here, in Limerick city, in the past five years, the city has been flooded on two occasions so students can very much



relate to the problem at hand, and they can see the structures that are vulnerable to flooding right along the banks of the river Shannon, which is the largest river in all Ireland. So, when we get intense periods of rain, and we do indeed get intense periods of rain in Ireland, the river swells, and on occasion bursts its banks. So they are responding to a problem that has local social impact and

http://www.irishexaminer.com/remote/media.central.ie/media/images/a/AerialOfFloodsDec2015_large.jpg?width=648&s=ie-370901

meaning, it gives a purpose to their learning, they are trying to help the people they live among, whether they're in their homes, or whether they are in the university campus and out of this, they are able to identify without me ever talking about a syllabus, the content that's important and significant in the module.

Once students see the relevance to their learning, that's a very useful springboard to start talking to them as an engineer about, well, where do you think this goes? and what do you think you need to do? is there any test that you think might be important to get the answers to these questions you have identified? Out of this dialog, emerges the set of laboratory tests the students need to do. I do not specify any test, they identify the tests that they see are necessary. Some of them, undoubtedly, get it spot on, for others the light bulb doesn't come on, but they see what the other groups are doing, and they inquire, why are you doing that? They're learning off each other. This is such a rich and multifaceted pedagogy - in fact, it's not just one pedagogy it's numerous pedagogies coming together and are yielding dividends.

Interviewer: You have shared with me the idea of enriching this personal pedagogy even more by bringing faculty and students from other disciplines together. Is this in your thinking for future iterations of the module?

Interviewee: Not with this module, but I have been doing it very successfully in another module for the past seven years. It's a module with final-year students. Again, it draws on my professional experiences which has been a very rich source of ideas for me. When I went into professional practice every problem I encountered was a source of intrigue, and a source of curiosity that continued to drive my thinking further and further.

One of the expertises at the company I worked with was in forensic engineering. Forensic engineering is about looking at things that didn't work as intended; it doesn't necessarily mean things had to fall down, although they often did, but to investigate why things went wrong, and identify where the sources of the problems were. I gathered these cases that I was involved with, and I told myself I would find a use for them at some point in the future. So, within the university, the law faculty have got a moot court. This is a wonderful courtroom, fully equipped with cameras, loudspeakers. It replicates any modern courtroom. When I realized this resource was available, I sought out a law lecturer, who I thought might be interested in hearing the idea I had, which was:

"Your law students are using this courtroom, where you're taking real cases, but you have lawyer pitched against lawyer, where you're undertaking these moot court activities, and you're playing out the events of the court. I have a way in which you can make that experience much more real and relevant. I worked as an engineer with a company who investigated failures, and I had these cases documented. Would you like me to share them with you, and you could offer the opportunity to your law students to engage with civil engineers who would act as expert witnesses for you, they would get their briefing from the law students, they would investigate the case."



I, as a lecturer, remained the source of the body of knowledge, or the actual case material that they needed to investigate the problem. We operated that on the basis that the students would write to me through their lawyers, and request very specific information, and I would give them that information. If they missed out on asking for an important piece of information, I would not forward that information.

We had two groups of engineers working with two groups of lawyers; one group was from the defence side, the other group was from the plaintiff side. Over the course of the semester they worked through the case, and the engineers wrote an expert's report, and both sides then exchanged their expert reports. The lawyers could see where the common ground was, and where the debate would take place. This is true to real life. And then we had our day in court. The students would be called to give their evidence in the box, and this would all be recorded. After the event, they would get a video of this recording where they could critique their performance under a fair amount of stress, mind you, they took this very seriously.

We have been doing that now, and iterating, and making it better every year, and it's something that the students really enjoy. It brings out the issue of responsibility for their own learning, as well. It very often gets them to meaningfully grapple with ethical issues, because there is always something that is ethically challenging within these cases. Someone has behaved inappropriately, or someone made a mistake, they weren't competent enough to do the task they were supposed to do. The module is actually called forensic engineering and ethics, and teaching. Ethics on its own can be a dry enough topic. But when you weave it into real cases, it becomes a relevant, meaningful and significant issue.

Interviewer: *What you are describing is the embodiment of learning in close to life activities and behaviours which is another deeply engaging pedagogical strategy. Have you exhausted all the pedagogical approaches you use in your programme?*

Interviewee: No, I'm constantly pushing myself to try different ways to engage. I really think that's where the challenge is. Whether your view on education is, "I'll do what was done unto me," in other words, you follow the traditional model, or whether you try and intervene in a way that promotes engagement based on the sorts of things that engaged you.

You are always going to have students who will be engaged, and students who won't be engaged no matter what. The hope I have is by trying these different approaches, you might reach or engage with more students than you would otherwise. For example, something I did last year for the very first time was, I put into practice the concept of flipping the classroom. I developed all of my course material into very short videos, and when I say short, I'm talking about videos six, seven minutes long at the most. But in many cases, only one and a half minutes long. And each video addressed a key concept that I would otherwise deal with in a lecture setting.

I was able to distil the content, which is key for engineers to understand. I was able to distil it down into a very short video, which is freely available to anyone on YouTube. The students are then asked to view the content ahead of time, and because it's short, you're not demanding an awful lot of them. I do not think it's fair to ask students to watch a video that's 50 minutes long. I wouldn't do it myself, and I wouldn't ask them to do it. Now, with that model, when the students come to class, the

idea is that you would now be able to use this very precious and limited contact time to engage the students, and start from a point where they are lost, rather than the traditional place, where you would go through the content in class, and then give them homework to do at home, and they just become frustrated because they're lost with their known systems. Now, of course, there are challenges with that, and not every student will watch the video. How do you incentivize them to engage with the material? Again, not everyone will no matter what you do. What we use in civil engineering at UL, is, we have been using clicker technology. We use it from year one, and we ask a series of short multiple choice questions (clicker quizzes) at the start of the lecture, which is based on the video that they were asked to watch.

We assign this activity a nominal amount of credit, so, say, one percent. Now, we have 12 weeks teaching, and we typically teach at least twice in the week, so there's 26 occasions in which you meet with the students. If we have, let's say, 15 clicker quizzes, then that means that they can miss some. We're only going to award 10% for it, and we pick the best 10 results that they get. So we're all the time trying to encourage them, rather than say, "This is, if you don't attend, you won't get the mark." I have found, this approach has increased their engagement with the material, and when you ask the questions, of course, you get an immediate response on the board, there's no embarrassment felt by the students because they don't have to answer personally, and yet they can see the histogram of understanding of their classmates to the question that's been asked. That histogram if it shows poor understanding, can mean, of course, that they haven't watched the video, but it can also mean that they don't understand, and it acts as a very useful litmus test for you starting your lecture, and, say, well, let's discuss this. That's another thing that we have tried, and I'm sure, if I talked to you in a year's time, there will be other things that we'll have tried. Because we should never stand still.

Interviewer: *Throughout this interview you have highlighted the importance of the time you spent in professional practice outside the academy on your thinking about how education in Civil Engineering should be done.*

Interviewee: Yes, I think I was very fortunate and privileged in the job I got when I graduated. At that time the Irish government had a scheme where they were promoting professional graduates to leave the country, work for a period of two years, and bring to back to Ireland the expertise they developed in those two years abroad. It was a great idea, and I benefited greatly from it. I worked in the United States and was fortunate to be employed by a company offering a diverse set of services to the construction industry. Indeed, my US experience continues to influence my teaching philosophy. My employer had expertise in structural engineering, geotechnical engineering, which, incidentally, is the area I went on to specialize in, the company also had expertise in forensics, and had their own site investigation drilling crews and soils and chemical laboratories. They did field testing, quality control testing, along with proof testing proprietary products for market certification. Land surveying and environmental services testing were also available. So as you can see, we could offer a comprehensive and integrated service to a client.

It was so diverse, and I got a chance to work in many of these divisions - this has been a wonderful broadening experience for me. It has influenced my approach to solving problems, and, maybe, perhaps that added to some of my later encounters, particularly with people that have inspired me, and who have moulded my thinking on what I should be doing, to give our students the best opportunity to achieve their potential. And more importantly, to be happy in their working lives. If you can achieve this then you've got a great chance that your career will be a fulfilling one – this has been the case for me and it certainly has rewarded me very well. I think, if we can get more people who are happy in their employment, everyone benefits.

A lot of things our governments seek to achieve require people who are willing to approach problems anew. People who are willing to draw on their creative and innovative abilities and who use technology to assist them in finding the best solution, I believe how we educate today needs to provide opportunities to develop these skills in our students, not as add on activities, but as activities that are integrated into the problems and activities we set the students. Of course, we need governments that have the vision and foresight to support educational models like this - these undoubtedly require a significant shift from the traditional didactic and economically efficient model.

Interviewer: *Thank you very much Declan for sharing your insights into how you have become the sort of teacher you are. It's a privilege to record and share it with other higher education teachers through our magazine.*



Additional image credits

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Creative Academic Tours the West of Ireland

Norman Jackson, Co-founder Creative Academic



One of the goals of our *Creative Pedagogies for Creative Learning Ecologies* project is to share what we are learning through institutional talks and workshops. During June I was delighted to be invited to talk about our work in three different institutions in the west of Ireland - Galway and Mayo Institute of Technology, Athlone Institute of Technology and the University of Limerick. While the weather could have been a little kinder the scenery was stunning and the people were warm, friendly and hospitable. At GMIT & AIT I gave a talk on the ecology of learning, teaching and creativity and explored the idea of personal pedagogies. I also facilitated a workshop to encourage the integration of perception, reasoning and imagination, and challenge participants to create their own educational designs that encourage students to create their own ecologies to use their creativity.

Whenever I facilitate these sorts of workshops I am struck by the creative ideas that emerge when participants, who care deeply about their students' learning, discover new affordances in their own teaching and learning contexts.





My role at the University of Limerick was different. Here I was the lead facilitator to coordinate the contributions of nine other people on a week-long CPD module. It was an entirely new module formed around the idea of Contemporary Issues in Higher Education. With the help of Programme Director Angelica Risquez we underpinned the curriculum with the idea of higher education ecosystems and used the opportunity provided by the module to explore how issues like, sustainability, internationalisation, leadership and creativity emerged from and impacted on

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institutional ecosystems. We also used some of the techniques we have learnt through our Creative Pedagogies and #creativeHE projects, for example designing a daily challenge but giving participants the freedom of how to interpret and represent their responses to the challenge. We also learnt from #creativeHE by creating a Google+ platform to encourage interactions and sharing outside the classroom. All in all I found it a most enjoyable and rewarding experience with many interesting insights emerging from the participants as each topic was considered and discussed and the production of some fantastic creative performances and artefacts. Once again it highlighted to me the enormous learning power and potential of faculty from different disciplinary backgrounds coming together to share their perspectives, ideas and practices.



THINKING CREATIVELY OUTSIDE & INSIDE BOXES!

Creative Academic recently interviewed Tony Dias and Julius Dobos two experienced teachers working at Cosgrove College in California. Over the last few years they have developed an approach called MediaWorks through which digital media students work with business and industry clients on a significant project with commercial value. The interview is published in the latest issue of Creative Academic Magazine (CAM7 April) and it's well worth a read.



<http://www.creativeacademic.uk/magazine.html>

One of the points Julius made was that it's no good encouraging students to think outside the box (whatever that is). when working for clients they have to use their imaginations to think inside the boxes that the client defines. Seems like an important principle to master before we can change the box that the client (or institutional manager for that matter) wants us to think inside.

We wondered how other teachers interpret and work with this principle.

Commissioning Editor: I have long admired the thinking and writing of educator Jackie Gerstein. Jackie generously shares her ideas and unique perspectives through an amazing blog containing many useful and often inspiring insights. In fact, I was once so inspired by her post on Education 1.0-3.0 that I immediately sat down and wrote my own version that considered creativity and learning ecologies through the 1.0-3.0 evolutionary metaphor - such is the power of her ideas. In this article, which I came across by accident, Jackie writes about the role of teacher educator in modelling his or her own learning - acting as a leader by doing and showing. It's something I have believed in for a long time as well and have said many times that students need to know that we have had to engage in our own learning process in order to teach them.

So what has this to do with the June issue? As the article above shows I acted as a lead facilitator for a CPD module at the University of Limerick and one of the things I decided to do was to participate in the building of a website artefact which all the participants were required to do, and openly reflect on my own learning, which all participants were required to do. I found this article by Jackie very helpful in enabling me to think about the learning I had done to enable me to facilitate the module.

Educators as Lead Learners

Jackie Gerstein



Jackie is a teacher/educator and an educational writer/blogger. She has been a leader in the 'Maker' movement. Her user generated education blog has received nearly 1.5 million hits.

usergeneratededucation.wordpress.com

"I don't do teacher for a living. I live teaching for my doing . . . and technology has amplified my passion for doing so."
You can learn more about me by viewing my Twitter Profile at <https://twitter.com/jackiegerstein>.

I have discussed educators as model learners before:

The educator's role has or should change in this age of information abundance or Education 2.0-3.0. The educator's role has always been to model and demonstrate effective learning, but somewhere along the line, the major role of the educator became that of content and knowledge disseminator. Now that in this information age content is freely and abundantly available, it is more important than ever to assist learners in the process of how to learn. (Educator as Model Learner)

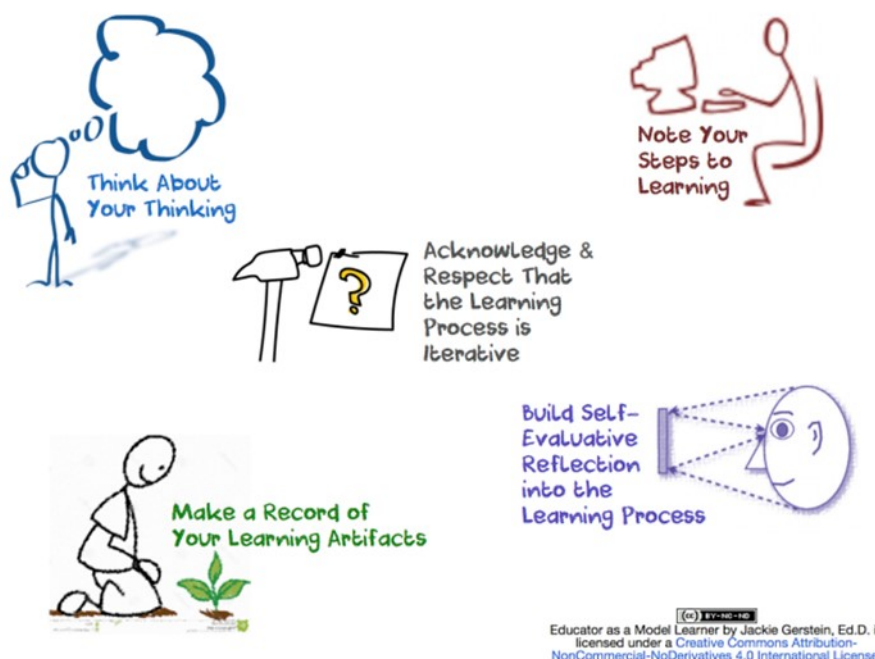
The goal of this article is to encourage educators not only to adopt the mindset of the educator as a lead learner but also to model, demonstrate, and teach his/her learners the process of learning how to learn new "things".

In our schools, "the emphasis is on *what* students need to learn, whereas little emphasis—if any—is placed on training students *how* they should go about learning the content and what skills will promote efficient studying to support robust learning," writes John Dunlosky, professor of psychology at Kent State University in Ohio. However, he continues, "teaching students how to learn is as important as teaching them content, because acquiring both the right learning strategies and background knowledge is important—if not essential—for promoting lifelong learning." (Smart Strategies That Help Students Learn How to Learn)

To effectively do so, though, the educator needs to understand and be able to articulate and demonstrate the process of learning, him or herself. It is a mistaken assumption that educators know how to do so. The learning process can be made overt through recording and clearly articulating the steps, procedures, and/or strategies for doing so. To learn and model this process, I recommend that educators pick something new to learn and practise doing the following:

1. Explicitly state and record the metacognitive process while learning.
2. Demonstrate and articulate the actual steps of learning.
3. Record the stages of artifact development.
4. Understand and embrace the iterative process of learning.
5. Use and demonstrate the self-evaluative reflection process.

Educator as a Model Learner



Deep Understanding of Metacognitive Processes

The educator should be familiar with and able to demonstrate metacognitive processes. “The most effective learners are metacognitive; that is, they are mindful of how they learn, set personal learning goals, regularly self-assess and adjust their performance, and use strategies to support their learning” (<http://sites.cdnis.edu.hk/school/Is/2011/05/12/teachers-as-lead-learners/>). Developing one’s own metacognitive skills begins with developing an awareness of one’s own thought processes while learning new things. Once this awareness is developed, the steps of learning can be more clearly articulated.

Articulate and Showcase the Actual Steps of Learning

If learning is understood as a process – one that goes from not knowing to one of knowing, then educators should know, understand, and clearly articulate the steps to that process. Granted, learning different things requires some different strategies, but there are some steps that cut across disciplines. For example, some of these steps include how one does the following:

- How do I gather information about what it is that I want to learn?
- What are the steps am I taking to learn?
- How do I know if I am adequately acquiring the knowledge, skills, etc., related to that learning?
- What do I do when I get stuck?
- What do I do when I need help?

So related to the metacognitive process, if the educator records the steps to their learning process, this can help make it more overt and obvious.

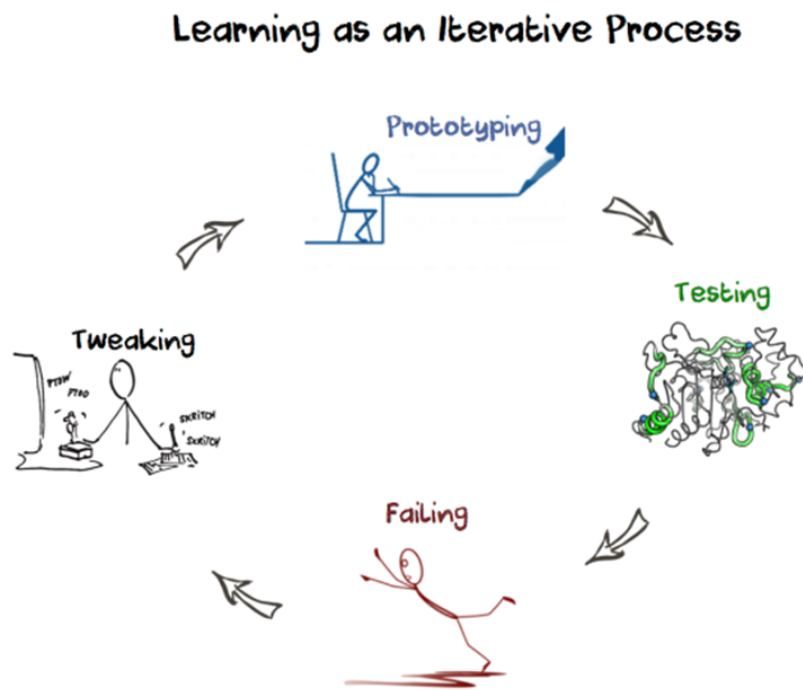
Understand and Embrace the Iterative Process of Learning The following video discusses that “effective” learning is often iterative which involves prototyping, testing, failing, tweaking, and then repeating this cycle.

The educator as a lead learner normalizes, embraces, models, and reinforces the iterative process of learning.

Record the Stages of Artifact Development

This strategy can be especially useful if the goal is to create or make something. It can include writing something, learning a new skill, and making something (as in Maker Education). Too often education techniques focus on exemplary models.

This gives the message that perfection is expected – not respecting that there are several stages, often several prototypes or iterations on the road towards perfection. Recording those iterations as artifacts through images, pictures, descriptive narratives will support and reinforce learning as a process.



Learning as an Iterative Process by Jackie Gerstein, Ed.D. is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Use and Demonstrate the Self-Evaluative Reflection Process

The authors [of this research] argue that learning from direct experience can be more effective if coupled with reflection — that is, the intentional attempt to synthesize, abstract, and articulate the key lessons taught by experience. The results reveal reflection to be a powerful mechanism behind learning, confirming the words of American philosopher, psychologist, and educational reformer John Dewey:

“We do not learn from experience ... we learn from reflecting on experience.” (Learning By Thinking: How Reflection Improves Performance)

Another strategy, intimately connected with the others presented in this post, is engaging in periodic self-evaluative reflection. It involves the revisiting the following question throughout the learning process, “What criteria am I using to assess the “goodness” and accuracy of my learning? In the absence of meeting that criteria, what do I do to adapt my strategies to meet this standard?”

Knowledge of one’s learning process can (and should) be used as part of an educator’s professional development. If done as such, it teaches and reinforces:

- The importance of learning new things; the importance of being a lifelong learner.
- The process of learning so this process can be more easily described and reinforced with students.
- The importance of a growth mindset; that growth is possible during any time of one’s career.

It is important to realize the implications for our students of our own critical reflection. Students put great store by our actions and they learn a great deal from observing how we model intellectual inquiry and democratic process. Given that this is so, a critically reflective teacher activates her classroom by providing a model of passionate skepticism. As Osterman (1990) comments, “critically reflective teachers – teachers who make their own thinking public, and therefore subject to discussion – are more likely to have classes that are challenging, interesting, and stimulating for students” (p. 139). Stephen Brookfield

Acknowledgement: Original article posted February 15, 2015 User Generated Education
<https://usergeneratededucation.wordpress.com/2015/02/15/educators-as-lead-learners/>

Conference Report

Creativity is as Creativity does: UK Creativity Research Conference

Ian Hocking

Nobody is sure, quite yet, where ideas come from, but we know that the idea for the UK Creativity Researchers Conference emerged over burgers in Barcelona, where Lindsey Carruthers, Shelly Kemp and Gillian Hill were attending last year's BPS Cognitive Section Conference. Their feeling was that a creativity-specific gathering was needed for researchers to bring together their work and ideas. They imagined forty or so people might turn up. There were considerably more than that, and the conference was a great success. The organisers were particularly concerned with generating impact, and judging by the emails I've received this morning from potential collaborators, together with some of the emails I fired off yesterday, the impact should be resounding.



Like intelligence and the Cornish pasty, creativity is difficult to define. That was one of the threads running through the talk by the keynote speaker, Giovanni Emanuele Corazza, which also included an impressive array of research projects underway at the Marconi Institute for Creativity. He conjectured that creativity might be the single most important research area for the remainder of the century, simply because artificial intelligence is encroaching into so many other domains of human performance; our creativity, and perhaps related higher-level processes, might be last bastions to fall to AI. Parenthetically, one of Giovanni's papers on eye tracking was suggested to me by a colleague last year when I was presenting similar work at the BPS Cognitive Section Conference, so it was interesting to see where that work is heading (Agnoli *et al.*, 2015); just another example of the links that can be made at such gatherings.

Incubation was a feature of the talks that followed, first by Ken Gilhooly ('Incubation: Past, Present and Future') then George Georgiou ('Incubation: Facilitation of Creative Problem Solving'). Incubation is the idea that people perform better on a problem when given a distracting break, as long as they know that the problem is waiting for them when they get back. One of Ken's points is that unconscious work can be better than conscious work; from George, I learned that the effect of incubation is larger if the break is taken immediately. Kathryn Friedlander finished off this session with a description of her work on cryptic crosswords as a way of generating insight experiences ('The Problem with Insight Problems'). Other talks included one from Paul Sowden ('Exploring and Influencing Creative Thinking Processes'), in which he looked at dual process thinking in garden designers, and another from Alison Pease, which looked at the use of computers to investigate creative solutions to things like mathematical conjectures.

Overall, it was a great conference—fun and well organised. It was even worth flying there and back in one day, though waking up at 4:30am and getting to sleep at 1:30am, together with a bit of exotic food (haggis) seems to have given me jet lag. There's some research suggesting that non-optimal time of day can improve divergent thinking (Wieth & Zacks, 2011), so no complaints; I certainly have plenty of ideas, without even needing a burger.

Citations

Agnoli, S., Franchin, L., Rubaltelli, E., & Corazza, G. E. (2015). An Eye-Tracking Analysis of Irrelevance Processing as Moderator of Openness and Creative Performance. *Creativity Research Journal*, 27(2), 125-132. <https://doi.org/10.1080/10400419.2015.1030304>

Wieth, M. B., & Zacks, R. T. (2011). Time of day effects on problem solving: When the non-optimal is optimal. *Thinking & Reasoning*, 17(4), 387-401.

Source CCCU Psychology Programme Blog May 19 2017

<http://cccuppsychology.com/blog/2017/05/19/creative-is-as-creative-does-uk-creativity-research-conference/>

Creative Academic contributes to University of Portsmouth Professional Development Event May 8th 2017

One of the aims of our Creative Pedagogies for Creative Learning Ecologies project is to contribute to the professional development activities of higher education institutions, so we were delighted to receive an invitation from Phil Verrill at UoP Academic Development to facilitate an afternoon interactive seminar. The session was attended by over 30 academic's from different subjects who engaged in a number of activities and discussions facilitated by Professor Norman Jackson around the ideas that have emerged through our project for example - the ecology of learning, teaching & creativity, the idea of personal pedagogies and pedagogical practices that encourage students to use their creativity. It was an enjoyable afternoon and participants' feedback was generally positive.



NEWS ITEMS



Cogswell College @CogswellCollege · 3h

So cool to see @academiccreator publish in-depth review of MediaWorks!
Hands-on + teams + clients = learning laboratory

creativeacademic @academiccreator

April issue creativeacademic.uk/magazine.html is out with
interesting example of project-based learning involving clients
MediaWorks @CogswellCollege



creativeacademic @academiccreator · May 13

thank you @duhring for suggesting mediaworks would make a good case
study we learnt a lot @lifewider1 #creativeHE #projectbasedlearning

John Duhring @duhring

Replying to @CogswellCollege @academiccreator

@jseelybrown So good- How does MediaWorks work? p. 53, A 'Real World
Challenge': A Project-based Ecology for Learning p. 62

Throughout March & April Creative Academic's support for World Creativity & Innovation week was recognised



WorldCreativityWeek @WorldCreativity · May 12

Thanks @LeilaOliva @IKUinnovation @academiccreator for being top
engaged community members this week :)

Creativity in Teaching, Learning and Student Engagement Higher Education STEM Conference

The HEA Annual STEM Conference returns in 2018, focusing this year on *Creativity in Teaching, Learning and Student Engagement*. The conference is an ideal opportunity to collaborate and learn from other higher education professionals within STEM disciplines and to share best practice.

Student success in higher education depends on a careful balance of factors including engaged learning, environments conducive to learning and the desire to develop in students the knowledge, skills, behaviours and attributes expected of graduates.

This two-day conference, featuring a mix of peer-led workshops, presentations and respected keynotes will provide a forum for each of the individual STEM disciplines as well as opportunities to learn from cross-disciplinary practice.

This year's conference themes focus on those aspects of pedagogical practice within STEM subjects that support, nurture and improve these factors:

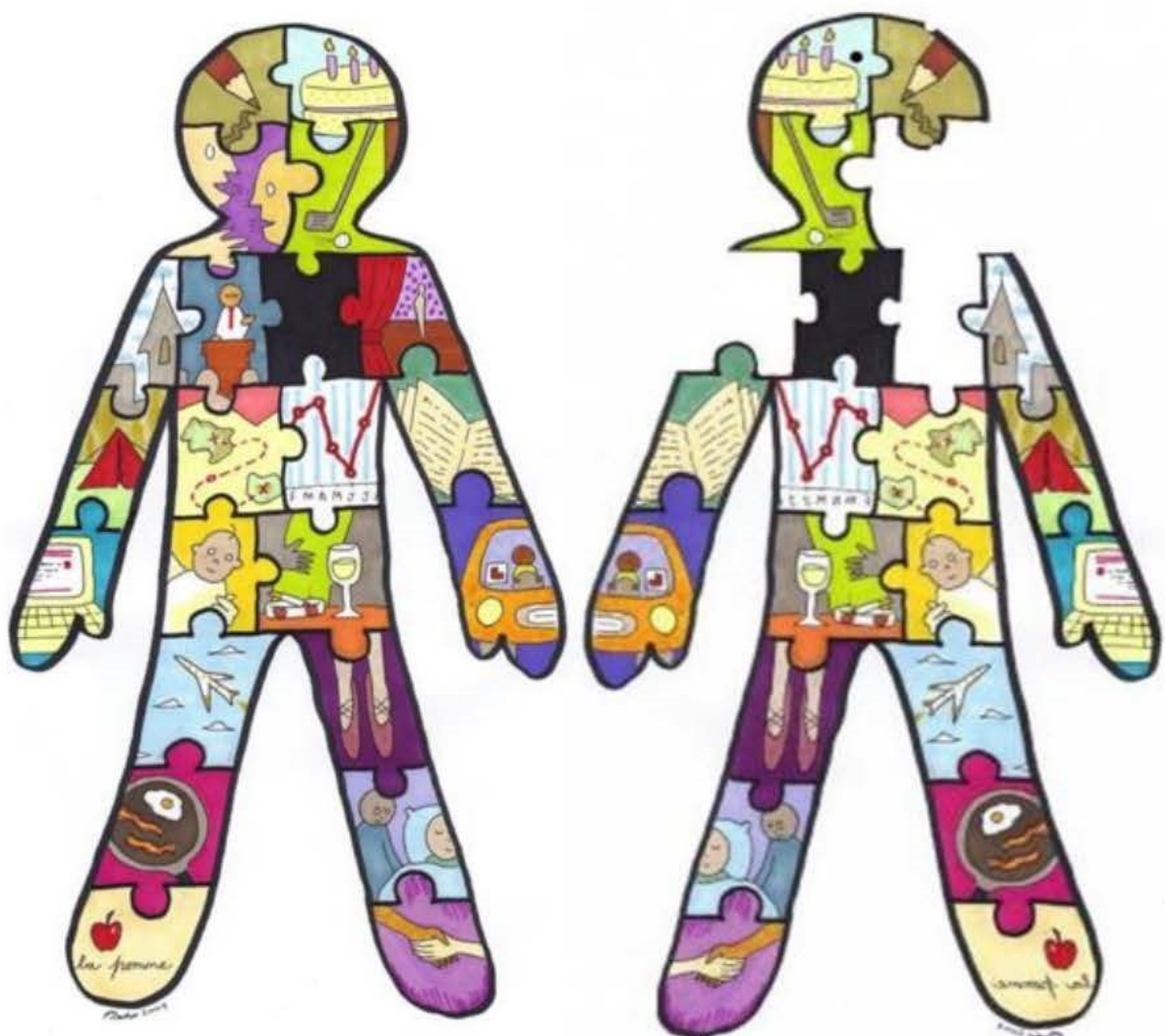
- Driving teaching excellence:** How can we improve our practice to ensure the best learning experience for our students?
- Cross-disciplinary practice:** What can we learn from successful initiatives undertaken in other disciplines?
- Creative pedagogies:** How can we enhance student engagement through creative practices?

The 2018 call for papers will open on 6 July 2018.

Conference Date: January 18th

Venue: not announced

<https://www.heacademy.ac.uk/training-events/hea-stem-conference-2018-creativity-teaching-learning-and-student-engagement>



Role of the Body In Creative Processes & Practices

Guest Editor: Lisa Clughen

Executive Editor: Jenny Willis


 **creative academic magazine**

Issue Number 8 2017

More from Creative Academic

<http://www.creativeacademic.uk/>


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**creative academic**

Creative Academic champions creativity in all its manifestations in higher education in the UK and the wider world. Our goal is to support a global network of people interested in creativity in higher education and committed to enabling students' creative development. Our aim is to encourage educational professionals to share practices that facilitate students' creative development in all disciplines and pedagogic contexts, and to connect researchers and their research to practitioners and their practice. Our ambition is to become a global HUB for the

Google+ Discussion Forums

<https://plus.google.com/communities/110898703741307769041>

**creativeHE community**
Creativity for Learning in HE course & community
MODERATE


What do you want to share?

Ellie Hannan • General stuff, announcements

Hello everyone! For those of you with an interest in digital learning and teaching, myself and +Chrissi Nerantzi are hosting a Wildcard event this afternoon (1:30-3PM UK time) called the #101creativeideas challenge.

It is part of the ALT Winter Conference and the idea is to create and share ideas for creative digital practice in learning and teaching!

You don't need to register, just go to <https://altc.alt.ac.uk/online2016/sessions/101creativeideas-challenge-75>



Chrissi Nerantzi: Thank you Ellie. Join us if you are around. Thank you for all your wonderfully creative ideas so far.

Chrissi Nerantzi Owner • General stuff, announcements

Hello everybody,

Nassi (15) has created an advent calendar for some daily inspiration. Please access <http://www.celt.mmu.ac.uk/advent/index.html> to unlock your daily star.

Feel free to share with others. Thank you. Chrissi from the #greenhouse

AC16
celt.mmu.ac.uk

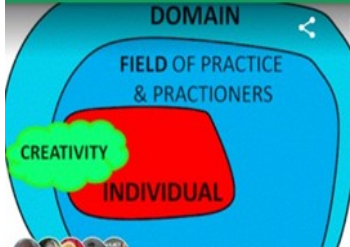
francisco j. santos: Nice and inspiring. Thank you Chrissi.

Sandra Sinfeld Moderator • General stuff, announcements

#loveltd - loving this invitation! Thanks #clmoo!

Originally shared by Kevin Hodgson

<https://plus.google.com/communities/113507315355647483022>

**Creative Academic**
A space for people working or studying in higher education to share their thoughts and practices about creativity in higher education

What do you want to share?

Norman Jackson Owner • General Information

NOVEMBER ISSUE OF CREATIVE ACADEMIC MAGAZINE #7 HAS BEEN PUBLISHED

It contains a number of articles drawn from the recent #creativeHE conversation including a synthesis of the Little Boy Story.

We are intending to publish several more articles in the December update and welcome further contributions on the theme of Creative Pedagogies for Creative Learning Ecologies. Special thanks to contributors +Jennifer Willis +Simor...

