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Enhancing Creative Thinking Abilities through the use of Social Media

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ABSTRACT The use of social media in higher education as part of a learning management system is becoming increasingly common and moving beyond mere instructional approaches that characterise a lot of traditional teaching. Social networking platforms and online communities are now an integral part of student's everyday lives and increasingly albeit informally their educational experience. This paper explores the use of Ingenium, an online creativity tool, supported and delivered through a social media site 'Unearthing Ideas Online', established to enhance the teaching of creative thinking. The process builds on traditional pedagogy and evidence demonstrates increased student engagement, deeper understandings and confidence in applying creativity principles and methodologies in a range of topics. The process provides a structure for applying creative thinking using Ingenium that students themselves are expert in and reconfigures the notion of the classroom beyond traditional physical and pedagogical boundaries.

Keywords: Social learning, Social media, Creativity, Education

Introduction

The use of social media in higher education as part of a learning management system is becoming increasingly common and moving beyond mere instructional approaches that characterise a lot of traditional teaching. Social networking platforms and online communities are now an integral part of student's everyday lives and increasingly albeit informally their educational experience. This paper outlines the relationship between social media and education for creativity demonstrating how the teaching of creativity is enhanced through the use of Ingenium, an online creativity tool, supported and delivered through a social media site 'Unearthing Ideas Online'. The process builds on traditional pedagogy and evidence demonstrates increased student engagement, deeper understandings and confidence in applying creativity principles and methodologies in a range of topics. The process provides a structure for applying creative thinking using Ingenium that students themselves are expert in and reconfigures the notion of the classroom beyond traditional physical and pedagogical boundaries.

The social media phenomena

Higher education has embraced internet technologies, through the use of online course/learning management systems like *Moodle, Desire2learn, Blackboard, e-mail,* and now to a lesser extent, *social media*. Worldwide, we have witnessed the take up of significant online education and the use of Web 2.0 technologies, encouraging greater student input into content and knowledge production. *M. Lee, C. McLoughlin (2007).* In fact educational institutions increasingly promote themselves and are being judged on the educational technologies they offer. A 'New Media Ecology' as defined in a three year ethnographic study *McArthur Foundation Report (2009)* reflects the emerging relationship between learning and new media that represents new cultural phenomena based on public networking, increasing media literacy and peer based learning. We saw this as an opportunity to develop a pedagogy based on greater learner engagement in how knowledge is presented and processed, and acknowledged peer review processes that enhance dialogue and content creation in how creative ideas are developed and reviewed.

Experience however has demonstrated that many of the technological tools currently used in the classroom do not facilitate students thinking capabilities and specifically their creative abilities, as they are more to do with the delivery of content and information. "With the advent of e-learning, we have managed to overcome the confines of the traditional, four-walled classroom, but instructor-centred pedagogies continue to prevail, It is imperative that educational uses of technology are conceptualised within theoretical models that relate to how pedagogies can be transformed to capitalise on the affordances of social software tools for learning." *McLoughlin (2007).*

The problem we see with traditional course-management systems is that they emanate from, and serve the various accredited programs and courses, not always being flexible enough to address the needs of individual students. Even with the introduction of computer mediated communication such as chat rooms and forums, student feedback has indicated that they are not popular or engaging, and often seen as too formal. An assumption of these systems is that they replicate traditional existing models of teaching and learning where most learning takes place within the formal structure of the 'classroom'. *Selwyn (2009),* in response to criticisms of expanding the application of these approaches in education states that "many commentators are now arguing that these Web 2.0 applications are of equal if not more importance than formal educational ICT applications in the 'real-life' educational conduct of contemporary learners and, as such, are worthy of acknowledgement by the education community".

Combining the teaching of creativity with social media

The courses we teach in Creativity and Idea Generation Methods at The University of South Australia (UniSA) help students develop an understanding of the creative process building their confidence and ability to engage and create new ideas in the way they apply their knowledge. The principle aim of this experience as well as creating awareness of the creative process, building a body of knowledge and generating ideas, is to decrease inhibitions and encourage creativity through collaboration and exploration.

As mentioned, we are using the creativity tool "Ingenium", designed as a framework to provide a methodology, facilitating creative thinking and the generation of ideas to a wide range of participants and situations. Developed as a result of an Australia Council Teaching and Learning Grant (2012), Ingenium is still in the development stage and is being piloted in a range of disciplines locally and nationally.

It could be argued that Ingenium is still a traditional online type system. Therefore, to enhance collaboration and exploration, the use of Ingenium is complimented by the Facebook Page 'Unearthing Ideas Online'. This creates a social media environment designed to support students with their learning, thus bringing together the unlikely combination of education and social media. However unlikely as this combination may seem, our approach acknowledges the growing importance that social media is

playing in the lives of students and attempts to utilise positive characteristics of the medium to capture the engagement (often outside the control of education) that students already have in this medium and harness its educational potential in an effort to foster creative thinking.

Social media has been designed and has grown into a phenomenon that creates and enables new modes of social interaction in the way information is shared between participants. Facebook is the most popular social media service available through the internet, its origins developed from within a university campus which is also its largest audience. *Pew Research Centre (2010)* has concluded from extensive statistical data that "More so than for their elders, the internet is a central and indispensable element in the lives of American teens and young adults. As of September 2009, 93% of American teens between the ages of 12 and 17 went online, a number that has remained stable since November 2006."

We acknowledged and embraced this trend and in the face of much public opinion as to the frivolous non-academic nature of the medium, we built on growing evidence recognising that the medium is capable of supporting multiple communities of learners contributing and sharing vastly to knowledge acquisition, processing and ultimately new knowledge and ideas. *McWilliam (2011) Pei Ling Tan (2011), Dawson (2011) Bosman, Zagenczyk (2011).*

Social media by its nature is very public, transparent and encourages opinions and conversations. In creating an environment suitable for student collaboration this seemed a space worth exploring as we wanted to take creativity, and the ability to generate ideas, out of the formality and limitations of the classroom and the 'specialist' realm and into a broader community context. We saw as *Solis (2008)* pointed out that "Social media is redefining how we relate to each other as humans and how we as humans relate to the organisations that serve us. It is about dialogue – two way discussions bringing people together to discover and share information."

Our continuing work demonstrates that using social media breaks down barriers between formal and informal education and learning and between lecturer and student, providing a support environment or community encouraging the creative side of the student to "*come out and play*". The creative element comes to the fore and provides a much more fluid interaction between the student and lecturer. A blurring between what we define as work, play and learning *Windham (2006).*

This rapid evolution of new technology practices within a media communication community landscape is creating a challenge to our traditional teaching methodologies and the subsequent learning on the part of students. What *Buckingham (2007)*, describes as a "digital divide' between in-school and out-of-school use" and changing the teacher student relationship, especially in terms of adult/institution authority and negotiation in the educational process. However, the process of teaching creativity, we would argue, has always encouraged students to challenge this authority and to shift expectations from the teacher being the dispenser of the knowledge to the student who is the mere recipient. A process orientated model based on speculation and exploration where negotiation and collaboration become the method that best provides the essential environment for creativity to flourish. *Connected Learning (2013*) describes it as 'a historical moment of transformation and realignment in the creation and sharing of knowledge… needing new models of education… not simply new models of schooling but entirely new visions of learning better suited to the increasing complexity, connectivity, and velocity of our new knowledge society'.

Malony (Pg. 26 Vol. 53 No. 18, 2007) states that people are using new technologies to look at problems in many different ways, to make new connections and form relationships between disparate, sometimes apparently contradictory pieces of information, and ultimately to create something new that can be shared with others. "All that is reminiscent of current approaches to learning, including student-centred and active-learning models that encourage students to solve meaningful problems and reflect on their thinking processes. The challenge that we now face is figuring meaning."

It is our contention from our findings that participation in online platforms means more than accessing educational information but rather engaging in social conversations that enhance learning and influence teaching. We were conscious and were able to confirm that the medium has unique properties that greatly influence engagement and creative thinking and that these are able to be manifested differently than their interpretation within the formalities of traditional education.

An opportunity was created to challenge and reimagine when, where and in what ways learning

occurs and an opportunity to in turn challenge students to utilise their unique interests and abilities to be empowered and motivated to engage and provide a direction in their learning. This can be defined as an 'interest driven' attribute *Connected Learning (2013)*, where it has been demonstrated students achieve higher order learning outcomes in not only acquiring knowledge but in the decision making process for its application.

The changing landscape in the recognition of the educational value of social media resonated well in our approach coupled with the case that is building for the importance of creativity in all aspects of human endeavour and its place in education. *Robinson (1998), Florida (2004) and Cunningham (2006).*

Creative thinking and the importance of creative thinking

Creativity and creative thinking is the process of coming up with something new and different. That something may be a product or service, a work of art, a solution to some problem. Research studies have shown that creativity can be trained. *Torrance (1973)* analysed 142 separate studies and concluded that creativity training significantly improves individual creativity and problem solving. In a review across two studies, *Scott, Leritz & Mumford (2004)* found that creativity training programmes produced improvements on everything from attitudes towards the importance of creativity at work through to improvements in job performance.

The Australian Government highlighted the central role that creativity plays in education and as the driver of social and economic success in a report published in response to the Australia 2020 Summit, which acknowledges that "creativity, interpretation, innovation and cultural understanding are all sought after skills in the 21st century". *Connected Learning's 21st Century Competencies (2013)* list creativity as one of six clusters of cognitive competencies that promote '*deeper learning*' that can transfer between disciplines and contexts. The recently introduced Australian Quality Framework (AQF) that all universities need to comply with lists creativity as one of four broad categories of generic learning outcomes that have application in study, work and life contexts. The need to foster creative talents, a creative economy and workforce; application to the processes of how designers think in business productivity and an education system shifting from knowledge transfer to knowledge application in the construction of new ideas is well argued by *Pink (2005), Martin (2006), Hacket (2005) and Robinson (1998).*

University graduates will be operating in a world less focused on knowledge management and routine problem-solving and more focused on new discipline and social relationships, novel challenges and the ability to deal with 'big picture' scenarios. *Cunningham (2006), Florida (2002), Pink (2005).* Imagination, creativity and innovation will be the qualities needed to supplement traditional knowledge in performing work that is finding a broad consensus among employers about the qualities they are seeking in graduates where creativity has become core business for those who seek to develop employability capacity through formal education. *McWilliam (2007).*

As educators this was having significant implications for our teaching and learning practice and whilst there has been much progress in the provision of Information and technology systems in higher education; understandings of what new collaborations and approaches this might create lags behind and has become the basis of our current practice in creative education. Our research indicated that most universities acknowledge creativity as a valuable graduate quality/attribute but often this does not translate this into teaching practice with a distinct lack of any methodology and specific practice apart from basic descriptive knowledge.

As a result, creativity is not well understood in the university environment, and is often perceived as difficult to teach, supporting *McWilliam's (2007)* findings that 75% of Australian universities have an expressed commitment to 'creative' learning outcomes but there is a conspicuous absence of definitional clarity in the policy documentation and in our view specific structures to facilitate its teaching and learning. *Jackson (2006)* states that while teaching practice has implications and expectations of a creative outcome it is "rarely an explicit objective of the learning and assessment process". *Ken Robinson (1998)* attests to the same lack of understandings relating to creativity in general education.

Social media's impact on creative education, our methodology

In developing our pedagogy for the introduction of social media in the teaching of creativity, we identified a number of relationships between the two (creativity and social media) that facilitated and enhanced the educational experience. Many of these are values and approaches we have always valued in traditional education as basic principles that foster greater student engagement and learning. Our work is ongoing, however through formal reviews of student outcomes, and a synthesis of evidence from focus groups, formal course evaluation instruments (CEI), as well as feedback and reflective comments from students online, we determined the impact social media was having in developing and enhancing student's understandings and abilities in creative thinking.

Our aim was to provide a learning environment where students could develop their creative thinking skills by working and learning together, collaboratively (both formally and informally), - in course groups, study groups or in project and team spaces. The interactive, on all the time, nature of social media created a variety of possibilities in the way information was gathered, processed, reconfigured and reflected upon, generating a powerful medium to explore in supporting our style of teaching.

We gathered data and drew our conclusions as a result of several classes that were taught across the University over the past twelve months where we applied Ingenium and Unearthing Ideas Online. These ranged from Creative Thinking, Visual Communication, Event Management, Digital Media, Entrepreneurship and Business and Marketing. All students in these classes were surveyed using detailed questionnaires both throughout and after their experience as well as the online commentary to summarise the following.

Interest driven

Social media builds its success on participants being interest driven and like creativity thrives in an inviting atmosphere that allows participants to develop higher order learning outcomes by pursuing interests and contributing to the acquisition, flow and exchange of information and knowledge on behalf of others and themselves. It is what *Connected Learning (2011)* describe as 'Interest-power'; learning "development and embedded within social relationships and cultural contexts.... grounded in an understanding of people's everyday activities rather than focusing exclusively on formal educational contexts and academic subjects". Our approach facilitated interest driven engagement by shifting the internal classroom dominance of the teacher, to a more external conversational, collaborative and welcoming social media space.

Students are comfortable with the Facebook environment and creativity is conducive in spaces where learners are emotionally comfortable. *Green (2001)* "an environment that minimises command and control" while providing scaffolded opportunities for members to conduct themselves in ways that optimise team and thereby their own performance. *Sfard (1998)* refers to the *acquisition* and *participation* metaphors of learning where knowledge does not exist in the minds of individuals but is a cultural phenomenon based on participation and sharing where learning happens within engaged networks. Engagement in creative activity encourages students to become immersed in their work and willingly explore research and converse with others about what they do. It is acknowledged that creativity thrives in a culture of recognition and supportive environments and communities where there is an opportunity to speculate, question, challenge, share, build and reflect on ideas. People engrossed in what they are doing learn best and when motivated to solve problems by exploring appropriate skills and knowledge *Csikszentmihalyi, et al. (1993); Norman (1993).*

The use of social media in education however gives the interpretation of 'interest' a new slant when it is perceived as presenting something that students are already interested in rather than evoking an interest in the work set in the curriculum. We did not just rely on the innate interests of the individual students, but viewed interests and passions as something to be actively developed in the context of generating ideas and practicing creativity where personalised learning pathways could be developed, allowing for specialised and diverse identities and interests. Students commented almost unanimously

that the experience was very much interest driven and developed a new networking within the group and communication both social and formal with fellow students and lecturers.

> *I have used Facebook for the Ingenium assignment and found it useful to get advice and ideas.- student # 1*
>
> *I like the Facebook group being able to post ideas and read what other people have to say. I think that it is a creative/social way to get your view across to such a big group." – student # 2*
>
> *Initially the course intimidated me, but right around the middle I was completely involved and enthralled. – student # 3*

Choice of learning styles

Social media in an educational context can encourage different learning styles in that students can choose when and how they engage. This need to communicate provides an experience that enables connections and sharing provides information and enhances a range of learning experiences that rely on more student focused approaches and increased ownership of the process within this community. *Howard Gardener* refers to the development of 'Multiple Intelligences' as a more engaging and realistic methodology for educational pedagogy as opposed to the traditional literacy and numeracy dominant curriculum to demonstrate intellectual ability. Creativity in turn also relies on the ability to apply a variety of approaches and styles in generating ideas especially in what *Gardener* refers to as the development of interpersonal intelligence (seeing things from other perspectives, listening, empathy, understanding other people's moods and feelings, co-operating with groups, communicating both verbally and non-verbally, and establishing positive relations with other people) and intrapersonal intelligence (reflection, understanding inner feelings, dreams, relationships with others, evaluating thinking patterns, reasoning with themselves, understanding their role in relationship to others); characteristics that are articulated in the Ingenium process.

Informal

In trying to bridge the gap between social media and academic content we were attempting to tap into the positives of the informal learning processes that might characterise the connection between the two. Informal learning is seen as happening in a personalised manner, very much driven by interests and needs and voluntary, self-directed and embedded in a social context which promotes ongoing activity and continual leaning. Social media and creativity have strong Informal characteristics. Social learning is just that, social, and it's the informality that attracts students. Idea Generation is very much a fluid process encouraging many possibilities and needs input from a diverse crowd and larger body of experience which social media can facilitate. 'Messing around' is a term used in the *Living and Learning with new Media report, (2009)* implying, searching for information on line, experimentation and play, exploration , trial and error with relatively low investment and reduced consequences of failure. What *Dundar (1997)* describes as" the messy convoluted routes to inspiration, or "idea finding in the wild". These in turn are the very things that characterise an environment that fosters the creative thinking we were trying to encourage in our students.

The process of Ingenium provides a structure for applying creative thinking that students themselves are expert in and reconfigures the notion of the classroom beyond traditional physical and pedagogical boundaries. Formal student feedback conveyed that developing skills and confidence to apply creativity principles was enhanced in this informal social media environment that encouraged an element of students making decisions beyond the 'confines' of the classroom and the perceived curriculum. The very nature of what we might term the creative approach certainly encouraged students to explore, experiment speculates and take risks in their endeavours and the informal learning environ-

ment gave them the license to do this. To reinforce this, lecturers conveyed feedback on creative ideas in positive and supportive ways, to build on strengths.

Students report social media to be an extremely useful extension to their classroom studies and would like the service made available via other classes. Access to their lecturer, being able to clarify questions, enjoying conversations about their ideas and collaborating for better outcomes are reasons they cited for improving their overall learning experience.

> *At the start of the process I was weary as to how much I could personally think 'outside of the box'. .. after the first 50 or so thoughts began to flow easier. I found myself writing things that I would usually hesitate to suggest at the risk of sounding 'foolish—student # 4*

> *I find social media informal… it could be used for certain educational purposes that need a social, interactive element—student # 5*

> *I was expecting essays and endless hours referencing and quoting; in short another theory subject. What I was pleasantly surprised by was the conversational manner in which the course was carried out—student # 6*

Engagement

Our experience in fostering the creative process was communicating to students that it can happen in a variety of ways, contexts, spaces and time and that the notion that you turn up to class at a set time and "practice creativity" then switch off until the next class is unrealistic, even if the process matches much traditional educational practice.

The social media platform allowed us to extend the class experience beyond the architecture of the university; linking learning, home and community allowed learners to best achieve by reinforcing learning in multiple settings. Short bursts of activity limited to class and then homework do not generally facilitate best practice idea generation philosophies and do not facilitate incubation of ideas over time. Students acknowledged the benefits of this wider conversation in a time place context and how it facilitated thought processes, sharing, collaborating and reflection

> *I use Facebook and Instagram. The group event to communicate outside of hours is very good and I think it should be used in other courses too. It gives a comfortable way of communicating. For me, social media is a daily thing. A more relaxed way of communicating with tutors is very helpful—student # 7*

Collaboration

Collaboration and cooperation is promoted through social media and is a characteristic that is being recognised as a great facilitator of creative thinking. Traditionally collaboration in the classroom is not promoted or supported and our research within our own institution supports this where the bulk of the student academic experience focuses on a measure of the individual effort. In spite of extolling graduate attributes that include working collaboratively as part of the student experience the structure of course delivery in the main advocates individual achievement which does not facilitate creative abilities reliant on collaborative interactive and reflective communities *Schon (1983) Csikszentmihalyi (1996).*

One of the major objectives of social creativity is to foster innovation and creativity through the creation, accumulation and sharing of knowledge by building creative academic content in a collaborative social cultural context *Fischer (2005).*

> *Through my interactions with Unearthing Ideas Online I feel I have been able to understand the processes of generating creative ideas through posts by others. It*

> *has been much easier to generate creative ideas due to the range of genders, ages and various minds working together to give personal, unique opinions and perspectives on any particular topic. With this, it allows a new branch for ideas to grow off!—student # 8*

We have found from our formal evaluations that the use of social media enhances networking and social communication for both the teacher and the student by promoting a wider variety of learning styles, alternatives to traditional presentations, creating classroom communities, and building the teacher student and student to student interaction *Paulus, Larey & Dzindolet,(2000)* have developed a cognitive theory of group creativity suggesting that the sharing of ideas in groups stimulates the development of ideas by being exposed to more ideas than solitary idea generators and it is this interaction and collaboration with other individuals that is critical to creativity *Fischer (2005), Csikszentmihalyi (1996).* In regard to the use of our on line facility to foster creativity the opportunity to generate ideas individually then share, significantly enhances cognitive stimulation where ideas from others leads to novel associations *Smith (1995), Osborn (1957)*…and feedback from students supports this… *Fischer (2005)* contends that socio-technical settings amplify the outcomes of creative groups by multiplying rather than simply collating individual creative efforts and those organisations get their strength from the creativity and engagement of their individual members. The essence of this is 'the conversation' as *Dunbar (1997)* states "The most productive tool for generating good ideas remains a circle of humans, at a table, talking shop" and so for us, the table was our social media site.

> *It's interesting how ideas are bounced off one another - which provokes the idea to be pushed further. Ideas build fluently and are continuous—student # 9*

> *I'm starting to see the benefits for constructive conversations—student # 10*

> *Collaborative thinking and approaches can truly be an advantage The manner in which my colleague and I approached our assignment ….was inspired by interactions within our group and our interactive approach was inspired by more than the assignment brief… but much of what I learnt from and shared with my study partner—student # 11*

Peer learning

Peer based sharing and feedback emanate from interest based communities such as Facebook and unlike formal educational environments where feedback is provided by the persons in authority who 'own' the experience. Feedback from peers and audiences who have personal connections and interest in the work promotes collaboration and informal learning and was a strong feature of our site. This once again relies on the notion of social creativity and *Csikszentmihalyi's (1999)* insistence that it is the community, not the individual that is the appropriate unit of analysis in any investigation into how creativity gets fostered. He advocates, intentionally turning away from the individual nature of the creative experience to focus on a social context model. This implies diversity of participants where all ideas and contributions are valued and feedback from our students (show this) demonstrates that learning involving peer interaction encourages participation and engagement. The results of our work were not peer isolated but involved adult, lecturer community involvement which was welcomed by students.

> *Great sense of teamwork developed through Facebook conversations….felt great to get feedback from peers—student # 12*

> *What was refreshing was that I found validation in the ideas and posts I submitted on line from other people in the class—student # 13*

Active participation and engagement

The underlying premise for both collaborative and cooperative learning is founded in constructivist theory *Panitz (1999).* Where knowledge is discovered by students and transformed into concepts they can relate to. It is then reconstructed and expanded through new learning experiences where learning consists of active participation by the student versus passive acceptance of information presented by an expert lecturer. Learning and specifically creativity comes about through transactions and dialogue among a community of students, lecturers, faculty and society in a social setting. Creativity relies on discovery through the processing of information into new and novel configurations that can be facilitated by lecturers peers and community but essentially it needs to be actively generated.

The use of Unearthing Ideas Online fostered this processing of information through active engagement and self-expression at the student's pace and timeframe and enhanced communication through real time feedback providing a faster and easier approach for teachers and students to connect with each another. Students commented that the generation of ideas in this exchange was greatly facilitated.

> *Ingenium allowed me look into a topic on a scale that I wouldn't normally. I now understand that the more you break down the initial issue or question to the core the easier it is to rebuild it in a different way. It is this way I was able to come up with ideas I probably never would have if simply asked to answer the question—student # 14*

Ambient awareness

Social media conversations allowed lecturers to become more quickly acquainted with students and vice versa. Within the first week of online interactions we were getting to know our students extremely well something that often took several weeks in the traditional weekly lecture studio interaction. Students commented that this more informal relaxed connectivity made them feel more secure and relaxed removing the formal expectations they thought we had of them. This in turn facilitated better teaching and learning in their creativity development by removing blocks and inhibitions that come from the need to conform to the authoritative gate keeper of the knowledge role model reminiscent of the traditional education many of them had experienced.

This challenged traditional views of instruction and curriculum design, based on didactic and transition based models with the teacher in authority the expert and responsible for how knowledge is delivered and processed. Creativity is encouraged in our model based on partnerships with not only immediate learners but with a wider community of learners and stakeholders.

Responsibility and autonomy

Creativity like social media encourages independence by providing the opportunity to express original ideas and opinions. In this environment the ability to self-teach and to drive one's own learning encourages personal responsibility and ownership of the learning experience. Our approach provided the opportunity to re-engage students with their university experience by promoting one of the traditional objectives of education in what *Bugeja (2006)* describes as the 'critical thinking in learners'.

The process of creative thinking is an iterative process relying on exploring, playing with possibilities, speculating, sharing and reflecting to develop new ideas. The constant adjusting, critiquing , changing and revising to present models and prototypes of ideas was very evident in student postings on the site enhancing creative outputs.

> *When creativity is approached in this manner it gives the individual the feeling of being in control of their own process, which can be liberating and inspiring in*

> *itself. Yet, at the same time having the opportunity to receive valuable feedback and support. Collaboration with freedom—student # 15*

We observed that the site encouraged variety and flexibility of expression in the learning process an important component in encouraging creative thought and something not always possible in the structured traditional approaches where bodies of information are delivered to all students in the same way and at the same time.

Recognition and reputation

Social media provides many opportunities to gain recognition and build a reputation for one's opinions and creative people likewise need recognition, and the opportunity to share their ideas. *Kaplan and Haenlein (2010)* explain that the presentation of a user's identity can often happen through the conscious or unconscious 'self-disclosure' of subjective information such as thoughts, feelings, likes, and dislikes. Further, they state, "the concept of self-presentation states that in any type of social interaction people have the desire to control the impressions other people form of them *Goffman (1959).* On the one hand, this is done with the objective of influencing others to gain rewards (e.g., make a positive impression on your future in-laws); on the other hand, it is driven by a wish to create an image that is consistent with one's personal identity (e.g., wearing a fashionable outfit in order to be perceived as young and trendy)." *Kaplan, Haenlein (2010)*

Creativity demands discourse, tension, dialog, and debate among the interested parties *Gardner (1994).* Social communities even though providing informal feedback and support contribute greatly to recognition and support to an audience engaging in creative work where the sharing and exploration of ideas and opinions facilitates creativity." Most participants in interest driven communities are motivated by the fact that their work will be viewed by others or by being part of an appreciative community" and they are able to "gain validation, recognition and audience for their creative works and to hone their craft within groups of like-minded an expert peers" *Living and Learning with New Media: Summary of Findings from the Digital Youth Project. (2009).*

Academic Orientation

It was paramount that in developing our social media approach that peer culture and interest driven activity be aligned to academic achievement and outcomes recognising the importance of academic success for intellectual growth. The social learning context of reciprocity provides students with scenarios to produce and evaluate knowledge and culture, contribute content and comment on others content, while expert participants provide leadership, direction and commentary but not have authority over fellow participants.

Students are encouraged to develop their identities and reputations through these peer based networks within a network of respected peers, rather than formal evaluations from lecturers or a testing regime. They also take on more responsible roles through ownership of their presentations, learning and evaluation of others, adults have a role but not conventionally an authoritative one that may be the expected norm, teachers are working collaboratively and in a consulting role…"co-conspirators" *Mahendran, Cha'vez and Soep (2005).* Which they have identified this as "Pedagogy of Collegiality" where the responsibility for education is more of a distribution within networks of people and institutions.

This learning environment provides time to tinker and explore without the dominance of direct instruction. It requires 'a cultural shift and a certain openness to experimentation and social exploration that is generally not characteristic of educational institutions' *Living and Learning with New Media'. Or what Fischer (2011)* describes as a shift from educational institutions thinking of learners as customers by creating a mindset of learners as consumers rather than of ownership of problems.

Fluid—anywhere anytime by anyone opportunity

Social media can build and foster traditional creativity pedagogy in relation to fluency, flexibility and elaboration of ideas and evidence demonstrates increased student engagement, deeper understandings and confidence in applying these specific creativity principles and methodologies in a range of topics. *Kaplan and Haenlein (2010)* explain that collaborative projects enable the joint and simultaneous creation of content by many end-users.

We found that the fluency and flexibility of ideas was enhanced by posting and interaction on the Facebook site due to the self-reinforcing function that commenting and then subsequent conversations created. Many ideas (fluency) were being encouraged whereas students noted this did not happen when they worked in isolation. Ideas were being interrogated/discussed and reworked, (flexibility) and students were grasping the underlying principles, *the thinking behind the thinking* (elaboration**)** relating to creativity and building confidence in knowing when and how it was taking place. Evidence of this deeper learning and understandings was happening from what students were posting and commenting on. Growing of ideas and reconceptualising of concepts were going far beyond specific task orientated course requirements and even beyond the bounds of the course as social media was allowing students to enthusiastically take control of their learning.

> *I feel some of the ideas I came up with never would have surfaced if I hadn't considered the topic so intensely. I definitely would use this process again—student # 16*
>
> *Made me look at the topic in completely new way – student # 17*
>
> *The beauty of utilizing social media in conjunction with the more formal approach to education is that you have the opportunity to work with a more collaborative approach, which often stretches our thinking and methods beyond the initial working brief. Ultimately, resulting in greater engagement. As confidence grows, we extend the process further, which often results in reconsidering the preliminary approach as the idea grows and is out-worked further, creating better results—student #18*

How we did it

Engaging a student body is complex. Our challenge lay in engaging professionally, while remaining relaxed and informal as expected within an online environment. Though we set up "Rules of engagement" and principles from the start we also had to remember that this was a public page with community members based worldwide. Using a typical "teachers voice" wouldn't cut it. So many theories went out the window as we got relaxed, chatted and exposed ourselves in the process, along with them.

We used various aspects of Facebook functionality, such as using page notes and events for student task orientated collaboration, after discovering early on that messages and student posts were getting lost in the general wall news feed. Students engaged most with visual elements and so we frequently posted class pictures or had them contribute their own works for display. The philosophy that everyone likes a like became well used. We posted images using differing visual styles also, such as the use of black and white photography to help stand out in the general crowded and colourful newsfeed. We also engaged the Unearthing Ideas Online community with daily word challenges using Instagram, etc., to break up the routine of the page and to keep it lighter and more informal.

Students like and appreciate the many links to external resources that can be shared through Facebook. This exposes their minds to a multitude of ideas, thoughts and designs they may not necessarily find on their own. Of course, in the true social learning style, they also share their finds with us. This two way interaction is where social media comes to the fore and really unleashes its true potential. The creative mind is indeed insatiable when it starts to research and gather information on a subject. Having a community of like minds helping each other and sharing is when our work comes together in the fullest way.

By using the Unearthing Ideas Online Facebook Page, we tapped into an existing network or community of people, on a platform where we assumed over 80% of students would have access and an understanding of how to use. In fact as stated the actual student participation rate was close to 99% and the Facebook Page itself had grown to over 760 members since its inception with membership coming from the university, broader community, as well as many local, national and International professionals, designers and creatives.

Impact at the University of South Australia (UniSA)

As UniSA Idea Generation course lecturers, we have continued to explore ways to use social media for the purpose of informal and social learning in the idea generation and creativity field. Our findings to date, with the associated feedback previously reported, have given us our commitment to continually develop new ways to inspire and capture our students interest, for them to learn, and for us to learn from them. This focus shapes the type of assignments we set, the style of homework we give and we do so with an emphasis on being able to share work to enable collaboration. Our methods and approaches have already influenced changes in pedagogy within other courses in the University such as Business and Marketing, Event Management and Communication. As a result of our input these courses have been revised to now have creativity embedded in their content, delivery, and assignment and assessment components. Our Vice Chancellor has taken an active interest in our work and has asked us for a proposal to build creativity and Innovation as a core graduate attribute in all students in the University and for it to be taught as a discreet skill as well as it being embedded into existing course structures.

Conclusions

In summary the project aims to and is already beginning to shape and enhance the creative educational experience of our students in a growing information age landscape drawing on the power of technology to connect young people's interests, friendships and academic achievement. We are challenged in our ongoing work to convert the case that has been made for the importance of creativity and the influence of social media into a pedagogical framework for fostering creative thinking skills. Our premise was that creativity flourishes in a more relaxed informal environment and we are building on the engagement that social media through 'Unearthing Ideas Online' offers as a method to enhance the skills and attributes that characterise creative learning. While not all students who start out in our courses believe they are creative, due to a number of preconceptions and inhibitions, what we find through social encouragement and online conversations and just "being there", is that over the course of the journey their inhibitions are reduced and they gain the confidence and ability to generate new ideas. It is our contention that it would be impossible to replicate this type of social learning environment in any other way.

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