

Promoting Creativity through Explicit  
Teaching Strategies

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# Promoting Creativity through Explicit Teaching Strategies

Mark McMahon and Andrew Ewing

## **Abstract**

Creativity is a recognizable and valued skill but is prone to multiple interpretations both in terms of its very nature and how it can be developed in students. This paper highlights one approach that has been taken in an undergraduate unit in creativity that has involved the implementation of a staff development program in applying explicit teaching strategies. The approach integrates a conceptual model of teaching creativity with the application of a professional development program called Advancement via Individual Determination (AVID). The intervention was undertaken as part of an OLT grant in collaboration with Victoria University that explored the value of training teaching staff in explicit teaching strategies. Initial findings suggest that students responded well to the program and perceived value in terms of their engagement in learning and the development of their own creativity.

## Introduction

Everybody recognizes creativity. It is a defining human characteristic and highly valued university graduate attribute. Yet it is also a concept that is ideologically fraught and bound by the context of the disciplines in which it is applied. It is no surprise therefore, that creativity is prone to multiple definitions and theories as Harnad (2007) describes in terms of Method, Memory, Mutation or Magic. Each of these perspectives contains implicit assumptions about the creative process and the extent to which it can be encouraged or developed, whether it can be formularized (Method), is tied to innate knowledge or understanding of the world (Memory), is the result of serendipity (Mutation) or is simply inexplicable (Magic). Such notions veer from the pragmatic to precious, raising questions about everyday creativity and whether it can be a taught skill. At least two theories that have explored the notion of the creative person have defined it in terms of Person, Domain and Field (Davis, 2004). Csikszentmihalyi (1996, p. 55) argues the role of 'gatekeepers of the field' in terms of recognition being an important attribute, while Howard Gardner in his book *Creative Minds* goes to far as to use case studies of famous creative people to define seminal creative qualities (Gardner, 1994).

This notion of creativity as eminence, however, diminishes the status of everyday creativity and would instantly discount the vast majority of undergraduate students as being creative simply by their youth or inexperience. Such a position is untenable for a course that seeks to develop creativity in its students but it does raise a number of legitimate questions. If one is to adopt the notion that everyone has the potential to be creative and that creativity itself is explainable, then how can creativity best be framed as an academic discipline and how can the potential for creativity be realized within undergraduate students?

## Teaching Creativity

A number of approaches can be utilized to develop creativity, one dominant one focusing on the direct development of creative strategies. The modeling and application of strategies such as analogical thinking (Davis, 2004) or Jung's Active Imagination require students to explore their own personal creativity and generate original ideas (Jung and Chodorow, 1997). For group creativity, De Bono's Six Thinking Hats ensure a range of perspectives are brought to an issue (De Bono, 2008). There are also analytical and visual tools such as mind mapping, and brainstorming. The question remains, though, around exactly what is being learnt through such strategy instruction. Are they learning to apply tools or genuinely learning to be creative? The issue is further compounded by research that has shown that

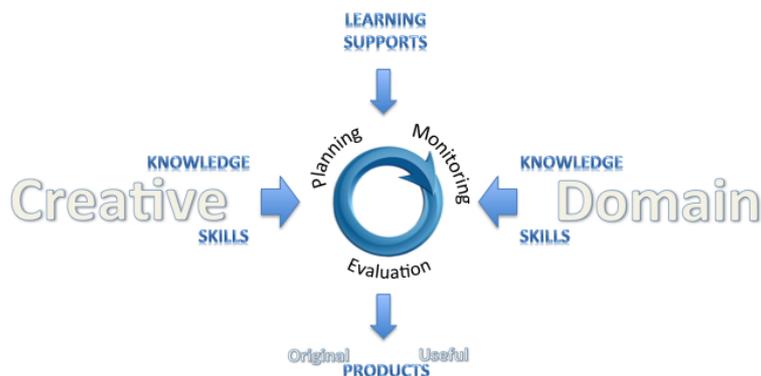
creativity in one domain does not necessarily lead to creativity in others (Sawyer, 2011).

One common response to such a conundrum is that while one cannot directly teach creativity, one can teach *for* creativity (Kaufman and Sternberg, 2007). Thus, creativity is like many other fields of study that can be addressed through a range of related skills and attributes. These may involve the acquisition of specific skills and knowledge such as creative strategies as well as broader generic skills such as critical thinking and information literacy. Clements and Nastasi (1999) foreground the role not of knowledge itself but knowledge acquisition strategies. Such strategies 'relate newly acquired information-to-information acquired in the past. Knowledge-acquisition components are fundamental sources of learning, insight, and creativity.' (Clements and Nastasi, 1999)

This broad perspective on the prerequisite skills for creativity has also been emphasized by academics such as Brenda Gourley, former Vice Chancellor of the Open University UK. Gourley argued for the following skills to be developed to enhance learners' creativity:

- Information management;
- Self organisation;
- Interdisciplinary knowledge;
- Personal and interpersonal skills;
- Reflection and self-evaluation skills; and
- Ability to manage risk (Gourley, 2003)

One can see therefore, that the teaching of creativity must go far beyond the provision of skills to a broader notion of self and personal attributes. Such an approach would not negate the application of specific strategies, nor would it suggest that teaching approaches themselves should be so open-ended as to assume that learning happens through pure modeling and osmosis - quite the opposite in fact. A previous paper has outlined a conceptual model of teaching creativity that highlights the multidimensionality of the concept and its complexity in terms of integrating both generic and domain-specific skills (McMahon, 2012, Figure 1).



**Figure 1:** A Model for Teaching Creativity

One of the defining characteristics of the model is that it sees the development of creative product as the integration of domain-specific knowledge and skills (e.g. Graphic Design skills) with creative ones, leading to the production of original and useful work. In this approach, learning creativity is primarily a metacognitive activity, which is mediated by engaging students in a process of planning monitoring and evaluating their own thinking as they learn. To instantiate this model into curriculum, however, requires content that reflects the multiplicity of creativity but also learning supports and activities in the form of strategies that engage learners in resolving this multiplicity and developing their own professional identity.

Achieving this can be challenging to even the most experienced teachers and like many universities, ECU's School of Communications and Arts relies heavily on sessional staff who are often experts in their field but lack formal teaching qualifications and experience. This paper, therefore addresses the need for the development and application of an approach to teaching that can handle such multiplicity, while providing a suite of strategies to promote student engagement at a holistic level.

## **AVID**

One such approach is Advancement via Individual Determination or AVID. AVID is a university readiness program designed to support institutions through the means of an ongoing professional learning system that builds explicit teaching skills (Brown, 2014). The program equips low socio-economic and under-performing students with the academic, social and emotional skills to be successful at University. This is an important cohort for ECU, where 18% of undergraduate students at ECU are currently from low socio-economic backgrounds (Vice-Chancellor welcomes education reforms, 2009). It was recognized as a case study of excellence by the Organization for Economic Cooperation and Development (OECD) in their report Equity and

Quality in Education (OECD (2012)). AVID for Higher Education (AHE) builds on its secondary and primary programs to specifically meet the needs of students attending a college or university. AHE resources systemically address the goals of increased learning, persistence, completion and success in and beyond college. It has been described as a holistic, integrated University success system designed for students with the determination to succeed and for campuses committed to promoting student success (Cuseo, 2012).

In 2011, Victoria University received Commonwealth HEPPP competitive funding of \$1.4 million for the implementation and research into the AVID program in Australia and in the following year Edith Cowan University and Victoria University received an Office of Teaching and Learning grant that facilitated, amongst other activities, professional learning workshops designed in part to complement sessional teaching staff's range of instructional skills. These workshops taught high engagement, active learning strategies with a focus on adapting them for specific course content. Participants learnt how to engage students in inquiry-based learning, critical thinking processes, and collaborative learning activities, in addition to improving organisational skills including instruction in various AVID based explicit teaching strategies. Staff members were encouraged to participate in interactive sessions where explicit teaching strategies were modeled supported by theoretical explanations and explorations of how these teaching strategies might be incorporated in their own units and courses to enhance learning outcomes.

These strategies and their adaptability marry well to our goals of promoting creativity. In particular they allow the development of communities that allow risk; the creative generation of ideas through brainstorming; theoretical creative knowledge formalized through critical reading and the accommodation of the multiplicity of concepts through AVID led activities such as Philosophical Chairs, a structured form of dialogue in which students develop a deep understanding of a text or subject (Krohn & Quijano, 2011). These goals reflect Gourley's four principles of learning environments that promote creativity:

- Secure, trusting relationships allow people to take risks and learn from failure.
- A variation of context permits the transfer of knowledge from one context to another.
- The right balance between skills and challenge means people have the right skills to meet real challenges.
- Interactive exchange of knowledge and ideas allows ideas, feedback, constructive criticism and evaluation, drawing on diverse sources of information and expertise, to be constantly exchanged. (Gourley, 2003).

### Example Strategies applied in unit CCA1103

In the unit Creativity: Theory, History and Practice the focus has been on creating such a learning environment through the implementation of explicit AVID teaching strategies. It should be noted that like many units at ECU, sessional tutors who frequently do not have a formal teaching background do the majority of teaching. The goal has therefore been not only to benefit the students but also to empower the teaching staff. Jeffery Huerta contends that AVID professional development is a significant predictor of teacher leadership, even after any overlapping effects from a teacher's gender, level of education, and teaching experience have been accounted for (Huerta, 2008).

The unit engages students in building and sustaining a community, writing and learning to speak, inquiry strategies, collaboration, organisation, reading and understanding visuals. The specific techniques covered include but are not limited to developing **Social Contracts** that create a working culture and environment with explicitly shared goals, values, and expectations, including behavioural expectations. The process of developing the contract is inclusive, providing students a voice in establishing the norms that move the group from a "class" to a community of learners (Krohn & Quijano, 2011). This feeling of community is one-step towards establishing a sense of well being and empowerment for students within the academic paradigm, focusing not only on their teaching and learning needs but establishing a focus on their overall quality of life (The Student Academic Experience, 2014), echoing Gourley's argument for a broader notion of self and personal attributes (Gourley, 2003).

Other AVID activities include **Quickwrites** - an informal exercise that can help reduce students' fears and anxieties around writing and open channels of creativity and the generation of ideas. Structured peer responses require students to engage in the writing process both by evaluating the work of a peer and by assessing peer feedback for their own writing. The **Two-Minute Speech** is an excellent way to give students experience with formal oral communication, thereby increasing their comfort level with speaking. This has often been implemented early on in the unit to foreshadow the group presentation assignment and allow students to receive early feedback and guidance on their public speaking skills. Importantly, all activities are delivered with their explicit goals set out before engagement so that students can understand not only what they are doing in class but why.

The **KWL** (Know, What/Need to Know, Learned) strategy is a metacognitive tool requiring students to identify what they already know about a subject, what they want to know or need to know about the subject, and what they learned from the process. It allows students to connect what they already

know with what they are learning and evaluate the processes. Costa's Levels of Thinking (Costa, 1985) and Bloom's Revised Levels of Critical Thinking (Bloom & Krathwohl, 1956) are implemented to engage students with their own reasoning processes and to highlight the importance of thinking for themselves instead of chasing the "right answer". This is often a crucial learning shift for them especially when it comes to the subject and practice of Creativity. **Socratic Seminar** is a structured activity designed to engage students in deep thinking. Subjects such as online copyright infringement were discussed within the forum of asking and answering questions to stimulate critical thought, illuminating the aforementioned subjects in ways that the students often are surprised by. **Brainstorming** is an everyday creativity-generating activity that is useful in a variety of instructional and professional settings. This collaborative process allowed students to rapidly spawn an assortment of ideas without censure or judgment, lending itself well to the university workshop environment.

### **Tentative Findings**

In the space of a semester the explicit teaching strategies made noteworthy changes to student's attitudes regarding learning about creativity as evidenced by the results obtained in its Unit Teaching and Evaluation Instrument (UTEI). While a measure of student satisfaction rather than learning, it is one of the primary indicators used within the university to gauge students' perceptions of teaching efficacy. The UTEI logged student satisfaction in CCA1103 at a mean value twenty points lower than the university average in 2012. This figure had changed radically a semester later with the implementation of aforementioned explicit teaching strategies. The mean value was now eclipsing the university average by six. This also coincided with the strongest response rate in recent years, suggesting students were more actively engaged in the value of the unit and the affect they could have on its delivery.

UTEI comments have been quite remarkable in the extent to which students' perceptions of their learning have been tied specifically back to types of activities undertaken in class and their role in students' creative development:

*"The tutorials generated my confidence and diminished my fear of public speaking, due to an extremely clear understanding of each weeks unit topic."*

*"I liked the variety of content with each weeks lecture and talking about the different theories on creative practice and creative individuals really helped me to understand myself and my own creative processes better. The*

*assessments required quite a lot of effort but was (sic) good in helping me to push myself creatively.”*

*“All the readings were relevant and easily accessible for students. The workshops had relevant activities and the tutors were all very supportive and engaging.”*

*(UTEI Unit Reports 2013-14)*

Not only do the reflective nature of comments such as these bear out the metacognitive underpinnings of the model for teaching creativity, they also demonstrate how effectively the model can integrate with AVID strategies for key skills such as critical reading, community building and communication. Importantly, they highlight how explicit teaching strategies have the potential to engage learners without necessarily producing lower order outcomes inherent in many formulaised approaches to learning.

Whilst the statistics have fluctuated over the last year they cautiously suggest the success of the strategies in improving the quality of the unit for students. Given that sessional staffing fluctuates too, the need for ongoing professional development is imperative in ensuring the standards and quality of the explicit teaching practice. The AVID for Higher Education pilot identified several key conditions necessary for AVID to effectively address student success at an institution of higher education and these match our preliminary findings: strong campus leadership, vision, and support; coherence in student experiences achieved through structures such as cohorts, academies, learning communities and linked classes; and instruction that is learner-centred and engages students in AVID’s key learning components of writing, inquiry, collaboration, organisation and reading (Why AVID for Higher Education, 2014).

## **Conclusion**

Neither teaching nor creativity itself can be reduced to a set of strategies. Both are complex, ill-defined pursuits that rely heavily on the reflective processes that learners, teachers, and creators engage in. Nevertheless, an attempt to identify the key metacognitive processes inherent in learning to be creative and apply the strategies that can be implemented to achieve these outcomes has proven valuable for student engagement in this unit. Given the overarching nature of metacognition and the inherent design of AVID as an approach to learning that can be applied across a range of contexts, this suggests AVID can be equally effective for other disciplines. Professional development in the use of AVID, therefore, was expanded from this initial context to include other units and courses in the School of Education and in ECU’s UniPrep enabling course. Early survey data suggests training in AVID has a high-perceived value among participants. The current

stage of the VU/EUCU project involves the production video examples of AVID in action. Such examples can then be used to illustrate the potential of explicit teaching strategies to enhance learning and support sessional staff in developing approaches to engage students in the critical learning skills required for range of higher education disciplines.

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