

## Developing and Valuing Students' Creativity: a new role for Personal Development Planning?

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### Background

SCEPTRE's educational mission is 'to develop an enquiry-led approach to learning for students using peer, tutor and employer support in a way that enhances academic and personal development. It will make use of e-learning as well as a programme of skills and personal development planning (PDP)' (CETL bid document 2004). Its educational goal is to facilitate the development of students as '*critical and creative enquirers*' and develop skills and attitudes that will enable them to engage effectively in individual and cooperative enquiry and problem working in both disciplinary and work-based contexts. This paper examines the potential role of personal development planning in students' creative development.

### Introduction

Personal Development Planning (PDP) is a process that is being introduced in UK higher education to encourage students to plan for, manage and reflect on their own learning and development. It treats the student experience holistically ie it addresses the academic, career and personal dimensions of student development. There are many potential objectives for PDP, depending on context, but important objectives include encouraging students to gain deeper insights into themselves as individuals, as learners and achievers and to help them develop personal knowledge that they can use to communicate and demonstrate their abilities and achievements to others. The valuing of personally constructed knowledge of self through PDP signals an important change in HE; one that recognises that self-identity and self-expression are important in higher education learning. As far as I'm aware, UK is the only higher education system in the world attempting to systematize identity and personal knowledge building in the HE curriculum.

PDP processes contain within them a set of interconnected activities, experiences and relationships namely:

- **thinking ahead and deciding what to do** – analysing tasks, identifying goals, creating strategies to achieve objectives;
- **doing / producing things broadly in line with planned intentions** but being responsive to the effects of actions and changing plans if appropriate; learning through the experience of doing with greater self-awareness;
- **self-observing and recording** - thoughts, ideas, experiences, actions and their effects, experiences, to develop a record of learning and to evidence the process and results of learning and support the enterprise of 'learning about learning;'
- **thinking about what was done and what was achieved in order to learn** (reflecting, reviewing and evaluating; making sense of experience; making judgements about self and the effects of personal action and determining what needs

to be done to develop/improve/move on; the enterprise also supports the process of learning about learning).

The PDP process is also likely to involve communication, interaction and relationships with tutors, peers and possibly employers.

From this set of activities we can generate a social and process-based conception of PDP i.e. approaches to learning that connect planning (specific goals for learning and strategies for achieving desired goals), doing (aligning actions to learning goals), recording (self-evidencing and reporting on the process and outcomes of learning) and reflecting (reviewing and evaluating actions, results and the effects of both). All these domains of thinking and action provide potential sites within which an individual's creativity might be utilised, recognised and further developed.

This paper argues that if higher education is about helping people develop their potential as fully as possible within the HE learning context and helping them prepare for a life time of learning, problem working, changing and coping with change then helping students to understand and develop their unique creativities is an important and worthwhile educational goal. Enabling students to be or to become creative in their different subject or intended vocational fields should be an explicit part of their higher education experience (Jackson 2003, 2005a). The complexity and richness of the higher education and concomitant wider life experience offers considerable opportunity for individual creativity but we currently lack comprehensive and shared understandings of what it means in different subject and pedagogic contexts. The Imaginative Curriculum network, in collaboration with academics and educators, is trying to develop this type of understanding through surveys of teachers in different disciplinary and teaching contexts (<http://www.heacademy.ac.uk/creativity.htm>).

This article focuses on the learning opportunities and processes that are associated with the practice of personal development planning. It draws on the results of two surveys and a workshop undertaken in December 2005 (Jackson, 2006). It argues that PDP and creativity are allies and that the behaviours and thinking processes that PDP is intended to promote can be used to help students understand their individual creativities and encourage them to be creative. The paper concludes that PDP has the potential to become an important pedagogy to support the development of students' creative potential.

### **Some initial thoughts on creativity**

Creativity exists and operates on a continuum from inventions and interventions that change the world, through those that change a domain (like physics), to those that have local and personal significance: 'a sort of "personal effectiveness" in coping well with unknown territory and in recognizing and making choices' (Craft 2002 and in press). In education (schools) there has been a shift in the last few decades from seeing creativity as an ability associated with the very gifted and most able, to something that we all possess to varying degrees and which can be encouraged, nurtured and developed. The latter view is embodied in the concept of *life-wide* creativity developed by Craft (2002). In higher education, we are primarily concerned with democratic notions of creativity. For example, a study of National Teaching Fellows found that 71% of NTFs disagreed with the statement that creativity was a rare gift and 92% believed that creativity *can* be developed (Fryer, 2006). As educators we must recognize the continuum of creative ability and potential and support both everyday notions of creativity but also aspire to prepare people to take on challenges at the level of making a real difference to their chosen field of endeavour.

We don't need creativity for routine, predictable, situations. It becomes necessary and important when we want to move beyond the known or when we are confronted with complex, indeterminate problems or situations. We need to see creativity in the context of other abilities and capacities that are developed for working with new, complex and challenging problems and situations. Sternberg and Lubart (1995) argue that we need three different sorts of abilities to be successful: *analytical abilities* – to analyse, evaluate, judge, compare and contrast; *practical abilities* – to apply, utilise, implement and activate; and *creative abilities* – to imagine, explore, synthesise, connect, discover, invent and adapt. To this I would add the abilities that PDP seeks to encourage and develop – to plan, analyse problems and tasks, set goals and devise strategies to achieve them, and reflective abilities to help make sense of the world and learn through the experience of engaging with it. Successful people (people who generally achieve what they set out to do) do not necessarily have strengths in all areas, but they find ways to exploit whatever pattern of abilities they may have in any given situation or context. Perhaps an individual's creativity is at the heart of their ability to combine their thinking, abilities and behaviours in ways that enable them to be successful in particularly challenging situations.

Learning does not sit in isolation from context – like a subject, a problem, an opportunity, a challenge or a test! Neither is it isolated from motivation – need, desire, interest or compulsion. PDP gathers meaning when it is enacted within a particular context which includes the motivational forces. Context also stimulates the need for creativity and shapes the form that creativity takes. Personal choice is also important; we can choose to be or chose not to be creative.

In higher education the subject is often the most important context. The creative acts of a biologist are different to those of a historian or an engineer and the sorts of problems encountered in these different fields require different sorts of creative response. In higher education conceptions of creativity are shaped by the forms of thinking, doing and being in the discipline. Only an engineer who has developed the specialist knowledge and ability to 'imagine' as an engineer, can utilise their imaginations in the creative solution of difficult engineering problems i.e. for the engineer creativity is socially constructed within the engineering domain.

Problem working seems to be a major focus for creative effort where problems are both issues to be resolved and opportunities to be exploited. Problem working might be abstract (e.g. solving a mathematical puzzle) or concrete (e.g. a medical consultation).

### **Generic features of creativity**

According to Biggs (2002), creativity involves the extended abstract outcomes of learning like – hypothesising, synthesising, reflecting, generating ideas, applying the known to 'far' domains,' working with problems that do not have unique solutions. Creativity also involves the capacity to generate and connect ideas and create frameworks to judge the worth of ideas and potential solutions. Many academics would see these as higher order academic skills and capabilities that they seek to develop in their disciplines.

Previous studies (e.g. Jackson 2005a and b) reveal that academics associate a number of features with creativity regardless of disciplinary, pedagogic or problem working context. For example –

- *Being imaginative* – generating new ideas, thinking out of the boxes we normally inhabit, looking beyond the obvious, seeing the world in different ways so that it can be explored and understood better.

- *Being original*. This embodies:
  - the *quality of newness* for example: *inventing* and producing new things or doing things no one has done before;
  - being *inventive with someone else's ideas* – recreation, reconstruction, re-contextualization, redefinition, adapting things that have been done before, doing things that have been done before but differently;
  - and, *the idea of significance* – there are different levels and notions of significance but utility and value are integral to the idea.
- *Being curious with an enquiring disposition* – *willing to explore, experiment and take risks* i.e. the attitude and motivation to engage in exploration and the ability to search purposefully in appropriate ways in order to find and discover. It is necessary to work in an uncertain world and often requires people to move from the known to the unknown.
- *Being resourceful* – using your knowledge, capability, relationships, powers to persuade and influence, and physical resources to overcome whatever challenge or problems are encountered and to exploit opportunities as they arise.
- *Being able to combine, connect, synthesise* complex and incomplete data/situations/ideas/ contexts in order to see the world freshly/differently to understand it better.
- *Being able to think critically and analytically* in order to distinguish useful ideas from those that are not so useful and make good decisions.
- *Being able to represent ideas and communicate them to others* – the capacity to create and tell stories, sell ideas and show people possibilities, opportunities and solutions in ways that make sense to them and capture their imagination.

Important questions for this study of the relationship between PDP and creativity are:

- Do PDP practitioners also associate these features with creativity?
- Are there other features to be added to this visualization?

### **Do PDP practitioners also associate these features with creativity?**

This question was addressed in two different ways. Firstly, a group of about 30 PDP practitioners participating in a workshop at the University of Manchester were invited to discuss and comment on the list of features given above. The overwhelming view, with a small number of qualifications, was that the list embodied the main characteristics of creativity in higher education learning and that there were no significant omissions.

Secondly, a survey was undertaken within the PDP-UK network using a 30 item questionnaire that was developed from the generic list of features. The results of the survey are given in Table 1. They show that 85% or more of the 29 respondents believed that 19 of the items were associated with creativity in HE learning while 69% or more believed that 25 of the items were associated with creativity in HE learning. The three lowest scoring items were 'awareness of beauty' (39%), 'storytelling' (54%) and 'valuable ideas' (54%).

### **Additional features**

PDP practitioners identified a number of additional features that they associated with creativity in higher education learning (additional features at the bottom of Table 1 and below). Some (perhaps all) of these are likely to be subsumed within the package listed above but it is important to see how practitioners express and relate the ideas:

- Creative synthesis of theoretical ideas - eg. use of visual methodology to convey theoretical issues and pose searching questions
- A sense of knowing how and when to ask questions – a kind of enhanced curiosity and criticality.
- Applying skills – not necessarily acquired in an academic environment - to new situations in order to problem-solve, question accepted thinking on a topic...
- The opposite of spoon-feeding ie students thinking for themselves, rather than being dependent on academic staff for direction or answers
- Not necessarily having original ideas or taking radically innovative approaches to tasks, but knowing how to combine or synthesise information to come up with something new
- Knowing the standard procedures (such as the conventions for writing essays) and using them to explore and develop an independent “voice”
- Completing practicals and assignments in such a way that demonstrated the application of understanding and ability to utilize knowledge that goes beyond the learning materials that were provided.
- Understanding own learning and to taking control of it.

We might deduce from these and other surveys that even though it is not articulated there is a fair degree of agreement within the HE teaching community as to the key features of creativity in higher education learning and that these ideas, ways of thinking and behaviours can be connected in quite complex ways. It also suggests that learning is an inherently creative process.

### **Does/how does PDP encourage and support students’ creative development?**

When responses were invited to the questions *what sorts of creativity does PDP have the potential to encourage/support? and how does PDP encourage/support students’ creative development?* most respondents suggested one or more ways in which it could support students’ creativity or creative development. The overwhelming belief within the practitioner community is that PDP does have the potential to support students’ creative development. (This does not mean that it does!).

There were however a small number of more critical voices. ‘Most PDP seem to be process driven and seen as a chore by students so not convinced that they actually stimulate creativity’ and ‘Not sure it does at all’.

When invited to identify in the survey instrument the items that PDP had the potential to encourage and support, 7 items – generating new ideas; looking beyond the obvious; seeing the world in different ways; seeing unusual connections; evaluation; self-identity and self-expression scored 80% or more agreement.

Some respondents believe that all aspects of the PDP process have the potential to support creativity and creative development.

**Table 1 Survey of PDP 28 self-selected practitioners within the PDP-UK network**

*Q1 Which of these things do you associate with creativity in higher education learning?*

*Q2 Which of these things does PDP have the potential to encourage and support?*

	<b>Q1 n=28</b> % respondents	<b>Q2 n=28</b> % respondents

generating new ideas	100	85
thinking outside the boxes we normally inhabit	100	54
looking beyond the obvious	92	85
seeing the world in different ways	92	81
inventing and producing new things	96	26
adapting things that someone else has invented	96	46
doing things no one has done before	88	42
doing things that have been done before but differently	92	62
being resourceful	85	77
Curiosity	96	69
Enquiry	92	77
Exploration	92	73
Discovery	85	73
Experimenting	96	50
taking risks	69	46
Analyzing	73	88
synthesising	77	81
combining ideas	88	73
seeing unusual connections	92	81
Storytelling	54	54
valuable ideas	54	50
seeing the world from someone elses perspective	69	69
Evaluating	69	81
solving challenging problems	88	65
self-expression	69	96
self-identity	69	81
sudden inspiration	85	42
awareness of beauty	39	12
unconscious activities	62	35
designing something	92	42
<b>other things identified</b>		
building a network	X	
experiencing difference between teaching and learning	X	
rising to challenges without necessarily succeeding	X	X
challenging assumptions about self, others, theories	X	X
exploring own others values, ethics	X	X
creating energy	X	X
managing feedback and failure	X	X
putting things together in different ways for aesthetic or utilitarian reasons	X	
applying imagination	X	X
recognizing opportunities	X	X
seeing yourself in a new way	X	X
organizing own knowledge	X	X
awareness f elegance in the solution of a problem	X	
Speculation	X	
Chance	X	
Correlation	X	
Argument	X	
Feeling	X	
Sensuality	X	
Serendipity	X	
increasing areas of specific knowledge	X	X
increasing self-understanding	X	X
contributing to a community of knowledge	X	X
ability to articulate own qualities	X	X
self confidence	X	X
self awareness	X	X

'I feel that all stages of the process encourage creativity from through diagnosis of learning needs, through considering activities and options to identifying objectives and measuring achievement PDP challenges the individual to think and act creatively. This is equally relevant to academic study and personal and professional achievement.'

The importance of PDP as a way of fostering conversation between tutors and learners or perhaps learners and learners is also recognised.

‘Ideally all students would have a personal coach or mentor – someone to talk them through the developments in their study and their progress. This personal contact would help the student to explore their feelings about their own creativity.’

Most respondents identified specific aspects of PDP as potential vehicles for supporting and promoting students’ creativity e.g.

1) Fostering a climate / making sense of new ways of seeing the world.

‘There are broadly two ways in which PDP can help. It may assist with fostering the climate which forces the new thinking/creativity – providing a structure to the process for some. Or when you make a step jump change you need to reframe all your other beliefs to realign with the new perspective and/or unpack what supports the new position.’

2) Fostering a culture of enquiry / curiosity

‘To engender a questioning attitude that permeates all aspects of studies and informs future plans’.

3) Understanding own identity, ambitions, intentions and motivations.

‘The process of PDP could encourage students to talk/write about their hopes, dreams and aspirations and possibly to articulate in speech or writing when they think they have been creative. This would help to make the value of creativity more explicit’.

4) Planning/designing things/processes

‘a student designs a research project by performing a review of literature, identifying a research question, and then planning an experiment to address the identified problem; this is a creative task although at the time students may not think of it in this way’.

5) Increased self-awareness while engaged in learning/doing.

‘Increased self-awareness, increased awareness of relationships/interactions with others, reflection on behaviour (eg. through team work),....’

6) Reflecting on an experience or achievement to learn more.

‘Reflection is a creative process. Seeing oneself in a holistic sense and drawing together all areas of ones life, personal as well as academic and career, requires creative thinking if the outcomes are to be of any use’.

‘Encouraging students to think reflectively about their practice also encourages ‘putting ideas together in novel ways’.

‘In the reflective phase and in discussion awareness of creativity may develop. This can be carried forward to future objectives’.

'the learning log [has] huge potential to encourage things like creativity, storytelling, analysis and synthesis, - but students do need to be trained and supported through this'.

'One of the most productive aspects of PDP comes about through the *reflective articulation* of past activities and, as a result, identifying what will be useful in terms of future development. Reflective articulation in this context, in so far as it is mostly in the form of a written account, may encourage and support those aspects noted in the questionnaire but there is no guarantee, and it often is the case that that PDP does not aid the creative development of the student – it records a personalized view and attempts to evaluate and note an interpretation of the practices, processes and behavior of the student'.

#### 7) Seeing the bigger picture.

'They can make connections across all parts of the course and into their outside lives enabling them to see how one part affects another in an unforeseen way'.

#### 8) A framework for making sense of creative experience. One respondent from an Art and Design saw PDP as a framework through which to evaluate the creative process.

'In the context of the framework we are trying to develop, it is more about using PDP to somehow structure or objectify the creative process. If we assume that all art and design practices position creativity – as innovation, invention, imaginative flair or even dreaming – as something that is quintessential to all activities, then PDP allows for a kind of detached reflective position to be established that should not restrict the dynamic of the creative act but assists in the making of judgments about the level and direction of the process'.

### **PDP and creativity: visualising relationships**

Clearly, from the response of the practitioner community, there is both an interest in exploring the issue of creativity in higher education learning and the potential roles of PDP in students' creative development, and a widespread belief that PDP already does this (at least implicitly). This section attempts to draw some of these ideas together in a simple process model of PDP. Underlying the exploration is the appreciation that PDP is part of a complex set of relationships involving learners and their peers, teachers, contexts and situations; an unpredictable environment in which the need for personal creativity will inevitably emerge.

PDP is underpinned by the strategic process of planning-doing-reflecting/evaluating (Figure 1). Within this simple visualisation we can locate and consider the key features of creativity outlined above.

The three domains of thinking and action embodied in the model include:

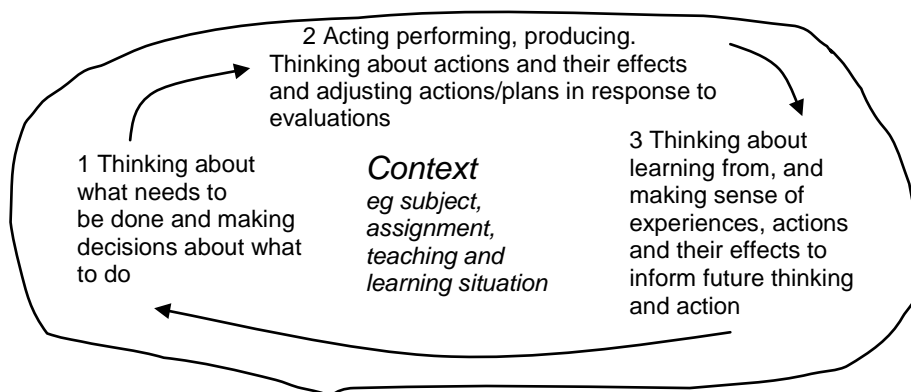
*Forethought* – Thinking about what needs to be done; thinking about and analyzing tasks, problems, contexts, situations, people ahead of action.

*Performance* – Doing things in ways that are informed by this thinking (and adapting plans/strategies if necessary as new situations emerge and the effects of actions are understood).

*Self-reflection* – Thinking about what has been done and achieved in order to make sense of the experience; replaying and mentally re-experiencing the performance in order to learn and improve future performance.



Figure 1 Ways in which students' creative development might be supported through PDP – represented in terms of the three domains of thinking, action and behaviour which PDP-processes engage and recognising contexts such as disciplinary learning or problem working.



### Thinking about what needs to be done and imagining how it might be achieved

In this part of the PDP process ideas are born, problems or situations are visualised, ways of tackling a problem or situation are deliberated and decisions are made about how to approach the problem or situation. Ideas may be born from rational deductive or intuitive inductive ways of thinking.

The more analytical/rational brain analyses tasks, sets goals and develops strategies. The intuitive brain may provide an idea or insight to a way of thinking about a problem that could not be achieved purely by rational thinking.

What is planned is influenced by contexts, self-efficacy, expectation of immediate and longer term outcomes, levels of intrinsic interest and goal orientation (e.g. learning for a purpose like assessment or mastery of a process or skill). For some people the opportunity to be creative or different is a major stimulus and source of energy and motivation to engage and stay engaged with the problem or opportunity.

It is important to have knowledge that is relevant to the job in hand. A discipline-based problem requires disciplinary knowledge and also knowledge about the way this type of problem is solved in the discipline. e.g. awareness of rules, boundaries, protocols, methodologies, concepts, symbols.... In life we often lack the knowledge we need to solve a problem so knowing how to acquire knowledge/seek help are important aspects of creativity. Creative people are highly resourceful in this respect they form associations and networks to help them acquire the necessary knowledge.

The ability and motivation to be curious, to problematize and to imagine/find and explore perceived problems through questioning are important features of creative thinking at this stage.

The ability to generate ideas (generative thinking) and to critically evaluate ideas to distinguish those that are most useful and exciting are important. This thinking draws on memory of past experience and also imagination stimulated by things outside of one's own experiences.

For some routine situations very little imagination/creativity is used but where new and challenging problems and situations are encountered imagination may be needed to generate new ideas, to look beyond the obvious, to identify possibilities and to see the world in different ways so that it can be explored and understood better.

In the PDP process this is the domain in which we develop our thinking for action and plan our strategies and the tasks to achieve specific goals. It is the domain in which we can reveal our imaginations and record our initial thinking. We might approach a problem in the same way we have approached similar problems many times before or we might think about it in a more divergent or exploratory way. Some people are naturally inclined to approach problems in an open non-linear way but all too often we grasp an idea early and shape it into the solution to our perceived problem...even though there might be other possibilities or even that the most important problem to address is not the one we think it is. 'Creative thinking techniques' can be employed to encourage/force us to think more associatively when we are engaged in the *thinking about* stage. This stage of the PDP process could therefore be used to encourage students to think creatively about the problems and situations they encounter.

### **Acting, performing, producing**

This is where creative acts are performed and where creative products are produced. Creative acts are domain dependent. The creative acts of a musician are different to those of a general practitioner, engineer or historian. Creative acts are stimulated by a context which is often a complex challenging situation or problem within the domain. The thinking and attitudinal preparation that has been undertaken prior to acting is crucial to performance. Prior thinking and the states of mind they engender determine the courses of action to be taken, the desire/ambition to succeed, the willingness to experiment with new ways of doing something, the willingness to be open and responsive to situations / opportunities which emerge along the way. Selling ideas, helping others to see new possibilities, opportunities and solutions may be an important part of the creative process. Engaging and communicating with others during problem working may also require creativity, particularly in real world problem working. Creative people are good at monitoring/sensing/evaluating the effects of their actions and continually adjusting what they do to achieve desired effects/results. They develop strong feedback and sensory mechanisms to inform their decision making.

HE learning experiences that are more likely to engage students creatively include such things as: opportunities for real world problem working; assignments / problems where there are no right/wrong answers only many possibilities and different ways of engaging with a problem; projects/dissertations requiring independent/original work; enquiry- or problem-based learning that require collaborative exploration; experiential learning like learning in work place or community settings or study in a foreign country, ways of learning that require students to see the world from different perspectives like role play and powerful learning moments<sup>1</sup>.

In PDP this is the domain in which students are encouraged to be aware of their actions and their effects, to self-observe and record their own processes and their effects through journals /diaries / portfolios. PDP could be used to help students record their

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<sup>1</sup> A good example of such a moment is when Mr Keating in the film *Dead Poet's Society* tells his class to rip out the foreword to a poetry book because the advice given is, in his view, antithetic to the analysis and appreciation of good poetry. Such symbolic moments are emotionally and intellectually engaging and are never forgotten.

unique creative responses to the challenges they encounter and through this process help them evidence their creativity.

### **Thinking about experiences, actions and their effects and learning through this process**

This is where processes and products involving creativity are reviewed, evaluated and judged, cause and effects are attributed and where we decide whether or not we are satisfied with what was achieved. The process involves making sense of experiences and outcomes in order to gain deeper insights/learning which can be drawn upon in future situations.

It is necessary to combine reflective and intuitive thinking that builds meaning through synthesis, connecting thinking, processes and outcomes in ways that are meaningful to the actor and processing emotional responses, with more critical analytical ways of thinking through which objective judgements are made and cause and effects are attributed.

It is only after a creative process has been completed that a real sense of value/worth can be gained about the results, and the quality of newness, level of significance, inventiveness/re-inventiveness can be judged. The process of appreciation is aided by dialogue with others who were not part of the creative act – tutors and peers or perhaps professional practitioners who can bring a level of objectivity to the evaluation of utility and inventiveness. Developing consensual agreement on the hallmarks of creativity in the particular contexts in which it was used through such a dialogue is an important part of the process of evaluation and the way in which we develop deeper understandings and insights into the nature of creativity.

In PDP this is the domain in which we reflect on and learn from our experiences, make claims for the development of new knowledge, skills and capabilities and identify possibilities for the future. PDP could be used to help students make sense of their own creative processes and to enhance their understandings of creativity. The production of narrative accounts of the creative process based on self-observation and records of learning and thinking could be used to make claims for creative outcomes. It could be used to encourage students to think about the 'where do I go / what do I do next?' questions in the context of creative enterprise.

'Recognising connections between areas of thought and experience that have previously appeared to be separate. This forging of connections is, in my own view, best achieved through highly reflexive modes of study, and manifested in such forms of assessment as study journals, self-assessments, and patchwork portfolios of similarly small pieces. These are creative works, and indeed can be made more explicitly creative by encouraging students to experiment with fictional forms of writing, or writing from different perspectives'.

### **Teaching to support creative development**

The critical role of the teacher in enabling PDP to support/encourage creativity often in the context of disciplinary learning (e.g. learning how to be a historian) is also acknowledged.

'...I should say that I do think it depends very much on how PDP is presented to the students. A creative and imaginative teacher will do far more to encourage these

qualities in students than a process applied bureaucratically, no matter how ingeniously it is designed'.

'In my subject area I think it is the subject itself which should encourage creativity. PDP should perhaps encourage students to reflect upon and recognize when, and to what degree, they have been creative. Whether we succeed or not is another debate'.

Teaching for creativity requires a pedagogic stance that is facilitative, enabling, responsive, open to possibilities, and collaborative, and which values process as much as outcomes. Teachers operate in strong cultural and procedural environments that have significant impact on what they can do as teachers to promote students' creativity. In spite of, or perhaps because of the many constraints in HE, teachers who care about creativity are able to overcome barriers to create through their pedagogy, curricular spaces and opportunities for learning that encourage and reward students for their creativity. PDP could be positioned in terms of an enabling device in environments which are generally not conducive to creative enterprise.

Creative performance also requires positive attitudes and high levels of motivation (passion) evidenced by persistence and willingness to work hard. Such attitudes derive from personal beliefs that obstacles can be overcome and/or high standards of performance can be achieved. So learning processes to foster creativity must develop self-efficacy, encourage risk taking in safe environments and help students to engage with messy/complex and unpredictable situations where there are no right and wrong answers.

An analysis (Jackson 2004) of 28 accounts of teaching that was deliberately trying to encourage students to be creative in a range of disciplinary contexts revealed the things that higher education teachers do to promote students' creativity. They –

- give students permission to be creative
- encourage them and value their efforts to be creative
- provide time for students to be creative
- provide safe spaces where they can try new things out
- give students the confidence to take risks
- develop students' self-confidence to work in unpredictable situations
- promote the development of self-awareness and reflective learning
- provide situations for learning where there are no right answers
- provide real-world learning situations
- provide activities that are meaningful to participants
- provide learning situations that are both fun and challenging
- demonstrate their own creativity : provide a role model
- are prepared to take risks themselves
- are prepared to reveal something of themselves in the teaching process
- act as guides and facilitators
- adopt a questioning approach to learning
- create opportunities for problem – or enquiry based approaches to learning
- provide opportunities for collaborative working and discussion
- are sensitive to the balance between challenge and reinforcement
- are sensitive to the balance between freedom and control
- are responsive to students as a group and as individuals and adapt their teaching as new possibilities emerge

The role of teachers as facilitator, coach and resource provider was recognised in the responses of participants in the PDP and creativity survey.

'Teachers/tutors need to be more in facilitator mode (we are also going to get students to suggest criteria to help us to construct our PDPs) I think one aspect which assists the creative process is to perhaps move away from the simple deficit model (closing a perceived skills gap etc) and providing more stimulating ideas which allow students to see the value of reflection (I am looking to develop short vignettes on DV film which students could access via Blackboard virtual learning site)'.

'Any kind of teaching which encourages students to think for themselves (rather than merely accumulate knowledge) helps students to be creative within PDP processes. Teachers and tutors can give students the space and confidence to be creative by showing that they value individual contributions in teaching sessions and providing a wide range of assessment methods to suit the different ways in which the students prefer to express themselves'.

'Tutors play a vast role in that they facilitate the pdp process. Often they are the ones who can see where the student needs to plan and develop themselves. The teachers are able to identify both the creative needs of the student, and also can advise re any available resources'.

### **PDP and creativity: a pedagogic model**

We have to acknowledge that there are some people (PDP practitioners, teachers and learners) who will not accept that creativity is important in undergraduate learning or their own learning or work. Other PDP practitioners will argue that PDP is already too complex and to add new, difficult to understand dimensions to it will not help in its implementation.

Fortunately for students, there are many HE teachers/educators who do believe that creativity is an important part of the self-identity and capability of an individual and that the real strength of PDP is in its ability to support the development of this type of complex, difficult to understand self-knowledge.

Being creative involves both conscious and deliberate acts and things that are done or understood which do not seem to be the product of deliberate thinking and action, for example the sudden insight or flash of inspiration. People make decisions about thinking and behaving in certain ways in a particular situation as a result of which new ideas, products and performances are more likely to emerge. Conversely, their decisions may lead them into thinking and behaviours which are not creative. In other words, they are regulating their potential to be creative in response to the environmental and cultural contexts in which decisions are being made.

In simple terms PDP can support the higher education creative enterprise in four main ways (see Appendix synthesis).

Firstly, the strategic process that underlies PDP can be used to help learners articulate what they understand creativity to mean in the contexts in which they are using it. A learners initial conceptions of creativity can be made explicit within the forethought stage of the process which provides a reference point for subsequent reflections on creative activity. They can be more aware of the ways in which they are using their own creativity when they are actively engaged in learning or performing and they can gain deeper insights and new understandings through reflective processes.

Secondly, PDP can provide a vehicle for helping students to think about their problems in creative as well as analytical ways. By developing students' creative thinking abilities we can expand their capacities for engaging with complex problems and difficult situations and perhaps their capacity to work with others to explore and understand a complex problem.

Thirdly, the process can encourage learners to be more aware of their own creative processes and actions as they are engaged in activities in which creativity plays a part. Encouraging students to observe themselves, record their evaluations and reflect on the effects of actions in real time will create an evidence base to support an individual's claims for creativity. Such explicit knowledge provides the raw materials for engaging tutors and peers in conversations about the nature of creativity and the products that emerge from such processes.

Finally, encouragement to reflect on the whole experience provides opportunities for developing a deeper overall understanding of the nature of an individual's creative process and how an individual has used their different abilities to tackle a problem.

What seems to come out of this enquiry is the idea that PDP provides an important pedagogic vehicle for promoting and supporting students' creative development in higher education: a pedagogy that can and is being applied in all disciplinary contexts. I am struck by the parallels between the conclusions that have been reached in this enquiry and the pedagogic model to facilitate students' creative development and the social and context specific construction of knowledge and understanding about creativity described by Professor John Cowan (in press and summarised below).

*Step 1:* Individual students prepare their own 'definitions and explanations' (provisional understandings) of creativity and in discussion with other learners and teachers prepare their own statements of standards relating to their understandings of creative abilities.

*Step 2:* Learners engage reflectively in creative activity that is central in their study programme. Learners maintain a reflective journal that is formulated around questions about their creative process.

*Step 3:* Learners take part regularly in group "crits", as practiced in architecture and the creative arts. In these sessions, learners critically appraise a piece of their work in progress, after which peers and tutors will offer comment, with an emphasis on reasoned and constructive judgements of that work.

*Step 4:* During the programme, learners will be free to make any changes they wish in definitions, statements of standards or personal aspirations – provided these are reasoned and recorded in their journals.

*Step 5:* Learners assemble their self-evaluation containing their understandings of creativity and their claims for creativity.

### **Does PDP provide a mechanism for helping students and teachers recognize and understand the role of creativity in HE learning?**

'I don't believe that it does'.

'For all the PDP schemes I have encountered I do not think that they do. I would be delighted to find one that does!'

'In itself, I'm not sure that it actually does much to sell the role of creativity – at present it's something of a by-product. Of course, one could turn this round, and "sell" the PDP as a process that enhances creativity'.

While many responses to the survey clearly indicate that there is a widespread belief that PDP could and does assist students' creative development, words like these indicate that we are a long way from infusing PDP with the notion that it is a vehicle for promoting students' creative development. It is also clear from a number of responses that if we are to utilise PDP to support students' creative development we will have to think carefully about the design of PDP and the contexts in which it is implemented.

'PDP does provide a mechanism potentially to explore creativity between the writer (student) and his or her audience (including the teacher) but to do so, the PDP has to be designed to prompt such exploration and discourse'.

There is also a recognition that we have to be more sophisticated in our understandings of creativity in different subject contexts. The work being undertaken by the Imaginative Curriculum project to explicate the meanings of creativity in different subjects is relevant here and PDP can contribute to the further development of such understandings.

'In general, I doubt that this occurs, but in some subjects where creativity is valued as a set of core skills, then it may exist. There is clearly potential for PDP to be a catalyst....but suspect the words used to describe the process of creativity might need to change to suit subject areas'.

We also have to recognise that PDP is focused on individual learners' understandings and conceptions so for PDP to work as a vehicle to promote an individual's creative development it must be designed and implemented accordingly.

'Yes – it has the potential to do this – if it makes 'creativity' a focus in the process. However, this assumes that everyone has a common understanding of the meaning of 'creativity' and I'm not sure that this is the case. I think we also need to get away from the 'one format suits all' approach. Each person is an individual. Each person has their own individual talents and creativity. The PDP process needs to help each person to realise their own potential and therefore needs to be structured in a way that enables this'.

Within the responses there is also a sense that there are barriers to promoting creativity in higher education through PDP for example,

'The development of creativity is a useful by-product of the critical reflection and supported personal development processes. Creativity in HE learning should be more highly valued as a core element of the drive for independent learning but we seem to stop that type of learning through over-assessment, and rigid quality management processes. The fluidity of learning and the development of a personal learning identity seems to be lost in the increasingly strategic and bureaucratic nature of higher education'.

'I think that some of our assessment processes at the moment, with the definition of what to do to get an A grade, are designing out creativity, constraining the student to see *the* right answer. We are missing open-ended scenarios which encourage creativity and connections across disciplines'.

'I bet that a study of learning outcomes across the HE sector would find very few (with the exception of the visual and performing arts) that had the courage to include the word "creative".'

'Most students want to know what they must do to pass – being creative (other than excuses for non-attendance) comes quite a long way down their list of importance'.

With this final perception in mind it is fitting to finish this piece with a quote from a study of student perceptions of creativity which suggests that creativity lies at the heart of a student's own identity.

'even where creativity was not taught, not considered teachable and not valued in assessment, it was still relevant in defining how the students saw themselves. The use of creativity as a discourse – currently so confused and inconsistent – becomes vital in this respect, since claims to an emergent creative identity can only be warranted if they can be articulated. In this sense, it may be possible that even a small change – helping students learn how to talk about creativity, particularly in the context of their study – would have an important effect, enabling students to lay claim to creativity in a way that currently eludes them within academic contexts'. Oliver et al (in press).

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The work forms part of an ongoing study into the nature of creativity in higher education and the way in which different pedagogies can support students' creative development being undertaken by the Imaginative Curriculum network  
<http://www.heacademy.ac.uk/creativity.htm>

**Please send comments and additional/alternative perspectives to  
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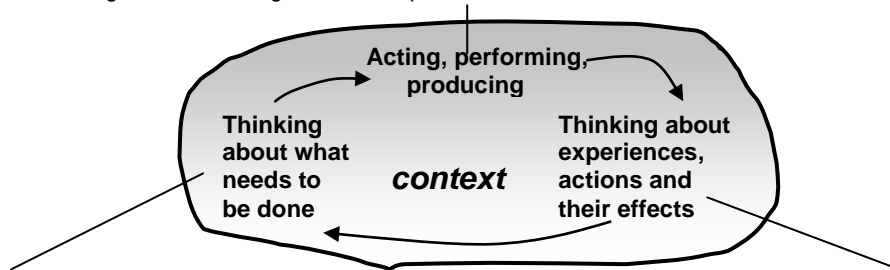
**APPENDIX PDP-CREATIVITY MODEL:** Ways in which students' creative development might be supported through PDP – represented in terms of the three domains of thinking and action within PDP-processes.

**ACTION / PERFORMANCE**

**This is where creative acts are performed and where creative products are produced.** Creative acts are domain dependent. The creative acts of a musician are different to those of a general practitioner, engineer or historian. Creative acts are stimulated by a context which is often a complex challenging situation or problem within the domain. The thinking and attitudinal preparation that has been undertaken prior to acting is crucial to performance. Prior thinking and the states of mind they engender determine the courses of action to be taken, the desire/ambition to succeed, the willingness to experiment with new ways of being/doing, the willingness to be open and responsive to situations / opportunities which emerge along the way. Selling ideas, helping others to see new possibilities, opportunities and solutions may be an important part of the creative process. Engaging and communicating with others during problem working may also require creativity, particularly in real world problem working. Creative people are good at monitoring the effects of their actions and continually adjusting what they do to achieve desired effects/results. They develop strong feedback and sensory mechanisms to inform their decision making.

HE learning experiences more likely to engage students creatively include such things as: opportunities for real world problem working; assignments / problems where there is no right/wrong answer but many possibilities and different ways of engaging with a problem; projects/dissertations requiring independent/original work; enquiry- or problem-based learning that require collaborative exploration; experiential learning like learning in work place or community settings or study in a foreign country, ways of learning that require students to see the world from different perspectives like role play..

*In PDP this is the domain in which students are encouraged to be aware of their actions and their effects, to self-observe and record their own processes and their effects through journals /diaries / portfolios. PDP could be used to help students record their unique creative responses to the challenges they encounter and through this process help them evidence their creativity. It could encourage them to experiment, to push themselves into challenging situations and to gain more learning from such experiences.*



**THINKING ABOUT WHAT NEEDS TO BE DONE**

**This is where ideas are born and decisions are made about how to approach and work with a particular situation.** Ideas on how to tackle a situation may be born from rational or intuitive thought processes. The more analytical/rational brain analyses tasks, sets goals and develops strategies. The intuitive brain may provide an idea or insight to a way of thinking about a problem.

What is planned is influenced by contexts, self-efficacy, expectation of immediate and longer term outcomes, levels of intrinsic interest and goal orientation (eg learning for assessment or mastery of a process or skill).. For some people **the opportunity to be creative / different is a major stimulus and source of energy and motivation to creative thinking and subsequent actions.**

**It is important to have knowledge that is relevant to the job in hand..** a discipline-based problem requires disciplinary knowledge and also knowledge about the way this type of problem is solved in the discipline. eg awareness of rules, boundaries, protocols, methodologies, concepts, symbols.... In life we often lack the knowledge we need to solve a problem so **knowing how to acquire knowledge/seek help are important aspects of creativity.** Creative people are highly resourceful in this respect.

**The ability and motivation to be curious, to problematize and to imagine/find and explore perceived problems through questioning are important features of creative thinking at this stage.**

**The ability to generate ideas (generative thinking) and to critically evaluate ideas to distinguish those that are most useful and exciting are important.** This thinking draws on memory of past experience and also imagination stimulated by things outside of own experiences.

For some routine situations very little imagination/creativity is used but **where new and challenging problems and situations are encountered imagination will be involved to generate new ideas,** to look beyond the obvious, to identify possibilities and to see the world in different ways so that it can be explored and understood better.

*In PDP this is the domain in which we develop our thinking for action and plan our strategies and tasks. It is the domain in which we can reveal our imaginations and record our initial creative thinking. 'Creative thinking techniques' could be used by students to help them think more imaginatively about problems they encounter. They could be encouraged as part of their own identity building to explain/examine their understandings of creativity and through PDP become more aware of their own creativity.*

**LEARNING FROM EXPERIENCE**

**This is where processes and products involving creativity are reviewed, evaluated and judged,** cause and effects are attributed and where we decide whether or not we are satisfied with what was achieved. The process involves making sense of experiences and outcomes in order to gain deeper insights/learning (*metalearning*) which can be drawn upon in future situations.

**It is necessary to combine reflective and intuitive thinking** that builds meaning through synthesis, connecting thinking, processes and outcomes in ways that are meaningful to the actor and processing emotional responses, **with more critical analytical ways of thinking** through which objective judgements are made and cause and effects are attributed.

It is only after a creative process has been completed that a real sense of value/worth can be gained and the quality of newness, level of significance, inventiveness/re-inventiveness can be judged. The process of appreciation is aided by dialogue with others who were not part of the creative act – tutors and peers or perhaps professional practitioners who can bring a level of objectivity to the evaluation of utility and inventiveness. Developing consensual agreement on the hallmarks of creativity in the particular contexts in which it was used through such a dialogue is an important part of the process of evaluation and the way in which we develop deeper understandings and insights into the nature of creativity.

*In PDP this is the domain in which we reflect on and learn from our experiences, make claims for the development of new knowledge, skills and capabilities and identify goals/objectives for the future. PDP could be used to help students make sense of their own creative processes and to enhance their understandings of creativity. The production of narrative accounts of the creative process based on self-observation and records of learning and thinking could be used to make claims for creative outcomes. It could be used to encourage students to think about the 'where do I go / what do I do next?' questions in the context of creative enterprise.*