

Improving Educational Practice And Generating Educational Knowledge.

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Introduction

My purpose in writing this paper is in the title: I want to contribute to improving educational practice. I understand educational practice to be what educators do to enable students to; create and offer valued knowledge of themselves and the world as gifts; develop talents to create and offer their gifts, and to enhance their abilities to have an educational influence in learning and life.

Recently I think I have understood something useful about the educational processes and want to test my ideas with you:

- Can you understand what I am trying to communicate,
- Does it make sense to you, and
- Are any of the ideas of any use to you in your endeavour to improve your educational practice?

The values that have emerged as I have worked on this paper are explanatory principles that I use in explaining why I do what I do. As I clarify their meanings in the course of their emergence in practice, they form the living standards of judgment (Laidlaw, 1996) I use in accounting to myself for the work I do and in evaluating the validity of my contributions to educational knowledge (Whitehead, 1989). They include: emancipating the individual in their learning and life and enhancing the ability of the individual to make their unique contribution to evolving a world of wellbeing and well becoming.

In this paper I will:

1. Describe the context from which I am writing;
2. Outline what I believe distinguishes education and educational practice;
3. Distinguish between creating knowledge and acquiring knowledge, with knowledge constituting description and theory;
4. Introduce an educational perspective of the systematic and organic processes of persons creating and offering valued knowledge of their unique, ontological self and the world, which is inclusional;
5. Opportunities and implications for practice.

1) Context

I am writing in the context of an English education system with socio-cultural and socio-historical roots in medieval Western Europe (White, 2006) and propositional forms of logic, while flowering in a 21st century multicultural, international world with the possibilities opened by a living logic (Whitehead, 2008a).

I understand education to be a very personal business and much that is educational is lost in the distractions of categories and attempts to measure the un-measurable. This paper is concerned with raising children not scores, and as Barry Hymer once said to me, "Labels are for jam jars, not children". I will occasionally use 'persons' rather than 'people' in this paper as a reminder that my focus is on enhancing the unique contribution of individuals and emancipating them in their own lives and communities. I believe that it is possible to show improvement in educational practice but it requires multimedia narratives, as well as text, to offer valid and rigorous evidence of what is a relationally dynamic process. (Huxtable, 2009)

The local context of this paper is my employer's vision,

'We want all Children and Young People to do better in life than they ever thought they could. We will give children and young people the help that they need to do this' (Bath and North East Somerset Local Authority, 2005)

My contribution to realising this vision is through my role coordinating and developing inclusive and inclusionary gifted and talented educational theory and practice in the local authority.

Through this paper I will introduce you to educators, children and young persons who inspire me and have enabled me to clarify my thinking and enhance my practice.

I am not the originator of the key threads I weave in this account. It is important to me that I do not violate or inadvertently plagiarise the original ideas of others and I appreciate that as my thinking develops I may not present them as they were originally conceived. Their influence has become so much part of me I am no longer able to distinguish where many of my thoughts and practices come from and hence may not reference as fully as I should. I urge the reader of this paper to go to the originators to gain an insight into what they meant by living theory (Jack Whitehead, 1989), TASC, Thinking in an Active Context, (Belle Wallace, 1993), learning opportunities as part of the School Wide Enrichment Model (Jo Renzulli, 1997), inclusionality (Alan Rayner, 2005) and inclusive gift creation (Barry Hymer, 2007). I reference some of their seminal work but their thinking evolves and I strongly recommend the reader to dip into some of their most recent works. I want to stress the personal contribution they and others make to educational knowledge and, breaking with the traditions in English academic writing, will use the first and second names to emphasise this point

2) What distinguishes education and educational practice?

I understand education to be distinguished by educational values that form explanatory principles and living standards of judgement of practice. Educational values are ontological, those that give purpose and meaning to human existence. My understanding of the basic purpose of education is to enhance the abilities of each student/pupil to create, recognise and offer valued knowledge of her/his self and the world. These are of mutual importance and are dynamically inter-related.

I understand knowledge to comprise theory and practice, an explanation together with a description of the phenomena, experience or observation. As Quinn (1997) says, 'good practice without theory is blind and good theory without practice is sterile' (p.3).

Educators and the politicians directing education policy and practice focus on the acquisition of knowledge. Even projects intended to open new possibilities are often constrained by inappropriate, quasi-scientific research methodologies. A description of predetermined deliverable outcomes, plan of action and timelines, and quantifiable data is required, together with a certainty of 'success' before most research will be sanctioned, let alone funded. Lessons are developed and 'evaluated' along the same lines. The prospect of venturing into the unknown and being open to the possibilities that might emerge seems to present an emotional and personal, as much as an intellectual challenge, to many educators and policy makers. They are not unique in feeling an anxiety in moving the focus from knowledge acquisition to knowledge creation. Medawar (1969) describes the same anxieties that scientists must confront to progress,

'It is in the *generation* of scientific knowledge, not in its interpretation or in a retrospective analysis of 'the data', that scientists are oppressed by the fear of error. It is a truism to say that a 'good' experiment is precisely that which spares us the exertion of thinking: the better it is, the less we have to worry about its interpretation, about what it 'really' means.'
(pp.14-15)

The education system is obsessed with transmitting what has gone before and quantifying the effectiveness of transmission, while simultaneously recognising that this will not prepare our children and young persons to contribute to an evolving, and yet to be imagined, world. Godard (2009) starts his paper 'A case against school effectiveness',

'Numbers are like people; torture them enough and they will tell you anything.'

And concludes

'Schools are mini-societies in which pupils may learn how to interact, what to expect from wider society, and how to judge fairness (Gorard and Smith 2009). Schools seem to be a key influence on pupils' desire to take part in future learning opportunities, and on their occupational aspirations (Gorard and Rees 2002). All of these outcomes have been

largely ignored in three decades of school effectiveness research. It is time to move on. ' (p.19)

In identifying knowledge creation as a fundamental concern of education I am hoping to help us 'move on'.

3) Creating knowledge and acquiring knowledge

If you always do what you've always done, you will always get what you've always got; for us to progress a directing principle in education has therefore to be improving the ability of students to create knowledge, not simply to acquire knowledge. Keeping in focus our intention to improve educational practice, which has at the core creating and offering knowledge of the world and our self, there is the possibility of progressing the wellbeing of us all instead of recycling the past.

Creating and making public valued knowledge of the world, with the intention of enhancing the wellbeing and wellbecoming of all, is something I believe we all have a responsibility to do. I say wellbecoming as well as wellbeing as sometimes we must look beyond the current place of being and endure some discomfort in order to move towards a better future for us all. This is one of my moral imperatives and comprises an important part of my understanding of what it is to live an ethical, worthwhile life.

In Western schools and education institutions it is systematic enquiry as a process of acquiring knowledge, which is understood and valued. In schools children and young people are now often referred to as 'learners', identifying them as novice acquirers of knowledge, and teachers are tasked with their efficient acquisition and application of skills, information and understandings of the world. The purpose of schooling is to enable the learner, to become proficient in acquiring knowledge prescribed in curricula.

Even then 'learning' as an educational process is poorly understood with disastrous results as the paper by Stephen Godard (2009) shows. Yet that limited understanding is of no use unless it contributes to the ability to create, value and offer knowledge. Without that ability we can never progress beyond what *already is* to what *might be*.

We have an appreciation of what valuable knowledge created of the world looks like, but only some knowledge is accepted as valid by authority. For instance, it is extremely difficult to break new ground and have knowledge legitimated by the Academy if it is beyond the realm of the dominating academics examining it. The processes of knowledge creation are poorly understood and are not explainable within the traditional forms of logic as Medawar (1969) points out eloquently here.

'The purpose of scientific enquiry is not to compile an inventory of factual information, nor to build up a totalitarian world picture of natural Laws in which every event that is not compulsory is forbidden. We should think of it rather as a logically articulated structure of justifiable beliefs about

nature. It begins as a story about a Possible World – a story which we invent and criticise and modify as we go along, so that it ends by being, as nearly as we can make it, a story about real life.’(p. 59)

Interestingly even in the traditions of ‘knowledge acquisition’ there is little opportunity or value placed on synthesis, which in Bloom’s (1956) taxonomy is almost at the top of the hierarchy of learning skills. To synthesise, requires leaving the tidy, systematic procedures currently identified as good teaching and learning, with the learning objectives neatly penned on the board at the beginning of every lesson, to explore the dynamic inter-relationships of acquired knowledge in new spaces and weave within and between different planes and dimensions. Creation is a messy business as far as humans in the West seem to be concerned, and is often abandoned to the artists and valued only in that discrete category of activity.

Knowledge created of self is even less appreciated and little is valued or recognised as making a valid contribution to the knowledge base for us to draw on, and it is not usual to officially give time or a valued place to it in school. This contrasts with the movements beyond the school gates as shown by this extract from a book on career counselling:

‘In the postmodern world, employees can no longer depend on an organisation to provide them with a familiar and predictable environment to hold their lives. Instead, individuals must rely on themselves to construct a story – a self and a career – to hold themselves and their lives together when they encounter discontinuity. As they move from one assignment to the next they must let go of what they did but not of who they are. If they let go of everything, then the loss may overwhelm them. By holding onto the self in the form of a life story that provides meaning and continuity, they are able to move on in a way that advances narrative lines and actualises overarching goals.’ (Maree, 2007, pp.1-2)

I believe that we create and offer knowledge of the world most effectively when we have a personal investment to create knowledge as gifts, valued by the creator and as an expression of the creator’s personal interests, passions and uniqueness and ontological values. As a gift it is offered freely, with the hope, but not the expectation, of appreciation or use.

I have an educational responsibility towards myself as I can hold myself no more nor less important or deserving of love than others. As I create knowledge of myself I am fulfilling that obligation I have to myself. In fulfilling my obligation to myself I am fulfilling my obligation to others. I am enabling myself to enhance my gifts of knowledge of the world I create and offer through being attuned to my self, my developing and developed talents, my motivations and the educational influence I have in my own life and that of others. I focus the energy of what motivates me, drives me, and captures my imagination, to develop the talents I need to create and offer knowledge to enhance the world and the lives we are living, as a gift to others and myself.

Teachers engaging with the living theory work of Jack Whitehead on their Masters CPD (continuing professional development) programme have enjoyed

an unusual opportunity during which they are actually valued as creators of knowledge. I say unusual because the predominant model of CPD is of training, with prevailing wisdoms delivered to teachers to apply. Through this alternative, transformational, CPD, which is educational as well as instructional, teachers are enabled to make their contribution to the educational knowledge base of the profession. Their accounts of the knowledge they have created of themselves and their practice is valued by Jack Whitehead making their accredited accounts public on <http://www.actionresearch.net/mastermod.shtml>. Educators internationally have accessed these accounts. Taking into account student requests, the University of Bath is just making moves to emulate this practice by making public on their own website successful professional MA assignments from other units.

As an educator in the 0-19 English education system my task is to enable children and young persons to have an increasing educational influence in their own learning and lives. My educational intent is to contribute to them: coming to know the person they are and want to be; recognising and enhancing the talents they have developed and need to develop; and envisioning the gifts of knowledge of the world to which they might commit themselves to creating and offering. I believe that facilitating their access to, and acquisition of, the explicit, implicit and tacit knowledge of others and themselves, can help them do this. I am not insinuating that acquiring knowledge is necessarily a precursor to engaging in the process of creating knowledge.

I do not have a responsibility for the education of particular pupils or students as a teacher has, and rarely work directly with children and young people. It is working with teachers on their Masters programme that has transformed my understandings and it is this work that I will be drawing on through this paper. For instance, I will be referring to data of Sally Cartwright, working on her Masters programme (Cartwright, 2008, 2009) and the young people, working with her on their AS Extended Projects, as evidence of the emancipating and energising power of people, of all ages, empowered to accept and express their educational responsibility towards themselves and others. In their accounts and in the video of their presentations they offer the knowledge they have created of the world and themselves as a gift.

4) An educational perspective of the systematic and organic processes of creating and offering valued knowledge of self and the world.

Introduction

This section is the heart of the paper where I will offer a description and explanation of educational processes of knowledge creation of self and the world, which are inclusional. I see this as inter-related with the theory and practice of creating my living educational theory (Whitehead, 1989), the explanation I give for my educational influence in my own learning and in the learning of others. I also want to communicate something of my theory of learning which is educational.

Before I go further I want to make it clear that I recognise that the processes of creating knowledge are continuously evolving processes, within which transition structures can be developed to help us make sense and explain what we are doing. I do not want the transition structures I develop here to become rarefied or confused as reality, as is so often the case.



I will use TASC (Wallace, 2008) here to help me explain what I am doing. I am using TASC as an example of an action research method comprehensible to children and adults. I use other frameworks and methods of enquiry but here I will primarily use TASC to get to a simple description and explanation of multidimensional and relationally-dynamic processes, where there are recognisable boundaries

and spaces, which describe but don't define, what is being lived.



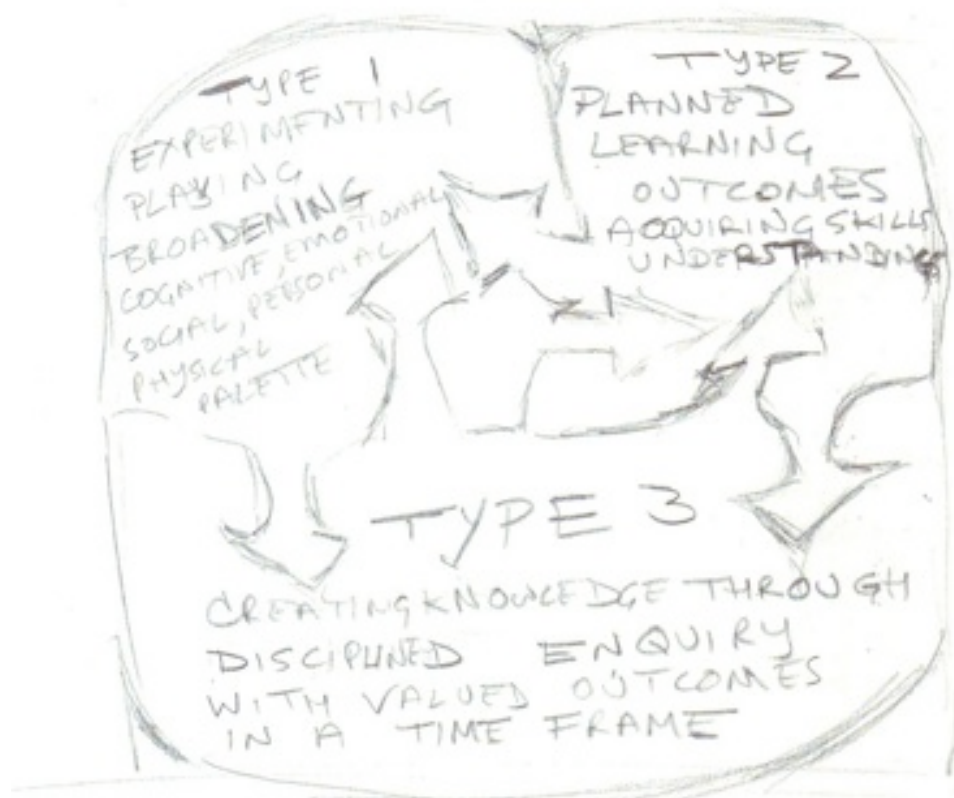
I find it helpful to use Rayner's (2005) notion of inclusionality; a dynamic awareness of space and boundaries as receptive, responsive and co-creational. I particularly like his communication of inclusionality in what has become known as 'the paper dance of inclusionality'.

<http://www.youtube.com/watch?v=yVa7FUJA3W8>



I use the metaphor of a bubble to help me understand and communicate the relationally dynamic boundaries and spaces, which constitutes educational practice. I rather like this particular picture (except the brown background!) of a bubble and its reflection in the water on which it sits. For me it represents the elegant beauty of different places of understanding, which resolve into a simple, but not simplistic, representation. You can't have one bit of a bubble as a discrete entity but we can focus on a distinct place of the bubble and agree what we are looking at.

I will also be drawing on Renzulli's (1997) notion of three types of learning opportunities to help me explain what constitutes educational practice.



- Type 1 – learning opportunities, which are tasters, experience broadening opportunities, opportunities to play with ideas, to ‘boldly go’ cognitively, socially, emotionally, personally, physically...
- Type 2 – learning opportunities with planned learning outcomes where the provider is focussed on the learner acquiring skills, understandings, knowledge... for instance the prescribed curriculum, social skills programmes, thinking skills courses, research methods workshops etc
- Type 3 – learning opportunities for the creation of knowledge by the learner about themselves and/or the world. A disciplined enquiry to create valued knowledge with valued outcomes in a time frame. This includes the process of creating an account that communicates, to and with others, theory and practice. The persons or people for whom the gift is created and to whom it is offered may vary, as does the participatory audience in the process of gift creation.

I will also be drawing on the videos of Sally Cartwright and her students at a meeting of the local 14-19 strategy managers. They were invited to talk about their experiences of working towards the award of the AS Extended Project. You might want to take the time to look at these four videos here (which can be accessed from

http://www.youtube.com/view_play_list?p=68BFC36A0791E85F) and return to them periodically as you engage with the text. They are each less than 10 minutes long). I hope in doing so the relational dynamic I am alluding to will become clearer.

In this next section where I focus on the relational dynamic I will,

4(a) Show these educational processes expressed in the educational practice of Sally Cartwright and her students working towards accreditation of their work on the AS Extended Project and the implications for developing educational practice.

4(b) Clarify the educational processes of creating valued knowledge, which are organic, systematic and dynamically inter-related.

4 (c) Describe my inclusional theory of learning, which is educational, that holds the creation and offering of knowledge of self and world together.

4 (a) Showing the educational processes expressed in the educational practice of Sally Cartwright and her students working towards accreditation of their work on the AS Extended Project and the implications for developing educational practice

I will,

4 (a) i. Introduce the AS Extended Project

4 (a) ii. Clarify what distinguishes this as an unusual award

4 (a) iii. Describe how this offers an educational opportunity

4 (a) iv. Outline implications for developing practice

4 (a) i. The Extended Project

This extract from the press release 14th August 2008, 'Knight: Extended Projects Will Help Prepare Students For Work And University' serves to set the scene,

'Schools minister Jim Knight today said that he wants every school to offer their students the opportunity to take an extended project to help prepare them for work or university.

Extended projects can be done on a wide range of exciting topics that can cut across all the subjects a student is studying. The projects can involve making films, music, working models or solving mathematical problems as well as writing essay based investigations or research projects....

The extended project is a single, stand-alone piece of work, which requires students to use a research plan and work on their own. It is a

compulsory part of the Diploma and can be taken alongside A Levels, or as a qualification in itself. It will be worth half an A Level.

Teachers will deliver a taught element including research skills and advise on project management. They will also supervise and support students as they carry out their project. Projects will be marked internally to strict criteria.' Accessed 5th February 2009 from http://www.dcsf.gov.uk/pns/DisplayPN.cgi?pn_id=2008_0173

The work of the five young people who completed in the pilot phase of the AS Extended Project were awarded four A* s and an A. While this is helpful to the school in responding to the DCSF 'Standards Agenda' the educational significance of the work is to be found beyond this limiting focus.

I will make two points, first concerning the award itself and secondly the way in which the teachers took this as an opportunity to develop learning spaces and relationships, which were educational. In my concluding remarks I will ask you again to consider the implications this holds for you as an educator wanting to develop your educational practice.

4 (a) ii. What distinguishes this as an unusual award

I do not know of any other possibility for children or young people, as creators of knowledge, to have their accounts legitimated through an examination-board. By creators of knowledge I mean here they pursue a question of personal interest in a disciplined manner within a time-frame and with a valued outcome, .

The focus of enquiry in the Extended Project is specifically open to the young person to determine.

'It offers students a free project choice, so they can explore in depth

- * an aspect of a subject they are studying, or
- * a topic in which they have a personal interest.

The topic for the project is chosen by the student and agreed by the student's teacher, who then acts as his or her supervisor. The student has to show that they can

- * plan
- * deliver, and
- * present an extended piece of work at Level 3 of the National Qualifications Framework.' Accessed 5th February 2009 from <http://www.aqa.org.uk/over/extendedproject.php>

This new initiative is, in my experience, unprecedented in offering a unique opportunity for teachers to express their educational responsibilities towards their students engaging within a process of accredited work. The various qualifications and formal assessments already in existence, including SATs and a lot of interpretations of AfL, concern how well pupils can be shown to have engaged with predetermined content and processes. The teacher's role as

educator is often subservient to that of instructor, with their practice judged by their pupils' results on high-stakes tests. Outcomes have been shown to drive practice with unfortunate results (Amrein and Berliner, 2002). The Extended Project offers the teacher the opportunity to focus on their practice as educator rather than simply as instructor.

4 (a) iii. The Extended Project as an Educational Opportunity

The context was a meeting of local 14-19 strategy managers. Sally Cartwright and her students had been working on their AS extended projects and were asked to give the audience a feel for what was entailed and what they got, and were getting, from it. It was inspiring!

Two of the students had been part of the pilot group. The awarding body, AQA, has legitimated the accounts of the knowledge they have created of the world as essays and in presentations of their papers to an invited audience of teachers, peers and family and awarded them A*s. The other students are about half way through the course.

Watching the four videos, which can be accessed from http://www.youtube.com/view_play_list?p=68BFC36A0791E85F I can see them expressing their embodied knowledge of themselves. They have yet to create a reflective account of their learning about themselves; a living theory account, which is an explanation of their educational influence in their own learning, in the learning of others and in the learning of the socio-cultural formations in which they live and work (Whitehead, 1989). However, here is evidence on video of young people creating and offering knowledge of themselves and the world. The dynamic relational processes of knowledge creation can be understood where they are reflecting on the enquiries focussed on creating knowledge of the world and where they describe and explain the knowledge they are creating of themselves. I will explain this more when I explain an inclusional perspective of learning in the following section.

First I want to communicate why I was very excited by what I heard and saw, education at its best. I saw a teacher with the courage and professionalism, to accept and express her professional responsibility as an educator to improving the educational experience of her students. Sally seizes the possibilities offered by a national initiative as an educational opportunity.

As the presentations in the meeting are made, I see, hear and feel the energy of enthusiasm and pleasure, of young people and their teacher offering the educational experiences they value, as a gift of knowledge of themselves offered to their audience. I want to amplify their voices with the hope of enhancing the systemic influence of that gift.

What I experienced in accepting their gift was the pleasure of feeling an expression of my educational values in the lived reality of those presenting: a loving recognition of, a respectful connectedness with, and an educational responsibility towards, self and others. These may not be your educational values. Your values, as your explanatory principles and evaluative standards of judgment of your educational practice, may lead you to different conclusions.

However, if you share a sense of the life-enhancing qualities of the values that I express then I hope to show you why I see this work to be of considerable educational importance. I believe, that this communicated widely, will excite other educators with the possibilities of values based educational practice being developed, within the constraints of the nationally directed school system.

In the vast array of national strategies and agendas, for instance, inclusion, AfL (Assessment for Learning), personalisation of learning, learning beyond the curriculum, wellbeing, healthy schools... there are possibilities of working to improve the quality of the educational experience of our children and young people. If educators, whether they are in school or the local authority, find the courage and energy to actively seek and take these opportunities and offer the knowledge they have created of their learning as gifts, as Sally and her students have, I think we would make a significant improvement in education. Martina Clerkin (2009) demonstrates a similar quality of educational responsibility when working with the possibilities offered by the current enthusiasm for AfL by the Irish education policy makers.

Here the AQA outline what is expected of the teacher, which could be interpreted as the teacher 'delivering' as a good instructor,

'Teachers will deliver a taught element including research skills and advise on project management. They will also supervise and support students as they carry out their project. Projects will be marked internally to strict criteria.' Accessed 5th February 2009 from http://www.dcsf.gov.uk/pns/DisplayPN.cgi?pn_id=2008_0173

The qualification opens the door but it is how the teacher interprets their role and responsibilities, their skills and understandings of research and their pedagogy that they bring to it, that makes this important beyond simply an opportunity for project-based learning. Sally takes this as an opportunity to be the educator she wants to be, developing educational spaces and relationships for, and with, her students to create knowledge of themselves and the world. I heard this professionalism being expressed by Sally where she talked about how she works with the AQA specifications and accepts her responsibility to make decisions in the educational interest of her students.

Sally begins by responding to a question about whether the choice of interest has to be validated by the board.



[AS Extended Project decisions as an educator.](#)

'Within your institution students come up with a title and within each institution there is a supervisor who then checks that title. In the pilot phase we had to send the titles off but now you as the tutor decide, as the supervisor decide whether it is an appropriate title and the key thing, is a bit like at an undergraduate course or a masters course, you have to, the student has to make sure whatever they do they're actually answering the essay title. So we found that

the essay titles have actually been refined and changed as they've gone through the course. So the answer is the school decides. – (Question, Am I right in thinking the board gives you guidelines as to what's suitable, what type of title and topic)– The key, we've gone with AQA and we've worked very closely with their specifications sat beside us week by week as we've worked through. If you as a supervisor are concerned you can contact the board, but the key thing is that the student is answering the essay title. So whatever the title is if they are providing evidence and they're supporting it as they go through it almost doesn't matter but you as supervisor have to make the judgement that they can actually meet the criteria of the qualification through the essay title they have chosen. And there is a word limit of 5,000 words, whereas Simon and Louise both went over, if you go over you have to make sure there isn't irrelevant material in it. If it's relevant then they were both very successful.'

The traditional social science approach to research would be to define the title or question as a precursor to researching, which is frequently an accumulation of prevailing knowledge, rather than a process of creating knowledge. The approach Sally takes recognises the emergence and clarification of the question through the research process as a living, dynamically relational process. It is a reflection of her educational influence in her own learning coming from engaging with the Masters programme tutored by Jack Whitehead at the University of Bath. I name the tutor as the programme reflects the tutor's pedagogy and embodied living educational theory.

Through creating an account of her educational influence, which comprises description and her educational theory, Sally deepens her own understanding of herself and her practice and how she might continue to enhance her contribution to an improving world. Her accounts can be accessed from <http://www.actionresearch.net/mastermod.shtml>. I can see in these accounts the educational experience of an educator supported to research her practice through a living theory methodology (Whitehead, 2008b, 2009), reflected in the educational experience she creates for her students. Through her accounts and the video clips referred to in this paper you can see evidence of Sally creating and offering valued knowledge of the world and enhancing her educational influence in her own learning and that of her students.

The educational approach Sally takes recognises the emergence and clarification of her students' questions through the research process as a living, relationally-dynamic educational process, respecting the student as the creator of valued knowledge. She does not deny the usefulness of the learning offered by others but she recognises and respects the considerable amount of knowledge her students bring with them. I will return to this later in the context of a description of the learning opportunities she creates and offers when I draw on the work of Renzulli.

The quality of the experience of the young people engaged with Sally on the pilot of the AS Extended Project can be understood as educationally very significant. The significance is in the pleasure the young people express in feeling recognised and engaged with as valued creators of knowledge. In short, they recognise they

are becoming emancipated in their learning and life and creating and offering valued knowledge of the world, which is a reflection of Sally's educational values expressed in her practice.

In this clip of Sally, Simon and Louise describing their research process I think you can see a respectful connectedness between them as the presentation flows from one to the other and see them,

- Respected as responsible for their own learning, allowed and encouraged to creatively explore and make decisions about their learning without the predetermining constraints of other people's agendas.
- Recognising and valuing the educational influence each person was having in their own learning and lives and in that of others,
- Sharing their enthusiasm for knowledge creating research and their pleasure of being part of a community where they are taken seriously by their teachers and themselves as creators of valued and valuable knowledge, about the world and themselves.
- Growing in their understanding of themselves, their values and how they want to contribute to their own and other's wellbeing and wellbecoming.

I would ask you to read the transcript and then watch the clip to test the validity of the claim I have just made.

The clip starts with laughter as Simon acknowledges that what he was going to say to introduce the presentation had been done by the consultant.

[AS Extended Project as a living educational opportunity](#)

<http://www.youtube.com/watch?v=KkMRaC1UAc>



Simon (0.0) *'I was going to tell you what it was all about but that has been most ably done. I'll go into a little more detail really. I can only speak for us doing it on AQA as a stand-alone qualification but as Rob rightly said you can do it as part of an IB or another qualification. With AQA it's three parts; you have the*

actual project itself, in my case there was a 10,000 word essay, I went over it a little bit, (to Sally) I don't know, were you going to distribute? Sally – there are six copies there if we could have them back at some point. Simon – if these are forced on you I do apologise, it's not that bad really. There's that, there's the project log, where you write down a list of everything you've done, project reviews, and that kind of thing, and there's the actual presentation that for us was at Bath University to a lecture theatre. And it's not just about writing it's actually about making, not a literal presentation

but making sure you can communicate with people. That's pretty much all I have to say actually. Lou was going to talk about our learning community.

Louise (0.53) – *Yes, as part of the project we set up a research community with the help of Marie and Jack; Dr Jack Whitehead at Bath University. When we first met with them we held a kind of university style seminar where we were giving and receiving constructive criticism of each others work, which I think was invaluable for the development of each others projects because we're each a new pair of eyes to each others work and because we were all doing such different subjects, for example I was doing, well the title of my project was 'how is the rise and fall of the Berlin Wall affecting Germany?', so mine was quite historical but Simon's was based round physics and space, so it was making sure that I could understand what Simon was saying and Simon could understand what I was saying and then just giving each other ideas, which I think was invaluable for the development of each others projects really. It was definitely a skill that I will definitely be able to use in, I have been using in, my other subjects in school and I will definitely take on to university as well.*

Sally (1.57) *So very much we had four very different titles: one student we had doing the relationship between maths and art and looking at aesthetics, someone else looking at saturated and unsaturated fats and then Louise and Simon's and they had to work and critique each others work and the target was to be able to write for an educated lay audience. So AQA was saying think of the readers of magazines like History for Today or New Scientist. They have to be writing to that standard. So we were fine, particularly with scientists, and I'm a none-scientist, that I didn't understand a word of what was being written and therefore we had to work really hard to unpack it so that they met the criteria of that audience. So we worked a lot on analogy.*

Simon (2.44) *There was one bit in particular where I had to rewrite one paragraph about five times because I kept coming up with it to Louise's, 'I don't get this, scrap it, write it again'. And it really helped because that whole process means that everyone got it and I think that is one of the big challenges of science is to be actually able to communicate it to a lay audience really.*

Sally (3.02) *But that was without it making what you wrote a reductionist, wasn't it, making sure you maintained the integrity of the research but you were communicating it. And then by work in this research community style it meant we were meeting as well as doing the independent work, we were sharing good practice as well. So I think that adds strength to it doesn't it?*

Louise (3.25) *Yes, definitely. It was that process that really made our project so successful really. It was possibly one of the main reasons why we all achieved what we all achieved. Without it I don't think I definitely wouldn't have done as well because to hear everyone else's ideas definitely is what my project so successful. Making sure they understood what – because although I knew a lot about it because I had done a lot of background*

reading, they didn't really know much about it so I had to go to areas where, which they would thought would be important rather than cutting it.'

Now, I would ask you to read the following transcript and then watch the video – again looking for the evidence of the educational influence in learning of Sally and the young people engaged with their Extended Projects. Look for the flow of energy that carries the pleasure these young people share in offering the gift of their learning and educational experience.

[AS Extended Project as a life enhancing educational experience](#)

<http://www.youtube.com/watch?v=tMpaItNH7kg>

Simon (0.0), 'Last year when I took the Extended Project, I took Maths, Further Maths, Physics, Geography and the Extended Project and so as I did something as I already said about space, my essay title was 'why is it proving so difficult to do a manned mission to Mars'. So it was fitting with my physics but the first thing I really gained from it was in terms of what we know as our learning journey, which as far as I understand is consultant speak for what we learn in terms of our skills, is it's significant independent study at an intense rate. When I did GCSE I did my Geography GCSE at home because I couldn't choose between Geography and History so I did both and this is the first time I have ever done anything really intense. At GCSE my teacher would give me something every week to do and say do these exercises whereas with this I had to choose my self. So I had to you know be very strict. By the time the holidays I said right today I'm going to ion drives, tomorrow thermo-nuclear drives and I'd really have to have a strict regime for myself. That was very helpful and it came up at my university interview and I've been lucky enough to con my way into Oxford to study physics and it came in useful during the interview and it's something I want to carry on.

The second thing from the project, which is communicating to a lay audience. So as I said, with Louise it was that particular issue was about artificial gravity, which isn't the most dinner party worthy of conversations, but it was a struggle to get it to be understood but eventually by the last draft everyone in the group understood it and it was a skill to be able to look at a scientific idea that I understood and put it into lay terms so that none of the meaning is lost so it's as simple as possible but not simpler as I understand Einstein put it and I want to carry that forward and in later life I would love to be in science media and doing lectures to an audience like Brian Cox or Marcus du Sautoy and that kind of thing I hope will be very useful to me.

The last big thing I got from it was the actual research side of things. We've already mentioned, Isaac mentioned about the huge range of sources. When I was going round university open days my questions to the head of department was, do you know anything about space, kind of thing, and I had a couple of people email me back and I had a very nice professor at Leeds University who I had a conversation with and she sent me some notes on planetary dynamics that I used in the essay. And in addition to that I used the internet, I used books, I used journals, I used a lecture I went to and

having to reference all of that using the Harvard Referencing System that I think is a key life skill that I've learnt. Certainly in geography essays I now incorporate it. And I'm very glad to have done the Extended Project even if it was just for that. If I gained nothing else from it just the referencing skill I would be pleased that I'd done it because it is such a useful thing. Obviously I've enjoyed it so much that now in Year 13 I'm doing an Open University module. So I'm a bit of a learning addict now. It's Mrs Cartwright's fault, I'm determined to rid myself of all free time. In addition to the skills it is hugely enjoyable. I mean in terms of my learning journey the end result is that I enjoy it and the destination was worth the journey.



Louise (3.00) *Well everyone's learning journey is completely different and I gained two skills for me which are the most important. The first one is as part of my research for my project I actually contacted who lived in East Berlin when the Wall was up and because I was studying German it meant that I could communicate with her in German. I carried out over the internet an interview asking her questions and*

then she gave me all her comments but they were in German so I had to translate them and incorporate them into my essay. So that for me was a really important skill; the ability to translate. And also that wasn't my only source in German I used a wide range of German sources, from German books and German newspaper articles that were on the internet. So that for me was really important because I had never really done that before using sources in a foreign language to such a degree. So that's definitely helped me with the course work in my French and German that I'm doing at the moment. It means I can look at foreign language sources with a lot more confidence than I had before.



The second thing for me is public speaking because before I started the Extended Project I hadn't done any public speaking at all and the thought of standing up and giving a public presentation just made me feel sick to be honest but as part of the project we've done quite a few presentations. We've attended another conference, we gave the presentation for the actual project

itself and just talking to people about the project has just given me so much more confidence with standing up in front of an audience and speaking and telling them about my experiences. So for me that has been a huge step and given me a lot more confidence when I went for my university interviews because Simon's got into Oxford and I've got into Cambridge and definitely doing the Extended Project has definitely helped me because I don't think I

would have had the confidence to go into my interview and be able to talk to the interviewer if I hadn't done the Extended Project. So for me it has definitely changed my life.



Simon (5.04) *Just to finish what Louise said it came in very useful in my interview as I had a copy with me and when they mentioned it I just slammed it on the desk and left it for them and they had a read through and seeing I got into Oxford it worked so thank you Mrs Cartwright.*

4 (a) iv. Implications for developing practice

The AS Extended Project has opened the possibility for the young people to have the knowledge they create, which is of importance to them, legitimated with an accredited award. Sally Cartwright has taken this possibility and opened it as an educational opportunity for her students to understand themselves as knowledge creators and come to know something more of themselves so they might live a satisfying and productive life as they earn a living.

Sally didn't just help them to learn skills, she was more than instructor, she showed how engaging young people in an educational experience they were learning about themselves, the person they were and wanted to become. That is the educational experience I want for all children, young people and adults all the time. Sally has shown what is possible. In creating this account I felt I was saying what excited me about Sally's work but I was hesitant, feeling I was making claims on her behalf. I wanted Sally to explain her practice and she wrote to me,

From: Sally Cartwright

To: Marie Huxtable

Sent: Friday, 13 February, 2009

Hi Marie

Below is an attempt to explain why I have so enjoyed working on the Extended Project Qualification.

The EPQ provides an opportunity for a student to ask, explore and answer their own question in depth without the constraints of specifications. It enables students to give free reign to their intellectual curiosity with the result that they can take themselves beyond what the education system has to offer. Within the time allocated to the project there is space to make mistakes, to change minds, and for each student to find their own challenge. I have found it to be a very creative process and one that is exciting because none of us know what possibilities lie at the start of the

work or what avenues their research will take them into. It takes us all out of our comfort zones.

As a teacher I am in a partnership of learning. In return for the content and ideas they bring to the lessons I can provide guidance on shaping and structuring the information - but they are at liberty to reject the advice. I can remind them of the 4 assessment objectives set by the exam board but what material they choose to use is entirely up to them. This has required giving up a teacher's traditional authority and involves taking risks as you don't actually know how the student's work is going to fall into place. I also am learning from the students. Where else in the school week can I be on task in lessons discussing the existence of NATO, whether music should be taught or self taught, the Immigration policy of the UK, the life and death of Tutankhamen, the similarities between Bristol and Bordeaux and whether love can be explained chemically?

As the students have to be able to write for an educated lay audience they are faced with the fresh challenge of how to write in a way so that they are giving the reader a helping hand through their work. For most of the students this is a new challenge writing for someone who might not understand the topic - quite different to writing for an exam board or teacher who already know the answer!! .

The establishment of the concept of a research community has added a wonderful dimension because each student is exposed to the work of other students which takes them into completely new areas. The student writing a play for a year 5 class is exposed to the student fascinated by NATO. The student wanting to write an essay on Shariah law is exposed to the student exploring issues about conservation and urban planning. In the environment where sections of each student's essay is read aloud for a group critique, we grapple at times to understand the topic to identify how to improve structure, clarity and grammar. There is a sense that we all need to help the student move forward in their project and yet they are fully entitled to give a robust defence against making changes. As a research community there is a huge reliance on sharing or giving in order to receive. I enjoy these group sessions because we are all sharing in this journey together and yet each of us is making our own journey as well. The students are excited by what they are discovering for themselves and what they are bringing to the table for discussion not by what I am bringing and giving. My aim is to provide the space and structure in which this can happen.

I hope this helps

Sally

Sally values her students as creators of valued knowledge and recognises them for the unique person they are. She is respectful of herself and her students, the abilities, knowledge, enthusiasms, skills, curiosities... that each brings into the

space and facilitates the opening of those respectful channels of connectedness. She expresses her educational responsibility towards, but not for her students, by working with their best intent of curious enquiry rather than their short-term interests, which might be served by keeping an exam grade in sharp focus.

I want to enable children and young people to learn about themselves and the person they wanted to be, contributing to their own lives and that of others. I want to help them develop informed and informing aspirations and develop the confidence and competences to realise them, able to contribute to and benefit from their own learning and that of others. I can hear all of that realised in the video of the presentation. That could not have happened without Sally, her willingness and courage to create and venture into the educational spaces and relationships as an invitation to her students. She challenges her own thinking, enquires, critiques and has the courage to bring expressions of her values in her practice into the school to have a systemic influence.

Sally's students were creating knowledge about themselves, the person they were and wanted to become and the world. That is the educational experience I want for all children, young persons and adults all the time. Sally has shown what is possible. She has opened the space with TASC and her Y7 project (Cartwright, 2007) and now she has opened this space with the AS extended project. She is the educator she wants to be and has shown incredible courage to keep that space open.

Respecting students as responsible for their own learning

Sally Cartwright (their teacher) right at the beginning of the presentation expressed her emancipating educational values, 'You put your students in the driving seat or the learning and they totally drive the content. What you do as a member of staff is to guide them through the learning and study skills... for me it is enabling students to think outside the box, its very much driven by them.'

The students communicated their delight at being recognised as responsible for their learning and their pleasure in accepting the responsibility. You can see in the video Simon and Louise talking of the skills of project management they had to learn and the self-discipline of establishing work routines and juggling demands, which they recognised would serve them well beyond school. This wasn't forced on them. They used them all as they expressed their responsibility for their own learning.

Students researching to create knowledge and being part of a community

The students do not just choose 'a topic' and just find out what is already known. They are supported to enquire and question in a disciplined creative manner to create knowledge, which they value and that communicates. A high level of scholarship and commitment to create an artefact, which communicates effectively, is required. As Sally said,

'The exam board doesn't want anything which isn't finished. They have to complete it.'

I can see the young people doing this as they communicated a confidence and a passion for what they were doing. They were enjoying themselves as learners, in good company and appreciating the educational influence they were having in their own learning and that of others.

Their enthusiasm for learning was fed by being encouraged to wander and explore extensively, way off the tracks that their usual schoolwork either allows or encourages. They were finding that unfettered journey exciting and were changing their focus of their current enquiry as a result. They didn't talk of 'blind alleys' when their exploration didn't eventually appear to come into their enquiry. There were no blind alleys but places they explored they might return to some other time.

Students recognising and valuing educational influence.

They kept coming back to the importance to them of the research community where they learnt to listen to, learn from, and challenge themselves and others.

[AS Extended Project a living research community](#)

<http://www.youtube.com/watch?v=1BxBkGXvdYQ>



Sally (0.0) *'I teach a lot of A level students and I find quite a lot of them find it very difficult to actually share each others work and then listen to the criticisms from their peers and that's something we've worked quite hard on. We've also worked on actually having the confidence to challenge your own assumptions and some students have moved quite significantly. They began with one particular standpoint and by the end of the project they've actually got quite a different stance and also constantly looking through their essays to look at are there assumptions you haven't evidenced are there*

assumptions that you haven't justified you need to unpack. We've also worked very hard on keeping a learning log so they keep almost a diary through the process. We also teach about the Harvard Referencing System that has to be absolutely precise and how you run a bibliography as you're researching, you obviously cant leave it all to the end. So I think there are quite a lot of academic skills that are in there that you would need at university along the way, and I think you found that quite helpful.

Simon (1.08) *Certainly in terms of the learning community it's a format of meeting that I will carry forward in that we are attending a debating conference in a couple of weeks time and hopefully we are going to start meeting in a very similar way, inspired by that of sharing each others research and instead of writing an essay we're going to be writing resolutions for this conference. So hopefully it's sort of a trial idea that I've had that we're going to carry forward. Hopefully we'll have some results from that. So I'm interested to see something else I've learnt to see if this meeting style can be applicable elsewhere.*

Sally (1.41) *Also because we've linked in with the University of Bath what I've really liked is that by geographically, physically being in that place a couple of times it's actually again taken us out of the comfort zone of school and by giving their presentations in a lecture theatre to an invited audience of about 40, 50 people, and again they get questions. They do 15 minute presentations and then their open to questions from the floor. So although you might put a few plants in the audience, of questions, I don't know if you did but obviously because it's such a big audience you are actually there having to answer questions you've no idea what you're going to get. And that, that for me, was the real test of all the background they'd done and I think all five actually handled that very well. It showed you as an audience how much work they'd done because they had to reduce a 5,000 word project down to 15 minute presentation and that's equally important along with the essay and the log. The log's about 15 pages that they send off and you have three formal interviews. You have a primary interview when you meet the student to sort out their title, a midpoint interview and a final point and the ability to reflect on their learning journey, there's a page in their log where they are expected to do an A4 sheet on reflecting on their learning and I think that's been incredibly powerful actually enabling them to look back with hindsight at it (3.08)*

Sally is asked about what she has learnt.

Sally (4.10) *I think one of the things I've learnt, I think it was Simon who said that he reached – because I'm doing a Masters with Jack Whitehead and Marie – we've partly modelled, set this up modelling the seminars that I go to at the university. I've learnt a huge amount from the students and one of the things Simon said, you reach a point where you've just got to write every week for an hour even if it's rubbish or not you've just got to get into that discipline of writing. So it's been very much a two way process. I've gained a huge amount from what they've done and you can probably guess I'm very excited about what they've done and I feel very much as a teacher that you are learning with them, very much a partnership because you're not in control of the content at all. They do go and talk to subject staff. They'll go out and say can I talk to a member of the music department because I don't have those specialisms. Some institutions, the projects are run in faculty or within a department but we've deliberately chosen to do it across the board so you get this interchange, interdisciplinary exchange. I think for us it has worked but I think each institution is doing it quite differently and I think you'll find quite a lot of different models of practice nationally. (5.25)*

Growing in their understanding of themselves, their values and how they want to contribute to their own and other's wellbeing and well becoming

I like the quote from Denise Shekerjian (1990) at the start of her book, 'Uncommon Genius',

‘Everyone has an aptitude for something. The trick is to recognise it, to honour it, to work with it’. (p. 1)

I believe that you never know what you can do until you’ve done it and that does not mean that it is necessarily easy. Quite the converse; things are easy when they have already been mastered, discovered, or created. To go to somewhere new in your learning requires a commitment, effort and determination to challenge yourself. I believe education should open people’s eyes to themselves, to get a taste and confidence to explore and be open to ‘life’s possibilities’ as they do so.

The students did not just find working with Sally on their extended projects simply of actuarial use – just being of use with their application to university or with their intended higher studies– they communicated an growing understanding, pleasure and enthusiasm for their subject, for learning and knowledge creation. Some had clearly been influenced by what they intended to do at university. Others started with their interest and were inspired by their peers to connect with a subject that they were studying in school to create an academic orientated enquiry, which they found opened them to new and unexpected possibilities that excited them.

Through the process they also learn about themselves; these can be moments of epiphany or quieter moments, which contribute to their sense of wellbeing in community. You can see this in the preceding videos and transcripts.

In the next section I want you to keep in mind the living practice as I offer an explanation of the living research processes of knowledge creation.

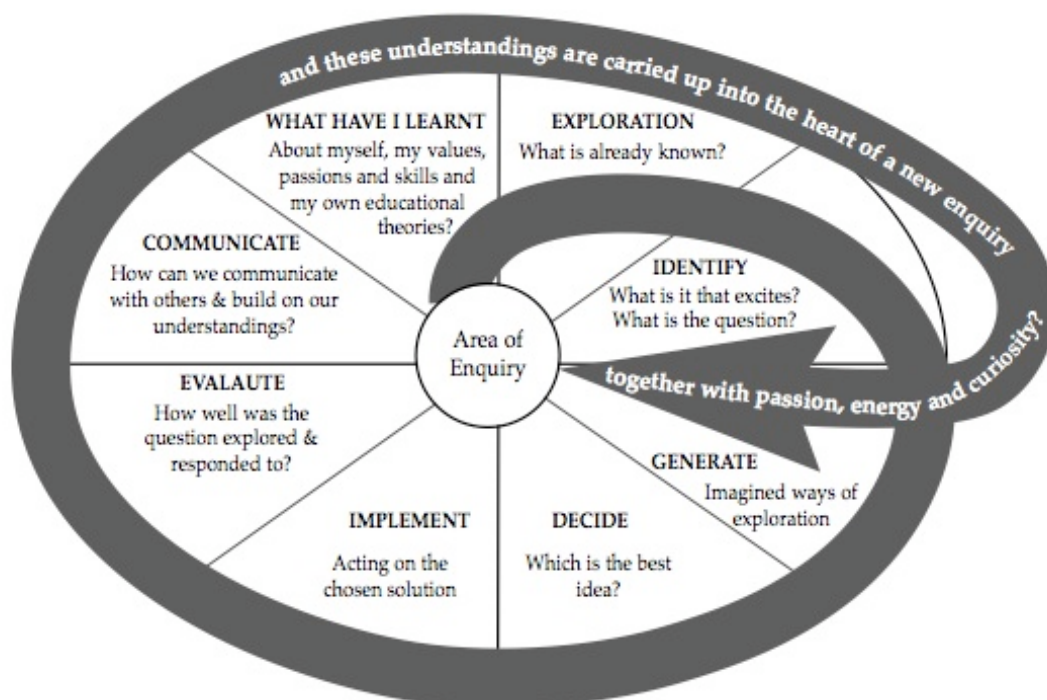
4 (b) Educational processes of creating valued knowledge, which are organic and systematic and dynamically inter-related

The processes of knowledge creation seem in essence to be similar irrespective of the domain or dimension. Two phases can be distinguished which are dynamically interrelated: a systematic phase, and an organic phase. TASC offers an easy to recognise description of a systematic process of knowledge creating research, which can also be used to clarify the organic phase.

A systematic phase of creating knowledge

The systematic phase is the familiar phase of creating knowledge and is directed to creating an artefact such as an account, a play, a poem, an exhibition, a satisfying and satisfactory response to a problem or question, an essay and presentation for the AS Extended Project... but often stops with the creation of the artefact. TASC is not just another form of ‘plan, do, review’. What I like about TASC is the focus on the deep learning that comes from moving beyond simply reviewing what has been learnt about that specific question to what has been learnt through the enquiry process about creating and offering knowledge of self and the world. TASC focuses on issues of wisdom that arises from the communication, with and to self and others, about what has been learnt in

creating the artefact, response or answer and this learning together with the passion and energy for knowledge creation informs the new enquiry.



I have described this as a living TASC knot (Huxtable, 2006; Huxtable, 2008). The sections of TASC: 'communicate', focuses on the learning that emerges from reflecting on the enquiry processes and communicating this learning to and with others and self; and 'what have I learnt' which is not simply concerned with metacognition but with extending the understanding of self that have emerged in terms of personal values, theories, beliefs, aspirations, motivations, development and enhancement of my talents etc.; feeds the next cycle of knowledge creation. The Y2 children working with Joy Mounter (Mounter, 2007) express this very well in the video clips and in the model they create of their learning theory.

There is a great deal written on what is meant by 'deep learning' and 'wisdom'. I do not want to deviate here into those fertile and exciting places but want to draw your attention to how important these notions are. I rather liked a quip I heard on the TV recently, 'Knowledge is knowing a tomato is not a fruit, wisdom is knowing not to put it in a fruit salad' and will leave that with you to reflect on and know there is much more I would like to say about the wise acceptance and valuing of knowledge as gifts.

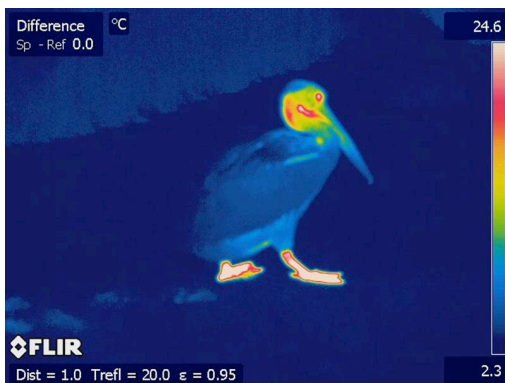
An organic phase of creating knowledge

The organic phase is focused on being fully present in the moment or activity, and moving where the energy is. For instance it may start with clarifying a question of interest until you get stuck, leaving it and coming back to it when inspiration returns. It is a phase of enquiry where words like, 'creative'; 'intuition' and 'inspiration' are more often used. The flow from one space to another may appear to be chaotic and incomprehensible but I think a form can be recognised that is similar to the systematic phase but does not progress in a consistently ordered flow.

In the organic phase of enquiry I find it helpful to use the schema I use in the systematic phase, a living knot form of TASC. I can recognise when I am 'doing', 'imagining possibilities', etc. Which space I shift my focus to can be dictated by events or noticing that I have not devoted enough focussed time in one space, such as reflecting on what I have learnt and the deeper understanding of my values in practice that offers me, or clarifying why I select one possibility rather than another. What I learn contributes to the systematic phase of enquiry.

I remember going to a restaurant one evening when abroad with my Mum when I was about 20. Around the neighbouring table were gathered good friends who enjoyed company and good food. They had a starter, enjoyed that and had another, then a desert caught their attention so some of those dishes were sampled, a lull in the conversation was fuelled by a drop more wine, before one of the a fish course was embarked on... and so it went on through the evening with the revellers moving around the menu as company, appetite and inclination led them until they had sampled something from all the sections of the menu. Under different circumstances I think they would have created a nutritionally balanced meal working their way systematically through the menu, drawing on what they had learnt the previous evening.

In real life there are many enquiries going on at the same time, sometimes barely distinguishable, with the organic and systematic phases dynamically inter-related. We are used to recognising the systematic phase but not the organic.



Accessed from <http://www.dailymail.co.uk>

We are used to looking at a 'light' image and this is close enough for us to recognise the pelican. Did you notice the warm footprints the pelican has left? When you think about it you will not be surprised to find them in a thermal image but I doubt you would have included that in 'what you know about pelicans' in a systematic enquiry.



This rather odd diagram is my way of representing the flowing inter-connections within and between the systematic TASC and the organic process where information is gathered, action is taken etc, moves in a non linear manner around the TASC framing.

I want here to pause to remind you that I said I would be working with a notion of three types of learning opportunities based on Renzulli's (1997) Schoolwide Enrichment Model.

Whether in the systematic or organic phase I can use a TASC as a transitional structure for 'looking' at what I am doing, I can recognise when I can't enter a space as effectively as I want because I need skills, understandings or knowledge, which others have. This directs me to find a 'type 2' learning opportunity, one where the learning outcomes are determined by another. I can recognise when I am struggling to find my question or even field of enquiry and I need more access to type 1 learning opportunities, those unfettered by constraints of discernable outcomes which will feed my imagination or help me look in different ways or extend my cognitive, personal, social, emotional, physical register...

Sometimes I will be directed through necessity, for instance to create an account for a Masters assignment or for the AS Extended Project, or I recognise when I need to enter a systematic phase of enquiry to learn from creating an artefact. It is problematic as Murray (2007) so nicely puts it,

'One of the consequences of my epistemological nomadism for producing a clearly communicable text that I have come to understand through my inquiry is that I have this creative, excessive, or 'leaky' (Lather, 1993) tendency where my imagination is still working out the possibilities that have moved further on than I have been able to communicate in my text. This produces a 'gap' because I have not stabilized either my meanings of writings before I have moved on again in the direction of new, insightful 'oases

The flow of my liquid imagination requires a solution or moment of stability, perhaps a stabilising process, in which the runaway liquidity of my meanings are staunched just long enough for me to translocate them in communicable ways into my text. This tension of exposing and opening up new ideas set against the practical need to hold them steady and stabilise them so that I can communicate their meanings has remained with me throughout my research inquiry as a journey of liquid discovery, and ever-present in my writing-up process. I have not resolved this issue. The tension remains: I imagine it will require a very conscious effort of self-discipline on my part whenever I write'. (p.208)

In the systematic phase I pick from what I have learnt in the organic phase of the enquiry to create an outcome that I value and is communicable. Jane Spiro describes this really well in her story of Eye and the Fellow Traveller, which you can access from www.jackwhitehead.com/janespiropdfphd/storyepilogue.pdf. I really recommend you take the time to read this.

The processes of creating knowledge are both organic and systematic and do not necessarily progress in sequence. Knowledge acquisition is integral but is not predefined and the relationship between the known and the yet to be imagined might be described as an inclusional process, in which intuition and analysis are dynamically inter-related. Dan Barwise offers a very useful metaphor here.

From: Daniel Barwise

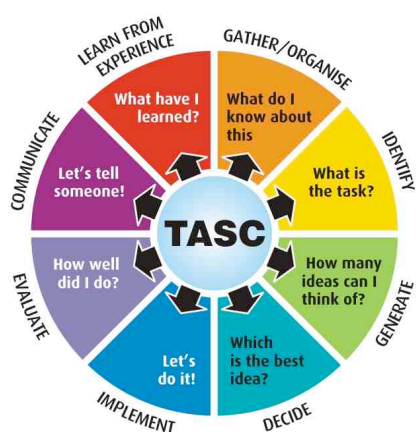
To: Marie Huxtable

Sent: 6 March, 2009

Hi Marie,

I was thinking about your way of representing the TASC wheel in 3-D this morning.

As the TASC wheel looks like a circle, had you thought about using a sphere instead?



Each part of the TASC cycle could be represented as a segment like a piece of an orange. This way they all meet in the centre so you can bypass one piece and go straight to the next.

I guess you've had a Terry's Chocolate Orange before? You know that lovely bit of chocolate that sticks all the segments together in the centre... that could represent where all the complex weaving, jumping and backtracking between stages goes on.

Just a thought that occurred to me on my frosty walk to work in the sun, but if I don't share it with you it will be forgotten forever!

Regards,

Dan

What has excited me in the work of Sally Cartwright is seeing the educational practice I have been describing becoming a reality in schools and young students creating, valuing and offering knowledge, which is legitimated by an awarding body. I want to ask you to hold the conceptual thinking I have offered up to now and reflect back on the evidence I offered you above. I see in what Sally shows in her work with her students studying for their AS Extended Project what it is for an educator to hold the organic and systematic knowledge creating processes together.

4 (c) My inclusional theory of learning, which is educational, that holds the creation and offering of knowledge of self and world together

In the previous section I have told you how I see the creation of knowledge, whether of the world or self as being similar and I have used TASC as my transitional structure. I have shown that the phases are dynamically interrelated but I have not as yet placed much emphasis on the relationship between the creation of knowledge of the world and the creation of knowledge of my unique and ontological self.

Examples of knowledge creation of self and the world, held together, valued, offered and legitimated by the Academy as living theory masters and doctoral theses can be found on <http://www.actionresearch.net/living.shtml> and <http://www.actionresearch.net/mastermod.shtml> and <http://www.jeanmcniff.com/reports.html> and in the Educational Journal of Living Theories accessible from <http://ejolts.net/about>.

Like a bubble it is difficult to know where to start to make sense to anyone in the linear communication of speech or text.

If you can look at this ball knitted by a strange spider and imagine the creation of knowledge of the world and self as two enquiries on the membrane of the bubble ball held together by flowing connections of events/experiences/understandings... this gets close to how I see the creation of knowledge of the world and self being inter-related. Values and self are not a separate consideration but are integral to knowledge creation of the world.

Let me see if I can be clearer by making reference to the video of Sally and her students presenting to the strategy managers. You can, for instance, hear and see them formulating their question for the enquiry that will be the basis of their accounts for the AS Extended Project accreditation. Simon's experience of the research group is leading him to recognise he has a passion for communicating about science and his vocation might be as a science communicator. Similar stories can be heard in what some of the other young people say at the presentation to the strategy managers and at a later date to a group of Head teachers.

In exploring to create and not just acquire knowledge of the world the learning, understandings and experiences are not only within the dimension of creating knowledge of the world, they are also within the dimension of creating knowledge of self. This can be recognised in the oral accounts of the young people and in the written and multimedia accounts of improving practice of educators working with a living theory approach to educational research. The researchers begin to recognise and work with some of the passions and values that may form and inform their gifts of knowledge of their research to improve their practice.



The sketchy lines in the spider's ball represent the flowing connecting between the different sections of TASC for knowledge creation of self and of the world on the membrane of the spider's bubble. The space between is open and vibrant with the creative and productive energy, which flows when I am doing what I believe in and making a contribution I value.

The videos http://www.youtube.com/view_play_list?p=68BFC36A0791E85F particularly show Sally and her students simultaneously creating knowledge of the world and of themselves.

Sally had brought her students to work with Jack Whitehead at the university, as he works with Sally and the Masters group, respecting the other and the knowledge they bring to their question.

Researching to create knowledge of self

This 'dimension' of enquiry and research is recognisable in living theory accounts (Whitehead, 1989) where the researcher offers knowledge they create of self; my values, the person I am and want to be, how I want to contribute to 'improving' the world and myself. Through this research individuals recognise and re-form their living standards by which they judge their life as satisfying and productive. It is a process by which the individual comes to understand what it is for them to live a life worth living – being the best they can be while making the world the best place they can make it. In creating living theory accounts that communicate, they learn how to improve the educational influence they have in their own educational journey and that of others and the social formations in which they live and work.

Researching to create knowledge of the world

In creating knowledge of the world the processes are similar to those creating knowledge of self.

An organic phase where you may 'gather' what is known as you are 'doing it'. You may imagine possibilities, create a question while deciding how you are going to go about creating a response to a half formed question that is in response to a provocation, a stimulus or something you happened on which provoked your curiosity. There is an organic meandering with many 'operations' occurring at the same time.

The systematic learning cycle often, in reality, goes no further than the 'evaluation' stage. The 'write up' is often just that; often a historical account, which carries no interest for the writer and is not often read with any particular relish either. This is a traditional social science approach and in school is often missed out. The bits of the TASC process that are skimped are the 'communicate to' and the 'learning about self'. The knowledge created in the process is often

lost not being honoured as of value to the creator or others. There is little evidence of real reflection in reflective practice and where it is noticeable it stops at reflective learning not realising the learning that arises – and often the deep learning where new knowledge is really created is not engaged – occurs in the communicating to and with others and self reflecting back over the journey. In working to communicate to and with others you have to decentre and it provides a lens through others eyes, ears, feelings, ways of knowing.

Sally demonstrates how as an educator she has enabled her students to extend their sophistication as a creator of knowledge within the field or domain in which they were enquiring.

Between the dimensions

There are dynamic connections made within and between the two dimensions – that of knowledge creator of the world and that of knowledge creator of myself. These can be enhanced through developing the interconnections between learning opportunities; those that extend the cognitive, intellectual, social, emotional and personal register, those that have planned learning outcomes, and those which support individually inspired research, and developing educational spaces and relationships.

5) Opportunities and implications for practice.

The more I read, the more I see the national gifted and talented education strategy bringing into relief the dichotomies and tensions that exist in the theories and practices of individual practitioners and in the array of national strategies intended to implement the Every Child Matters agenda.

The key to recognising the confusions and contradictions is very simple – values. The current focus on gifted and talented education is an implicit statement of the contradictions in societal values. There is the unspoken undercurrent of individualism and elitism, values associated with earlier eras, which is at odds with the explicit values of emancipation in a democratic, inclusive society of the 21st century which holds hope for humans progressing a humane world to see a 22nd century.

An example of the implications of these very different values can be understood in the conflict between the resulting pedagogies. One is underpinned by the belief that the ability to create valuable knowledge is the prerogative of a few special individuals, while the majority of persons have only the capacity to acquire, to a greater or lesser extent, what has been created for them. The other pedagogy rests on the belief that all learners are capable of creating and offering, valued, and potentially valuable, knowledge. I subscribe to the latter, and the educational theories and practices I am interested in developing and improving are predicated on values of a love of humanity and of emancipation in a democratic, inclusive, society.

As you read the account of the young people's presentation again I would ask you to keep in mind your educational values. I would also ask you to be mindful of

the values represented in the Every Child Matters agenda, the current enthusiasm of the government for teacher CPD and the demand from the business world for creative, confident, engaged people.

Let me offer an example working with the DCSF national gifted and talented education strategy. The following is taken from Effective Provision for Gifted and Talented Students in Secondary Education produced by the DCSF 2007, Deborah Eyre concludes the forward with:

‘In thinking about gifted and talented provision in the secondary school it is useful to consider the exit point. What do you want to have achieved for these students prior to their move to post school destinations? An important part of the answer here of course, relates to achievement but some also relates to learning dispositions and to emotional development. Aim for high achieving, well-rounded, thoughtful learners, ready and confident to take on new challenges and new opportunities.’ (p.5)

Accessed 4th Feb 2009 from

<http://www.educ.cam.ac.uk/library/24hr/publications/>.

I take her point and would say that the ‘exit point’ is not just useful to consider but vital. If school is to have any educational relevance the exit point needs to be focused in the individual learning to live a life they find satisfying and productive. Attainments on leaving school offer data that can be used to monitor the instructional success of some procedures and processes. It is not to be confused with what may constitute evaluative data of the educational influence school has had in the young persons learning and life.

The ‘exit point’ that I have in focus to guide the gathering of evaluative data, is of young people emancipated in their own learning, coming to know themselves, developing informed and informing aspirations with the confidence and competences to pursue them and able to contribute to, and benefit from, their own learning, the learning of others and a world they want to live in. In clarifying the evaluative data that the AS Extended Project offers I am suggesting that this will help us to focus on improving educational, as distinct from simply instructional, theory and practice.

This work is not simply of importance to those who are working with the national 14-19 strategy. I would like to put this in the context of the possibilities of developing educational practice with all in the learning community, from the youngest child to the oldest adult.

For instance in the interim primary review:

Aims and values for primary education

1.32. No matter how they are configured, educational aims and values generally recognise two mutually beneficial sets of outcomes: those for the benefit of the individual and those for the benefit of society (personal fulfilment and utilitarian benefits). Aims and values must also inspire confidence that these outcomes are valid not only for the here and now but also for the foreseeable future; hence the constant reminder from

respondents to the Review to make sure the primary curriculum is 'fit for the 21st Century'. (p.22)

Children of primary age have been asking where there is a place for the valuing of their learning. Teachers like Joy Mounter where she researches her question, 'Can children carry out action research about learning, creating their own learning theory?' (Mounter, 2007)

<http://www.jackwhitehead.com/tuesdayma/joymounterull.htm> show what is possible if invitational educational spaces and relationships are created for children and adults develop, recognise and share the educational influence they have in their own learning and that of others.

Energising and transformational challenges to improving the educational experiences of all children and young persons

There is a recursion; the educators themselves are going through the same educational processes they are supporting their students/pupils with. I am not sure that it is possible for an educator to support their students to create knowledge of the world and self in this way without themselves being engaged in creating and offering valued educational knowledge of the world, in the case of educators that is their practice, and themselves.

In offering a description and explanation of the living research processes of knowledge creation I hope to have contributed to the possibilities of enhancing the quality of the educational experience that educators can offer to children and young people which emancipates them in their learning and life and enhances their ability to make their unique contribution to evolving a better world. Do you understand the processes I have tried to communicate? Do they appear reasonable and rational? Can you use any of these ideas to improve your educational practice?

References

Amrein, A. L. and Berliner, D.C. (2002) An Analysis of Some Unintended and Negative Consequences of High-Stakes Testing. Retrieved 8th March 2009 from http://epsl.asu.edu/epru/epru_2002_Research_Writing.htm.

Bloom, B., Englehart, M., Furst, E., Hill, W., and Krathwohl, D. (1956). Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain. New York, Toronto; Longmans, Green.

Cartwright, S. (2008) How can I enable the gifts and talents of my students to be in the driving seat of their own learning? Masters, Gifts, Talents and Education Unit, University of Bath. Retrieved 14th March 2009 from <http://www.jackwhitehead.com/tuesdayma/scgandtnov08.htm>

Cartwright, S. (2009) How can leadership qualities improve my practice as a teacher? Masters, Educational Enquiry Unit, University of Bath. Retrieved 14th March 2009 from <http://www.jackwhitehead.com/tuesdayma/scee010109.htm>

- Clerkin, M. (2009) How can I use Irish language e-portfolios in the assessment for learning approach in my primary classroom? *Educational Journal of Living Theories*. 2. pp. 32-67.
- Godard, S. (2009) A case against school effectiveness. Retrieved 8th March 2009 from http://www.education.bham.ac.uk/staff/gorard_stephen.shtml
- Huxtable M (2006) How can I improve my practice through 'walking the talk' and 'dealing with doorsteps'? Masters Educational Enquiry Unit, University of Bath. Retrieved 15th March 2009 from <http://www.actionresearch.net/mastermod.shtml>
- Huxtable, M. (2008) Living Theory and TASC: A multidimensional, inter and intra relational, flowing knot of enquiry. *Gifted Education International*. 24 (2/3) 109-204.
- Huxtable, M. (2009) How do we contribute to an educational knowledge base? A response to Whitehead and a challenge to BERJ. *Research Intelligence* 106. (in press).
- Hymer, B. (2007) How do I understand and communicate my values and beliefs in my work as an educator in the field of giftedness. D.Ed.Psy. University of Newcastle. Retrieved 13th March 2009 from <http://www.actionresearch.net/hymer.shtml>
- Laidlaw, M. (1996) How can I create my own living educational theory as I offer you an account of my educational development? Ph.D. thesis, University of Bath. Retrieved 17th March 2009 from <http://www.actionresearch.net/moira2.shtml>.
- Maree, K. (ed.) (2007) *Shaping the Story: A guide to facilitating narrative career counselling*. Pretoria; Van Schaik Publishers.
- Medawar, P. B. (1969) *Induction and Intuition in Scientific Thought*. London; Methuen & Co. Ltd.
- Mounter (2007) 'Can children carry out action research about learning, creating their own learning?' Understanding Learners and Learning Masters unit, University of Bath. Retrieved 15th March 2009 from <http://www.jackwhitehead.com/tuesdayma/joymounterull.htm>
- Murray, Y.P. (2008) How I develop a cosmopolitan academic practice in moving through narcissistic injury with educational responsibility: a contribution to an epistemology and methodology of educational knowledge. M.Phil., University of Bath.
- Quinn, V. (1997) *Critical Thinking in Young Minds*. London; David Fulton Publishers.
- Rayner, A. (2005). Space, dust and the co-evolutionary context of 'His Dark Materials'. Retrieved 12 February 2006 from: <http://people.bath.ac.uk/bssadmr/inclusionality/HisDarkMaterials.htm>.

Renzulli, J. and Ries, S.M. (1997) *The Schoolwide Enrichment Model: A How-To Guide for Educational Excellence*. Connecticut; Creative Learning Press, Inc.

Shekerjian, D. (1990) *Uncommon Genius: How Great Ideas are Born*. London; Penguin.

Wallace, B. (2008) The early seedbed of the growth of TASC: thinking actively in a social Context. *Gifted Education International* 24. (2/3) pp.139-156.

Wallace, B. and Adams, H.B. (1993) *TASC Thinking Actively in a Social Context*. Bicester; AB Academic Publishers.

White, J. (2006) *Intelligence, Destiny and Education: The ideological roots of intelligence testing*. London; Routledge.

Whitehead, J. (1989). Creating a living educational theory from questions of the kind, 'how do I improve my practice?' *Cambridge Journal of Education*, 19(1), pp.41-52.

Whitehead, J. (2008a) how can we use TASC to develop out talents in the gifts we create? how can TASC help us as we account for our lives in our living educational theories? *Gifted Education International* 24(2/3); 179-189

Whitehead, J. (2008b) Using a living theory methodology in improving practice and generating educational knowledge in living theories. *Educational Journal of Living Theories*, 1(1) 103-126. Retrieved 11 March 2009 from <http://ejolts.net/node/80>

Whitehead, J. (2009) Generating living theory and understanding in action research studies. *Action Research*, 7(1); 85-99.