

Imaginative Curriculum Story: *An Experiment in Collaborative Learning* Norman Jackson, Malcolm Shaw and James Wisdom

Contexts

What we will describe is a knowledge production process involving HE teachers, people who have a role in staff, educational or curriculum development, educational researchers, people with responsibility for developing teaching and learning strategies and policies, and people involved in quality assurance. A diverse and rich community that is connected by the theme we have chosen to work with – *developing knowledge about the curriculum in contemporary higher education to help people and institutions that want to examine, reflect up on and develop their thinking and practice.*

We chose to work with the idea of imagination because we want to expand horizons and celebrate creativity: the two are intimately connected. *'Creativity involves first imagining something (to cause to come into existence) and then doing something with this imagination (producing something that is new and useful)'* Jackson (2002). We imagined two different things. Firstly, that with the help of colleagues in higher education, we could develop knowledge about the curriculum that would be useful to a variety of end users. Secondly, that we could develop this knowledge primarily through a network of interested practitioners and that the network would facilitate the evaluation and validation of this knowledge and its diffusion and use within HE communities.

Our project has been trying to turn the imaginations of the participants into something tangible. In working this way we are engaging with the idea that knowledge about teaching (in our case the curriculum) is transdisciplinary knowledge in the sense of Gibbons et al (1994). This type of knowledge is different to the disciplinary knowledge that academic communities are primarily concerned with. Gibbons et al (1994) used the term Mode 1 to represent the scientific disciplinary-based form of knowledge production. The content of subject-based HE curricula is fundamentally concerned with this type of knowledge and assessment processes test (amongst other things) its acquisition and use.

Our project on the curriculum is not concerned with this type of knowledge *per se*, rather it is concerned with knowledge about the designs for learning and the teaching activities and processes that facilitate students' learning. While this knowledge is grown through day to day application in different disciplinary contexts it is fundamentally transdisciplinary in nature (the Mode 2 knowledge production process of Gibbons et al, 1994). Such knowledge has to be useful to teachers and fulfill particular purposes and this imperative is central to our enterprise. This type of knowledge is contested, it is therefore produced through a process of continuous negotiation and it is produced through the experience of working with a continuous succession of transient and emergent situations and 'problems'. Mode 2 knowledge production does not rely on the existence of codified knowledge to solve current and emergent problems that are heavily contextualized. Rather, it seeks to harness the *know how* embodied in the current practices of working communities. Transdisciplinary knowledge is the main knowledge used in the world of work. It is this knowledge (rather than disciplinary knowledge) that most of our students will work with for most of their lives. Curricula that are designed to help students work with transdisciplinary knowledge pay particular attention to the processes of learning and the building of personal knowledge about how to learn in different contexts. Collaborative (team) working, network-based learning, open-ended enquiry and sustained problem working, personal development planning and managing own learning, are all manifestations of this concern for process and knowledge of learning. This is the natural territory for our generic project and our emergent learning has caused us to focus on the principles of design that underlie process-based curricula.

Working with transdisciplinary knowledge is more complex than working with disciplinary knowledge in cultures that have a well developed understanding of how the knowledge should be used and a shared conceptual vocabulary. We acknowledge that we have much to learn about working with this type of knowledge. At this stage of our work we are trying to address this issue by providing different types of knowledge (content), levels of knowledge (detail) in different styles (texts/graphics) so that it

might appeal and be useful to different sorts of users. We are also trying to capture, through examples and discussion, the transdisciplinary experience. Experience is personal, it is contextualised and it is evanescent when expressed. And when listeners or readers share it, they often value the trivial as much as what the giver thinks is central. This is why we are concerned to support networking and collaborative learning through email and face to face discussion. In some aspects of our work we have experimented with sponsoring practitioner visits to other institutions because this is a way of enabling practitioners to capture those aspects of experience that cannot be easily written down.

Beliefs and values

We rarely declare our beliefs but they are central to what we think and do. The Imaginative Curriculum project is working with a number of beliefs. Our research (Appendix) tells us that HE teachers primarily learn about the curriculum by designing and delivering courses. This creates a vast and rich source of experiential learning about the contemporary curriculum. Our aim is to liberate some of this knowledge and make it accessible to anyone who would find it useful. By surfacing such tacit knowledge we will be helping to develop a collective memory for our higher education system.

The many changes to education are putting a premium on knowledge and skills for teaching and the reproduction of traditional behaviours will no longer suffice. Our belief is that with the right balance of encouragement and the right contexts for learning we will eventually learn to use this new knowledge wisely. We have to believe that such knowledge will help us work better and it will lead to greater personal satisfaction.

Our sense of direction is fueled by another set of beliefs that relate to the idea of creativity. For example:

- ❑ that teaching is an inherently creative process;
- ❑ that creating opportunities for students to recognise and develop their interests in creativity and abilities to use it is a good thing;
- ❑ that creativity is an essential capacity for working with complex and unpredictable learning situations such as those we encounter everyday in our working and personal lives;
- ❑ and that any programme or course can be developed to make it more favourable to nurturing creativity.

The story so far

A story can be told in a variety of ways. We have told you something about the evolution of our conceptual understanding. The chronological story is set out below.

1 Autumn 2001 Conceptualising the process and the potential outcome, and building the network.

2 Market research to find out how teachers develop their knowledge about teaching, how they perceive the curriculum, and assuming that we could persuade them to use it – the information they would find useful on a web site.

3 January 2002 Project launched at a meeting at Universities UK – network involvement in reshaping the work plan. (Reports of meetings on the project web pages).

4 January-July 2002 Network contributions to the development of knowledge about curriculum models, principles for design, contemporary pressures for change, creativity in designing a curriculum and creativity in students' learning. Also development of a strand concerned with helping Tutors involved with HE Teaching and Learning Courses (in response to a need identified at the Network meeting in January).

5 July-December 2002 – Participation of members of the network in producing content for the web site around a series of topics identified as being relevant. In parallel, the development of the IC web site via the creation of principles for web site design, production of a web site map and core web pages and some example guides and other types of information. These were evaluated by the network. Development of illustrative examples to show how we might connect this information to information about the curriculum hosted by LTSN subject centres. Support for institutional exchange visits for Tutors involved with PG Cert HE Teaching and Learning Courses. Also the initiation of work on how institutions engage in strategic curriculum change.

6 November 2002 *Imaginative Curriculum conference on Constructive Alignment in Action* – the main diffusion event for the project and an opportunity to grow the network.

During 2003 we will continue to develop contextual knowledge and guides that focus on process-based curricula and continue to support network-based discussion and learning.

A creative process

While we planned and worked with a strategy the project has been one of emergent learning.

Conception and visioning – The project set out to celebrate and value the fact that designing and implementing a curriculum is an inherently creative process and to explore manifestations of this creativity. Emerging from this initial conception (and to some extent being driven by the interests of some participants) was the desire to examine the extent to which creativity in student learning is valued and how well contemporary curricula promote the development of creative capacities in students. The project was conceived as a year-long process to create the network infrastructure and sense of community that would enable us to learn and produce new and useful information resources. The scope of the project is enormous and the project team considered that the most important goal for the project would be to demonstrate the learning power of a network such as this and try to promote the conditions that would sustain the network as a community of practitioners.

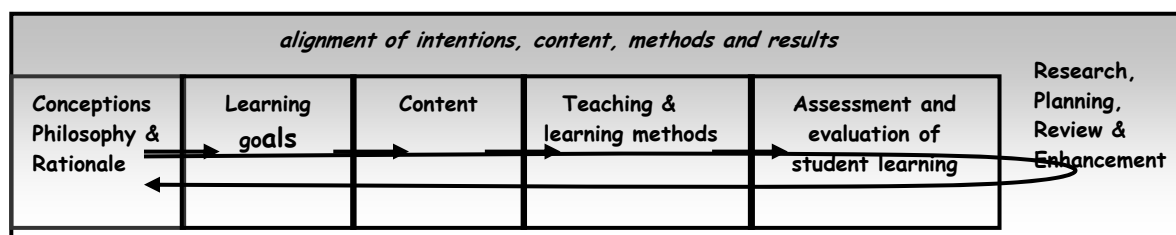
The process began with the production of a series of concept maps to show what systematic information about the curriculum might look like and the architecture of the web site that might host such information. An experienced associate (MS) was appointed to help facilitate networked learning and a small independent advisory team was established to serve both accountability and development functions. A network of over 50 interested people (educational and curriculum developers, educational researchers and people involved in promoting skills development) was created (the network has grown to over 80 people).

Knowledge development – began in the visioning stage with the construction of concept maps. One of the goals of the project was to develop useful knowledge about the curriculum and make it accessible to HE communities through the Generic Centre's web site. The first step in the knowledge development process was the creation of a concept map by the project team for the information to be held on the web site (Shaw and Jackson, 2002 and Figure 1). This map was used to test the initial ideas and assumptions of the project team with participants in the project. A rational and inclusive view of the curriculum and an extension of the constructively aligned model promoted by John Biggs (1999) was thought to provide the best framework for organizing and systematizing information – on the understanding that this would not preclude other models of the curriculum. The original organizing framework had seven elements: conceptions, philosophy and rationale; learning goals; content; teaching and learning methods; assessment methods; research and development; and quality assurance and regulation. Relevant topics were identified in each area and these provided the focal point for knowledge development.

This provider-led approach was complemented by discussions with the network on the utility of the model and a number of research studies (Oliver and Plewes 2002, Oliver, 2002, McGoldrick 2002, Wan 2002, Anderson 2002 – appendix) to gain the perspectives of potential users. Each researcher interviewed ten members of their institutional community – a mixture of experienced course leaders/tutors, less experienced module or unit tutors, academics new to teaching and someone who

supported curriculum development. Our research told us that academics work with multiple conceptions of the curriculum and this probably reflects their perceptions of their role as a teacher and the particular contexts in which they work. For this reason the curriculum is an inherently complex concept, with many variables and contextual factors influencing it. Curriculum development and change is dynamic and inevitably problematic with modifications in one area of the curriculum often having significant consequences for other areas. Curriculum development takes place in response to the increasing demands/wishes of many and varied stakeholders and the 'trick' for curriculum developers is to create a balanced and informed response which does not compromise their own beliefs and values. We have come to view the development of a curriculum as an informed, mainly rational, iterative but progressive decision making process involving working with the many variables in each of the areas portrayed in the figures. It is a juggling act – all the variables are connected and decisions made in one area influence decisions in other areas. We believed that this model of a curriculum can be applied at the level of the whole curriculum (course or programme) or the individual curriculum building blocks (units or modules).

Figure 1 Initial conceptualisation of the infrastructure for developing and organising information about the curriculum.



The network discussion and our research studies confirmed that the dimensions of the working model were those that influence the contemporary curriculum, but the way these were approached was highly variable and no assumption should be made about the way academics engage with the design process. Our commissioned research studies also reinforced the view that academic teachers work implicitly or explicitly with these variables. But the network discussion revealed a concern that we should not represent the curriculum as a linear process. This prompted an examination of the importance of visualisation and graphical representations in curriculum design processes and the development of alternative representations e.g a representation that attempted to visually connect the many variables (Figure 2) a simpler representation in which interconnectivity is pervasive (Figure 3).

Figure 2 Representation showing how the variables in the curriculum are connected.

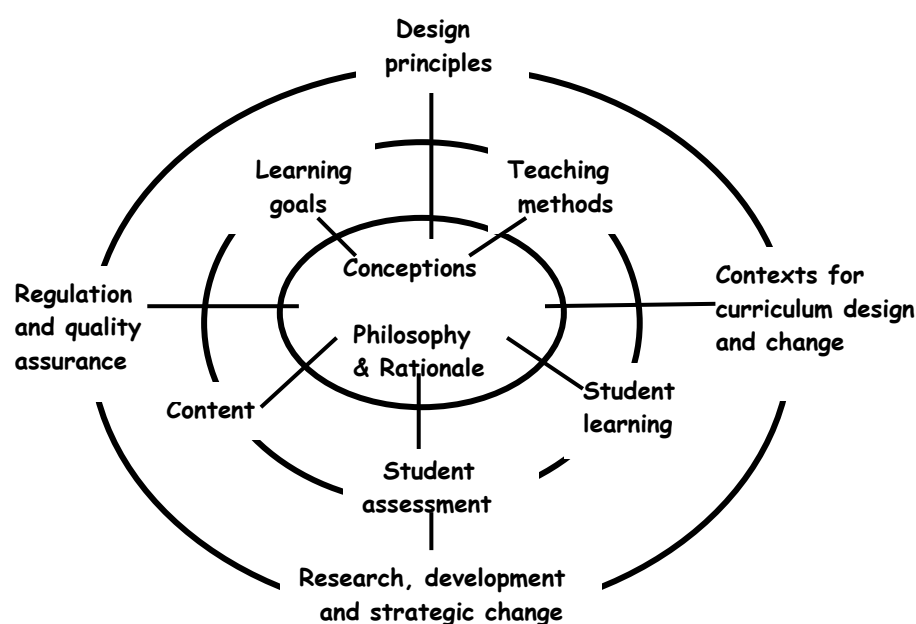
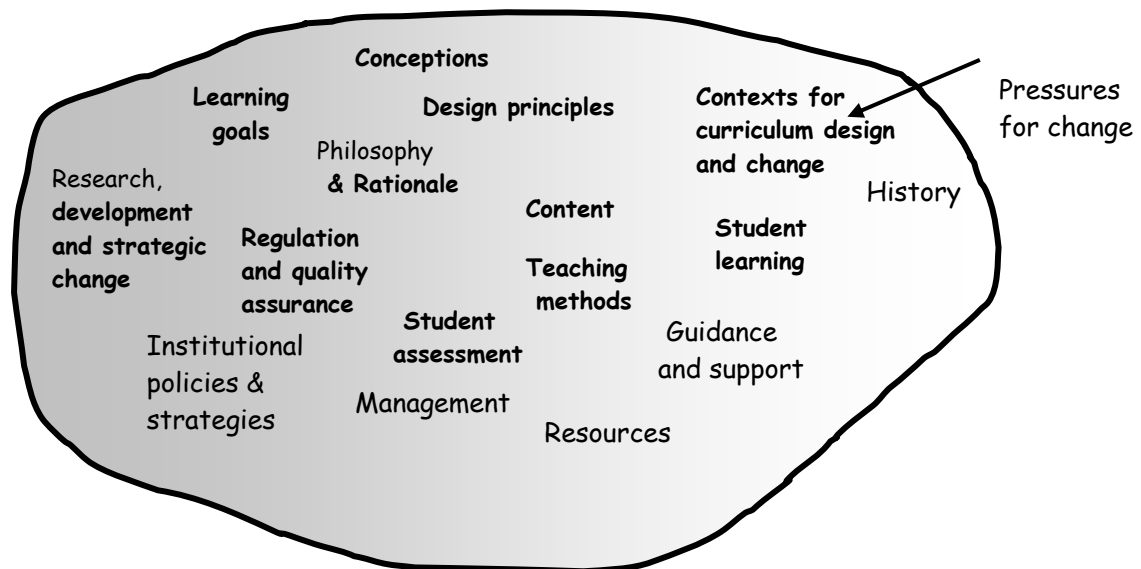


Figure 3 A representation of the curriculum as a whole entity in which variables are interconnected in complex ways. HE teachers will place more or less emphasis on each of these variables according to their work contexts, beliefs, perceptions and circumstances, and institutional and external expectations and requirements. This map of curriculum variables is informed by the influencing factors mentioned in the research studies.



Our commissioned research also highlighted the absence of a culture of searching out web-based information to inform curriculum design or any other aspect of teaching for that matter. The absence of this culture is a major challenge for the whole LTSN enterprise, but we can't begin to develop this culture without developing information and creating social learning processes (like the network). We believed that the only way to understand how to do this was to work with the problem.

People who were interested in joining the network were invited to a meeting to consider and discuss the initial thinking set out in a start-up paper (Shaw and Jackson, 2002). Discussions focused on testing the concept, raising issues, identifying the interests of participants and how they would like to contribute, and trying to create a sense of community. Notes of the meeting were published on the project web pages and the work plan was reshaped to take account of the feedback received. A number of useful ideas and themes emerged from the meeting including the need to connect information resources to institutional policies and guidance to staff and to embed usage in formal processes for learning like courses for new HE teachers. It was also felt that we needed to support those involved in the initial preparation of HE teachers. This resulted in the creation of a strand within the project and the recruitment to the network of over 20 tutors with responsibility for Post- Graduate Certificate HE Teaching and Learning courses. An experienced associate (JW) was recruited to facilitate this work.

Web site development began with the project web pages. These hosted development papers and showed users how the information had been grown and who had created it. We wanted users to understand the context and to see the results of collaborative working and learning. The second stage of the development of the web site was to create a framework for the more systematic archiving and retrieval of information (Figure 2). A set of principles for web site design were evolved and tested through the network. These made provision for the following types of information: 1) *stimulators* – concise guides for busy academics; 2) *Guides to Curriculum Design* – which contained more detailed information and included theory and 3) *Examples of practice* within a template format 4) *Resource maps* – highlighting other sources of information. Provision was also made for users to contribute

their own examples of practice. At the time of writing, a test site is being piloted with example pages and downloadable guides and this will be evaluated by the network in autumn 2002.

Knowledge diffusion – The creative process was primarily focused on the development of knowledge but this is of limited value if it is not going to be used. The presentation of the information (described above) is an important dimension of usage. Diffusion covers the dissemination and facilitation of use of information resources. The network itself, which contained representatives from over 40% of UK HEIs, is an important element of the diffusion strategy. The individual influences of network members within HE institutions and their personal networks is key to building a critical mass of awareness and understanding and it was hoped that participants would develop a sense of ownership for the information resources that were developed. The forward plan is to develop some case studies with network participants to show how HE institutions can make use of this type of information and include these in a briefing paper for HEIs. Our guides and contextual papers will be promoted through a national conference and we are trying to work with tutors for courses for academic staff who are new to teaching. Locating the use of our information in a learning process for teachers is essential if this information is to be seen as an aid to a professional approach to curriculum design.

Aspirations

Our working problem is far more complex *than 'how do we create a web site with some useful materials for practitioners? It is much more about 'how do we support collaborative learning and encourage improvement across higher education within the limited resources we have available and in a way that is motivating and self-sustaining?'* In higher education it has always been difficult to identify the most effective relationship between information about practice and the people who might want to use it in their work. In pedagogic terms, large web sites written by experts can feel like long lectures presenting overwhelming amounts of information. Only good opportunities for processing and using the information will lead to the intention to develop deep approaches to professional learning. Staff who are involved in changing their professional practice usually need more than just information to succeed, so we are trying to incorporate interaction, processing, personal stories and opportunities for discussion and networking.

Our research for the project tells us that academic teachers learn about teaching and designing courses primarily through doing it and talking to colleagues rather than through reading about it or engaging in formal staff development. Not surprisingly, seeking information about teaching through web sites does not feature very highly in their list of things to do. This poses a major challenge for the project and somehow we need to help those in institutions that are trying to help their academic colleagues develop their knowledge and skills for teaching. What we are trying to do is support the institutional work processes in which curricula are reviewed, designed and developed and the social processes for professional learning by providing rich sources of information for the people who support and lead and facilitate these processes. Ultimately, it is these users that will judge the value of what we have done.

Acknowledgements

We would like to sincerely thank all the members of the Imaginative Curriculum Network for their support and contributions to the project. The names of colleagues who have contributed to the web site can be found at <http://www.ltsn.ac.uk/genericcentre/index.asp?docid=17281>

References

- Biggs, J. (1999) *Teaching for Quality Learning at University*, Society for Research into Higher Education and Open University Press. New edition 2003.
- Gibbons, M. Limoges, C. Nowotny, H. Schwartzman, S. Scott, P and Trow. M (1994), *The New Production of Knowledge: the dynamics of science and research in contemporary societies*. (1999 edition) Sage.
- Jackson N J (2002) *Designing for Creativity*. <http://www.ltsn.ac.uk/genericcentre/index.asp?id=16893>

Shaw M and Jackson N J (2002) Imaginative Curriculum Project: Initial Proposals.
<http://www.ltsn.ac.uk/genericcentre/index.asp?id=16893>



LTSN Generic Centre Imaginative Curriculum Web Pages
<http://www.ltsn.ac.uk/genericcentre/index.asp?id=16893>

Appendix 1 Imaginative Curriculum Network Achievements January-November 2002

Imaginative Curriculum Project Overview and Progress Reports

- ❑ Project overview – Norman Jackson - January 2002 (rtf)
- ❑ Initial proposals - Malcolm Shaw and Norman Jackson – January 2000 (rtf)
- ❑ Notes of first network meeting Norman Jackson -- March 2002 (rtf)
- ❑ Notes of a Meeting with Directors of Post Graduate Certificate Courses in Teaching and Learning in Higher Education – Norman Jackson and James Wisdom May 2002 (rtf)
- ❑ Project progress report – Norman Jackson - June 2002 (rtf)
- ❑ Briefing Note for LTSN Subject Centres – Norman Jackson August 2002)

Imaginative Curriculum Papers and Guides

- ❑ Pressures for Curriculum Change *Norman Jackson*
- ❑ Conceptions and Visual Representations of the Curriculum *Norman Jackson & Malcolm Shaw*
- ❑ Illustrative examples of conceptions of the curriculum
 - ❑ John Biggs (Aus),
 - ❑ Peter Knight,
 - ❑ John Stephenson,
 - ❑ Maggi Savin-Baden,
 - ❑ Alan Jenkins,
 - ❑ Paul Tosey,
 - ❑ Liz Dunne,
 - ❑ Tim Riorden (USA),
 - ❑ Bob Farmer.
 - ❑ Jenny Moon
- ❑ Complexity Theory and Curriculum Design *Paul Tosey and Norman Jackson*
- ❑ The Idea of a Creative Curriculum *Peter Knight*

Guides to Curriculum Design

The network is trying to develop and capture knowledge about curriculum design in a series of Guides primarily intended for people within institutions that have a role in supporting curriculum development. For each theme we are also producing a simpler Guide for Busy Academics which contain the basic ideas. The longer term aim is to adapt the information and illustrate through examples of practice for discipline specific audiences.

- ❑ Guide to Curriculum Design : Principles of Good Design *Paul Kleiman* (August 02)
- ❑ Guide to Curriculum Design : Personal Development Planning *Norman Jackson* (August 02)
- ❑ Guide to Curriculum Design : Working with External Pressures *Malcolm Shaw* (August 02)
- ❑ Designing for Creativity : *Norman Jackson* (September 2002)
- ❑ Aligning teaching and assessment to curriculum objectives *John Biggs* (September 02)

Research Studies

- ❑ How teachers develop their teaching
Richard Dunne, Educational Consultant and Elizabeth Dunne. University of Exeter
- ❑ Academics' curriculum development practices at UCL: a preliminary study for the Imaginative Curriculum project
Martin Oliver & Louise Plewes, University College London
- ❑ Market Research for the LTSN Imaginative Curriculum Project
Stephen Wan, Sheffield Hallam University

- ❑ Market Research for the Imaginative Curriculum Project
Viv Anderson Leeds Metropolitan University
- ❑ Imaginative Curriculum Web Site – Network Views
Malcolm Shaw, Leeds Metropolitan University
- ❑ Creativity and Curriculum Design: what academics think
Chris McGoldrick, Liverpool John Moores University
- ❑ What conditions and environment could support teachers in finding space for ‘creativity’ in their work with curriculum?
Jo Tait, Open University
- ❑ Creativity and the curriculum design process: a case study
Martin Oliver, University College London
- ❑ Perceptions of the HE curriculum: Summary of Imaginative Curriculum Research
Norman Jackson, Malcolm Shaw and James Wisdom

Constructive Alignment in Action Symposium Papers

- ❑ Imaginative Curriculum Story:
An Imaginative Experiment in Collaborative Learning
Norman Jackson, Malcolm Shaw and James Wisdom
- ❑ Aligning the curriculum to promote good learning
John Biggs
- ❑ QAA policies: a champion for constructive alignment.
Norman Jackson
- ❑ Promoting alignment through programme specifications and subject benchmarks
Warren Houghton
- ❑ Curriculum alignment in contemporary UK higher education: a research perspective
Dai Hounsell
- ❑ Constructive alignment in the world of institutional management
Rob Cuthbert

Publications

Jackson N J (ed) 2002 QAA Subject Benchmarking. Special Issue of Quality Assurance in Education. v10 (3). *The Generic Centre has sponsored a number of practitioners to apply their subject benchmarking statements in order to learn about the process and the implications for curriculum design and assessment.*

Financial support for republication

Dewulf S and Baillie C (2002) CASE Creativity in Art Science and Engineering.: How to Foster Creativity. Department for Education and Employment. (Caroline Baillie is Assistant Director of LTSN UK Materials Education Subject Centre).