

Curriculum and Assessment for the Knowledge Society: Interrogating experiences of re-form/new-form in Queensland and Ireland

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Introduction

The concept of the knowledge society is one of the most pervasive concepts in the rhetoric of educational reform. The knowledge society is neither a stable nor a well-defined concept. Its boundaries are fluid, but its power is undeniable and ubiquitous. As such it is functioning as discourse within educational reform, and as public discourse within the policy making and framing public.

As a consequence, multiple voices from a range of sources claim that what is now paramount for students is the need to become better learners and generators of knowledge (Hargreaves, 2003; Deakin-Crick, Broadfoot & Claxton, 2004). Thus, for example, in a recent paper for the Lisbon Council, Andreas Schleicher of the OECD announced that the challenge for Europe is clear:

“.....the most effective modern economies will be those that produce the most information and knowledge – and make that information and knowledge easily accessible to the greatest number of individuals and enterprises“(Schleicher, 2006:4).

The sources and nature of this apparent cacophony of consensus themselves merit both investigation and contestation, but the focus of this paper is on two responses of two education systems, both responses framed, and fuelled, by knowledge society discourse. The emergence of the knowledge worker as the powerhouse of successful economies has generated new demands on education systems and on schooling, in particular, as education becomes what Castells called “the key quality of labour“(1998:345) in the knowledge

society. Successful knowledge workers are not characterised by being knowledgeable as traditionally understood, but by their ability to learn and re-learn and by their engagement with what Florida calls the new “creative ethos“(2002:21).

Hargreaves (2002) has analysed the implications of the knowledge society for schools, for teachers and for learners. While not the primary focus of this paper, his dystopian vision of the standardized marketized school system fuelling the engines of economic growth is not unfamiliar to anyone working in educational reform in the 21st century. Of greater interest for this paper is his vision of a school system for the knowledge society focused on learning – teacher learning as well as student learning:

“Teachers who are catalysts of the knowledge society must therefore try to make their schools into learning organizations where capacities to learn, and structures to support learning and respond constructively to change are widespread among adults as well as among children“(Hargreaves, 2003:20).

Increasingly governments and employers are seeking graduates, citizens and employees with thinking skills, the ability to problem solve and to be creative in the transformation of information and ideas. At the same time educationalists are aware of the need for teachers and their students to understand the nature of learning and the need to teach learning skills (Black and Broadfoot, 2004; Hargreaves, 2002).

As Claxton (2005) has indicated, learning is learnable and is very much more complex than schooling has assumed. He predicts that this realisation will help to direct curriculum development and education research in the future. He cautions that ‘raising standards’ as evidenced through exam results is a limited view of how we should be preparing students for a lifetime of change in the 21st century. He suggests there is a need to:

- Disseminate good practice in the sense of developing learning-to-learn;

- Review the curriculum to analyse the extent to which the different stages offer a coherent programme for the development of ‘learning power’;
- “Coach beginning teachers in how to vocalise the processes of learning, to ‘learn aloud’, and to model effective learning” at initial teacher education level and to use this perspective to inform national teacher training agencies and teaching councils;
- Encourage parents to collaborate with schools in developing their children’s ‘learning power’;
- “Develop new assessment instruments that enable students, their teachers and parents to keep track of their developing learning power so that they can feel a growing sense of achievement, not just in passing tests, but in becoming steadily more resilient, resourceful and reflective in the face of real difficulties”. (Claxton, 2005: 4).

It is Claxton’s latter recommendation that is useful in explaining the relevance of developments in the Australian state of Queensland. It is his second recommendation – that associated with curriculum –which is more useful in understanding developments in the Republic of Ireland. Taken together, this paper proposes, these two cases provide some indicators of a re-framing of traditional curriculum discourse and an emergence of re-form/new-form curriculum that both transcends the ubiquitous tail-wagging-dog relationship between assessment and curriculum, and the hegemony of the technical in some recent curriculum debates (Donnelly, 2004). We propose re-form/new-form as a means of signalling both the break with traditional curriculum reform discourse, and the emergence and increasing influence of the learning curriculum.

The Queensland Case - introduction

Recently, in Australia, there have been national demands for greater consistency in education in all states and territories. The Australian Government is exercising a leadership role in: identifying and promoting national standards for students; reporting nationally comparable data on student

achievements; and improving reporting and accountability on schooling outcomes to parents and the wider community. The government's interest is in working with Australian schools to ensure the country's international competitiveness. It is the Australian Government's focus on the use of standards for reporting and accountability purposes that has impacted on developments in Queensland.

In this state, where there has been a history of innovation in school based curriculum and assessment, an important advancement that addresses the identified needs for the learner in the knowledge society has been the development of the 2005 Queensland Assessment Task (QAT). This common task comprised a computer-based task and a constructed response and was developed to assess the student's achievements in transforming ideas and/or information. The trial of the 2005 QAT with Year 9 students (aged 14 years) was evaluated for the purposes of informing the major policy change proposed in the form of the Queensland Curriculum, Assessment and Reporting (QCAR) framework.

Evaluative data was collected using the following sources and methods: analyses of documents and reports, classroom observations (2 schools), focus group interviews with students (30) from these two schools, survey data from 227 student respondents immediately after completing the QAT, questionnaires completed by 794 students from the 56 trial schools, telephone interviews with 28 principals/teachers from 27 of the 56 schools, focus group interviews with teacher-markers (12) and focus group interviews with the technical support team (12). When this data was analysed it was possible to describe how teachers perceived the impact of the 2005 QAT on their teaching and learning. They had been motivated to share their learning and insights with other school staff for the purposes of reforming current practices. To illustrate:

“Teachers may have heard about learning styles at school but when it ... comes to teaching so that we teach children to organise information and to think, teachers don't have those skills. ... For secondary

teachers to ... focus on ... thinking strategies and organising information is really confronting, as well, ... their own personal literacy. ... the QAT ... demonstrates that need, that pulling that together, the fact that it tested the transformation thinking really pulled that together. ... I feel more confident to lead that (connection of curriculum areas through generic skills)." (Teacher interview, 2005)

Queensland – the policy context

The Queensland Studies Authority (QSA) in collaboration with teacher and professional expertise is in the process of developing a new Curriculum and Assessment Reporting framework that will:

- include statements about the essential learnings that must be taught in Queensland schools;
- provide a common frame of reference and a shared language for communicating student achievement;
- equip teachers with high-quality assessment tools for collecting evidence of student achievement;
- promote teachers' professional learning, focused on good assessment practices and judgement of the quality of student achievement against statewide standards;
- introduce statewide assessment of student learning in Years 4, 6 and 9 and
- provide more meaningful reports of student achievement (Department of Education and the Arts, 2005c: 2).

The essential learnings are being identified from Queensland's eight Key Learning Area (KLA) syllabuses of The Arts, English, Health and Physical Education, Languages other than English, Mathematics, Science, Studies of Society and Environment, and Technology. In this sense it is not a new curriculum but a re-forming of curriculum.

Standards have been defined as ‘descriptors of student achievement used to monitor growth in student learning and provide information about the quality of student achievement’ (Department of Education and the Arts, 2005: 6) and are to be linked to the essential learnings. To enhance teachers’ understanding of these standards, descriptions with exemplars of student work for each standard will be provided. These standards will be developed from analyses of student work, curriculum materials and sequencing of knowledge, skills and attributes of the essential learnings. This is another element of the re-form/new form curriculum for the knowledge society.

An important implication for action from the evaluation of the 2005 QAT has been the need to identify the generic or learning skills **as well as** the domain-specific knowledge, skills, understandings and dispositions at key junctures. These skills need to be incorporated into the common assessments so that students and teachers recognise their value and come to understand their importance in learning.

It is intended that an assessment bank of high-quality assessment tools for collecting valid and reliable evidence of student achievement will be provided to support teachers’ classroom assessment practice (ibid: 7). In addition there will be support to promote assessment knowledge and skills, models of good assessment practice and resources to support consistency of teacher judgments about student achievement (ibid).

To date statewide assessment of curriculum does not take place at lower secondary level, however it will now take place at Years 4, 6 and 9. This evidence of student achievement will provide a focus on the continuity of learning in the middle years and will help to facilitate comparison with Years 3, 5 and 7 statewide tests of basic literacy and numeracy skills (ibid: 8).

The assessment tasks will involve ‘authentic and complex tasks that allow students to demonstrate their breadth and depth of understanding in the essential learnings’ (ibid:9). These tasks will be completed under common conditions, and to maximize consistency of teacher judgments the following

strategies will be implemented to ensure that reliable and valid evidence of student achievement is reported:

- administration and marking guides will accompany every assessment task;
- reporting guides and exemplars of student work will help to illustrate each standard;
- intra and inter-school comparisons of teachers' judgments of student achievement will be possible and
- processes for validating teacher judgments on statewide assessment will be developed.

The 2005 QAT was a pilot programme for the development of common assessment tasks and produced examples of these processes and products (Klenowski, 2006). The QAT was designed to capture rich information about student achievement in processing skills, drawing on the Key Learning Areas of Studies of Society and Environment and the Arts, and across other KLAs in various mediums using a variety of instruments, devices and strategies. It was pitched at Level 5 and administered to Year 9 students and was made up of two separate standardised tasks, although the intention had always been to have three as follows:

- computer-based task that requires students to respond to subtasks with a computerised interface;
- collection of constructed-response tasks in pen-and-paper format and
- performance-based task.

The latter was not administered in the trial because of a lack of funding and the changing policy context. The performance task is therefore not discussed in this paper.

The processing construct of transformation of information and ideas and the underlying generic skills and dispositions were particularly suited to the use of technology and formed the basis for assessment. This common assessment task aimed to incorporate more than just a pen-and-paper test and did not take the form of a traditional exam of these disciplines.

The guiding construct for the item writing for the 2005 QAT:

“was not factual and conceptual, but focused on kids’ capacity to process. There was a need identified to move towards stronger links with the purposes of education for the 21st century and repertoires of practice while drawing from the disciplines and constructing assessment tasks in a transdisciplinary way”. (QAT developer, 2005)

What is important to emphasise is that a more generic assessment, achieved by focusing on the construct of processing, provided the solution to the existing curriculum context in Queensland schools. Teachers use a wide-range of curriculum materials and approaches that provide students with a range of learning experiences. However, if the developers were to assess curriculum content in a standardised way they could not assume that students had learnt the same content in SOSE and the Arts throughout the state. A generic assessment approach as opposed to a curriculum content approach was therefore chosen for the development of the assessment tasks (Klenowski, 2006).

Re-form/ New-form Curriculum Queensland: Focus on Assessment of Generic Skills

What is new and significant in this re-form/ new-form curriculum is the possibility of reporting processing skills of transforming information and ideas. Table 1 summarises the categorisation of the types of transformation that were assessed.

Table 1 Types of Transformation (Education Queensland, 2004)

Type 1 <i>Genre</i> changes, but not the <i>medium</i> . The natures of <i>information and ideas</i> remain highly similar.			
	Information and ideas	Medium	Genre
Subject of the transformation	Scientific report on connections between a prescription drug and potential side effects	Written text	Scientific report
Product of the transformation	Leaflet to accompany the drug warning of possible side effects	Written text	Informational leaflet
Type 2 <i>Medium</i> changes, and hence <i>genre</i> . The natures of <i>information and ideas</i> remain highly similar.			

	Information and ideas	Medium	Genre
Subject of the transformation	Data and analysis section of a scientific report on connections between a prescription drug and potential side effects	Written text	Graphical and tabular data analysis
Product of the transformation	Series of posters for campaign informing the public of possible side effects of the drug	Visual art	Poster
Type 3 There is a substantial shift in the nature of <i>information and ideas</i> (the nature of the shift might be thought up by the students themselves). <i>Medium</i> changes, and hence genre will need to change.			
	Information and ideas	Medium	Genre
Subject of the transformation	Scientific report on connections between a prescription drug and potential side effects	Written text	Scientific report
Product of the transformation	Dramatic exploration of the impact of exaggerated reactions to drugs on patients and their lives.	Drama	Comic play
Type 4 There is still a substantial shift in the nature of <i>information and ideas</i> . (The transformation is not Type 3, though, because the <i>Medium</i> remains the same.)			
	Information and ideas	Medium	Genre
Subject of the transformation	Scientific report on connections between a prescription drug and potential side effects	Written text	Scientific report
Product of the transformation	Personification of drugs which allows them to pursue their own agendas (via the side effects)	Written text	Drama script

The identified underlying skills involved in the processes of transformation included the following: translating, presenting, designing, imagining, writing, tabulating, devising, ICT skills, synthesizing, performing, mapping, interpreting, evaluating, modifying, deciding, contrasting, analyzing, summarizing, graphing, exemplifying and sketching. The identified dispositions included: a comfort with using technology, sensitivity, logic, self-expression, inclination to experiment and a striving for accuracy.

The assessment of generic skills applied in Year 9 proved possible and was reported relative to an A-standard performance. The A grade was described in terms of desirable features of the responses in the task. So in addition to exhibition of knowledge:

“A-grade students:

Extract information from prose, diagrams, maps and symbolic text; clarify it and transform it to display meaning in multiple media. Discern patterns and relationships in verbal, pictorial and symbolic text (alone and in combination); make significant decisions and judgements, operationalise these into accurate representation and products.” (EQ, 2005)

These processing skills relate to learning-to-learn or in Claxton’s terms ‘learning power’ (Ibid). In a teacher’s own words;

“... the QAT ... gives us ... items that gave the children the opportunity to demonstrate their skills, their confidences and the interconnectedness of information. I think that the criteria for those tasks are going to be really useful and I think that if the common assessment task can have that as a starting point I think we are ... headed in the right direction.” (Teacher interview, 2005)

Many teachers emphasised the importance of generic skills involved in transforming ideas and information and the impact of the QAT in raising teacher awareness of how these skills need to be addressed.

“... need for kids to be taught and guided in (skills) like analysis ... synthesis ... evaluation and critique. If there is a focus on the knowledge base only, without putting the knowledge to use in some context, they may not be teaching the processing.” (Teacher interview, 2005)

In a similar vein another teacher commented:

“... this (2005 QAT) has been a real eye-opener, that we are purely looking at ideas and thought patterns and understanding. We are looking at abilities and literacies and abilities to use information and make a response ...” (Teacher interview, 2005)

The Ireland Case – introduction

The Ireland case draws on reform proposals for upper secondary education (called senior cycle in Ireland) prepared for the Department of Education and Science by the National Council for Curriculum and Assessment (NCCA), specifically on the proposals for key skills in the curriculum. The rationale for the key skills draws heavily on the knowledge society discourse flagged earlier in the paper, specifically on the need for schools to produce successful learners with a range of flexible skills applicable in a range of settings. The term ‘key’ is used by the National Council for Curriculum and Assessment, the developers of the new key skills framework, was chosen rather than ‘generic’ or ‘core’ to flag that these skills ‘unlock’ success in learning, communication, social interaction and collaborative working. Of note is that earlier documentation used a range of terms including ‘basic’, ‘generic’ and ‘transferable’ (NCCA, 2002, p. 50). The list of skills has also evolved. Earlier consultation material offered the following two-tiered list:

- General skills
 - Communication
 - Numeracy
- Technical skills
 - Information and Communications Technology
- Personal and social skills
 - Self-management
 - Thinking skills
 - Working with others
 - Physical skills
 - Work, learning and study skills. (Ibid, pp 50-51)

The rationale for key skills offered in the consultation paper was wide ranging, but made explicit connections to knowledge society and knowledge economy discourse:

“As many western economies move from a manufacturing to a high-skills focus, congruence emerges between the skills identified as contributing to the knowledge economy and those that would be

viewed as educationally appropriate at this level.“ (NCCA, 2002, p.51).

The consultation paper raised the issue of the assessment of key skills only in passing, noting that some countries assess key skills separately, while others “treat them as aspirational attainments“ (ibid, p.50).

Respondents to an online survey (discussed below) were asked to suggest how the learning environment at senior cycle might be changed in order to meet some of the challenges to be faced by students in the future. Three perspectives emerge from the responses. A high proportion of respondents agree that ‘learning for understanding’ should take precedence over ‘learning for examinations’ (94%) and that learners ‘should receive more feedback on their work’ (92%). There is also support for a greater emphasis to be placed on basic skills (91%). There is little support evident for greater academic focus in the senior cycle.

The second perspective suggests that the future learning environment should be more varied and more appropriate to the needs of learners. Respondents agree that ‘more project-based learning should be encouraged’ (82%) and that ‘learning should have a more practical focus’ (85%). Overwhelming support exists for the students’ involvement in ‘more creative activities and problem-solving’ (97%) and for the increased use of technology as a tool for learning (90%).

Learning should be more relevant to the young person and more experiential. (Parent)

The way forward for education is change and adaptation. The senior cycle must move away from a system where recall is dominant and must adapt to a system where critical thinking and understanding holds more precedence. (Teacher)

I strongly agree that individuals need to learn for understanding and not just for exams. I feel this is at the heart of the unsuccessfulness of the current system, and affects not only what and how pupils learn but also what and how teachers teach. (Student)

Learning should be about process. Learners should be able to have more control over the content of their learning. Learners should be able to develop all their intelligences, not just the linguistic and mathematical. (Other educational professional)

The third perspective reflects the view that the range of learning settings should be diversified to include the community and the workplace. A majority of respondents agree that there ought to be closer links between learning and work (85%), more community-based learning (77%), and greater opportunities to take out-of-school courses (77%).

Further analysis of the data presents interesting patterns in attitudes to project-based learning across the different groups. While there is strong support for project-based learning across all respondent groups, the support from parents, principals and teachers is noticeably weaker than student support. Increased project work is supported in the responses because it is perceived to encourage student participation, develop critical thinking and problem-solving skills, provide greater success for students with differing abilities, and support collaborative learning.

Students should be allowed to be more participative in their learning. Project work would encourage students to develop and learn more about things that they are interested in themselves and give them a chance to show what they can do when not under stressful examination situations. (Teacher)

Projects, portfolios [and] practical tests will help to improve and motivate a student who doesn't do well in written exams. (Student)

We need active project type learning where students have a period of time to complete tasks/projects and all the skills and qualities that the task/project seeks to develop can be assessed. (Teacher)

The contestation around project work and forms of assessment other than the terminal written test reflects the considerable regard for the status and exchange value of the upper secondary school leaving examination in Ireland.

Ireland – the policy context

To date, the upper secondary phase of post-primary education has been dominated by the end of school examination, the Leaving Certificate, described by the NCCA as a 'towering presence' on the educational landscape (NCCA, 2002, p.45) for students and teachers. This examination, taken in seven or eight subjects by upwards of 60,000 students over two weeks in June of each year, is generally focused on traditional style written papers with some practical work in art and technology subjects, and oral assessments in languages. Research projects and field studies have recently been introduced in the examinations for History and Geography respectively. All of this assessment is external, conducted by the State Examinations Commission. No teacher assessment is included.

The ban on the publication of examination results enshrined in the 1998 Education Act – a reaction to the league-table culture evolving in the U.K. at the time of the legislation – might lead to the mistaken conclusion that the Leaving Certificate examination is a low stakes test. School or teacher accountability is not at stake, but entrance to the university course of choice is. The Central Applications Office converts Leaving Certificate examination results to a 'points' score used for selection for third level education. What is known as the 'points race' has come to dominate senior cycle education. In a

much-discussed newspaper article in 2005, a student who scored the top score of 600 points explained how she achieved this score:

I asked Ruth if she believed the Leaving Cert was too exam-focused and if students were being short-changed when it came to true learning. "You can't get to grips with a huge subject like biology at school," Ruth says. "You can only select a few topics and learn them really well. If you want a deep knowledge of biology, that's what university is for. "

She continued by offering advice on how to get the best results:

"There's no point in knowing about stuff that's not going to come up in exams. I was always frustrated by teachers who would say 'You don't need to know this for the exams but I'll tell you anyway'. I wanted my A1 - what's the point in learning material that won't come up in the exams?" (Irish Times, 20.09.05)

The NCCA's review of senior cycle, including the Leaving Certificate examination, arose from a review of that 'points' system for university entry. Public submissions sought in the course of the review highlighted the negative impact of the Leaving Certificate examination. The report summarising the submissions refers to the emphasis generated by the Leaving Certificate examination on a narrow range of academic skills to the detriment of 'many other qualities which young people need for life and work' (Commission on the Points System, 1998, p.114). It was precisely to support greater connections between upper secondary education and those qualities that the NCCA initiated its review in 2002.

The data reported here is drawn from the online survey in response to the publication of the consultation document 'Developing Senior Cycle Education. Consultative Paper on Issues and Options'. The evaluation of the Queensland Assessment Task reports on responses to a proposed reform. The NCCA online survey reports responses to a proposed reform. In Queensland, the reform was well-developed in the task. In Ireland, the

reforms were still in development. The consultation process in Ireland had a number of strands. Reported here is the on-line component which generated 1,813 responses and, because the results of the survey were updated on a daily basis, ongoing media and public attention. The online format allowed for far more student engagement than heretofore as evidenced below

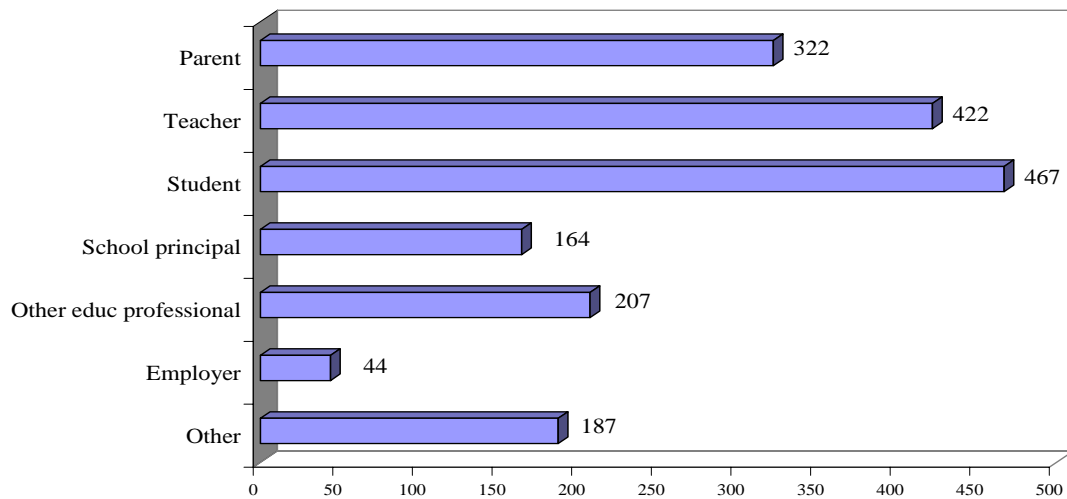


Figure 1. Responses to online survey by category.

The results of online survey showed a marked contrast between ‘official’ knowledge society discourse, and ‘public’ engagement with the issues. The questionnaire on which the survey was based asked respondents to respond to a list of challenges that might be faced by learners in their future lives. The following table shows what they considered to be most

significant:

Communicating with others	81%
Coping with stress and insecurity	67%
Making successful decisions and choices in life	66%
Appreciating different cultures	62%
Finding gainful work	61%
Maintaining family and community life	60%

Table 2. Responses to online survey of most significant challenges

I feel that, in the future, appreciation of different cultures needs to be developed. In Irish society today we have many other nationalities in our midst. Reaction to these has been negative. Tolerance needs to be developed in an attempt to create harmony. (Student)

Our attitudes toward other cultures and races is still an issue which needs to be addressed, we Irish have a habit of letting ourselves down when a coloured person enters the room. (Student)

The ability to cope with stress and the importance of personal fulfilment are also highlighted by students.

Coping with stress and study is very much a part of students' life, and could be approached using group discussions and helping to get a balance between academic and relaxation. (Student)

Happiness for the individual is a very important issue and if you can get that then you can build up the other aspects at that person's life. This needs to be dealt with in the school. (Student)

A number of respondents are unsure about the ability or suitability of schools to respond to the challenges to be faced by students in the future.

There can be little question that all of the above points are very desirable - the issue hinges in how they can be best encouraged and promoted through the curriculum. (Parent)

These may be challenges facing the students of the future, as many of them are and have been to present and past students. Is school the only place to learn coping skills? What part do families and society have to play? Are teachers academic tutors or social integrators? (Teacher)

I have indicated that the issues raised are of importance or very important for young persons in the future. However to what degree a school as an educational institution can provide the support and development of young people in this regard is questionable, both from a resource and a practical point of view. (Principal)

Reform/New-form Curriculum Ireland: Focus on the Senior Cycle Key Skills

In the final report on the full consultation process, of which the online survey was just one component, a second list of key skills is offered as those most frequently identified by participants in the consultation:

- learning to learn
- information processing
- communication
- personal effectiveness
- critical thinking
- working with others (NCCA, 2003, p. 20).

The swing away from the more instrumentalist first list provided in the consultation document is clear. Since the publication in 2003, the NCCA has been developing the key skills proposals and at present, the key skills framework is being presented in this wheel format:

Key skills

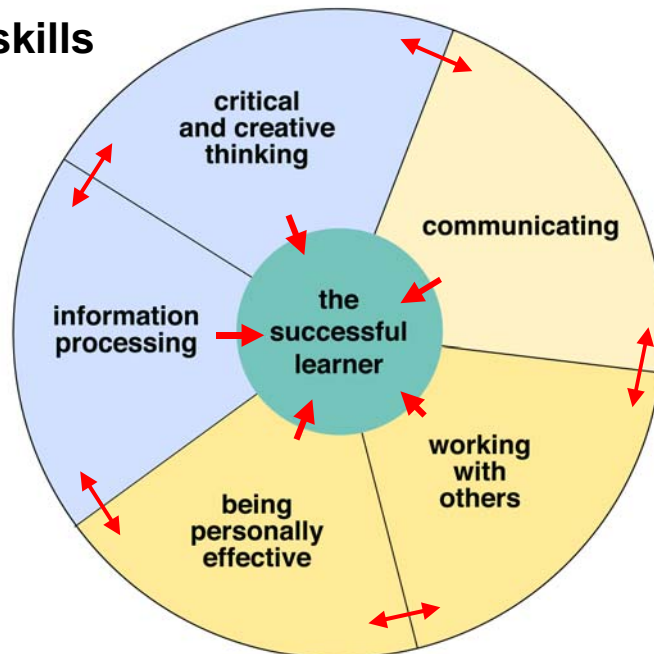


Figure 2. The Key Skills Framework, NCCA, 2006, p.4.

While the key skills curriculum is still a work-in-progress, the NCCA has prepared working descriptions of each of the skills it proposes as ‘key’ for successful learning.

Information processing, according to the NCCA helps students become more effective learners in an information-intensive environment. As well as developing the specific skills of accessing, selecting, evaluating and recording information, knowledge society learners will need to develop an appreciation of the differences between **information** and **knowledge**. In particular, they will need to learn that the mere availability of information and access to that does not generate knowledge, and that people need skills to create both personal and shared knowledge from information sources.

The acquisition of the skill of creative and critical thinking helps students to differentiate between different forms and patterns of thinking so that they can become more skilled in higher order reasoning and problem-solving.

According to the working paper, as well as becoming more adept with different forms of thinking, students will need to understand that thinking is shaped by cultural and historical values.

The key skill of communicating helps students recognise how central communication is for human relationships of all kinds and helps students to become better communicators in both formal and informal situations. As well as developing specific skills in a variety of media they will need to form a deeper understanding of the power of communication.

Working together is proposed as a key skill by the NCCA “to highlight the role that working with others has for learning and for reaching both collective and personal goals” (2006, p.5). The skill will help students to recognise that working collectively can be source of motivation, and can capitalise on all the talents in a group. The NCCA suggests that this key skill is also important for social cohesion and for engaging with diverse cultural, ethnic and religious groups.

The key skill of being personally effective is included because it helps young people to become more self-aware, and to build on that self-knowledge to develop personal goals and life plans. An important dimension of this key skill is to help young people recognise how to get things done, through garnering resources (people and technology), and to act autonomously out of a well-developed set of values.

The NCCA working paper on key skills suggests that “students’ growing knowledge about learning in general and their own learning in particular, contributes to their development as successful learners” (2006, p.5). The skills of successful learning (at the centre of the wheel) develops as students become more skilful in the other key skills as well as through their learning in the subject areas, what we might call in this paper, old-form curriculum.

“Becoming a successful student can be recognised through the development of their beliefs about learning, learning strategies, the

capacity to be reflective, to make connections across learning, and a willingness to engage in new learning situations. These features can be characterised as emergent in the sense that they evolve from students' engagement with learning across a range of domains as well as through supportive teaching and learning practices in classrooms" (NCCA, 2006, p.6).

Notably absent in current work, is discussion of how the key skills are to be assessed, and included in the certification at the end of schooling. Given the policy context as described, and the status of the Leaving Certificate examination, lack of engagement on re-form/new-form assessment is politically understandable, although, if not addressed in the next stage of the work, may quickly become educationally problematic. The work on grade criteria for the transformation skills in Queensland show the work still to be done in Ireland and to be continued in the context of policy change in Queensland and in Australia more generally.

Re-form/New Form Curriculum – mapping emerging contestation.

This paper focuses on the re-form/new-form curriculum in the knowledge society and the innovative developments in two cases.

The particular features of the cases are clear. First, developments in Queensland appear to be assessment led; those in Ireland are curriculum led, with assessment featuring by its absence in the reform proposals on key skills.

Second, in Ireland, there has been a greater emphasis on deliberation, consultation and consensus building resulting in the list of key skills being re-worked in the process; in Queensland the focus on processing skills for the QAT emerged from the existing curriculum context. That is, there is a wide variety of curriculum materials and approaches used by Queensland teachers to provide students with a range of learning experiences. A generic approach, as opposed to a curriculum content approach to assessment, emerged as the

solution for dealing with this diversity. The trial of the QAT was designed to investigate if processing skills could be assessed by a common assessment task and in this sense determine if there existed consensus among teachers across the state in terms of their acceptance of this re-reform/ new form of curriculum.

Third the differences in cultural and policy contexts have impacted on the implementation strategies and approaches adopted. In Ireland consistency and stability in terms of policy leadership and direction at the national level have enabled a more consultative approach to curriculum development. In Queensland contestations in terms of curriculum design and development, from the national through to the local professional levels, have resulted in a rapidly changing policy environment that has impacted on policy leadership and direction. What is clear from the evaluation is the need for consensus across professional boundaries and all policy-making groups for the implementation of re-form/ new form curriculum.

Conclusion

What is striking about both cases, it seems to us, is both the shaping influence of knowledge society discourse in curriculum and assessment debates and reform trajectories in two different systems, on two continents. Queensland's generic skills and Ireland's key skills are both presented as the curriculum for successful learning. The articulation of the 'construct of processing' in Queensland, and of 'becoming a successful learner' in Ireland, appear to us to signal an emerging re-form/new-form of curriculum in which traditional categories such as *content, skills and objectives* no longer serve the normative functions ascribed to them in curriculum reform to date.

Students too have been responsive, in both Ireland and Queensland, in supporting such changes to curriculum that provide challenge and make greater use of technology as a tool for learning. For example, a typical student response to the computer-based task of the QAT was:

“I think the whole concept of computer-based tests is great and there should be more of them – education needs to adjust to the fact that technology is becoming more integrated into every day life. (Student response, 2005)”

In re-form/new-form curriculum the traditional assessment challenges of construct validity, for example, or even of reliability are also re-framed. The A-grade descriptor for year 9 students in Queensland flags some of the new problems associated with an assessment or test for the ability to “make significant decisions and judgements”. Up to now the implications of assessment led reform for curriculum has remained relatively uncharted. What this paper has revealed is the need for greater understanding of how new-form/ re-form curriculum for the knowledge society is enacted in practice, in the classroom over an extended period of time. Such studies will help guide policy development and contribute to our understanding of the effects of curriculum for the knowledge society on students’ capacity to learn.

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