REFORMING JUNIOR CYCLE EDUCATION – what's it all about?

ETBI's Education Research Officer, Pat O'Mahony, draws on his experience in Australia and Ireland to reflect on why the Junior Cycle is being reformed, the essence and likely benefits of the reform, and the key factors likely to determine its success.

DEBATE TOO FOCUSED ON THE PERIPHERAL

There has been much debate in staffrooms and the media about the new Junior Cycle Framework and its implications for schools and indeed the future of Irish society. In a number of respects the debate has descended into a series of sideshows with much argument focusing on peripheral issues such as new subject specifications (syllabi), the introduction of short courses and the efficacy of teachers assessing their own students for certification purposes. At the core of this reform, however, is the transformation of teaching and learning to ensure that school leavers have the skills and competences to make the most of their lives in a constantly changing world, where information is never more than a mouse click away.

It is generally acknowledged that teaching can no longer be about subjecting learners to an experience. Rather, it must be about learners intimately engaging in the educational experience; about learners internalising their learning and using what is learned to solve new problems as they emerge, to interpret the world around them as it changes before their eyes, to inform relationship development, and so on. If we ignore this reality, we risk a repeat of what happened when the Junior Certificate replaced the Intermediate Certificate a quarter of a century ago.

RESPONSIBILITY TO GET BEST POSSIBLE RETURN ON INVESTMENT IN EDUCATION

While some find it distasteful to discuss education in the context of its cost, the reality is that education is not free, even though we may not pay for it at the school gate. The scarce resources invested in our education system come ultimately out of the taxpayer's pocket and it behoves all of us to ensure that Irish society gets the best possible return from the State's investment in education.

There is overwhelming evidence that our school system neither provides young people with the competences required to make the most of their lives in a world of ubiquitous change nor the competences to contribute to their full capacity to the betterment of the wider society.

To be equipped to make the most of their own potential, and to make valuable contributions towards the betterment of a democratic society, school leavers should have acquired the capacity to be discriminating, self-directed, lifelong learners; critical thinkers, active responsible citizens; effective problem solvers, resilient, healthy, fulfilled, innovative and creative.

Post-primary education, with its emphasis on the acquisition of knowledge and its regurgitation in both in-house and public examinations, is entirely unsuited to providing young people with these capacities. And junior cycle reform is about remedying this situation.

JUNIOR CYCLE REFORM A LOGICAL PLACE TO START

Many understandably hold that what really influences junior cycle education is the points race and the Leaving Certificate and that educational reform should start there. However, if we desire sustainable reform, it is probably better to build from the bottom up. Already, primary education is significantly reformed along the lines of what is envisaged for second-level. It would therefore seem illogical to commence second-level reform at senior cycle while leaving junior cycle reform for later.

In any case, junior cycle reform is being paralleled by a reform of the points race and, at senior cycle, by the development of more flexible programmes of learning, the development of outcomes-based syllabi, and the development of key skills and new ways of assessing learner achievement.

Inevitably, when junior cycle reform is fully implemented, it will be necessary to further reform senior cycle. But, if junior cycle reform is successful, this task should be less challenging than the task of junior cycle reform. By that time, an appetite for and an appreciation of the need for continuously reforming syllabi, teaching and learning to accommodate change will, hopefully, have taken hold.

JUNIOR CYCLE REFORM NOT AN IMPLIED CRITICISM OF SCHOOLS OR TEACHERS

Regrettably, some see the term reform in a negative sense; they see it as implying criticism of the teaching profession. As they see it, you only reform what is not being done well and, if something is not going well, those doing it are at fault. This interpretation of reform significantly constrains the debate we should be having about how schools, through their work, can improve learner and societal outcomes.

Junior cycle reform is not about blaming schools and teachers for what is happening currently. It is about harnessing research evidence and modern technology to empower and facilitate the work of teachers and students so that, working collaboratively, both can realise improved outcomes; for teachers, greater professional satisfaction and, for students, a set of competences that will better equip them for further study, life and work.

We now have the research and good practice evidence and the ICT tools to implement a new model of teaching and learning that will provide better returns to all involved in our school system. Deciding not to exploit this opportunity would be akin to ignoring a newly available health remedy.

IRELAND'S RELUCTANCE TO REFORM TEACHING AND LEARNING

More than most countries in the OECD, Ireland has been reluctant to reform its school system. We have long believed that our system is world class and that we had little to learn from developments in other countries.

As a young graduate in the early Seventies, this writer very much believed this narrative. So you can imagine the surprise when, on commencing teaching in New South Wales (NSW), students seemed genuinely interested in the subject matter and discussions about what was taught in class continued out onto the corridors and recreation areas.

Australian students did not seem caught up in the frantic race to third level; and to a significant degree they remain immune to this fever. They were more concerned about what they learned than about the extent to which it would be examined and the extent to which it would enable them to climb the 'greasy academic and career pole'.

One thing was immediately obvious; a young teacher could not establish order in a classroom by relying on his/her authority. This could only be achieved by establishing a mutually respectful relationship with one's

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students and, once this was done, the atmosphere in the classroom became both collaborative and productive. Coming from Ireland, where teachers could generally rely on their position of authority to control their students, this presented early challenges.

AUSTRALIAN SCHOOL SYSTEM CONTINUOUSLY CHANGING

At first something seemed to be awry with the system in NSW. In Ireland, when doing the Higher Diploma in Education, the disinterest of students in class was palpable. Oh yes, they were polite and well-behaved but class amounted to checking homework and what had to be learned off and then setting more homework. Certainly, Irish students wanted to do well in school and it was understood that many in the boys' school took grinds from teachers in the nearby convent school while the girls from the convent school took grinds from teachers in the boys' school. Clearly, Irish students were prepared to work hard but, for some reason, not a lot of learning took place in class. Indeed, at that time, the in-class relationship between Irish students and their teachers was distant to say the least.

If the atmosphere in NSW schools was a shock to the system in the early 1970s, this was only the beginning. In 1973, the NSW School Certificate (equivalent to Irish Junior Certificate) was awarded on the basis of 75 per cent school-based assessment and 25 per cent external examination and from 1975 it was awarded solely on school-based assessment, with state-wide moderation tests in all subjects to maintain comparability of grades across schools. Then, from 1977, the moderating tests for the school certificate were confined to English, Maths and Science.

Subsequently, in 1986, the NSW Higher School Certificate (equivalent to Irish Leaving Certificate) included, for the first time, a school-based assessment component. Today, the NSW Higher School Certificate is awarded on the basis of 50 % for a school-based assessment and 50% for a public examination.

This writer was back in NSW recently and got an update from representatives of unions, school management and several former colleagues on how the move from an external examination-driven system to a school-based assessment system had progressed over the years. Since junior cycle reform is taking us down a similar road, it was encouraging to hear that the fears palpable in staffrooms in the late 1970s had long since been expunged. Indeed, the NSW School Certificate was awarded for the first time in 2013 exclusively on the basis of school-based assessment without state-wide moderation in any subject. The general feeling in the staffroom was that schools are now well capable of assessing their own students, to a state-wide standard, without the support of external moderation.

If the pace of change in NSW appears rapid, a look north to Queensland suggests otherwise. There, since the mid-1970s, the Queensland Certificate of Education (QCE), which is equivalent to the Irish Leaving Certificate, has been awarded exclusively on the basis of a robustly-moderated school-based assessment. There are no public examinations in Queensland and students gain access to third-level e-college on the basis of their performance in the QCE.

ARE EXTERNAL EXAMINATIONS ESSENTIAL TO MAINTAINING EDUCATIONAL STANDARDS?

The 2012 PISA results provide us with insights into the impact that moving from terminal examinations to school-based assessment has on student achievement.

Ireland and Australia score similarly on the print mathematics scale. Australia scores appreciably better on the computer-based mathematics scale while Ireland outscores the Australians by a similar margin on the print reading scale and it is virtually a dead-heat on both digital reading and the science scales. Overall, it seems that Irish students are good on knowledge and skills but not nearly as adept when it comes to applying knowledge and skills to solve problems, and this is what one might expect given the focus of our teaching, learning and assessment. This view is supported by the recently released results of the performance of Irish 15-year-olds on the computer-based assessment of problem solving in PISA 2012. On this scale, Ireland achieved 22nd place out of the 44 participating countries while Australia scored 9th place.

Clearly, moving away from external examinations as the basis for assessing student achievement for certification does not adversely affect the maintenance of standards provided a robust moderation process, and all that it entails in terms of building teacher capacity, is appropriately resourced. NSW and Queensland have not abandoned external examinations to save money but rather with a view to improving learner and societal

outcomes and, concomitantly, improving the professionalism and professional satisfaction of the teaching profession.

REFORM MUST INVOLVE ROBUST MODERATION PROCESSES

There are legitimate concerns about the need to ensure that the Junior Cycle Student Award (JCSA) certifies a similar standard of achievement across all schools. In this regard, ETBI, the other second-level management bodies and the National Association of Principals and Deputy Principals (NAPD) have developed specific proposals for supporting in-school moderation to ensure such comparability; and the Department of Education and Skills (DES) has engaged with all the education partners around this proposal.

Having been involved in preparing these proposals and in the subsequent discussions, one feels that the need for some kind of moderation process is generally acknowledged and that the DES is willing to work with the partners in the development of a fit-for-purpose process. Indeed, a robust moderation process seems essential to implementing a sustainable reform of teaching and learning in junior cycle education at this point. In due course, as has been the experience in NSW, the need for external involvement in the moderation process will atrophy as the capacity of teachers is developed. But this will take time, resources and appropriate management structures. We must crawl before we walk or we risk a heavy fall.

WHY MOVE FROM EXTERNAL TO SCHOOL-BASED ASSESSMENT?

The move away from the exclusive reliance on externally set and externally marked examinations is rooted in the evidence-based conclusion that, if we want to improve student learning, we have to bring assessment as close as possible to where the learning occurs. The corollary of this is that there will not be real engagement between students and teachers, and between learners and what is being learned, unless teachers assess student achievement continuously and provide practical feedback to learners about how they may improve their skills and competences in the subject they are studying.

The comprehensive work of Paul Black and Dylan Wiliam convinces one that improving formative (continuous) assessment produces significant and often substantial learning gains across the age-range, from 5-year-olds to university students, and that formative assessment improves the achievements of 'low achievers' more than the achievements of high achievers. In their 1998 article, Inside

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the Black Box: Raising Standards through Classroom Assessment, Black and Wiliam summarise the research basis for their conclusions. It is significant to note here that for research purposes, learning gains are measured by comparing improvements in the tests scores of students rather than on the basis of any kind of subjective analysis.

ASSESSMENT FOR LEARNING (AFL) – THE KEY TO REFORM

This implies the need for a move away from student work being graded or marked, and from the practice of brief comments being written on students' work, such as: 'good work', 'can do better', 'capable of better', etc. Such feedback does not provide information to learners about what is wrong with their work and how they might put it right; and this is what students need if they are to improve. With this kind of engagement between teacher and learner, information flows both ways; with teachers obtaining feedback from their students that enables them to adjust the way they teach to meet the individual learning needs of their students.

This kind of formative assessment is known as assessment for learning (AfL), and a critical element in reforming junior cycle education is the sustainable embedding of AfL in the work of every teacher and in the learning of every student. This is a priority in reforming junior cycle education. Of course many teachers practice AfL; but the whole examination focus works against its use. Furthermore, there is a need to put effective CPD programmes in place to build the capacity of all teachers to implement AfL effectively. This will require resources and is not just a matter of a single in-service; there is need for an ongoing programme that facilitates teachers building this capacity incrementally. There is no one-off silver bullet. Over time, each teacher will need to integrate the AfL approach into his/her own particular teaching approach: it is not a matter of applying an off-the-shelf formula.

If we continue to rely on teachers teaching by delivering content, and assessment amounting to end of topic, end of term, end of year, and end of cycle tests and examinations, the prospect of transforming teaching and learning along the lines of what the assessment for learning approach comprehends is remote.

MANY CLASSROOMS ARE HIVES OF COLLABORATION BUT EXAMINATIONS SET THE SCENE

Though the relationship between student and teacher has improved greatly over the course of the years, and though many classrooms are hives of student-teacher collaboration, the inevitable focus on examinations constrains the potential for classrooms being places of real learning, where young people, with the support of their teachers, incrementally add to their understanding of their world and acquire skills and competences that match their aptitudes and prepare them for adulthood.

Instead, through no fault of either students or teachers, the system compels teachers to teach in preparation for 'the examination', and learning of the kind that adds to students' capacity to cultivate their full unique potential as citizens and workers is inevitably pushed to the side. After all, to adapt Shakespeare's epic words: 'the examination's the thing' and students and their parents are very much aware of this reality.

It is not the teacher that impels teaching to the test, but students and their parents. From my own teaching days in Ireland, comments like: 'is this going to be on the exam?' or 'Mrs Jones is not doing that with her class as she says it is never examined' or 'we need to get the course finished so we can revise for the exam' still ring in my ears. In so many instances such remarks surfaced at the conclusion of what had been engaging discussions during which students had learned about matters that had real meaning in their lives. Invariably, these comments would brusquely jolt one back to the reality of preparing for the examination.

CLASS TIME DEVOTED TO IMPARTING INFORMATION THAT IS RETAINED UNTIL EXAM TIME

And so class time is spent imparting information that students routinely learn by rote, without engaging with it and without, in any real sense, internalising what is learned and relating it to their own personal journey to adulthood. The import of the subject matter is in many respects irrelevant; it simply has to be learned off and regurgitated in exams of one kind or another in order to facilitate progression to the next step on the academic ladder, and most young people, not unnaturally, want to climb as high as possible on that ladder in the belief that those who climb highest get to claim the best jobs. Like it or not, the 'invisible hand' of self-interest drives most of us to do what we do in life.

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that class time involves real learning about those things of relevance to the lives of the students, having regard for their individual aptitudes and abilities. With this being done in the context of teachers and learners appreciating that what is being acquired is the capacity to go on learning about the things they deem relevant to their lives (in the family, in the community and at work) - in a world where change is both omnipresent and perpetual.

Currently, teachers and students work incredibly hard to ensure that a lot of knowledge is acquired and retained for a relatively short period of time – knowledge that delivers no real benefit to the learners in the longer term, other than that it builds a capacity for hard work. The analogy of the old board of works programmes, during the Famine, when the destitute were paid to build roads in the middle of nowhere so they might be paid a survival wage suggests itself. Obviously, these roads should have been built in places where they linked with the existing road infrastructure. Similarly, if teachers and students are working hard at the business of learning, they may as well be involved in learning that is of lasting benefit rather than learning material that will soon be forgotten.

Given the way second-level schools have done education since their inception, it is hardly surprising that many of us (students, teachers and parents) place a premium on the amount that is learned rather than on what has been learned, or the relevance of what has been learned to the lives of the learners and the wellbeing of society.

Reforming junior cycle is not about dumbing down the curriculum
Given this legacy, it is understandable that the proposed junior cycle reform should provoke concern about a dumbing down of education or, to quote from the TUI president's speech to the recent TUI conference: 'some very thin learning'. The unease is that focusing on the eight key skills (literacy, numeracy, managing myself, being creative, staying well, communicating, working with others, and managing information and thinking) and on learning outcomes (what learners should be able to do at the conclusion of a particular learning experience) will result in students not mastering sufficient content; that they will not therefore be able to negotiate the next steps in their education successfully.

These concerns could, to some degree, be justified in the past where one had to retain information but, in the information age, they are not well-founded. For most of us now, information is only a mouse click away; so the job of education is to ensure that learners understand the subject matter in way that they can build on it in their further studies and work. The detail is something that can be retrieved at any time.

In one sense, nothing has changed because, irrespective of the vocational area, notwithstanding the fact that knowledge was committed to memory, it would invariably not be possible to recall it unless it was used regularly. This inevitably meant that information seldom used would have to be 'relearned' before being applied. Now, of course, information is always at our fingertip.

JUNIOR CYCLE REFORM AN OPPORTUNITY TO DEVISE A NEW PARADIGM FOR SCHOOLS AND TEACHING

In the traditional teacher-led approach to teaching, teachers do much of the work in class and it is acknowledged that this can result in teachers feeling jaded and frustrated, as their efforts do not appear appreciated.
One is left with the inescapable conclusion that, in the 21st century, if students are to make the most of their talents, from both a personal and societal perspective, we have few options but to devise a new paradigm for schools and teaching – a paradigm that bridges the gap between teacher and learner and subject and learner, thus facilitating the emergence of a collaborative learning environment, where students take responsibility for their own learning and the role of the

teacher is to support student learning rather than, as it were, to force learning on unwilling recipients.

If junior cycle reform is appropriately resourced and implemented, and these are two indispensable conditions, we can achieve this kind of transformation. In doing so, we can make teaching a hugely rewarding and highly regarded profession. Such a development would be extremely significant at a time when there is considerable evidence of low teacher morale.

In the opinion of this writer, much current negativity towards teaching (both within and outside the profession), particularly at second-level, stems from the fact that teachers have been compelled by circumstances not of their own making to fill a role that no longer fits the social context in which they operate.

The implementation of the Junior Cycle Framework presents us with a real opportunity to reimagine the role of the teacher, thus ensuring the attractiveness of teaching as a profession and guaranteeing that the work of teachers contributes effectively to human prosperity, cohesion and fulfilment. There are good grounds for believing that low morale among teachers is a function of the extent to which teaching has been deskilled into an activity that is all about preparing students for examinations – more about training than education.

Released from teaching to the test, and junior cycle reform can make this aspiration a reality, teachers would be empowered to inspire and support their students to become independent lifelong learners and critical thinkers. On the basis of my teaching experience there are few things more rewarding than seeing a student learning about those things that have the potential to benefit not only the student but those s/he comes in contact with for a whole lifetime.

ICT A HUGE ALLY IN TRANSFORMING TEACHING AND LEARNING

In reimagining the role of the teacher, we have a huge ally in ICT. The time has never been more propitious for reforming teaching and learning because the ICT tools essential to realising what is envisaged in the Junior Cycle Framework should shortly be available in all second-level schools. By the end of 2014, schools should have access to 100mbps broadband and, if the digital strategy for schools, when it emerges later this year, is appropriately resourced then ICT should be the 'wind in the back' as schools implement the Framework.

Launching the public consultation phase of the development of the Digital Strategy for Schools last December, Minister Quinn observed that we already have excellent examples of schools using technology to innovate in the classroom and the 'challenge now is to ensure that every child in every school has the same opportunities to engage with technology across all aspects of the curriculum'.

This challenge must be met in full if teaching and learning is to be reformed as envisaged. All schools must be provided with ready-to-use and permanently maintained ICT tools sufficient for them to fully implement the Framework to the highest standards. Schools cannot be left to rely on the serendipity of having a technophile on staff. The school ICT system must be as reliable and fit-for-purpose as its lighting or heating systems. It is an essential tool of trade for teachers, not just an optional extra.

The effective use of ICT is the key to transforming teaching and learning and, as it were, emancipating teachers and

students from what might be termed a kind of master-slave relationship that has soured teachers and students for too long.

Used appropriately, and this is a matter of resources and capacity building, ICT has the potential to facilitate both the differentiation of teaching and the individualisation of learning to an extent that a few years ago seemed impossible. It can transform the role of the teacher from one of delivering a relatively static content-focused curriculum to one of facilitating and supporting student learning – with students learning at their own pace. ICT gives us a real possibility to reconceptualise teaching and learning to the benefit of students and teachers. It allows us to move from a 'teaching-led' model to a 'learning-led' model, with the emphasis moving from learners being taught what they need to retain for life to acquiring the skills and dispositions to take responsibility for their own learning and becoming able lifelong learners.

Sticking with the old teaching paradigm, long after the social context has changed, has disempowered second-level teachers in particular. Appropriately applied ICT can facilitate the emergence of a teaching paradigm capable of energising and professionally rewarding teachers - hence ensuring that all students are enabled to achieve their potential. The emergence of this new paradigm is essential to exploiting the full potential of the Junior Cycle Framework.

CONCLUDING REMARKS

We must move away from the redundant notion that learning only occurs where teaching has occurred to a situation where students, with the support of their teachers, gradually take on more and more responsibility for their own learning. This way, when students leave school they are autonomous learners. This is the way of the age. In all areas of our lives citizens are being empowered to take responsibility for their development and wellbeing – rather than relying on others to do for them what they can do for themselves. This is very much what junior cycle reform is about.

Can we achieve what is envisaged in the Junior Cycle Framework? In this writer's opinion, the goals set for us are achievable provided we realise, in the words of Black and Wiliam, that 'fundamental change in education can be achieved only slowly through programs of professional development that build on existing good practice'.

The Junior Cycle Framework is what it is, 'a framework' and it will take many years of incremental change and capacity building before we reach our goal. The publication of the Framework is not a 'magic bullet', it is a roadmap for a long journey that we are about to embark on.

In NSW, for example, it took nearly 40 years from the time the school certificate was awarded exclusively on the basis school-based assessment before external moderation was dispensed with.

For our journey to take us to where we want to go we must put appropriate management structures and appropriate capacity-building programmes in place to support us on our journey. We also must ensure that the education partners collaborate as fully as possible from the very beginning of the journey – both nationally and at school level. To achieve this collaboration, we must resolve differences regarding summative assessment before fissures within the teaching profession and between the stakeholders widen any further. We must urgently take steps to prevent unrelated IR issues getting inextricably linked with junior cycle reform, something that is already happening.

Based on the research evidence, this writer is convinced of the need to imbed AfL in all teaching and learning and the need to have summative assessment for certification comprehend a significant school-based assessment component.

A rather obvious solution is to implement an adaptation of the NCCA's original recommendation that the final assessment be marked externally but make the final assessment worth 50% rather than 60% of the total marks awarded for certification. This approach could be continued until all new specifications have been introduced (2022). At this point the whole matter of externally marking these scripts could be revisited as by then schools would have built significant capacity around in-school moderation through their work on the school-based assessment component. This should not in any real sense undermine the overall thrust of the Framework. After all, in the short term it is proposed have the scripts in Irish, Maths and English marked externally.

Ireland has been significantly influenced by the way 12 to 16 education is being reformed in Scotland and, indeed, a Scottish expert on assessment will shortly commence working with the NCCA so that Ireland may benefit from what Education Scotland has learned from its reform programme. Scotland is somewhat further along the reform road than we are and its approach to summative assessment for its National 5 Qualification (similar to JCSA) is similar to what the NCCA originally recommended for summative assessment at the end of junior cycle education here.

We are embarking on a journey that can transform teaching and learning to the benefit of students, teachers and Irish society. It behoves all of us to work together constructively to ensure that this journey reaches the Promised Land.