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Multiple Intelligences in Ireland

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ORGANIZATION, LOCATION

Abstract

As far as Ireland is concerned, Howard Gardner's theory of multiple intelligences was "the right theory in the right place at the right time." In the past decade, Ireland's population changed from being largely monolithic in terms of language, culture, ethnic background and religion, to being multi-cultural and diverse. New education laws in Ireland in the late 1990s required the education system at all levels to be inclusive and to facilitate and respect the diversity of learners in the system. Multiple intelligences theory provided an ideal framework for curriculum reform and delivery from early childhood to third level. This chapter describes how a research and development project on Multiple Intelligences, Curriculum and Assessment which started in University College Cork in 1996, influenced a growing number of educational policy makers, teacher educators, educational leaders, school principals, teachers and students at all levels of the Irish educational system.

As far as Ireland is concerned, Howard Gardner's theory of multiple intelligences was "the right theory in the right place at the right time." In the 1990s, Ireland's population changed from being largely monolithic in terms of language, culture, ethnic background and religion, to being multi-cultural and diverse – with significant implications for the Irish educational system. Until the 1990s, the population of Ireland, in comparison to other European countries and to the United States, was relatively homogenous. Ireland had virtually never experienced immigration but was all too familiar with emigration. However, the scene changed dramatically in the 1990s when Ireland experienced an unprecedented economic boom, which became known as the Celtic Tiger. As a result of this boom, Ireland began to attract immigrants from many countries, especially Eastern European, African and Asian countries. From being a largely monolithic society in terms of race, colour, language and religion, almost overnight, Ireland became a much more diverse country with an eclectic mix of people of various cultural, ethnic, religious and linguistic backgrounds.

While this was an exciting and welcome development, it created a challenge for an education system which had little experience catering to a diverse school population. Irish schoolchildren had traditionally attended separate schools depending on their religious background. Since the early nineteenth century, schools in Ireland had been run by the churches but with significant state aid. Over 98% of primary schools are owned and managed by the Roman Catholic Church. Almost all of the remainder are run by other churches, such as the Church of Ireland and Presbyterian. Less than 0.5% are multi-denominational, i.e., attended by children of all religious backgrounds and or children with no religious affiliation. There are no primary schools owned or run by the state or by public authorities. The majority of second level schools (i.e., for pupils aged 12 to 18) are also run by the churches. They traditionally have been academically selective, although the introduction of free second level education in the late 1960s began to erode the elitist tradition of second level education.

New Education Legislation in the late 1990s

The Education Act of 1998 recognised for the first time the diverse nature of the Irish population. The Act explicitly required the education system to provide “for the education of every person in the State, including any person with a disability or who has other special educational needs” and “to respect the diversity of values, beliefs, languages and traditions in Irish society.” Similarly the (Irish) University Act of 1997 required the universities to develop a policy on equality, highlighting “access to the university and to university education by economically or socially disadvantaged people, by people who have a disability and by people from sections of society significantly under-represented in the student body.”

The new education legislation of the 1990s, therefore, challenged schools at all levels to provide an education that respected all children and young people equally, regardless of their abilities or disabilities, or their cultural, social, linguistic, ethnic or religious background. The theory of multiple intelligences was a theory which could contribute to a pedagogical framework through which schools could implement an inclusive ethos.

It would be wrong, however, to suggest that Irish society or the Irish school system had traditionally been unsympathetic to those who were “different” or who did not conform to a traditional view of intelligence. In the book *Frames of Mind*, Gardner (1983) pointed out that the definition of intelligence varies from culture to culture and that different communities value different forms of intelligence.

The word “Intelligent” in the Irish language

In this regard, it is interesting to note that there is no one word for intelligence in the Irish language. The English word “intelligent” can be translated into a number of different words depending on the context in which the word is being used. The Irish words “éirim aigne” and “éirimiuil” are probably the words which most closely approximates the English

word “intelligence” or “intelligent.” But these words are not often used, and rarely within a schooling context.

The word “cliste” is probably most often used to denote intelligence or cleverness. “Duine cliste” is a clever person – clever with positive connotations – but “cliste” is not confined to academic learning. It can encompass creativity, talent and skills in a wide range of areas. “Duine glic,” on the other hand, is also a clever person, but he or she is usually intelligent in pursuit of his or her own interests. That intelligence might be manifest in the evasion of payment of tax or debts, or in escaping from deserved punishment.

“Duine críonna” is a wise or sagacious person, worldly wise from the experience of many years. In ancient Irish myths and legends, such a person was often depicted as an “elder” of the community, a reflective old man or woman looked up to by neighbors and called upon to settle ancient disputes. Yet another word which infers intelligence in the Irish language is the word “stuama.” “Duine stuama” is solid, reliable and sensible, an important form of intelligence in certain situations. In addition to the above words, modern dictionary translations of the word intelligent include the words “intleachtúil” derived from the English word “intellectual,” and “tuisceanach,” which translated directly means “understanding.”

The variety of descriptions of intelligence in the Irish language explains, to some extent, why IQ tests (such as the Stanford/Binet test), which focus largely on linguistic and logical-mathematical intelligence and which were popular in many other countries throughout the 20th century, have not been part of the Irish educational landscape. Although the notion of intelligence testing found some favor among Irish educational academics in the 1930s and 1940’s, IQ tests were not generally used in Ireland, as is attested to by the fact that no Irish language version of IQ tests ever existed. It was not until recent decades that IQ testing entered the Irish educational scene, and their use is largely confined to identifying children

with special educational needs to ensure that the required additional learning resources are provided for them.

The Curriculum in Irish Primary (i.e. Elementary) Schools

Since the early 1970s, there has been no national examination or national testing of primary school children in Ireland. This fact makes it easier for primary teachers to adopt a multiple intelligences approach to teaching and learning. In 1971, following the introduction of free second level education, a new primary (elementary) school curriculum was introduced in Ireland. A “child-centered” curriculum was introduced, the national examination at the end of primary schooling was abolished, and an individual pupil record card of the pupil’s progress and achievements was introduced.

The pedagogical approach in primary schools changed from didactic class-based teaching to a guided discovery approach. The teacher was to be a facilitator of learning, and children would play a more active role in their own education. The prescriptive, narrow, subject-focused curriculum of the early years of Irish independence was replaced by national curriculum guidelines that included a broader range of subjects, encouraged subject integration, and provided flexibility and choice for schools and teachers. The current (national) primary school curriculum in Ireland, which was further revised and refined in 1999, explicitly recognises that children have different styles of learning and different intelligence strengths. This curriculum lends itself to a multiple intelligences approach to teaching and learning.

In spite of (or maybe because of?) the fact that there is no national testing in primary schools in Ireland, pupil literacy and numeracy levels are high. In the most recent international pupil achievement study carried out by the Organisation of Economic Cooperation and Development (OECD), the PISA study, Irish pupils were the second highest

achievers in the European Union in terms of literacy. Only 11% of 15-year olds in Ireland are classified as low achievers compared to a mean of almost 19.8% in participating countries (OECD, 2006). However, literacy and numeracy rates are considerably lower among pupils from less advantaged than from more advantaged backgrounds, and young people from advantaged backgrounds are four times more likely to enroll in higher education than their less advantaged peers.

Primary teaching in Ireland is a highly sought-after profession, attracting the top 15% of high school academic achievers. Primary teachers (i.e., elementary school teachers) are well educated to honors degree level, with sound theoretical and practical training. While these teachers are open to adopting new and innovative pedagogies, they expect them to be soundly based in theory and to be relevant and appropriate to the curriculum they are teaching.

The curriculum in Irish second-level schools (i.e. High Schools)

The pedagogical approach in second level schools (i.e., schools for 12 to 18 year olds) tends to be more traditional than in primary schools. It places a greater emphasis on subject-based teaching and textbook-based learning. While there have been significant changes in the second level curriculum in recent years to cater for the learning needs of a diverse population of learners, the Junior Cert and Leaving Cert examinations continue to have a major influence on teaching and learning in second level schools.

The Leaving Cert, in particular, is a high-stakes examination, since results for this exam determine access to higher education. For example, Irish universities rely solely on Leaving Cert results to allocate scarce places, with the more prestigious courses such as law, medicine, or dentistry requiring very high levels of achievement. Students can choose from over 30 subjects at different levels (Foundation, Common and Higher levels) for the Leaving Cert, and many of the curricula are innovative and creative. But examination requirements

dominate teaching in second level schools, especially in the third and final years, in preparation for the Junior and Leaving Cert exams.

There is, however, one year of a student's second level schooling where students, in particular, are encouraged to explore their multiple intelligences and to undertake projects that reflect their individual interests and abilities: the Transition Year. The Transition Year takes place in the year after students have completed the Junior Certificate Examination - usually around 15 years of age. According to national guidelines, the Transition Year "provides a bridge to help pupils make the transition from a highly-structured environment to one where they will take greater responsibility for their own learning and decision-making. Pupils will participate in learning strategies which are active and experiential and which help them to develop a range of transferable critical thinking and creative problem-solving skills" (NCCA, 2004)(CITATION).

Multiple Intelligences in Ireland

Professor Kathleen Lynch, Director of the Centre for Equality Studies in University College Dublin, was the first person in Ireland to write about Gardner's theory of multiple intelligences and to discuss its potential for Irish education. In 1989, she referred to the theory in her book, *The Hidden Curriculum* (Lynch, 1989). In a later book, *Schools and Society in Ireland* in 1993, a full chapter was devoted to "Intelligence, the Curriculum and Education." She argued that the definition of intelligence is crucial, since "what is defined as intelligence or ability has a profound effect on what is defined as legitimate knowledge in schools" (Drudy and Lynch, 1993).

In January 1995, Lynch invited Gardner to University College Dublin. where he spoke to a public audience and facilitated a workshop for senior policy makers and teacher educators. As a result of this lecture and workshop, it was decided to initiate an action

research project, to be funded by The Atlantic Philanthropies, on Multiple Intelligences, Curriculum and Assessment in University College Cork (UCC), where the authors of this article were faculty members. The key research question addressed by the project focused on whether MI theory could be applied to and enhance aspects of curriculum and assessment at primary and second level in Ireland. The project involved educators from all levels and sectors, and it included an action research component, which involved over thirty teachers from schools in the Cork region.

During the first year of the project, the emphasis was on MI theory and on developing pedagogic approaches using multiple entry points. This approach was easily understood and readily adopted by most participants in primary and second level schools. A primary teacher (now an assistant Chief Inspector with the national Ministry of Education) wrote about his use of MI theory:

My fifth class and I have been learning through MI over the last few months. As a teacher, I was attracted to the theory because of the very broad view of intelligence it promotes. MI gives schools an educational theory which genuinely values *all* the talents which children possess. It is a positive philosophy of education which looks for strengths in people and really values them. All the talents which children bring to school are developed and valued. In the MI classroom, we use these strengths as doorways into learning. Teaching with MI means reaching for a story, a poem, a drawing, a song, a quiz or a dance. In short, anything which will help a child connect with a concept or new skill.

.... How does MI teaching and learning go down in the classroom? In a word – brilliant! The children really love the group-work, the sharing, the swapping, the singing, drawing, calculating, storytelling, planning, deciding – whatever. But I am sure that their greatest satisfaction comes from having their own interests valued as a central part of the learning process. Learning isn't presented as the same diet for all.

An important part of our classwork is learning that we all have different interests and talents. The (pupils) in my classroom have each made out their personal MI Passport – reflecting their particular blend of interests and abilities. We are learning that when we come across something new, certain avenues of learning will work very well for us (O Donnchadha, 1997).

However, as they began to engage more deeply with curriculum planning and with integrating content, pedagogy and assessment, many teachers in the MI project found that MI

theory alone was not enough. As one teacher, who appreciated the value of an awareness by teachers of MI theory, asked: “What do you do with that awareness? Foster it? Apply it to teaching methods? Where do you go from awareness?”

Teaching for Understanding

The answer for many of the teachers was to adopt a Teaching for Understanding approach. The TfU framework, developed at Harvard Project Zero, under the guidance of Gardner, Perkins and Perrone, is based on a particular view of understanding, terming it “a performance view” (Blythe, 1998; Stone-Wiske 1997). The performance perspective says, in brief, “that understanding is a matter of being able to do a variety of thought-provoking things with a topic, such as explaining, finding evidence and examples, generalizing, applying, analogizing, and representing the topic in new ways” (Blythe, 1998, p.12)). The framework includes four key ideas: generative topics, understanding goals, performances of understanding, and ongoing assessment. Good performances of understanding allow students to build and demonstrate understanding in a variety of ways. A teacher can design performances with a view to supporting pupils’ multiple intelligences and/or building on their intelligence strengths. The Cork project found that the TfU framework is an ideal framework for use in conjunction with an inclusive, MI approach to curriculum design, implementation and assessment.

The overall findings of the MI project in UCC confirmed that MI theory was consistent with the prevailing philosophy of education in Irish primary schools, which encourages a child-centered approach to education (Hyland, 2000). In second level schools, the dominance of an examination driven approach to teaching and learning militated against the implementation of MI theory. But good examples of MI approaches were evident in some subject areas, particularly in First and Second Year classes and in Transition Year.

Overall, teachers involved in the project acknowledged that MI theory provided them with a new lens through which to view their students' potential. This was particularly true about pupils whose academic performance was poor and where teacher expectations had traditionally been limited. MI theory was particularly welcomed by teachers in schools in socially disadvantaged areas. This finding confirmed the view of the project leaders that further work with such schools would be worthwhile and that any new supportive initiative should be on a whole-school basis, rather than simply involving individual teachers.

In 2001, a further university/school partnership project, Bridging the Gap, was set up with 40 participating primary and secondlevel schools in socially disadvantaged areas of Cork city. The aim of the project was to bridge the gap between pupils in schools in socially disadvantaged areas and their more advantaged peers. While the focus of the project was not specifically on MI, an MI philosophy was adopted from the start, and the arts played a major role in helping to enhance the educational opportunities of the pupils involved. Researchers from Harvard Project Zero came to Cork on a number of occasions to lead workshops and seminars and to enhance and critique the work of the project. The cascade and osmotic effect of these activities on the educational culture of Cork were significant. While engagement with and application of MI theory and associated practices differed from individual to individual and from school to school, the language of MI became common currency in Cork. MI theory became increasingly accepted in Ireland.

MI and TfU in Teacher Education

A one-year Postgraduate Diploma in Education is a prerequisite for registration as a second-level teacher in Ireland. Almost 2,000 student teachers who completed this diploma in UCC during the period from 1997 to 2007 were introduced to MI theory and the TfU framework. They were encouraged to use these approaches in their teaching. An extract from

the teaching portfolios of one of these student teachers gives a flavor of how MI theory influenced these teachers' thinking and classroom pedagogies during their teaching practice.

One student teacher wrote:

In terms of teaching and learning, MI theory concentrates our mind on the fact that we need to address the plurality of the child's intellect ... Group discussion provides an opportunity for the child to make a valuable input ... the fact that each individual group member has their own strong points serves to make the group stronger because they each need the other... If we truly accept and value the theory of MI, we must search for and develop methodologies that will allow all intelligences to shine in the learning experience. It means that we cannot go back to the hierarchical structure of teaching. Rather, we must grasp the notion of constructivism with both hands and give the students the freedom to explore and construct knowledge and understanding beginning with their own strengths.

MI and the Broader Educational Community in Ireland

As well as impacting individual teachers and schools in the Cork area, the MI project in UCC actively sought to influence attitudes among educational policy makers nationally. This was done through a series of different strategies, including through lectures, workshops and seminars to various interest groups and individuals; involvement in national curriculum committees and advisory bodies; and one-to-one meetings with key influential policy-makers. Many of these strategies proved effective over time. National educational policy documents and guidelines during the past ten years increasingly make reference to MI theory and its relevance to teaching and learning.

A recent search of the website of the National Council for Curriculum and Assessment (NCCA), the statutory body that advises the Irish government on curriculum and assessment at preschool, primary and second-level, identified numerous references to MI theory in NCCA documentation. A section on "New Understandings of Child Development" in the guidelines on early childhood education, *A Framework for Early Learning* (May 2007), includes Gardner's theory of MI. This theory is acknowledged to "give rise to the principles

underpinning the NCCA Consultative Document 2004 and ultimately the May 2007 Framework for Early Learning.”

Another recently published NCCA document, *Exceptionally Able Students – Draft Guidelines for Teachers* published in 2007, explicitly takes account of MI theory in describing exceptional ability and in suggesting checklists for identifying children with exceptional ability. (This is the first joint document issued by Ireland’s NCCA and Northern Ireland’s CEA and may well mark the beginning of a new era of cooperation on educational matters between the north and south of the island, following the signing of the Northern Ireland agreement by the Irish and British governments and the installation of a power-sharing government in Northern Ireland in 2006). This publication includes a chapter entitled “Other Ways of Thinking about Teaching and Learning,” which highlights MI theory and gives examples of teaching strategies based on the various intelligences. Explicit references to MI theory also can be found in national documents relating to the Arts at primary level; to Social, Personal and Health Education; to an evaluation of the Primary Curriculum; to Civic, Social and Political Education at second level; and to approaches to teaching and learning in Transition Year.

MI theory and TfU in University Teaching and Learning

From the late 1990s onwards, targeted funding became available from the national higher education funding body, the Higher Education Authority, for enhancing teaching and learning in universities and for improving access for groups which had traditionally been under-represented. These groups include students from lower socioeconomic groups, students with disabilities and mature students. Universities were encouraged to expand their teaching approaches to develop a more inclusive learning environment which recognized the diversity of learners.

Among the projects funded in UCC under the targeted initiatives were A Multiple Intelligences Approach to Teaching and Learning and Teaching for Understanding in a University Context. These projects and professional development courses for faculty provided a new opportunity to apply MI theory and the TfU framework – this time in a university teaching context. As well as being influenced by the work of Harvard Project Zero, the courses drew on the findings of research carried out by the Carnegie Foundation for the Advancement of Teaching, and in particular the work of the Carnegie Academy for the Scholarship of Teaching and Learning in Higher Education (CASTL). These studies included Boyer's (1990) seminal work, *Scholarship Reconsidered*, and its sequel, *Scholarship Re-Assessed* (Glassick et al., 1997), as well as Pat Hutchings' (1996, 1998) various publications on Teaching and Course Portfolios, the work on disciplinary approaches to teaching and learning by Mary Huber (Huber 2004; Huber & Hutchings, 2005; Huber & Morreale, 2002), and Lee Shulman's (2004) work on signature pedagogies. The complementarity of the work of scholars and researchers in the Carnegie Foundation and that of Project Zero was particularly relevant for university teachers in UCC (Hyland et al., 2007).

In its Strategic Plans, UCC has explicitly committed itself to equality; to social, cultural, and ethnic inclusiveness; and to facilitating students with disabilities. An MI approach to teaching and learning is a visible manifestation of this commitment and has been adopted by many faculty members. Some comments from faculty who attended courses, seminars and workshops in UCC on MI theory and the TfU framework, show how their approach to teaching in a university context changed as a result of engaging with these theories. Laurence Dooley in the Department of Management and Marketing embraces MI theory because it scaffolds him in his belief that good teaching can enhance student intelligence and performance, and can make a difference:

Gardner's work offers hope to all educators by emphasizing that teachers have the ability to nurture the intelligence level of their students by better

instruction and resources that traverse the multiple intelligences. Thus, students can improve their intelligence capability in certain intelligence types, and all students can learn. It is only through adequately embracing MI theory through both a constructivist and Teaching for Understanding perspective, that all students can have equal opportunity to succeed and fulfill their potential.

André Toulouse in the Department of Anatomy discusses the implications of Gardner's MI theory for his teaching:

Gardner's theory is probably the closest reflection of the true nature of human intelligence that is available at the moment. While some aspects might be debatable, one can only recognize the variety and uniqueness of combinations of "intelligences." It is very important to offer learners a broad variety of learning opportunities to maximize the learning experience.

He concludes that this theory is "probably the closest reflection of the true nature of human intelligence that is available at the moment."

At a national level, faculty at other universities and higher education institutions have also adopted an MI approach to teaching and learning. At Waterford Institute of Technology, faculty in Engineering Construction are involved in a research/teaching project to create a multiple intelligences instructional design framework for virtual classes. This project includes partners from other EU countries, including Turkey, the U.K., Cyprus, and France. It is part of an EU funded research project under the Socrates Minerva Action.

Also at Waterford, staff of the School of Nursing are using Ellen Weber's Multiple Intelligences Teaching Approach (MITA) to deliver the nursing curriculum. Preliminary research indicates that student groups using MITA are out-performing control groups not using MITA approaches in Nursing Practice exam results. A summary of this work has recently been published in the Annual Report of the (Irish) National Academy for the Integration of Research and Teaching and Learning. (NAIRTL, 2007).

Summary and Conclusions

Teachers in elementary schools, high schools and at university level who have been associated with the “MI movement” in Cork and throughout Ireland have found MI theory enables them to plan and deliver the curriculum in a way that more effectively engages their students creates an inclusive environment for student learning. This has proved to be particularly the case where students felt excluded in the past, where the examination failure rate was high, and where many students had been failed by an unduly academically focused system.

While the various MI research and development projects undertaken in UCC do not provide conclusive evidence that increased academic success is necessarily associated with the application of MI theory, there is compelling evidence that MI-focused teaching and learning has led to greater involvement by students in their own learning, to increased motivation on the part of students and teachers, and to a more inclusive learning environment.

In the experience of these authors, MI theory has acted like an injection of enthusiasm for sometimes jaded teachers. It has given them a renewed faith in their role as teachers and in the potential of their students. They now believe that their students can achieve and that they as teachers can play an important role in that achievement. However, the UCC projects confirm the view that MI theory alone will not sustain improved teaching and learning. MI strategies need to be grounded in a rigorous curriculum planning and delivery framework. For the UCC researchers and practitioners, the Teaching for Understanding framework, developed by Project Zero in the Harvard Graduate School of Education, proved to be the ideal delivery vehicle.

It will, no doubt, be argued that any sustained professional development program will help teachers to engage more effectively with their teaching. However, the same cannot be said about students and their learning. It is not often that a professional development program brings about visible and sustained improvement in student involvement in the way that

introducing an MI approach does. The authors of this chapter between them have over half a century of experience delivering initial and continuing education courses for teachers. They have experienced a greater sense of excitement among teachers and students when introduced to MI theory than to any other learning theory. Understanding the basis of MI theory and its potential for improved teaching and learning takes time and effort but it is time and effort well spent. Implementing and sustaining MI through a TfU framework takes more sustained effort and persistence but, in the views of these authors, it is an educational tool that really leads to improvement.

In the book, *Good Work*, Gardner, Csikszentmihalyi and Damon (2001) make the point that “[d]oing good work *feels* good. Few things in life are as enjoyable as when we concentrate on a difficult task, using all our skills, knowing what has to be done.” That sentence aptly summarises the views of the authors of this chapter: MI theory and the sustained work of many good school principals, teachers, students and faculty not only make teachers and learners “feel good,” but it results in a more inclusive learning environment and improve the lives and the achievements of students.

About the Authors:

Áine Hyland retired in 2006 as Professor of Education and Vice-President of University College Cork. She was Director of UCC's Multiple Intelligences, Curriculum and Assessment project from 1996 to 2000 and of the Bridging the Gap project from 2001 to 2007. She is currently a member of the Institutional Evaluation team of the European Universities' Association and is coordinator of a network on Graduate Education which is part of the Institutional Leadership program of the Carnegie Foundation for the Advancement of Teaching in Higher Education.

Marian McCarthy is a lecturer in Education and is Programme Coordinator of the certificated courses in Teaching and Learning in Higher Education in University College Cork. She has supported teaching and learning initiatives in the university since 1995 and is influenced in particular by the work of Project Zero at the Harvard Graduate School of Education, and by the work of the Carnegie Foundation for the Advancement of Teaching.

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