Developing Inclusive Education in Ireland: The Case for UDL in Initial Teacher Education

Inclusive Education in Ireland

Since the influential Salamanca Statement and Framework for Special Educational Needs (UNESCO, 1994), there has been an international commitment to more equitable education systems that recognise and respond to the diversity of the population, and a focus on educational inclusion for individuals with disabilities (Priestley, 2005). A new framework for action was adopted, the guiding principle being that schools should accommodate all children, regardless of their physical, intellectual, social, emotional, linguistic or other conditions (UNESCO, 1994).

The inclusion of children with SEN in mainstream education is relatively new in Ireland compared with many other countries. Throughout the 1970's Ireland operated a multitrack system of education (EADSNE, 2003), with children being educated in mainstream schools, special schools or special classes in mainstream schools where available. However, there has been a major policy shift in the past 15 years and Ireland is in a transition phase to a more inclusive model of educational provision. This is largely due to significant legislation such as the Education Act (Government of Ireland, 1998), guaranteeing curricular access for children and young people with special educational needs (SEN), and more recently the Education for Persons with Special Educational Needs Act (EPSEN) (Government of Ireland, 2004). This Act enshrines inclusion as a core value and states explicitly that school provision should be informed by principles of equality and human rights. The EPSEN Act states that children with SEN are to be educated in an inclusive setting unless this is not in the best interests of the child or the effective provision of education for other children in mainstream education. However, it is noteworthy that important parts of the EPSEN Act have failed to be implemented, such as those which would confer statutory entitlement to educational assessments for all children with SEN and consequent development of an individual education plan (IEP) as well as the delivery of detailed educational services on foot of an education plan. It is further argued that this weighs heavily on schools' capacity to develop inclusive environments and fully meet the needs of all learners (Shevlin, Winter & Flynn, 2013). Successive governments have argued that this is the result of financial restraints. However, the financing of special educational needs is viewed as a vital component of

inclusive education, with research suggesting that, if a country advocates inclusion, financial regulations should be adapted to support this goal (Meijer, 2003).

Notwithstanding these issues, the focus on inclusive education policy in Ireland has resulted in greater numbers of students with SEN attending mainstream schools, with prevalence estimates as high as 25%-28% of the school population with some form of additional need (Banks & McCoy, 2011; McCoy, Banks & Shevlin, 2016).

The Changing Profile of Mainstream Schools in Ireland

Over the years, the inclusion movement has sought to move from an approach that emphasises 'integration' or the need for children with additional needs to 'fit in' with their class level (Meegan & McPhail, 2006) and follow, as far as possible, a "one size fits all" curriculum (MacGiolla Phádraig, 2007, p. 290), to the broader discourse of human rights and social justice that developed in the 1980s and sought to shift the emphasis from the individual to the environment as the site of change (Drudy & Kinsella, 2009; Thomas & Loxley, 2001). In Ireland, this shift has been slow, mainly due to the influence of the psycho-medical model of disabilities that emphasises perceived individual deficits in people labelled as disabled or having SEN, and deterministic thinking embedded in Irish educational policy documents such as the EPSEN Act (Shevlin et al., 2013), as well as "bell-curve thinking" about ability on the part of educators (Florian, 2008, p.203). It is argued that, thus far, the necessary restructuring of the Irish education system to effectively meet the needs of students with SEN has not taken place, nor does there appear to be any consistent model of inclusive practice across schools in Ireland (Kinsella & Senior, 2008). It is a continuing challenge, therefore, for Irish schools to progress from integration of students with SEN, to truly inclusive school cultures and practices.

Universal Design for Learning in Ireland

The Association of Higher Education and Disability (AHEAD) in Ireland has been instrumental in developing inclusive higher education institutions (HEIs) and equality of access for all students in further and higher education (AHEAD, 2017). They stipulate that universal design (UD) and Universal Design for learning (UDL) are important approaches and methodologies in supporting the diverse range of learners in higher education institutions (HEIs). AHEAD has been instrumental in developing knowledge and understanding of UDL approaches in third level institutions and among administrators, educators and lecturers in colleges and institutions in Ireland. This is partly achieved through an annual International

conference held in Ireland each year which aims to spread research and evidence of good planning and practice in UDL by among all higher education institutions. However, it is acknowledged that much progress needs to be made by colleges and universities towards access to excellence in teaching and learning for all students (Ouellett, 2004). Indeed, the enthusiasm and support for UDL approaches promoted by AHEAD in Ireland has been slow to influence the ITE sector in any organised or united manner. Therefore, there is no clear UDL model of practice available for pre-service teachers to observe and emulate as they develop their planning and instructional skills and prepare pre-service teachers to teach in an education system with a high level of student diversity and students with SEN (Drudy & Kinsella, 2009).

The predominant model of pre-service primary teacher education in the Ireland is the concurrent model in which student teachers complete a four-year degree programme culminating in a Bachelor of Education degree (B. Ed) in a College of Education or a university. This degree allows the teacher to teach in primary schools (junior infants to 6th class (4 years to 12 years old approx.). In Ireland, the Teaching Council of Ireland charged with promoting "the continuing education, training and professional development of teachers" (Government of Ireland, 2001, section 6c, 8), and promotes curriculum studies as a core component of all initial teacher education (ITE) programmes. As part of its *Criteria and Guidelines for Programme Providers*, the Council advocate that ITE programmes should 'develop students' understanding of, and capacity to critically engage with curriculum aims, design, policy, reform, pedagogy and assessment' (Teaching Council, 2011a, p.13). This is significant given the importance of the curriculum in conveying ideological positions about an educational system, the inclusiveness of that system, and societal values towards diversity (Apple, 2004). The Teaching Council guidelines represent a shift from what has been a technicist mentality where the Irish curriculum was seen as a document to be adopted and followed by teachers (Gleeson & Donnabháin, 2000), and one where, historically, curriculum was narrowly defined in policy and focused on subject content and syllabi, and consideration of time to be allotted to subjects on a syllabus. Therefore, to what extent the Teaching Council aims can and are being implemented remains a pertinent question, especially as the manner in which components of a curriculum are stated as guidelines has a great influence on the way learning and instruction is planned and practiced in the classroom (Stanford & Reeves, 2009). The current Irish primary school curriculum (PSC) (DES, 1999) is set out in terms of the different primary subjects to be taught (e.g., Mathematics, English, Geography,

Music etc.), with each subject consisting of separate strands and strand units or elements for the different class or grade levels. The stand units are further divided into a number of content objectives/learning outcomes to be achieved by all students. For example, in the English curriculum, the three strands consist of oral language, reading and writing. One example of a strand unit for reading in the English curriculum is 'receptiveness to language', and there are a number of learning outcomes for this strand unit (e.g., engage in shared reading activities, visit the local library). As such, the curriculum is generic, broad, and based on instructional competencies (Gleeson, 2009). Differentiating of teaching is the stated methodology to cater for individual learners needs in planning and practice (Primary Professional Development Service, (PPDS, 2012). This can be achieved by changing the teaching style, task, pace of teaching, or teacher support to address the needs of individual learners in a classroom (p. 8). Thus differentiation is viewed as an approach that works for most learners *alongside something additional and different for those pupils who experience learning difficulties* (Norwich, 2013). However, there is no mention of potential barriers to learning and how they should be addressed in the classroom. so that all learners can access the curriculum. Indeed "diversity" is interpreted as "pluralism" and "equality of opportunity" is interpreted mainly in terms of socio-economic disadvantage (PSC Introduction, 1999, p. 28), while "access to the highest quality of education" is stated as a right for all children (PSC Introduction, p. 29), but it is not clear how this ideal is to be operationalised in the curriculum documents. There is no reference to catering for the diversity of the learners in Irish classrooms in the Specific Aims and Objectives of the Curriculum (PCS, 1999, p.34), but in an after note, it states that the child's stage of development and differences in terms of intellectual and physical ability "require consideration" (p. 34). Therefore, there appears to be little support in the curriculum for teachers in terms of their understanding, planning and practice as teachers of children with diverse and additional needs.

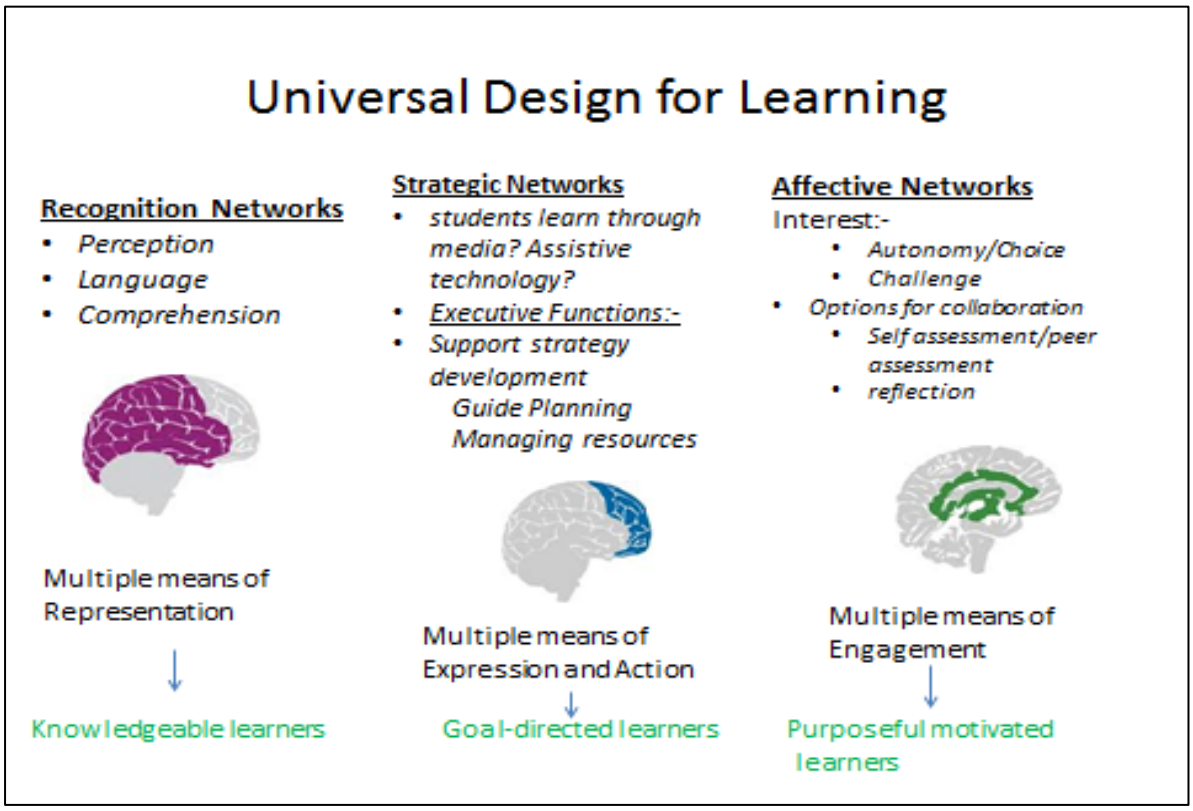
Universal Design for Learning Framework as Inclusive Practice

UDL is described as a tool for curriculum development that seeks to provide for all students, regardless of ability, with opportunities to learn to the best of their ability. It argues that the traditional "one-size-fits-all" curriculum ignores the vast individual differences in learning strengths and challenges (Nelson, 2014). As such, it directly addresses the challenges that teachers face in their classrooms in their planning and instruction and attempts to support their pedagogical choices, so that they can meet the needs of all learners. Therefore, the focus of UDL is highlighted as an educational approach that facilitates inclusion and catering for

diversity (Coyne, Ganley, Hall, Meo, Murray & Gordon, 2006). It is argued that teachers who design their learning approaches for the "divergent needs of 'special' populations increase usability for everyone" (p. 39). The three principles (see figure 1) are based on (1) how teachers represent the learning to pupils (recognition), (2) how the children engage with the learning and stay engaged as learners (engagement), (3) and how children express their learning (expression), have accompanying guidelines which consist of important options in each of these areas, and the provision of options underpins the UDL framework. Further detail is provided with the inclusion of checkpoints for each of the guidelines which offer more detailed options within each option. This detailed framework is a "blueprint for creating flexible goals, methods, materials and assessments that work for everyone" (CAST, 1998, para. 2). The concept of UDL is based on research in the areas of developmental psychology, cognitive neuroscience and education, and the framework developed from this research guides the design of flexible learning environments, material, and instruction (Hitchcock, Meyer, & Rose, 2005) in a proactive way, improving expected outcomes for all learners (Pisha & Coyne, 2001). Importantly, in the context of the this project, the framework draws on the work of key thinkers in the field of education such as Vygotsky's (1978) work on apprenticeship learning, the importance of scaffolding and the zone of proximal development, as well as Gardner's (2000) Multiple Intelligences Theory.

It was in the context of the potential of the UDL framework (see Figure 1) to support more inclusive practice among the students, and the ability to link the guidelines and checkpoints with lesson planning using goals, materials, methods, and assessments that the author developed the project on UDL for the student teachers. It was thought that reflection on potential barriers to learning in the learning environment during the planning process, and solutions to these issues, was an additional important factor in helping students to engage with inclusive approaches and get to know their pupils strengths and challenges.

Figure 1 Simplified Version of UDL Guidelines



See http://www.udlcenter.org/aboutudl/udlguidelines for detailed UDL framework)

The Reflective Inquiry Project

In this section, I will firstly describe the final year student reflective inquiry projects and outline the purposes of these projects and what they entail. Next I will outline the aims, methodologies, as well as the main findings and reflections of the group of 20 students who undertook the research project on UDL entitled "Universal Design for Learning (UDL): Improving Planning and Teaching for Inclusion" Up to 25 students can be assigned to a particular project. The purpose of the project is to introduce the students to action research and reflective inquiry as part of their professional development and allow them to explore an area of their practice of particular interest in more detail. Students are required to write up on their chosen project as follows:

Chapter 1: Introduction with aims and objectives and rationale
Chapter 2: A literature review
Chapter 3: Gathering Information
Chapter 4: Findings
Chapter 5: Reflections
Appendices were also included, with samples of lesson plans, children's work etc.

The project is a required element of the students' final practicum placement, which occurs in the second semester from the end of January to May of the final year. During this school placement, students are assigned to one particular grade in a school, and they are required to plan and teach lessons every day. So this was a very suitable environment to conduct a small research project. In the first semester, students groups meet with their project leaders (e.g., lecturer who offered a project) for a number of sessions and are guided and supported in their knowledge, understanding, planning, and writing of their particular project.

The UDL Project

The UDL project was guided by the tenets of teacher inquiry (Cochran-Smith, Barnatt, Friedman, & Pine, 2009) which argues that the process of becoming an effective teacher is dependent on students questioning, conceptualizing, and assessing their learning and their understanding of the recursive nature of the inquiry process. Teachers make sense of their work through practical knowledge which is "embedded in practice, in teachers' reflection on practice, and in teachers' practical inquiry about their everyday work" (Cochran-Smith & Lytle, 1999, p. 17).

The rationale for providing the UDL project was to investigate how students, at the end of their course of study to become teachers, make meaning of the concept of inclusive education through their planning and instruction. Through investigating the UDL framework and approaches, it was hoped to explore student's ability to discuss and resolve what Norwich (2013) terms "dilemmas of difference" in the real life task of planning and teaching a diverse group of learners. Although the neuroscientific background of the UDL framework is grounded in a strong body of research (CAST, 2014), there is a lack of research in how to prepare teachers in their planning and implementation of universally designed lessons (McGuire & Arndt, 2007), and a need for research on the advantages and limitations of UDL in practice for teachers and learners alike (Edyburn, 2010). This is especially important at early childhood and primary school levels which are the foundation levels of learning and development. A further aim was to support the group of students to develop their planning and teaching in more inclusive ways, to reduce their bias in using a one-size-fits-all approach, and increase their awareness of "bell-curve thinking" (Florian & Black-Hawkins, 2011, p.813).

The students taking part in the UDL project were required to plan and teach four lessons using the UDL framework (CAST, 2011) as a decision-making approach for their planning

and teaching of these lessons. They were required to use a UDL lesson plan template provided by me for each lesson, and plan the UDL lessons as discussed during the preparation meetings in the first semester. The students used a reflective diary to document their thoughts, observations and reflections throughout, as well as the children's comments and reactions, progress, assessment, and (as the class teacher was usually in the class when the student teacher was teaching, his/her comments if relevant. The students transferred the important observations and reflections gleaned from their field notes to their written project findings and reflections.

Data on the students' understandings, progression, and reflections on inclusion and the UDL approaches to planning and teaching during the course of the UDL project was gathered using the following methods

- A series of semi structured interviews with my student group, which took place during our semester one preparation meetings (with one final interview after their return to university)
- Student lesson plan reflections and field notes which were documented in their written project
- Student findings, discussions, conclusion sections of their written project.

Preparation Meetings (October-January)

Preparation meetings focused on a number of important aspects of UDL which were explained, demonstrated, and discussed in detail. Students were encouraged to navigate the CAST.org website and the materials available there. During the preparation sessions, they were provided with copies of the UDL framework, sample UDL lessons, exemplars, and some of the key literature (e.g., book chapters, articles) to read for the following session, as well as a general reading list. These readings would also support them in writing their literature review for the project. At the beginning of each meeting a semi-structured interview was conducted with the group. The questions centred round their knowledge, understanding and practice in the areas of UDL that was related to the aspects of UDL being explained and discussed in that session. Sessions focused on the following content:

- Planning and Teaching for all learners
- The UDL Framework
- Lesson Planning

- Linking Plans to Teaching

Main Findings

The findings from student interviews, lesson reflections, and reflections in the finished written projects, and my own notes and reflections made during the preparation process and sessions were analysed and general themes identified which were noted and coded. Further subthemes were also apparent in the data and were noted under each theme. Some of the main themes and subthemes are documented and discussed in this section.

Planning Lessons

In choosing lessons, the class teacher's planning for that week and term was an important consideration and these plans usually were aligned with the class textbooks. Students' lesson plans were chosen in liaison with the class teacher and textbooks were often used to inform planning in most subject areas.

Lesson Goals

Lesson goals were the subject of some discussion, and the students agreed that they usually start with the phrase '*the children will be enabled to-*', and that these goals were very general. The students commented on their use of the curriculum planning tool provided by the National Council for Curriculum and Assessment (NCCA). This is an online planning tool that can be used by teachers to write weekly and termly plans. Curriculum subjects are listed and chosen. The appropriate strands and strand units are chosen from a drop-down menu. Then objectives (goals) are chosen from another menu and inserted for each strand unit chosen. These plans can then be printed off and used by the teacher. All teachers said that they were aware of the tool, and sometimes used this tool to choose lesson goals. When asked if these goals were linked to their assessment of pupil learning, students agreed that they were not. When asked if it was important that all children achieved the lesson goals, the students agreed that it was, but admitted that they didn't often use assessment of learning techniques.

Expressing Learning and Assessment of Learning

Interestingly, none of the students said they used technology (e.g., use of power point, typed work with photographs inserted, etc.), as an option for pupils to express their learning. The most common options chosen were written work (e.g., essays and paragraphs, drawings and textbook exercises) and oral answers.

Of the plans that students brought to the preparation sessions to be rewritten using UDL approaches, two of the 20 plans had documented an assessment of learning method of thumbs up/down, and all other plans consisted of written questions and answers, maths calculations, and drawings as assessment methods. Asked if these assessments informed their planning going forward, the student admitted that the assessments and activities did not, but they were often used to measure pupil progress.

Materials and Resources

All students viewed resources as key elements of their lessons. When asked to name some resources they use regularly, the most popular ones were use of video and you-tube clips, pictures, home-made charts, objects and artefacts, food, and DVDs of music and songs. Interestingly, when asked about the purpose of these resources, the students agreed that they were primarily to make lessons interesting for the pupils and hold their attention, rather than as a means of access to the content and curriculum being taught.

Pupil Behaviour

Students admitted that one of their fears was when pupils misbehaved or were inattentive. They agreed that the class teacher was a great help to them on what to do and how to deal with difficult pupils and many schools had a code of behaviour which they could refer to. The students felt that the offending behaviour was generally caused by a disruptiveness or lack of attention in the pupil, and not linked to the lesson organisation, content or planning, or teacher action (or inaction). The majority of the students didn't feel confident when handling difficult behaviour. When asked why, they noted that they didn't know the pupils well enough nor their difficulties, and didn't feel confident in this area.

Reflections on UDL Approaches

UDL Lesson Planning

A number of different lesson plan templates were provided for the students (see Appendix 1 and 2) to do their UDL planning on their placement. Students reacted very positively to these templates in their reflections. They found they needed to profile their pupils in a more indepth way to recognise barriers to learning and provide solutions in their planning. Therefore all students spoke with the LS teacher and read through individual plans for pupils with SEN *before* the placement, which they normally would not do. Students also asked the class

teacher more questions about the class than they normally would for this placement, to become aware of pupil learning differences and difficulties in a more detailed way.

Disadvantages and Difficulties with UDL Approaches

Students written reflections in indicated that they found the UDL framework somewhat difficult to negotiate at times and thought that there was too much information to process at once. This is something that has been noted by Nelson (2014) when she speaks of the "unwieldiness of the UDL framework" (p. 15). As there is no right way to use the framework, it is necessary to practice using it over time, reflect on that practice, and return to it again with new insights. Several students also felt confused by the representation and recognition principles and needed to return to the framework to look at the options to figure out the difference. In addition students found it difficult to differentiate for all at times, and felt that they would not be able to do this for every lesson, as the resources, time, and choices were limited by what was available in the school.

Time was another issue for the students when planning their UDL lessons. It required much more time to plan UDL lessons, check the environment, see if technology was available, and think of providing a selection of options for teaching and learning. Students argued that it would have been helpful to have some support and guidance from teachers in the school. Students felt that it would make planning easier if teachers had resources that were UDL friendly, and sharing of knowledge and resources would have helped them. Use of the internet and technology was problematic at times in some schools. Students found that internet connections were not consistently available, especially in rural schools. This affected their use of technology, such as laptops and computers during a lesson. Several students found it difficult to offer solutions to some of the barriers to learning in their classes. These barriers related mainly to pupils with ADHD and dyslexia. However, this may have been because of an overemphasis on reading and writing in a lesson.

All students enjoyed the project and learned a lot about themselves as teachers. One student expressed that her planning and teaching had started to become pupil-centred and she was moving away from the more teacher focused approach that she had been using. All students felt they learned to know their pupils better because of the project and it made them question their views and understandings of disability and SEN. They also found it a very positive experience.

Conclusion

The UDL project highlights some of the difficulties in policy, curriculum, assessment, and educational practice at primary level (e.g., grades 1-8) in Ireland that oppose and inhibit the progress of inclusion and UDL approaches. Inclusive practices that enhance and support optimal teaching for diverse groups of learners in primary school level in Ireland can be aided by more knowledge and support for UDL.

The effectiveness of UDL as an inclusive approach is largely dependent on how teachers and educators use it. It is a work in progress as more research is needed around its development and effectiveness. It has been noted that the UDL framework does not include a component associated with meaningful student outcomes and it does not provide a means of measuring the effectiveness of student interventions (Edyburn, 2010). However, the UDL principles can make the curriculum accessible to as wide an extent of learners as possible (Meo, 2008). Sound structures and supports would help student teachers in their learning and use of UDL approaches as it does take time and practice to effectively plan and teach using the framework (Novak, 2016). Students appear to be using a one-size-fits-all model for planning and teaching, and this is embedded from the beginning of their undergraduate education. However, the diversity of learners in our classrooms is slowly eroding the usefulness of this approach to instruction as inclusive education calls for schools to celebrate diversity, provide equal opportunities and reconstruct schooling (Slee, 2010). The use of UDL framework at preservice level is a first step in this direction.

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Appendix 1

Universal Design for Learning Lesson Template

(See Instructional Planning Process)

Teacher:
Class:
Subject:
Lesson:
Step 1: Learning Objectives:
Step 2: Possible Barriers to Learning: Solutions:
Step 3: How will Children learn? What options will I include? How will I assess their learning:
Step 4: The Instruction Sequence (*Introduction/Body of lesson? Activities/How will I conclude lesson?)*
Step 5: Post lesson reflection

Appendix 2

UDL Lesson Plan Template

Teacher:
Class:
Subject:

Lesson Element	Procedure for Teacher	Potential Barriers to Learning	UDL Solutions: Multiple Means of **Representation** **Engagement** **Expression**
Lesson Opening			
Teacher input			
Guided Practice			
Independent Practice			
Activities			