

Learning Teaching: Reimagining the future



WEBSITE

<http://scotens.org>

ACKNOWLEDGMENTS

The Committee of the Standing Conference on Teacher Education North and South (SCoTENS) wishes to acknowledge with thanks the financial support of:

The Department of Education and Science, Dublin,
The Department for Employment and Learning, Belfast,
The Department of Education, Bangor

**The Standing Conference on Teacher Education,
North and South (SCoTENS)**

**LEARNING TEACHING:
REIMAGINING THE FUTURE**



*Members of the SCoTENS Committee 2013: from left to right front row:
Mr Eugene Toolan, Dr Carmel Gallagher, Mr Tomás Ó Ruairc, Professor Linda Clarke,
Professor Kathy Hall, Professor John MacBeath(speaker) back row: Dr Conor Galvin,
Ms Ruth Taillon, Dr Noel Purdy, Dr Geraldine Magennis, Professor Teresa O'Doherty,
Dr Tom Hesketh and Professor Anne O'Gara.*

2013 CONFERENCE AND ANNUAL REPORTS

Secretariat provided and report published by
THE CENTRE FOR CROSS BORDER STUDIES

ISBN: 978-1-906444-98-3

The following institutions and organisations are members of SCoTENS

St Patrick's College, Drumcondra, Dublin
Mary Immaculate College, Limerick
St Angela's College, Sligo
Church of Ireland College of Education, Dublin
Marino Institute of Education, Dublin
Mater Dei Institute of Education, Dublin
Froebel College of Education, Blackrock, Co. Dublin
St Mary's University College, Belfast
Stranmillis University College, Belfast
Dublin City University
University College Dublin
Trinity College Dublin
National University of Ireland Galway
National University of Ireland Maynooth
University of Limerick
University College Cork
Hibernia College
Waterford Institute of Technology
Queen's University Belfast
University of Ulster
National College of Art and Design
Irish Federation of University Teachers
Irish National Teachers Organisation
Association of Secondary Teachers in Ireland
Teachers Union of Ireland
NAPD
Northern Ireland Council for the Curriculum, Examinations and Assessment
National Council for curriculum and Assessment
The Teaching Council (Ireland)
General Teaching Council for Northern Ireland
Regional Training Unit Belfast
Donegal Education Centre
Drumcondra Education Centre
Kildare Education Centre
Monaghan Education Centre
Middletown Centre for Autism
Belfast Metropolitan College

CONTENTS

CHAIRPERSON'S INTRODUCTION	03
Professor Linda Clarke	
Mr Tomás Ó Ruairc	
ANNUAL CONFERENCE REPORT	05
Learning Teaching: Reimagining the Future	
RESEARCH AND CONFERENCE PROJECTS – INTERIM REPORTS	101
Managing Early Years Inclusive Transition Practices	
RESEARCH AND CONFERENCE PROJECTS – FINAL REPORTS	117
Early Number Concepts: Key Vocabulary and Supporting Strategies	118
Threshold Concepts in Language Teacher Education: Practice <i>versus</i> Policy	142
3 PLY – Exploring the Potential for Transformative Workplace Learning for and by Teachers – Executive Summary	148
RESEARCH AND CONFERENCE PROJECTS – CONFERENCE REPORTS	149
All-Ireland Doctoral Conference May 2013	
STUDENT TEACHER EXCHANGE PROJECT 2014	153
NEW RESEARCH AND SECTORAL CONFERENCE PROJECTS	155
Funded or co-funded by SCoTENS 2014	
SUMMARY OF SCoTENS RESEARCH PROJECTS, CONFERENCE AND PUBLICATIONS 2003-2014	159

MEMBERS OF THE SCoTENS COMMITTEE 2013

Professor Linda Clarke (co-chair)	Head of School of Education, University of Ulster, Coleraine
Mr Tomás Ó Ruairc (co-chair)	Director, The Teaching Council (Ireland)
Dr Noel Purdy	Stranmillis University College
Dr Geraldine Magennis	St. Mary's University College
Professor Teresa O'Doherty	Mary Immaculate College
Dr Eugene Toolan	St. Angela's College
Professor Anne O'Gara	Marino Institute of Education
Dr Billy McClune	Queen's University Belfast
Dr Conor Galvin	University College Dublin
Professor Kathy Hall	University College Cork
Dr Tom Hesketh	Regional Training Unit
Dr Carmel Gallagher	General Teaching Council for Northern Ireland
Ms Deirbhile Nic Craith	INTO
Secretary	Ms Ruth Taillon Centre for Cross Border Studies
Administrator:	Ms Eimear Donnelly Centre for Cross Border Studies

Chairperson's introduction



Professor Linda Clarke



Mr Tomás Ó Ruairc

Welcome to the 2014 SCoTENS annual report.

The last four or five years have seen a very interesting trend in the themes of SCOTENS' annual conferences on teacher education. We have moved from school leadership, through reflective practice, inclusion, literacy and numeracy up to creativity in our last conference in 2013. This brief overview gives a mere taste of the broad range of complex challenges that teachers, and teacher educators, must address day in, day out. It is one of the hallmarks of teacher professionalism that they rise to the challenge of making themselves new every day (Anne Looney, lecture to mark World Teachers' Day, 5 October 2012) and work with children and young people to help them prepare themselves to shape an unknowable future.

Hence the theme for our 2013 conference was "Learning Teaching: Re-imagining the Profession." In addition to the daily, monthly and annual process of self-renewal that teachers engage in, it was clear from the conference that there is an overarching process of professional renewal underway, which is to be led by the professional voice of teachers. The expectations of the teaching profession, at home and globally, can appear to be overwhelming at times. A process of renewal that reminds us of the centrality of learning for all to teaching for all will be a rich one that will lead to a wonderful re-imagining of the profession.

The conference's contributions, including plenary keynotes, debate and workshops, explored what a process of renewal might look and feel like from a number of diverse perspectives. Professor Mac Beath's keynote posited the possibly radical notion that learning needs to be re-imagined beyond the walls of the classroom. The panel discussion and debate on enhancing leadership in the profession touched on the inevitable tensions between teaching as a science and teaching as a creative art. The workshops examined the connections between teachers and research, the concept of teacher as leader and its potential to enhance learning, bridging the imagining of teaching between the classroom and the college environment for the student teacher, and the practice of teaching as manifested in a creative classroom. The final keynote, by Dr Sotiria Grek of the University of Edinburgh, showed that there were no bounds to this re-imagining of the profession. She explored a reconceptualisation of inspection as a learning act.

No introduction of this nature could possibly do justice to the quality, breadth and depth of the discourse which the conference hosted on the theme of learning teaching. The full

transcripts of the keynote presentations, along with the workshops, are published in this report, along with reports on other activities supported by SCoTENS. SCoTENS is a diverse and active network. In the overall context of relations on the island of Ireland, it can be argued that we have moved from a position where our main focus was “It’s good to talk together” to one of “It’s good to learn together.” This is simply a re-orientation of emphasis in the dynamic – we have always been talking, and we have always been learning. But we are now placing a more focused, rigorous emphasis on the learning, so as to support teachers in their teaching, for the ultimate benefit of the students and pupils in our care. To re-imagine the profession, in the company of professionals from around the world, was an honour and privilege. We hope that this report will give you a flavour of the richness of that re-imagining, and we look forward to hearing your views on related themes at future conferences.



Mr Tomás Ó Ruairc



Professor Linda Clarke

Learning Teaching
REIMAGINING THE FUTURE

Annual Conference



THE RADISSON BLU HOTEL, SLIGO
10-11 OCTOBER 2013



Pictured at the 2013 Annual SCoTENS Conference: From left to right: Mr John O'Dowd MLA, Professor Linda Clarke, Mr Ruairi Quinn TD and Mr Tomás Ó Ruairc

Conference Reports – Contents

Welcome: Professor Linda Clarke Head of School of Education, University of Ulster and co-Chair	09
Opening Address: Mr John O'Dowd MLA Minister for Education , Northern Ireland	11
Opening Address: Mr Ciarán Cannon TD Minister for Training and Skills, Republic of Ireland	14
Teachers, Teaching and Schooling: Quo vadis? Professor John MacBeath , University of Cambridge	17
Debate: Enhancing leadership in the profession of teaching in the 21st Century Chaired by: Dr Tom Hesketh , Director, Regional Training Unit Panel: Professor John MacBeath , University of Cambridge; Mr Ronnie Hassard , Principal, Ballymena Academy, Ballymena, Co. Antrim; Mr Bryan O'Reilly , Principal, Scoil Mhuire Junior Primary School, Ballymany, Newbridge; Dr Carmel Gallagher , CEO/Registrar, General Teaching Council Northern Ireland (GTCNI); Mr Tomás Ó Ruairc , Director, the Teaching Council, Maynooth, Co. Kildare and co-Chair SCoTENS	26

PARALLEL WORKSHOPS	40
Workshop 1 – Teachers as consumers and producers of research	40
facilitated by: Ms Joanne Brosnan , Christ King Girls Secondary School, Cork and Ms Rhonda Glasgow, Spa Primary School, Ballynahinch, Co. Down	
Workshop 2 – The practice of teaching facilitated by: Dr Sean Delaney , Marino Institute of Education, Dublin Ms Mary McHenry , St Louise's Comprehensive College, Belfast	42
Workshop 3 – Creative classrooms: Insights from Imaginative and Innovative Teaching in Ireland facilitated by: Ms Nicola Marlow , University of Ulster, Coleraine Ms Anne McMorrough , Marino Institute of Education, Dublin	49
Workshop 4 – Teacher as leader: 'Only when the position of the individual teacher is supported and developed will we ensure that the perspective, potential and talent of each individual child is fostered'	52
facilitated by: Mr Ronnie Hassard , Ballymena Academy, Ballymena, Co. Antrim and Mr Bryan O'Reilly , Scoil Mhuire Junior Primary School, Ballymany, Newbridge	
Training Session: SCoTENS 'Seed Funding' training workshop	54
Dr Conor Galvin , Lecturer, University	
Governing by Inspection: inspecting as a learning act	74
Dr Sotiria Grek , University of Edinburgh	
Reimagining the professional policy perspective	85
Mr Peter O'Neill , Department of Education, Bangor and Eddie Ward , Department of Education and Skills	

DAY ONE

WELCOME

Professor Linda Clarke

**Head of School of Education,
University of Ulster and co-Chair**



Education it seems is always in the news, always relevant, always topical. And this seems to be particularly true of teacher education in recent years. I have been fortunate to be part of the current BERA enquiry into teacher education and that's allowed me to peep over the fence as it were at teacher education reviews and developments in other surrounding jurisdictions.

Across the devolving four nations of the United Kingdom, and also here in Ireland teacher education is under active development and also some active divergence, having undergone carefully planned and choreographed changes in some places and far reaching disruptive changes indeed in others. In Northern Ireland by contrast there's been relatively little change even though it's been ten years since a multi stage review of teacher education was launched. And just this month, a further review has been initiated. While some bemoan the relative inertia in the North others, like myself, see this as an opportunity to take stock of what's happening elsewhere and learn some lessons before proceeding with further changes.

Undoubtedly the most radical reforms in these islands are taking place in England, where Michael Gove's trenchant stance on teacher education has been very prominent indeed. Teachers he believes, without very much reference to research, should be trained by other class teachers in schools. And yes, to an extent this practical situated craft knowledge is important as is the technical knowledge of protocols and roles, which is the technicist approach to teaching. But there are, in my view, some very substantial deficits in this approach. Firstly, it's a very narrow even simplistic view of professionals, and probably not even professional at all. It's one which casts teachers in the role of carefully controlled, managed and manipulated deliverers of other people's ideas. Secondly, Mr Gove attacks teachers and teacher educators ... sorry Mr. Gove's attacks on teachers and teacher educators are doing terrible, irreparable damage to university departments' expertise in education. Along with his studied insult to university teacher educators, whom he dubbed 'the enemies of promise'.

Thirdly, it's surely not the principal role of a serving teacher to teach student teachers. Their main role is, and has to be primarily about teaching pupils. My son and my daughter and not my student teachers.

I believe that these points are very widely understood here in Ireland – North and South. We have had model schools here a long time ago and we know they're not a panacea for teacher education, certainly not for the 21st century. However, there is of course considerable potential for enhanced partnerships between higher education institutions and schools. We also recognise that we should not take for granted the exceptional quality of the students who choose to become teachers on this island. These excellent students are also singularly capable of benefiting from the other key component of learning teaching. They can benefit from and they can contribute to the rigorous encounters with theory and with research that

must form a part, a vital part, of the formation of a thoroughly and thoughtfully professional professional.

The benefits of research based Masters level teacher education, CPD and preparation for leadership are widely recognised. Gordon Kirk believes they are as follows: they encourage teachers to interrogate their own practices and those of others; they induce the disposition to be innovative; they provide teachers with the skills to evaluate the impact on classroom performance of different teaching strategies and they sustain a professional community that is committed to improving practice. In addition the report of the Teacher Education Review here in Ireland highlights a further key advantage to having a culture of research-based teacher education because the teaching profession needs to model an approach to learning that it wishes pupils to adopt, enquiring, engaged and critical. For me this is the very best reason of all that we engage with research as teachers because what we do, our entire purpose, is about improving pupils' learning. I would argue in fact that if pupils are not learning teachers cannot say that they are teaching. They cannot even say, I would say, that they are teachers.

Engagement with both theory and research in order to improve teaching is not an esoteric affectation of academics. It is at the heart of what it means to be a professional teacher – from initial teacher education through career-long professional development and in learning for professional leadership and headship too. This year at SCoTENS we seek to re-imagine some key areas that are topical in teacher education, at present, through a stimulating and varied programme of lecture, debate and workshop. The conference explores several key dimensions of teacher professionalism, in particular career-long learning for leadership, ensuring equality in schools and sustaining research in teacher education.

I would like to highlight two new features of the conference this year. We are introducing a debate format shortly this morning, with an associated Twitter feed and that is already operational for questions and comments on #SCoTENS 13.

In workshop three this afternoon IT will also be used thanks to Nicola Ward, and Anne McMorrow. So if you don't have a Twitter account now is the time to set one up on your phone or on your laptop, although it's not of course compulsory.

A further very helpful innovation this year is the inclusion of a seed funding training workshop in the conference programme. Dr. Conor Galvin will be explaining our project selection processes and answering your questions about applying for this funding this afternoon.

We are delighted, ladies and gentlemen, that this year's conference is to be officially opened by the Irish Minister of State for Training and Skills Mr. Ciaran Cannon TD and the Northern Ireland Minister for Education Mr. John O'Dowd MLA.

OPENING ADDRESS

Mr John O'Dowd MLA **Minister for Education, Northern Ireland**



Thank you very much. Is pleasair do a bheith anseo inniu, in adhnaigh a bhfuil seasu deag ar oideacheas muintuiri a hUaigh agus a theas a hoscail go a haire Cannon.

It's my pleasure to be here today to open the conference, along with Mr. Cannon, the 11th annual Standing Conference on Teacher Education North and South. I am sure that Minister Cannon will agree that events like this are hugely important, not only in advancing North South cooperation but also in driving forward work that will improve the lives of the young people we all serve.

My Department and Minister Cannon's Department and Minister Quinn's Department have a very good working relationship. This is evidenced through the access taken forward through the North South Ministerial Council and through the collaborative engagement between our officials. It's also pleasing to see the level of exchange between student teachers North and South and I was delighted to join Minister Quinn in February this year to jointly open the conference on the role of teacher educators organised as part of the EU's presidency.

It's important that good relationships exist across all organisations, North and South, and it's also important that we learn from these opportunities and learn from each other and learn from the good practice that exists. I understand that the theme of this year's conference, reimagining the profession, will challenge you to reflect on methods of teaching and learning and how they can continue to be improved. We need to ensure, through events like this, that young people remain at the centre of our efforts to drive up standards and challenge school improvement. I am personally supportive of cross border initiatives and this conference represents an important opportunity to take time out of our busy schedules to consider how we can do things better. I then want to see results coming from that. I want to see outcomes which contribute to building a first class education system which provides for all our young people regardless of their background.

This is my vision for education; a truly world class education system that values every child equally; a system with strong sustainable schools planned on an area basis but flexible to meet local needs; a system where every school is truly a good school which provides high quality education and a system with schools capable of meeting the needs of all our children regardless of their background. I believe education must be the great equaliser which enables individuals to overcome differences in background, culture and privilege. I continue to push the boundaries and aim higher for every child, particularly for those children from the most deprived backgrounds, that way every child, whatever their background, will get the best possible start in life. That is why I am consulting on changes to how we fund our schools. I want to make sure that funding is directed to those most in need.

The consultation on the proposed changes to the Common Funding Scheme closes on the 18th of October. I would encourage everyone with an interest to take part in this debate and to submit their views to my Department. I also believe that education is central to the life of the community. Education should enable young people to grow and develop as individuals.

It should provide them with the skills to enter and play a significant role in the workforce. It should enable them to contribute to economic growth and share in society's prosperity on an equal basis. Every teacher and school leader has a part to play in meeting these challenges, as do I as a policymaker. Educationalists and teacher educators who need to ensure that teachers have the necessary skills and resources to make our ideas a reality all have a responsibility in this field.

Today's educators teach in times that are both exciting and demanding. Over the years we have witnessed significant shifts in education. Without doubt digital media and technology will continue to play a key role in shaping education into the future. Technology brings a world of information to our fingertips which impacts on our everyday lives. It enables an instant connection and collaboration on a global scale. Technology has created a new type of learner whose interest and focus often lie beyond our normal classroom. This has significant implications for the future role of teacher educators, and indeed teachers themselves, but how should the role of the teacher be redefined? The idea of reflective practice and lifelong learning will not be new to any of you. The rapid pace of change in technology and its implications for our education system place even greater emphasis on the need for continuous updating and refreshing of the knowledge and skills of our teachers.

I know that good teachers also need good leaders and I note from the conference programme that there is to be a debate and workshop specifically focused on leadership. Strong and effective leadership and high quality teaching are central to developing and improving outcomes for all our young people. It is these individuals and teams of staff who have the single biggest impact on academic achievement. I also know that good teachers flourish when they're supported in schools by great leaders. I have therefore decided that I need to take a fresh look at how we develop and support our school leaders. This service will enhance the training and support that is currently available to teachers, and school leaders, to ensure they are provided with coherent, modern, fit-for-purpose development opportunities that reflect the challenges of education in the 21st century.

In the North there are many examples of good work carried out in our schools on a daily basis. However, evidence from the most recent chief inspector's report indicates that there is scope for further improvement, and indeed, scope for learning from each other. Over the coming months I will set out my strategic vision for a coherent system of professional development to better support teachers and leaders. As well as this I am bringing forward legislation to strengthen the role of the General Teaching Council as the professional body for supporting teachers and upholding the highest professional standards. With a full range of powers the Council will be better equipped to contribute to our aim of increasing the professionalism of the teaching workforce, driving up standards of the schools and improving the outcomes for all our young people. These reforms will provide further assurances to learners and parents, the fact that a professional body is overseeing the conduct and standard of the teaching profession, and indeed will give confidence to teachers themselves.

Whilst high quality teaching and leadership are key I know that parents also have a significant role to play in the education of our children. I believe that education does not start or stop at the school gates. Strong links between schools and the communities they serve are key to engaging our young people. There is also no doubt that families can

have a huge impact on a young person's development, with parents and any other family members being a vital source of support, advice and inspiration. That is why last year I launched an advertising campaign aimed at driving home the message that education works. The campaign aims to inform and engage parents in particular those from the most disadvantaged backgrounds to become more involved in their children's education. The second year of the campaign, which began last month, has a strong focus on our youngest children just beginning the education journey.

Another area of debate and focus has been shared education. Many of you will be aware of the debate in the North regarding shared education arising from the report of the Ministerial Advisory Group which was published in March last year. I am considering the Advisory Group's recommendations and will soon be announcing proposals on the way forward. I believe that fundamental to shared education is the delivery of high quality education. We must strive to ensure that every child has access to high performing schools in their local community. A number of schools need to share resources and expertise to be able to provide high quality education to all children they serve, this presents challenges to our teachers, teacher educators and indeed policymakers, as well as local communities. I will ensure that professional development of teachers and leaders reflects the changing landscape of schools. In conclusion, the conference is a prime example of how working together we can ensure teachers continue to develop to meet the needs of our young people. We must take on the exciting challenges of developing 21st century educators for 21st century schools. The needs of society and those of our young people are constantly changing and our education system must keep up with these changes.

In conclusion, I would like to end by expressing my gratitude to the co-chairs of SCoTENS – Professor Linda Clarke and Tomás Ó'Ruairc – their committee and staff for their dedicated work and their invitation to me to launch the conference this morning. I have no doubt you will enjoy the next two days of debate, discussion and interaction and, as a result, our young people will benefit from the learning you are doing together. Go raibh míle maith agaibh.

OPENING ADDRESS

Mr Ciarán Cannon TD,
Minister for Training and Skills,
Republic of Ireland



Thank you Linda. A dhaoine uasla, ta an athais orm, a bheith anseo in aineacht libh go leir, agus cuir an faor chuin failte romhaibh ar fad, thuig chontae Sligeagh.

Minister, distinguished guests and friends in Education, it's a great honour for me to be with you here this morning, along with Minister O'Dowd, to officially open the 11th SCoTENS Conference.

The SCoTENS Conference is now widely recognised as one of the key education conferences held annually here on the island of Ireland and the theme of this year's conference 'Learning Teaching: Reimagining the Profession' reflects much of the work and the discussion that's taking place both nationally and internationally on the continuum of teacher education and it demonstrates SCoTENS consistency in addressing some very contemporary challenges. Teaching is the backbone of our education systems – and I may be somewhat biased in forming that opinion because my mother was a teacher for 42 years – but in a fluid, global context teaching and learning are constantly having to adapt to new challenges that are posed all the time.

I wish to acknowledge and to congratulate you teachers, and indeed teacher educators throughout this island, on your commitment to research to ensure that learners, all of our learners both North and South, have access to the best teaching and learning experiences. EU Member States and the EU Commission have both identified that quality teacher educators make a significant contribution to the overall quality of our education system. The EU Presidency Conference hosted by the Teaching Council in Dublin in February of this year examined the position of teacher educators as role models in the development of the professional identity of teachers. So when considering the theme of this conference many questions spring to mind, as reflected in the programme, such as who is the teacher? Who is the learner? Who is the teacher educator and how does a teacher learn to teach? Is the role of the teacher educator something that is confined to third level, for example? I believe that a teacher's career is multilayered, at all stages and levels throughout that continuum the teacher is both learner and teacher. Commencing with the learning that takes place in initial teacher education programmes with cooperating teachers, mentors and third level personnel all the way through to the nationally provided Continuing Professional Development opportunity accessed by teachers throughout their whole career, the majority of which are delivered by their peers, the teacher as a professional continues to evolve time and time again.

My Department has instigated and is overseeing a number of key initiatives and developments at different levels within the system and these initiatives are making an important contribution to changing the way in which teaching learning is perceived, how it's approached, how it's transacted and how it's achieved. The Teaching Council is leading the reconfiguration of initial teacher education courses at both primary and post-primary levels in line with objectives identified in our national literacy and numeracy strategy which was

published in 2011. The extended duration of courses, including the school placement aspect and the reconfiguration of content, facilitates the development of skills and knowledge about learning and about teaching through the promotion of teacher enquiry and teacher collaboration. Thus, inculcating research focused practices and approaches right from the very outset. At the next step on that continuum participation in a national induction programme of workshops is now mandatory for newly qualified teachers since September 2012. Over the next two academic years, the Teaching Council will pilot a new model of induction and probation for primary and post-primary teachers which is entitled Droichead or Bridge and integral to that pilot is the establishment of professional support teams. These teams will include fellow professionals, mentors and school principals in the newly qualified teachers' own schools. Opportunities for in-school and teacher-led CPD is a particularly important feature of other national CPD programmes including that planned to support the implementation of a framework for the junior cycle published by my Department in 2012. Junior Cycle reform is perhaps one of the most significant changes to take place in education at post-primary level in recent times and this reform places assessment for learning at the core of teaching and learning in the classroom. Teacher education will be central to its implementation. The rich professional development opportunities afforded by moderation is long recognised and this will enhance the discourse taking place in staff rooms within and across subject departments. Participation in moderation meetings will extend further the opportunities for teachers to develop their skills and their knowledge of teaching and learning.

I am aware that SCOTENS has supported research entitled *'Exploring the Japanese Lesson Study as a Model of Peer-to-Peer Professional Learning'* and during the last academic year our Project Maths development team supported the engagement of teachers in the initial Project Math schools in a Japanese Lesson Study approach to professional development. The learning from this work will be the central focus of a conference entitled 'Maths Counts – insights into Lesson Study' to be held in the National University of Ireland, Maynooth in November of this year. The collaborative planning and peer observation of lessons, not the teacher bear in mind, of lessons, in this approach to CPD facilitates the sharing of best practice as teachers adopt strategies and methods observed in their own classrooms and all of these developments require strong school leadership. The function of the school principal now places a greater emphasis on that of a leader whose role encompasses financial and human resource management as well as leadership for learning. The Department's parallel and complimentary initiatives, the Literacy and Numeracy Strategy, School Self Evaluation and Junior Cycle reform, and indeed developments in the area of induction and probation, recognise the significance of the role of the school principal as a leader of learning and teaching for the whole school community, including teachers.

As a number of workshops on your programme indicate, and as the developments I have spoken about here today demonstrate, learning teaching is not the sole remit of school leaders or teacher educators in third level institutions. Teachers at all levels of the continuum of teacher education have a key role themselves in reimagining their profession, building the capacity of school leaders at all levels and communities of practice are key tenets of the North/South collaborative programme of work in Irish medium schools for 2013/2014 and this collaboration amongst professional development support services and teachers in both jurisdictions is a further example of how teachers and teacher educators promote learning and teaching in the overall profession.

This conference has an opportunity to bring greater clarity to policy and practice in learning teaching and contributing to improved outcomes for all of our learners. I am delighted that you will hear more about teaching, schooling and the contribution inspection can make to learning for all teachers from our keynote speakers – Professor John MacBeath and Dr. Sotiria Grek. I was delighted to hear John mention technology liberally in his contribution earlier on and I am also delighted to hear there's a live Twitter stream going out from the conference here today because I genuinely believe one cannot underestimate the power of technology to enhance in a very deep and meaningful way the collaboration I've just been speaking about between teachers, between educators – not alone here in this island but indeed globally. Patricia Hutingir is the Professor of Technology in Education at Illinois University and she outlined recently how she sees the role of teaching and technology developing over the next decade or so and she described teachers, certain teachers – and we have many of them in this country and indeed a good few here in this room this morning as well – as trail blazers. Those who are innovating all the time within their classroom and forming new links and new collaborative processes using technology that weren't available to us even five years ago and it's wonderful to see them happening and I think as policymakers and as educators and as professionals and researchers we all have to embrace that extraordinary opportunity that's being presented to us at this point in time.

Finally, I would like to acknowledge the work of the staff at the Centre for Cross Border Studie for their administrative and professional work in support of SCoTENS. I wish the conference every success and I look forward to receive the outcomes of your deliberations in due course. Thank you.

TEACHERS, TEACHING AND SCHOOLING: QUO VADIS?

Professor John MacBeath
University of Cambridge



Thank you very much, Madam Chair and thank you Committee and SCoTENS and everybody else for inviting me back.

Well let's start with a definition. This is the problem isn't it?

Going back to England – to the days when I was working in schools – I was visiting a school in the north of England, and the head teacher went around stopping kids and he'd ask, "What did you learn in school today?" And they would say, "Well in maths today we did the mean, the median and the mode." And he said, "No, no I didn't ask you what you were taught, I asked you what you learned." Later, we were going to the car park and a boy, about nine or ten years old, came up to him and said: "Excuse me sir, what did you learn in school today?" I thought that was wonderful. Isn't it, talking about a learning community, a learning organisation.

Well, what did you learn in school? Did it encourage you to make mistakes? Mistakes are regarded as the worst thing you can possibly do and yet how do we learn if we don't make mistakes?

Did it encourage you to discriminate what's important, to share knowledge, learn with and from others and to deal with uncertainty?

Did it offer you any opportunities to exercise leadership?

If there's one book I would recommend to you it's *Self-Evaluation in the Global Classroom*. It was written by a group of school students who took a year out from This book describes what happened when teams of school students from Anderson High School in the Shetland Islands, together with students from Sweden, Japan, Germany, the Czech Republic, South Africa and South Korea took a year out to travel the world to visit schools, sit in classrooms and then to give feedback to the teachers. That was ... it was the most wonderful, I was going to say experiment but that's not right, the most wonderful initiative that I've come across and it's now in its 13th year. It's called the Learning School and these young people wrote a book – it has my name on the front but I did very little. I only wrote the introduction; they wrote the book for themselves and what they learned over the course of that year was just incredible.

Matthew Boyle, a young teacher in St. Gregory's school in Glasgow – which was described in the press as the worst school in Scotland – had this motto on his wall: "if at first you fail try again, fail better." Matthew was new to the school, a very laid back guy in jeans and a ponytail, with a fantastic relationship with these young people. He invited James Dyson, the inventor of the Dyson machine, to come and talk to his class. They asked, "Mr Dyson, how many attempts did you have to create that, to invent that machine?" He said something like,

"about 142." "Cor, 142 failures." "No, no, 142 learning experiences." It's such a powerful message to those young people; I love that slogan: "if at first you fail, fail better".

In the UK, nine out of ten teenagers have their own home computer, mobile phone and games console. We're currently preparing students for jobs that do not yet exist, using technologies that haven't been invented yet in order to solve problems we don't even know we have yet. Who could have understood the impact of technology? How that technology is to be used in schools and classrooms and out and beyond school?

I was in a classroom somewhere in Cambridgeshire and this superb, absolutely superb teacher spent the whole morning on this particular day talking to young people about what helped their learning and what hindered their learning. She used a kind of force field notion: what are the things that help? What are the things that hinder? I always remember a little girl – she must have been about nine or ten – said, "You know what hinders my learning? When we're having a discussion and then the teacher says 'put down your pens and listen to me'. She said, "You know we're here to learn and you're interrupting our learning." I looked at the teacher; what was she going to do? She stopped and said, "That's interesting isn't it? What are we going to do about that? "Not what I'm going to do about it as a teacher, but what are we as a class going to do about that so we get that right balance in the class of teacher talk and student talk." I went and talked to her afterwards and said, "These kids you know they were just so sharp, so bright. Their understanding of learning was so acute." She said, "Yes, but they didn't just come to that in the year." She said, "I've been teaching this class for three years and its taken three years to get to the point where they're able to talk about their learning, to talk about the process of their learning and being able to challenge."

Let me ask you about the five Ws and H – the When, the What, the Who, the Why, the Where and the How.

Chris Woodhead called me the man at the heart of darkness is because I had written in *The Observer* newspaper, why am I learning this today? Or why are you teaching me this today? In his book, *Class War* he takes me to task a number of times: "This is the man who thinks that children should ask the question why." And he says, "It's very simple, teachers teach and children learn. It's as simple as that." There you are from Her Majesty's Chief Inspector's words of wisdom.

Who you learn with and from? Don't you carry those key people you learn with and from around with you long after you've left school? Learning is a social experience.

How do you learn?

What do you take away from school at the end of the day? Do you take away 'the what' you learn or do you take away 'the how' of your learning?

David Perkins, the Harvard Professor who works with Howard Gardner at Project Zero, says that you forget 85% to 90% of what you learn in school. He claims that we lose something like 85% but we hold on to the way we learn, why we learn and I think, very importantly, *when* and *where*. We did a lot of research with young people about when they did their homework and when they learn best. During my time in the Government Task Force chaired

by David Blunkett, they introduced the literacy hour and the mathematics hour and they said, "These should be first at the beginning of the day when children are fresh." I remember saying, "Well there's a lot of research that shows some children's brains aren't even active until about 10 o'clock in the morning. So the time for them learning, their highpoint, is maybe in the afternoon." So, if when I ask people whether they are morning or evening learners – "how many people are bright-eyed and bushy tailed first thing in the morning and ready to go and that's the best time for your learning" – how many people would say "yes that's me?" If I said, "what about the afternoon/evening people?" It always divides doesn't it – almost 50/50 sometimes. – People recognise when they're at their most alert and I think as teachers that's something we have to take into account.

We're locked in to a whole set of assumptions; a curriculum, an assessment process which is very, very difficult to break out of. One of the reasons I was labelled a heretic was that I contributed to a book called *Why Learn Maths* by a number of mathematicians who queried: "what should come first in the core curriculum?" Currently the Government in England is talking about compulsory maths until age 18. Now when I was on Tony Blair's Task Force on Standards with all these luminaries, ministers and academics – there were about 22 of us for four years – I posed the question why: why should we teach maths? I wasn't talking about literacy. I wasn't talking about numeracy. I was talking about maths: algebra, geometry, trigonometry, etc. I said, "Can anybody give me one good rationale for why maths should be in the core curriculum for all children?" There was a stunned silence. David Blunkett coughed and then David Hargreaves said, "Aha" he said, "When I bought my new house I had to get the ladder into the garage and I couldn't get it in horizontally so I remembered the square of the hypotenuse of the right-angled triangle is equal to the sum of the other side and I worked out that it would go in diagonally into the garage." I said, "Very good David. Why didn't you just try and see if it would go in?" I'm not saying maths is not a great thing or it's not a wonderful discipline or anything else; but when we choose priorities what should children be learning in their school? What should be the core of a curriculum for everyone? I think it's a question worth asking. So there are my heretical credentials.

In England, Ransom talks about the performativity agenda – regulations, controls, pressures, targets, indicators, measures of performance – but questions: "can these realise the purpose of institutional achievement or strengthening of public trust?"

Richard Pring from Oxford told a conference, that he had been talking about John Dewey and afterwards Kenneth Baker came up to him and said, "I never want to hear that name ever again. John Dewey is the man who has destroyed education in this country." I think Pring answered, "No I thought that was John MacBeath."

Two questions: How many students were rendered callous to ideas? How many lost the impetus to learn because of the way in which they experienced learning? Ken Robinson talks about how children come into school with wonderful exuberance and optimism and desire to learn. He uses data to show how gradually over time they lose their impetus, their initiative or their curiosity to learn. I guess that rings fairly true with a lot of people here.

I like the Albert Einstein quote, "If you judge a fish by its ability to climb a tree it will spend its entire life believing it's stupid."

The OECD are launching a publication entitled *Leadership for 21st Century Learning* in Barcelona in December, looking at how we tackle this tension between the external – the global policy world – and the internal world of the classroom. We are all subject to that globalisation agenda which is driving that kind of competitiveness. Governments have a very short tenure and therefore need to accomplish something within that tenure. However, some countries like Singapore say, “Well we’re going to think ten years ahead. We’re going to think about how we create and reconfigure and reimagine what the education system and what schools should look like.” So I think the issue here – addressing the tensions between the managerial roles and talking differently about pedagogical leadership – is about moving the discourse from power and control to autonomy and collaboration; from demands for accountability, to how did we create schools and systems where the key centrepiece is professional support and development; and from centralisation to decentralisation? I think these are some of the big challenges, currently both for policy and for the profession.

You may be familiar with the six OECD scenarios about what’s going to happen ten, fifteen, twenty years down the line. If we look into future ten years from now, will we just get more robust bureaucratic systems? Are we going to lose teachers in a meltdown of which we already see signs in some countries? Or is it going to be a re-schooling, a re-conceptualising, and a re-imagining of schools as core social centres? Maybe they’re not going to be nine-to-three or nine-to-four. Are they going to be learning organisations where teachers and young people work together; where the centrepiece is learning? Or a de-schooling, in which we move away from an institutionalised notion of schools into networks, learning networks, a network society, schools without walls?

When I was working in the United States in the 1970s, there was a flourishing school without walls movement. I went to Philadelphia where the first school without walls existed. These young people had their whole school timetable built along what’s called the Parkway in Philadelphia. Anything they wanted to learn, anything that was on the curriculum, could be learned in the city: in the shops, in the museums, in the zoos, in the parks. I met with these kids and talked to them. They were just unbelievably knowledgeable about how a city works, as well as really well steeped in their disciplines. I was so taken with it that when I went back to Glasgow I spoke about it at a conference. The Director of Education for Renfrewshire came up and said, “Right MacBeath, put your money where your mouth is. I’m going to let you take kids out of school – 14- and 15-year olds – take them out of school for 11 weeks and let’s see how this whole thing works, a school without walls.”

They let me work with these young people because they were all disaffected and doing nothing at school. Well I sat down with them and asked them, “What would you like to learn? You’ve got 11 weeks. You’re not coming to school for 11 weeks, what would you like to learn?” We talked and talked and talked and eventually they said, “Well come to think of it: deep sea diving, astronomy, taxidermy. I’d like to stuff tigers.” Anyway I took the list, at the end of the day there were probably about 20 or 30 different things on the list, and I thought, “Astronomy. Where could this young person go to learn astronomy?” So I phoned the Astronomy Department of Glasgow University and said, “Could you take a young person for, say, one day a week?” “Great, fine, yes we’d love to do that, okay”. I phoned the museum and said, “Now I’ve got a young person who is very interested in stuffing tigers would there be any room in the Taxidermy Department one day a week?” “Well we’re not currently stuffing tigers but we are stuffing penguins.” So I went back to them, “Would stuffing penguins do?” There was at the time a Glasgow zoo – there isn’t any

more – but two or three young people went and worked in the zoo and did their biology and their zoology. The AA took young people in the patrol car around the city, and then took them into the headquarters to see how a city worked. So they got the bird's eye view and then they got the worm's eye view going out with the patrolman, the ambulance service and so on and so on. So for each child we designed an individual 11 week out of school programme. It was so incredibly successful that they made a film about it, talking about these young people and what they learned. When they came back to school they came with a renewed initiative and interest in learning.

There is a group in Stirling, Scotland who are writing and talking about Horizon One which is stability, predictability, clear measures of success, short term evidence, crops, annual crops and about the Third Horizon, which is comprised of uncertainty, dynamism, excitement; new, flexible, creative spaces for learning, emergent measures of success and long term evidence. Their question is, "How do we get from Horizon One to Horizon Three" and that's currently with a very realistic grasp of policy. How do we get from one to the other? As Sutherland, Robertson and John talk about, it's time to consider young people's out of school knowledge and cultures, not as distractions from the main business of schooling, but as rich, complex, diverse and powerful sources for learning; as an important place to start in designing education for the 21st century learning out of school; how that transfers out of school into school and how in school learning transfers to the outside.

If you go back, how do you learn to swim? In a pool. How do you learn to play a guitar? With a guitar. How do you learn to fish? With a fishing rod. How do you learn to play a piano? With a piano etc. Learner-centred in every case; concerned with skills and dispositions. Supportive but challenging. We know that the optimum state of learning is when you are most relaxed but at the same time you are at your most alert and, of course, age blind. I've called it teaching and learning and assessment in the wild. That's what David Perkins talks about. He talks about learning in captivity and learning in the wild. Put the name David Perkins into Google or You Tube and you'll get lots and lots of his three to four minute videos in which he's talking about how we learn in the wild and how we learn in captivity. Working with Howard Gardner they did a number of experiments with teachers and children. Really, really good teachers could achieve 100%, with 100% of the class, on a particular piece of knowledge or skill. He said, "Good teachers can do that" but then they put children in what he called an unstructured environment, an open field, to see how they could problem solve. The success rate fell to nearly zero because they didn't know, without the support of the direction of the teacher, how to learn for themselves. They didn't know how to understand the culture or how to use the culture of a place where learning wasn't being directed or scaffolded.

So that was an important challenge to the whole notion of how learning transfers from one context to another. We do know that children who can do well in maths can then cross to the next building and the science teacher says, "Now didn't you do that in maths?" Well yes, but that was maths and this is science. So the whole issue of transfer is one that we really need to think about. And again, if you look up David Perkins on thinking routines, you'll find some of these and they're very, very simple but very profound. The Brunerian notion of economy and power: Jerome Bruner said you can teach anything to any child in an intellectually honest fashion if you find the way to the key idea on which so much else hangs. He uses the example of the making and breaking of atoms: a very simple concept but a hugely powerful one of course.

So – see, think, and wonder. What do you see? What do you think about? What do you wonder about? At the end of a class or the end of a session or even during a class: think have you moved on? Have you reimagined your thinking?

In what way does the learning that's going on in the classroom connect with what you already know? In what way does it extend what you already know and to what ways does it challenge what you already know? Perhaps you might say at this moment, what does it connect with in what you're talking about? Does it extend my understanding? Does it challenge my understanding and then think, pair, share. I'm sure many teachers here will be using a similar kind of methodology. Vygotsky talks about scaffolding: what the good teacher does is provide that outline scaffolding of the big ideas, the big concepts; but it's young people themselves who have to build the structure within that scaffold. Vygotsky talks about the 'Zone of Proximal Development': beyond where we are into the potential, the next horizon, and questions if we can have a higher expectation of going beyond even where we think our potential is.

Potential is I think, one of the bad words in educational discourse, children "living up to their potential" or "using their potential". It can be a very limiting notion if you think of potential in that way. Whereas Matthew Boyle who I talked about, "if at first you fail try again, fail better" ... those young people went beyond the notion of what their teacher saw as a potential into what Vygotsky calls the Zone of Proximal Development.

Well let me talk just a little bit about one of my favourite current obsessions. Three years ago I was asked to evaluate the Children's University and I've been working now for four years with the Children's University which originated in a few schools in England. Originally Tim Brighouse founded it, then it kind of disappeared and it was revitalised about four years ago. It did have a little government money until Michael Gove decided that this wasn't a terribly good idea; that children should be sitting in rows and desks and not doing silly things outside of school. However, what the evaluation was showing very clearly was that compared to a control group, the children who went to Children's University were achieving far higher results. So there are currently many more schools involved, I think the number is 2,714. The Children's University has identified over 1,500 learning destinations; places which become validated – they get a sticker on the door to say that they offer a learning experience for young people which can be validated by the external reviewers. Children then get a stamp on their passport to show that they have got an hour say, in the British Museum or an airport or the docks or a stately home or an urban trail. Very recently a cemetery was added to the list. At the beginning they asked, "What can you learn in a cemetery?" Think about it. What can you learn in a cemetery about people, about history, about social history? So now, two or three cemeteries have been validated as learning destinations. My evaluation over the last four years was launched in the House of Commons – and if you are bored enough one evening you can listen to my ten minute talk in the House of Commons about the ten measures of success. The evaluation shows that children who attend Children's University after school, weekends, summers, out of school time achieve an attendance rate at school far higher than the control group. Their attainment in certain cases – not always – is sometimes incredibly much higher; their achievement much more broadly defined. They achieve things they never thought before they could achieve, in some very esoteric areas. Their attitudes to schools change very significantly. And then there are the adventures, the awards and the sense of agency. I would put that at the top of the list – that young people have that sense of their own agency. "Yes I can do it, yes I can aspire higher." I can go into that zone

of proximal development if you like, where I never thought exceeding my own aspirations or expectations. And the advocacy that they have! When I speak they're always bringing young people on immediately before me, which puts me in the shadow because these young people speak so passionately and with such advocacy of the Children's University.

If you can get a chance just Google 'Children's University' and you can find a lot of short video clips made by young people. There's one, of a kid in Middlesbrough talking about his own learning in these different places that he's visited. It is such a powerful, powerful advertisement for learning in these different kind of sites and how that child understands and talks about the learning in the 10, 11, 12 different learning destinations that he's visited.

One other thing before I finish, just have a word about Coursera. Coursera is also known as a MOOC, a Massive Open Online Course. Currently we've been working with the Commonwealth Education Trust on developing eight courses each of six weeks. Each of the six weeks has 24 lectures accompanied by think pieces and discussion forums. There are readings and videos and then for each of the weeks you take a standardised quiz, and three or four people who are on that course assess one another's work. So there are assignments and the peer assessments and it's an incredibly, incredibly powerful medium. My own course, which is called Learning and Teaching, and it's free, has currently thousands of students who are all writing in the forums. There's one guy from somewhere in South America writing about his problem with discipline in the classroom. Every day there are other people coming in saying, "have you tried this?", "what's the issue?", "how can I help?" I think he's had over a hundred different replies. People are networking with each other and helping one another in an incredibly generous way. So Coursera is one to look at.

A lot of people conceive of leadership in hierarchical terms. I've done research with Maurice Galton in England looking at the future of teaching. They have gradually added layers, and layers and layers to the hierarchy. We talked to so many teachers on that bottom rung who said, "I've had enough, I can't take it anymore, I'm leaving. I'm leaving the profession I love." Teachers' ownership of their own learning and their own teaching has been incredibly diminished over the years. Maurice Galton and I have five publications and we're about to embark on another one financed by the National Union of Teachers to look at what's changed, what's happened. Do teachers currently feel any more empowered or disempowered? As Joe Murphy said in 1996, "We have to think of leadership not as simply exercised at the apex of the organisational pyramid but as at the centre of the web of human relationships. That is where leadership is exercised." We often tend to think of leadership in the rhetoric as heroic; carried out by the big leaders if you like. Then there's the rhetoric of a notion of a gradual kind of distributed leadership. I've never been entirely happy with that because it sounds like its being handed out. You can exercise leadership that isn't just an individual activity. It's very often a collective activity, people working together; and that is the most powerful. Leadership is what people do.

I was in a staff room in an English school and they were all sitting having their tea at the break and there was a woman clearly distressed sitting on her own and somebody – a young teacher – got up, walked over and sat beside her and started to talk to her. That was an act of leadership; leadership as activity. It wasn't the head, it wasn't senior management who were doing it; it was a young teacher who took the initiative to do something. When I talked about Matthew Boyle earlier, that young teacher with the ponytail and the jeans and brand new teacher to the school, he became the key pedagogical leader in that school at the

age of 23 or 24. People who taught English, who taught history, who taught other subjects came to his physics classroom and worked with him. He was able to lead a group of people there who were instrumental in changing the school that was labelled as the worst school in Scotland. With Peter Mortimer at the Institute, we did the evaluation of 80 schools in Scotland over a period of four years. That school went from the bottom of the rung right up to, not to the top, but about halfway because of that one young teacher who had that kind of insight and leadership and was prepared to exercise it as an activity.

Leadership is a subversive activity. Intellectually we challenge people's thinking; we challenge people's ideas, we ask them to think differently. "I used to think; now I think". Leadership is a deeply moral activity. You must have a moral base and a moral commitment to the young people, to your colleagues, to the nature of learning, it is a moral process. Perhaps a small 'p', but it is also deeply political; because we always have to understand the political context in which we are working. What David Hargreaves at Cambridge called "flying below the radar"; we have to learn how to sometimes fly below the political radar, but sometimes being able to engage with that, with the policy.

Let's just think for a minute or two about the current discourse, about the language that is used, the language of delivery. I once said to David Blunkett, "Would you please stop talking about delivering outcomes" and to his credit the first time he ever actually listened to me. He said, "Okay, I'll stop using the word delivery." Phew, small victory. Why don't we talk about engagement, outcomes? I know it's so deeply embedded in the discourse, how could we not talk about outcomes? I remember being in the United States when the word was first invented – would you believe, 1971 – it was all the rage then. We're going to talk about outcomes but why don't we talk about achievements? Instead of performance why don't we talk about learning? Why don't we talk about dialogue? Instead of value added – which is a highly dubious concept by the way – why don't we talk about growth? Instead of accountability why don't we go back to the notion of responsibility? And this word instruction; that word is an imposition from the United States. Instruction is a horrible notion and instructional leadership is even worse. We should talk about pedagogy, about teaching. It's worth fighting for a different language because language matters.

Jonathan Jansen from the Free State University in Johannesburg is the most inspirational person. He was the first coloured head teacher and he went through hell, he suffered incredible racism. If you get a chance to read his book, *Knowledge in the Blood*, it's an incredibly moving book.

What lies on the horizon of possibilities? How can I, in collaboration with my colleagues, look beyond the present horizon to the patterns and the parameters of change that locks us in? How can I, how can we, think about a new and different kind of future? "We shall not cease from exploration but the end of all our exploring shall be to return to where we first started but to know it for the first time," said T.S. Eliot.

Thank you.

References

John MacBeath and Hidenori Sugimine (Editors), *Self-Evaluation in the Global Classroom: What's In it for Schools?* Routledge (2002).

Chris Woodhead, *Class War: The State of British Education*, Little, Brown (2002).

Richard Aldrich et al, *Why Learn Maths?*, (Bedford Way Papers), Institute of Education, 2000.

Centre for Educational Research and Innovation, Leadership for 21st Century Learning, OECD, 2013.

Rosamund Sutherland, Susan Robertson, and Peter John, *Improving Classroom Learning with ICT*, Routledge, 2008.

Carol Garhart Mooney, *Theories of Childhood: An Introduction to Dewey, Montessori, Erikson, Piaget, and Vygotsky*. Redleaf Press, 2013.

Jonathan D. Jansen, *Knowledge in the Blood: Confronting Race and the Apartheid Past*, Stanford University Press, 2009.

DEBATE: ENHANCING LEADERSHIP IN THE PROFESSION OF TEACHING IN THE 21ST CENTURY

Chaired by: Dr Tom Hesketh
Director, Regional Training Unit



Panel:

Professor John MacBeath, University of Cambridge

Mr Ronnie Hassard, Principal, Ballymena Academy

Mr Bryan O'Reilly, Principal, Scoil Mhuire Junior Primary School

Dr Carmel Gallagher, CEO/Registrar, General Teaching Council

Mr Tomás Ó Ruairc, Director, the Teaching Council

Dr Tom Hesketh

Well good morning colleagues and welcome to what I think is a first for SCoTENS, this is the first time that we're going to actually have a formal debate. The overarching theme is enhancing leadership in the profession of teaching in the 21st Century and it was great to see that towards the latter end of Professor MacBeath's talk this morning that we were given, I think, a wonderful bridge; a set of concepts; a set of ideas; a set of thoughts on teacher leadership which served as a very useful bridge, I think, into the session that we're about to go into.

We have already heard this morning a 21st Century characterisation of the teacher as a professional or in part predicated on a blend of both pedagogic excellence and also leadership excellence. Now I don't think we can say something similar to that in relation to the 20th Century or the 19th Century characterisations of 'teacher' that would still linger prominently within parts of our respective schooling systems. I think the case for a re-conceptualisation of teaching which sees a coming together of pedagogic leadership and leadership excellence in its own right is very compelling, not least because the task facing teachers and other professionals who work with children is much more challenging now than it was a generation ago, perhaps even half a generation ago. As Professor MacBeath reminded us on a number of occasions through his talk, the current approach to school effectiveness is predicated very much on targets and performativity and on measurement and is anchored in what we sometimes refer to as managerialist conceptions of leadership and of teaching. Those ideas which do linger in a very prominent way within our schooling systems have the potential to stymie any re-imagining, any re-conceptualisation of teacher professionalism which is fit for the kind of period that we're in and for the future that beckons. I think you get this tension very powerfully in the forward to Professor MacBeath's, *The Future of the Teaching Profession* when he quotes Fred Van Lewen as follows, "The debates on policy directions in education the past decade have been increasingly focusing on learning outcomes and effectiveness indicators in search of the hidden truth or the Holy Grail of what makes an effective school. While effectiveness and efficiency have become the call of the day, not only in education, but in other public sectors, too often attempts to capture

what defines student achievement and teachers' contributions to it have often been narrow, one-sided and limited leading to distorted policies effecting the efficacy and the morale of teachers."

So the paradoxes and the tensions between the two different world views that I think Professor MacBeath has taken us into have been very, very stark this morning and I think we are looking at two competing models of teacher professionalism. CPD, for example, to enhance professional autonomy and practice or to enhance performativity. The teacher as an informed and intellectual practitioner is merely a practitioner who delivers someone else's dictats and edicts. Are we looking at a future of the teaching profession which is going to continue to be dominated by managerialism? Can we open up new avenues and new pathways to pedagogic excellence? I think the implications of the old order thinking for what we might wish to achieve in the new order are conveyed in a very powerful way by Cuffy. Talking about teaching being characterised as delivery, he says, "They espouse a high performance model of school which is characterised by relentless pressure, competition, line managers, customer services and data for performance accountability and value for money and professional autonomy for teachers only when granted by the centre. Their model of the school system is highly prescriptive, top down and mechanistic. Teachers are reduced to the status of technicians, of agents of the state who deliver the ideas of others."

Now I think that's the view which this particular conference has been designed to confront and to offer an alternative to. We are serious about affording delegates an opportunity to explore what we mean by teacher and by teacher learning and by teacher leader in ways which are perhaps different from the predominant views that still prevail. We are particularly interested in this session to redefine or seek to redefine teacher in this period that we're now in. We're particularly interested in seeking to identify what part of that new way of conceptionalising teacher and teaching, what part of it actually focuses on leadership and in relation to this leadership, how might it be defined, how does it relate to the core tasks of teaching and learning and what might the implications of all of this be for initial teacher education for CPD and for the different ways and different parts of the system by which we seek to encourage professional growth and development?

I'm delighted to lead us in our considerations of these weighty matters this morning. We have assembled for you a wonderfully cosmopolitan panel which includes the esteemed, Professor MacBeath whom I think in terms of world thinking on these matters, lies at the heart albeit stretching it insofar as he is able to, into the kind of domains that I think most of us might authentically subscribe. We have the respective registrars of our two General Teaching Councils, North and South, Carmel Gallagher and Tomás Ó' Ruairc and to kick off the proceedings, because the focus is very much on leadership and the people who can really open the pathways in terms of encouraging greater teacher leadership and greater teacher empowerment are those who actually lead the institutions within which teachers now live and work and act out their agency. We thought it important to include on our panel two head teachers who are going to give us a very short but hopefully insightful piece on what teacher leadership means for them as head teachers. To kick off that particular part, I'm delighted to welcome and ask Bryan O'Reilly to contribute. Thank you.

Mr Bryan O'Reilly

Go raibh maith agat Tom, it is a privilege to be here.

I want to start by saying to you as teacher educators that I remember Sister Marion Walsh, I remember Joe Dunne, I remember Andy Burke, I remember Hugh Gesh and I remember Anne-Louise Gilligan as teacher educators that caught me in my formative years and I don't just remember them as people, I remember the moments in my thinking when they challenged me and what they challenged me about and I want to pay them a very important compliment in the roles they played in developing and informing teachers.

I'm going to start with a piece that I used in the school newsletter last June with a slightly different agenda to this morning but I think it's very relevant. It comes from Robert Kennedy, former Attorney General of the United States and he said, "Gross National Product measures neither the health of our children, the quality of their education nor the joy of their playing. It measures neither the beauty of our poetry nor the strength of our marriages. It is indifferent to the decency of our factories and the safety of our streets alike. It measures neither our wisdom nor our learning, neither our wish nor our courage, neither our compassion nor our devotion to our country. It measures everything in short except that which makes life worth living. It can tell us everything about our country except those things that make us very proud to be part of it." Leadership in education, in my view, must be rooted in the perspective that teaching is predominantly art and that we must be careful to ensure that the scientific and economic requirements accept this in the first instance.

Artistic endeavour is uniquely individual and given our commitment in the jurisdiction in which I work to the developing of the individual as enshrined in the 1971 and subsequently 1999 curricula, there is an onus on leaders to give scope to teachers to develop their craft in line with their unique prospective as individuals. Only when the position of the individual teacher is supported and developed will we ensure that the perspective potential and talent of each individual child is fostered. One key to this fostering that I want to focus on is the relationship that each leader has with their colleagues and the kind of relationship that colleagues have with each other. In order to share and communicate developing methodologies to ask and listen, reading recovery, literacy lift-off, better basics, maths recovery, stop, ask and listen, the quality of the relationships that the leaders have with their colleagues is really so significant. We have a range of scales and measures available to tell us that there are a whole scope of personality types in schools. They have a significant influence on the kinds of relationships that leaders have with their teachers. We need to develop a greater awareness among educational professionals about differing predispositions and the potential for these to cause differences within people. The consequent diffusion of energy is a block to authentic collaboration and effective relationships could be channeled into improved methodologies and far more effective teaching. In order for lifelong learning to take hold, it is vitally important that we provide further professional development for all in the area of personality type so that we have a fuller understanding of ourselves so that we can navigate the personality factors.

We need to seek to develop positive relationships with pupils, students, colleagues, parents, school management and others in the school community that are characterised by professional integrity and judgement. This seeks to give teachers a new language to support and direct them in developing their own language into the future in a way that makes sense

to pupils and parents, in a way that identifies them in their art and in their craft and through that art and craft then, subsequently, meets the needs of the economists and the scientists.

As a principal for the last 24 years, I've had numerous inspection interventions and here's a key point for teachers, the point of inspection interventions. The inspector that measured and that used objective and scientific criteria invariably left me feeling not very good as a professional. The inspector that caught me in relationship that made constructive suggestions and that had a vision for the central point of the curriculum of the individual child was the one that left me feeling enabled and feeling like a true artist.

Go raibh maith agaibh.

Mr Ronnie Hassard

Here in Sligo, this former English teacher, tasked himself to identify an appropriate line or two of Yeats' with which to frame these introductory thoughts. The choice fell upon Yeats' poetical profession of faith in *The Circus Animals' Desertion*. In rejecting the romantic escapism of earlier work, Yeats' assertion was that his poetry should henceforth tell emotional truths, however uncomfortable that might be: *'Lie down where all the ladders start/ in the foul rag and bone shop of the heart'* he says, and I think that is no bad place for this practitioner to begin an attempt to articulate his perception of some uncomfortable truths about leadership development. It is surely time to acknowledge that without intimate and ongoing school engagement the process of leadership development will be unsuccessful.

If this were a formal debate I would be proposing a motion along the lines that when it comes to Leadership Development for schools, those organisations whose business is 'Teacher Education' should work differently. Pause on those words, not do less work but work differently. Schools, on the other hand, would also work differently and most certainly be expected to do much more than is currently the case.

In 2007 in *Leading in a Culture of Change*, Michael Fullan observed that *'What is needed for sustainable performance is leadership at many levels of the organisation. Ultimately, your leadership in a culture of change will be judged as effective or ineffective not by who you are as a leader but by what leadership you produce in others.'*

How and where is that multi-layered leadership to be driven and derived other than by and within the culture of the school, with essential enrichment, research grounding and academic heft provided by teacher educators? My own view is that the external 'leadership' qualifications should all have components which are directly linked to and are assessed in the context of the individual's work in school. Furthermore, I contend that expert practitioners should be involved in delivery and assessment of such link components.

The following comment from the Chief Inspector of Schools gives us all food for thought, regardless of whether we are school practitioners or teacher educators:

'Teacher education and leadership development programmes need to ensure much greater continuity and progression, especially in developing those essential leadership behaviours which should emerge from the earliest stages of teacher education.'

I passionately believe that without schools' active and increased involvement as partners in the enterprise, leadership development programmes will not bring about the kinds of leadership needed for 21st Century Schools and 21st Century Education. They will stay frozen in the here and now with all of the changes technology being but one of the.

Dr Tom Hesketh

Thank you, Ronnie and Bryan. Two head teachers who I think are in a different planet from the one who I encountered 15 years ago as a young adviser going in to talk to him about middle leader development in his school. He looked at me and he simply said, "Tom, my aim as a head teacher is to keep as much leadership away from my teachers as possible". Clearly Ronnie and Bryan come at this from an entirely different prospective. We want to hear your comments on this theme; we want your questions on this theme which will enable you to extract the maximum value from the panel members which includes the registrars of our General Teaching Councils.

Would anyone like to kick-start the debate by making a comment or asking a question? When we think of teachers today and into the future, do we continue to run with the separation between teacher in the classroom and others beyond the classroom who have leadership responsibilities or are we characterising teacher and teaching today as combining both pedagogic leadership and also leadership of others?

QUESTIONS AND ANSWERS

Terry Murphy

I think we would all agree that teacher is leader in both ways that you've described. It is something that has been going on in schools for a long, long time but may not have been acknowledged as such, recognised as such and discussed and written about as such. We have a government and a society which is placing particular requirements on schools and then we have people like the professor very clearly outlining for us this morning how real education should be working in the interests of children. The real challenge is how we reconcile those two things in the best interests of education and of children and their development and I think that's the big issue and I'd be very keen to hear from the panel in terms of how we would make the change.

When a school in the North is inspected and found to be outstanding, instead of being elated by the outcome, there is a serious anti-climax within the school. If I ring the principal of a very successful inspection outcome school to congratulate them and have a chat about it, I'm not talking to people who are seriously elated by their outcome, they're quite deflated in many respects and I think that is a window into how schools are being affected by the system that is imposed upon them. So I would be very keen what the panel would have to say about reconciling these two things. Thank you.

Carmel Gallagher

Thanks Terry. I think this whole managerial agenda is so tangible and so felt by everyone and while we're looking to principals and leadership in schools, one of the issues is about system leadership. I feel that in the North at the moment we are actually in a bit of chaos theory and I'm just hoping that out of the chaos there's going to come some kind of systems theory. It

will be interesting to see what our policy makers are going to say tomorrow about a decade long waiting for a review of teacher education, a decade wait for a properly thought through professional development system. We have a review at the moment of inspection, school improvement and of exams; we're having a World War II on assessment. So hopefully out of the chaos will come some kind of system.

I think in terms of leadership it's as much of a challenge to people like me, people like you Terry, Jim and others. I was reading a book by John this morning on leadership, before I came down. It's a 1998 production, you possibly don't remember but you quoted Howard Gardner who had looked at leaders around the world. He said that things leaders do is to offer a challenge, confront authority, have a healthy disrespect, have a subversive quality, not the kinds of things we'll put in the competences for leadership but something that we all need to bear in mind.

Leaders take risks; they overcome the forces of conservatism and compliance. Leaders have a confidence in their instinct and their intuition. Leaders are able to keep in mind the big picture of where we all want to go and are driven by a moral purpose and a sense of timing. So I'm just hoping that the sense of timing is right, that out of chaos theory that some of us as leaders of the system can stand up alongside and beside our leaders in the schools, including the young teachers who feel so oppressed by a managerial system, and actually show some system leadership together.

Tomás Ó Ruairc

The question is 'how do we effect change?' The words that I jotted down when you mentioned them were trust, connect and enhance. I think my perception of the changes that are enfolding in the South and the rationale behind them is that the state placed increased trust in those at the core of the system. If you look at what we're trying to do in Droichead, what's happening in Junior Cycle Reforms, school self-evaluation what I perceive is that the predicate and the rationale is that those at the core of the system know best, full stop, and know best how to mediate policy and their contents. They're not the only ones who know. Clearly government departments have a lead role in formulating policy and that's the Minister in those cases; but how that policy transacts or is implemented or is realised in the classroom is best done by the practitioners in partnership and in conversation. They're the only ones that can do it. Tomás Ó Ruairc or anybody else can't do it in the classrooms in the schools, only the teachers can and I take the point about, I understand this fear about managerialism.

Managerialism strikes me as very much an ideology and like many ideologies – not all – it's some kind of a delusion; because I think ideologists by their nature are adhered rigidly to by people in spite of the facts. So I think what we're trying to do is to create spaces in time for the professionals to realise the art and the science of what they're trying to do. There is a science to it too, of course, but I take Bryan's point in terms of the relevant balance between different components. So to create spaces in time, as a national organisation we have a responsibility and can do, we don't do the doing, we don't go into every classroom around the country and nor do we seek to do so, despite what others may think we are trying to do. We're trying to get an overall framework for leadership to be realised and I think to take a case in point, last Saturday to celebrate World Teachers Day, we held our first Feile, or festival of education and learning and teaching excellence and it was quite literally and physically a space in a time. We put it in place and we invited teachers from all over the country to come together and simply talk to each other, lead each other physically around the venue

and lead each other in terms of ideas and it was inspiring. When you actually just put people, give people a certain atmosphere and a vibe and a space it's conducive to the kind of conversations you want to engender. You will be blown away by the results and it's not to take away from the reality, there is a harsh reality out there, we've had to endure for the last five years but there are other stories there too.

I'll finish on this last example in terms of mentor training, the National Induction Programme for Teachers inundated with applications for mentor training even though it's an unpaid position and a lot of the training takes place in the teacher's own time. It's one key example of how teachers, when given the opportunity to do so, are more than happy to lead teaching and learning in areas that we could hardly imagine.

Tom Hesketh

A Tweet has come in from a colleague in the hall, I think responding to what Ronnie asserted as a head teacher, asserting that he believes that all teachers are leaders and the question asks, "how then do we help them to be that?" From the standpoint again of a school Ronnie, how as a principal do you work with staff or create a culture for staff within which the leadership capability of your teachers and others within the school can be optimised?

Ronnie Hassard

Well first of all I think this is a cultural matter. It's a matter of developing within a school a culture in which people feel they have a say, that they have an input, that they as a new teacher have an input into how a subject meeting works, an input into a meeting, at a pastoral meeting or at a meeting of form tutors, that their views are sought and listened to. So that from the get-go, a teacher in the school feels that they have recognition.

Tom Hesketh

Okay, Bryan?

Bryan O'Reilly

Yes, just when I have the mic I'm going to take the opportunity to answer about challenging the political influence. Teachers communicating through children to parents have enormous political influence and that's a political potential that I don't believe has been tapped adequately and it hasn't been tapped adequately because teachers don't have confidence in their art. They don't have an adequate confidence but I know from practical political action that the INTO has taken, that we can mobilise people all over the country on a pupil/teacher ratio issue and I also know if we take our courage in our hands that we can mobilise parents to exercise political influence on their local TDs or their MLA representatives. We shouldn't underestimate the significance of that and we should be telling young teachers coming in that they need to be exercising that kind of political influence if they want to have it on the system.

The second point I'd like to make is that it takes enormous courage to resist the power of the measurement authority. I'm responsible for between €2 million and €3 million of tax payers' money. I don't actually pay it out because the Department of Education and Skills pays it out but I have that responsibility and I have to be accountable for that and the unfortunate inspector coming in has been given a tool set to measure that. Unfortunately, in my experience, the inspectorate in the Republic and their approach is significantly more

benign than in the North and I greatly respect that and appreciate it, but they're looking to have it both ways. They're looking to come in and evaluate and identify value for money while simultaneously exercising change in the system. We want policies for this, we want policies for that. With due respect, you're either an evaluator or you're a change manager. You're far more welcome coming in as a change manager on a support to change if that's your role. Don't mix the two please and the quicker we separate out those entities as an influence on schools, the quicker we'll free teachers to have confidence in their capacities and in what they are failing at. I'll go back to Professor MacBeath's reference this morning, 'fail better' and I say to my teachers, "let's fail better and let's tell parents when we fail and how we're going to fail better." It's a difficult thing to do when you're a teacher because you're supposed to always have it right. So it isn't just about doing it in the school, it's about communicating it to the community and through that communication, I believe, we have enormous potential to exercise political influence and to build confidence in our communities and make education what it is.

Tom Hesketh

Thanks Bryan. There's still a little bit of healthy scepticism in the room because someone has tweeted, "all teachers are leaders, great idea but what does it look like in reality now?" We've had two heads giving us their perspective on what it might look like in the context of their schools. Could I throw that challenge back to the teacher educators in the room? If we believe passionately that all teachers are leaders or have the potential to become leaders, what's happening in the colleges of education and the institutes of education in terms of initial teacher training to try and develop those capacities within those young folk who are going into teaching?

Harry McMahon

I left the duties and responsibilities involved about 12 years ago but since then I've been becoming an artist. I've gone back to University and trained as an artist. So what strikes me about teacher education, as I remember it, is that we didn't train them as artists. I mean we've had two artists, one in, well I don't know what your particular discipline is but I know we've had a poet at one end of the table and in some sense an artist at the other end of the table. When you think about what happens to artists as they are trained to be artists in our schools of arts around the countries, they come in and they experience disciplines other than the ones that they've experienced in schools. In schools they've probably been told how to produce a portfolio, you have to, for your examination. You have to have some of this and some of that and some of the other and that's not good enough. You've got to do better, you've failed, do better. Not fail again, get it right. That's the way they come in to schools of art. In schools of art they immediately meet many different media that they've never encountered before. They take risks, they flounder, they wonder what it's all going to mean in the future but gradually they become risk takers, they come up with a coherent philosophy of the art that they're trying to create, what it means, what it's for and they become self-confident, they go out and practice and they don't care what other people think of them. It's curious. They have reached the stage that they're so confident in what they're doing, they share with other artists that confidence and they don't pay too much attention to inspectors who don't think they're doing the right thing.

Tom Hesketh

John, teacher leader, is it just a new fad? Can we go deeper than the rhetoric, can we make

it a reality? We have two heads on the panel of course who believe passionately in it and see their teachers not just as teachers but also leaders, but how widespread is that?

John MacBeath

Well I suppose ironically you probably don't create teacher leaders unless you have the big leader or the big leaders able to create a culture in which teachers are empowered yet this whole notion of empowerment is really an interesting one because it's been said you cannot empower anybody. You can only create the conditions in which people feel free to take that power for themselves. I love the artist analogy, because when I've been working with teachers and going into schools and seeing those very self-confident, self-determined artists, the most exciting classrooms in schools are usually art classes aren't they? They've got things hanging from the walls and I always sort of want to go to those places because they have the confidence, I think, to be creative, to fly below the radar, to do all of those kinds of things and to create a mini-culture in their own classrooms.

This whole notion of creating a culture: if I can give two examples from head teachers who I thought were outstanding in doing this, one was Dick Linus. Dick Linus was a wonderful head teacher. He was six foot six, hence a very big guy and he used to stride around the corridors in his school in Scotland with power. One day a teacher said to him, "Look, could you come into my classroom and talk to my children, my first year children in French". They had been doing French for about six weeks. He went in and the children spoke to him. He knew no French and felt flustered and embarrassed but the teacher told him that he had watched the kids grow and they had been empowered in a sense, they understood that they could do something that their big leader couldn't. I think he learned a huge lesson about humility and about listening through that and if you want two qualities of leadership, they are humility and the ability to listen.

Do people know William Atkinson from the Phoenix School in London? He was played by Lenny Henry in the movie, *The Headmaster*. William Atkinson was a big guy, six foot three and when he walked around the school people kind of cowered in terror at this big powerful guy. Over a period he began to mellow and to learn a great deal of humility and one of the key moments in his life as a head teacher was when one of the children was stabbed to death in the community around Hammersmith and Fulham in London. William came into the school assembly and he started to talk about this and he broke down and he cried and he was, he said to me afterwards, he said "that was so terrible wasn't it, it was so, I broke down and I couldn't control myself. I was just moved" and I said, "but look how much respect you gained from everybody in that school because of your humanity. They saw that you deeply cared, you just weren't this big terrible frightening guy who walked around the school. They saw that side of your humanity." So I think there are huge lessons in there about how we are able to de-emphasise if you like, our power in a way that helps other people to take leadership responsibility, to have power.

Sam McGuinness

I was head teacher for 18 years and worked closely with Tom through our MBE work. I'm fascinated by the discussion and the idea that teachers are leaders where they are. That's what we're trying to promote, my colleagues to the left, that's what we're trying to promote. I don't think it's so hard to move to an idea if we define leadership as the motivation of others to an agreed outcome. Now I know from working with your colleagues, Ronnie that that's what you've been trying to do in Ballymena Academy. What are the impediments to

that where you are? What stops people seeing themselves as people who motivate others to an agreed outcome?

Ronnie Hassard

I think it's the historic factors of how authority and power are exercised within schools. How they themselves were taught in schools they themselves attended, where they did their teacher training and all of those things combined to shape a certain set of expectations and actually they fundamentally undermine people's confidence in themselves. Collectively a sense of a lack of confidence, I would say about giving confidence to people is one impediment. I don't think there is a lack of willingness but there is certainly another culture which says, "if I'm going to do that, should I not have a teaching allowance attached to that?" So there's a resource question in here as well but the expectation and the resource questions are all predicated on the idea that teaching stays as it is and that schools stay as they are. They haven't and they're not going to and, I think, whatever the technology is going to be and whatever we think about it, technology is going to change the relationship between the learner and what the learner is required to learn and the person who is teaching them and leading their learning. So another impediment is actually how we envision the future, how we look into the future and of course if you come to the workshop session, I'll ask more questions about that.

Conor Galvin

I saw the huge amount of damage that was done to the teacher education profession in England specifically when that whole movement of pushing teacher education into schools in a major way began. How do we avoid the same thing happening in our two jurisdictions, North and South, at this stage because it is a possibility? Question for the panel?

Ronnie Hassard

A defence of the 'M' word of management. Schools have to be well managed, they have to be well run and to operate well otherwise there is chaos. So I think whatever else we do in schools, schools must continue to be very effective organisations and we do have to have high quality outcomes. We have to have an inspectorate who come and do the measuring of performance and reach judgements about schools and hold them accountable for expenditure; who look at the whole performance of schools, not just one narrow set of measures. That's not a whole answer to your question but I think any response to that would have to be predicated, schools have to remain you know, quality places for quality learning.

Tom Hesketh

Yes, but in terms, of impediments, what do we do about a career structure for teachers which is still predicated very much on a separation between what teachers do in the classroom and what teachers do beyond the classroom? The continuing paradox is in that career structure where the further up – let's call it the hierarchy – that one moves then the greater the distance from teaching and from learning and does that not continue to create this false dichotomy between teaching on the one hand, leadership on the other which means the marriage that we need between the two still remains allusive?

Bryan O'Reilly

As an active union representative I have to be very careful about criticising the career structure, we badly need a career structure. I think it's really important and I know this from my own schools. I listed off the initiatives that my colleagues are actively engaged in

and I see my role as trying to facilitate them. I think that teachers and we know this from their involvement in education centres in the south, are education junkies. If a teacher is given a methodological process that will help the children in their class, they'll go for it. The NCCA website has invaded primary schools in the South. Why? Because it's illustrating really practical methodologies for teachers and they're discussing and they're talking about it. Now, the point you're raising Tom about this career structure piece, I think we have to look at a way of recognising that sort of professional engagement and separate the methodological and the professional engagement part from the assuming of bigger responsibility and the remuneration for bigger responsibility. I think Ken Robinson was referred to earlier. He has a very interesting piece on what money does to higher executives in companies. Money doesn't necessarily improve performance or improve prospects and I think in teaching in particular you need to be looking at some kind of a career structure that recognises the range of methodological experience that you can bring to the pupils in which you engage or with which you engage.

Gillian Beck

I was just going to ask does inspection and the quantification of educational results infer judgement rather than support for teachers and can this ethos of inspection inspire or does it give teachers the freedoms to be critical, reflective practitioners? You know, in inspecting and in bringing a top down set of criteria, are we encouraging stagnation of independent thought rather than confidence in art? Are teachers afraid to do what they feel to be right and what they know to be right in their professional judgement rather than meet the needs that they know inspectors are going to expect?

Tom Hesketh

I think we're all bought into the concept that we need our teachers to be both teachers and leaders. But for me just listening to the comments and the questions – and this isn't a criticism of what's being said or what's being asked – I think we're stuck in identifying the impediments which are getting in the way of authentic teacher leadership. So here's another one in terms of the inspection and the impact that that has on autonomy and on reflective practice and on the kind of practitioner that we want: How do we move out of that sort of cycle of being able to identify what's holding us back and actually begin to identify some of the things that can actually propel it forward?

Martin Hagan

Back to your initial question, Tom, in terms of how leadership and leadership quality is promoted in the initial phase of teacher education. I think in the first instance it must come from the idea of leading yourself, personal leadership and taking ownership of your professional development from day one of the initial teacher education phase. I think that's central and uses the processes of reflective practice. That is how that is promoted and so on. At the next phase then, beyond initial teacher education, the focus has to be on the promotion and leadership of learning and part of the interference with that is in terms of how we define what is an outcome, what do we mean by quality education, what do we mean by quality outcomes? And largely back to the points that the panel were making earlier; quality is defined by grades, pieces of paper with certificates and so on. So until we broaden that understanding and that concept of quality outcomes, I think that is one fact which mitigates against leadership and leading learning and promoting leadership within the profession of teaching.

Ann Looney

Bryan is a member of the National Council for Curriculum and Assessment and he has earned his tenure. The point that I wanted to make, actually just follows very well from the point that Martin has just made about the definitions of quality. I think quite a lot of the comments that have been made and that we have heard from the panel point to the competing discourses within which teaching happens, teaching leading happens and teacher education happens. We've certainly discussed at our council that they're competing and they're not necessarily compatible but they have a habit of colonising each other. So one is that discourse of quality that relates to the professional judgement of teachers that sees teaching as a knowledge based profession and the role of teacher judgement being critical to quality. Leading is about empowering teachers to do that and education is a research and evidence informed practice with which most people working in teacher education can identify. Then the consequence of that is you have a highly flexible curriculum; you have a lot of freedom for schools to navigate their own way. But on the other hand, education is a public project so it's subject to public sector discourse which is largely for teachers a discourse of derision. We're public sector workers, most of us, we're paid out of the public purse and therefore you then face all the other things that come with that at the moment: about control, management, lack of autonomy, measurement to very specific targets. It goes back to the point that Martin made about what you understand quality to be. So we're both supposed to be quality public sector professionals and quality educators and the two discourses have a great habit of colonising each other. I've actually met teachers who have been given more flexibility in curriculum and who tell me that will result in a drop in standards. I've met economists who talk about how a greater and more professional teaching force is the key to economic success but there are multiple understandings of what that means and I think the public and probably the profession needs to have a long debate and engagement about what quality means because the stakes around it are very high. I know Pазzy Salberg has characterised it as the global education reform movement, the germ debate versus the other kind of discourse but for us in Ireland, certainly in the South, that tension is very real and every teacher in every classroom feels it. So just as they feel that they have their great moments that are provided by the Teaching Council around celebrating teaching, they actually also then in the previous week read in a Sunday newspaper, a piece that was derisory of the teaching profession and everything that it stands for. So you face that reality all the time and I would be interested to hear how you cultivate teacher, is part of leadership taking on that debate?

Carmel Gallagher

Well I was just wondering Ann if, you know, if there's anywhere that has captured maybe the more positive discourse and is it in Scotland that there appears to be a greater confidence among the teaching professional and alignment, going back to our colleague down here who was asking about inspection and alignment between inspection and support.

Tom Hesketh

Is there enough, is there anything, in the various competency frameworks that Teaching Councils have been producing in consultation with stakeholders to underpin teacher professionalism? Is there enough in the competency frameworks to bring together teacher and leadership?

Carmel Gallagher

Well you know I've had that debate with you because obviously in Northern Ireland the Teaching Council has sort of owned to some extent the competencies for teachers but not for leadership. Therefore there is a requirement to align those two and also to rationalise them and make them much more workable. Because it would appear that they only really get used in initial teacher training and thereafter they die a death. Therefore the whole endeavour is about aligning the competencies so that they work right through the real work of schools, school development planning, school self-evaluation; so that they also align with school quality assurance and that we do get a joined up system. I take your challenge and I think we're going to try and do that and we hope that we will start to move to a more professional view of ourselves.

Ann Looney

Maybe it would be a good all-island strategy given that our intake into teacher education North and South, is similar, so that there might be something that we can do in common.

Carmel Gallagher

Yes I totally agree.

Tomás Ó Ruairc

I think in terms of my own response to the question Tom, I suppose what I'm sensing in the sub-text of a lot of what's been discussed so far is this sense of people saying, when teachers say, "tell me how to be a leader". The honest answer is I don't know how to be a leader. I am still learning how to be a leader and I know how I like to learn how to be a leader, by engaging with others and talking to them. I think Ann's point is really spot on, we'll be broadly aware of different discourses and different stances on teaching but the sense of colonising each other, that's an interesting insight. I'm in the middle of reading a book by Robert and Edward Skidelsky about how much is enough. About how the discourse of economics has shifted over the last half century from one concerned about what is a good life and what are the values we hold dear to one about growth rates, full stop. Coming back to think about Bryan's opening piece as it occurs to me now, the GDP, Robert Kennedy said, measures very little of anything of what we hold dear. In terms of not knowing how to be a leader, we need to guide each other. It reminds me of that anecdote of a person, trying to find a way to Mount Olympus, asks Plato for directions and Plato is reputed to have said, "I can't tell you how to get there, all I can tell you is to make sure every step you take is in the right direction". And being biased, I would say yes our standards, rather than competencies, our standards do contain a lot of the language and guidance for how teachers can lead each other and I think there's a danger of assuming that teachers have not been leaders in the past. We're talking about a different kind of leadership. Taking the idea of a more three dimensional view of leadership rather than a two dimensional hierarchical one, Charles Doohig's book *The Power of Habit*, talks about the sense of managing your nodes of networks, managing very closed type relationships on the one hand but equally he says if not more important in terms of effecting cultural change are the looser connections, the less proximal ones. That's the difference between a small local project in a given area, innovative as it may be, and something going in a good sense, viral. So I think in terms of that code of professional conduct, that for me is one of the key documents. As I would have said to the ETBI recently what guarantee do managers have or leaders have that good quality teaching is taking place? Do you talk about inspector reports, do you talk about exam results, the kids going home to their parents at four o'clock? They're all important forms of feedback but they all take place after the moment. So in terms of this kind of quantum physics

challenge of throwing your cat in the box and you know you can't be there but you want to be there, the only guarantee any of us have that good quality teaching takes place in the moments of teaching is the professional and ethical commitment of teachers. And I would humbly submit that one of the best descriptions you will find of that professional and ethical commitment of teachers is in the code of professional conduct.

Tom Hesketh

Okay, Tomás, okay. Well look colleagues I think one of the indicators of the extent to which the debate has inspired you and I think touched some of the key themes in terms of reshaping the teaching profession, is the fact that there are numerous hands up here in the hall in terms of people who want to ask questions. Unfortunately we are out of time.

References

John Mac Beath, *The Future of the Teaching Profession*, Educational International Research Institute, 2012

PARALELL WORKSHOPS

WORKSHOP 1

Teachers as consumers and producers of research facilitated by:
Ms Joanne Brosnan, Christ King Girls Secondary School, Cork and
Ms Rhonda Glasgow, Spa Primary School, Ballynahinch, Co. Down

This presentation/workshop contrasted the experience of two practising teachers who have recently conducted research in different educational contexts. They took issues which affected their teaching and had the opportunity to review current research, while testing out the findings in their classrooms. The facilitators drew on their research experience to examine how teachers benefitted from being both consumers and producers of educational research.



Curriculum & Administrative Issues



- Lack of confidence in Key Stage 2 'level' outcomes/ secondary schools apply their own assessments
- 'Personal' data only transferred via a Common Transfer File (CTF) Potential to include academic data
- Detailed knowledge and understanding built up in primary schools under-utilised
- Smooth transition hinges on the effective transfer of information

Key Documents

- The Northern Ireland Audit Office Report (2013)
- University of Ulster Report - Taking Boys Seriously (2012)
- NIEI Inspection Report - Transition in Matthe Primary to Post-Primary (2012)

We need

- A consistent system of passing on data between two sectors (academic data, SEN data, family information)
- Structured evaluation of existing good transition practices
- Further research on issues and challenges of transition



Value of my research fellowship

- Developed my research skills including the use of educational data bases and other on line resources
- Had time to read extensively on an educational topic which has direct relevance to me
- Developed my ICT skills both through conducting the research and finding out about the requirements in ICT for pupils
- Been given the opportunity to collaborate with post-primary colleagues and observe at first hand the teaching and learning in a post-primary school
- Had access to expertise from an HET and have contributed in a small way to the teaching and learning of students prior to enter the teaching profession
- Had the opportunity to interview other stakeholders in the transition process
- Been able to complete a report on the research already conducted on transition between primary and post-primary schools

Joanne's Research History

- Masters in Education 2009/2010, University College Cork.
- Modular Degree, one academic year
- Taught Modules:
 - Teaching Children to Think
 - Learning to Identify
- Minor Dissertation:
 - Fidelity or False Clarity: The Revised Junior Cycle Science Syllabus as an Agent for Change in Irish Classrooms
- VIP Project, University College Cork.
 - 18 month knowledge exchange project funded by the Irish Research Council for the Humanities and Social Sciences (IRC200)
 - Primary concern: issues of inclusion and student voice, identity, and participation in Irish primary and secondary schools. Aimed to develop classroom and school based strategies for learning based on recent developments in understanding about the

CPD

- Instructional Leadership: (JTR (JVEA)).
 - A Professional Development Programme to enhance learning and teaching repertoires in our schools, facilitated by Professor Barrie Bennett.
 - provides for engagement & submission, modelling & practice and the development of collegial networks as a means of support and encouragement.
- The Learning Schools Project: Teacher Education section of DoESK/ CESC.
 - an action research project undertaken by the Education Centres in Cork, West Cork, Kerry, Limerick and Clare
 - develop an increased awareness of what constitutes a learning school
 - support school-based activities promoting the on-going development of the learning school
 - enhance the capacity of individual teachers to contribute to the learning school, and nurture teacher leadership in schools
- Leading Learning: NAPP.
 - Exploring means of peer observation with a view to enhancing teaching and

Benefits

- Broadened my knowledge base.
- Changing view of the enterprise of education.
- A job becomes a profession.
- Opportunities for further collaboration.
- A greater understanding of and openness to change.
- Improved understanding of Third Level perceptions of teaching.

Current Opportunities for engagement

Study for Post Graduate Diploma, Masters in Education or PhD.

- | | |
|---|-----------------------|
| • Learning to research. | • Cost. |
| • Exposure to existing research. | • Time. |
| • Acquiring the language of research. | • Opportunity. |
| • Broadens horizons. | • Incentive. |
| • Engagement in a cross-curricular and cross-sectoral | • Relevance. |
| | • Limited Promotional |

Current Opportunities for engagement

Continuing Professional Development Courses.

- | | |
|---|--|
| • Mostly modelled on Action Research. | • Short term |
| • Personal choice which allows research to specifically align with practice/subject area. | • Restricted focus. |
| • Direct benefits for the practitioner, students and school. | • Relevance to other teachers within the school. |
| | • 'Closed' nature of schools. |
| | • Limited opportunity for dissemination of findings. |

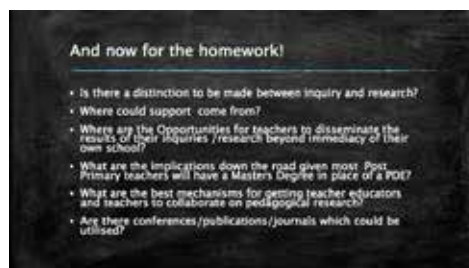
Possible Opportunities?

- School Self Evaluation: Necessitates evaluation starting with collection, collation and examination of baseline data, hence involving practicing teachers in research.
- Literacy and Numeracy Strategy: Involves all staff in examination of practice and the nature of learning which may foster interest in research and study.
- Junior Cycle Framework: has the potential to replace 'top down' change with school led change.
- NQT and Droichead: A new generation of teachers where lifelong learning is the norm.

Consumer vs. Producer.

- Can you be one without the other?
- Tradition?
- Access?
- Relevance to the Irish context?
- The Joy of Learning!

Research should be future oriented and designed to benefit learners rather than the researchers themselves



WORKSHOP 2

The practice of teaching facilitated by: **Dr Sean Delaney**, Marino Institute of Education, Dublin and **Ms Mary McHenry**, St Louise's Comprehensive College, Belfast

Seán Delaney, Karin Bacon, Anne McMorrough, Annie Ó Breacháin, Barbara O'Toole Marino Institute of Education

Abstract

This workshop explored various aspects of the practice of teaching and how prospective teachers learn to teach. This paper describes a new module that bridges the college and school experiences of student teachers. High leverage practices of teaching are represented and decomposed for novices in college before they in turn approximate the practices with their peers and with children in local schools. The assessment of the module is also outlined.

Teaching the Practice of Teaching

Challenges of teacher education

Most of us would agree that quality teaching is at the heart of a positive educational experience. Yet, two perplexing dilemmas of education today are how to identify quality teaching and how to ensure that every child has access to teaching of a consistently high quality (e.g. Hanushek & Rivkin, 2012). Teacher education programmes are the mechanism through which prospective teachers are prepared for the profession. But participating in a teacher education programme is no guarantee that a graduate is ready for the demands of a classroom. Teacher education has had a dubious record in terms of its influence on graduates.

Over three decades ago Zeichner and Tabacknick (1981) asked if school experience "washes out" the effects of university teacher education. More recently, Doyle and Johnson (2012) asked how discourses of teacher education methods courses are unravelled by elementary classroom discourses. Lortie (1975/2002) claimed that most teachers teach as they were taught, because of the seemingly lengthy, but ultimately unhelpful "apprenticeship of observation" they experience. Stigler and Hiebert (1999) would claim that a source of the difficulty in teacher education is that teaching is a cultural activity, one that is learned through experiences in the wider culture rather than in formal initial and inservice teacher education programmes. Labaree (2004) contends that the reason why teacher education has too often been unsuccessful is because of the nature of teaching itself. It is a difficult job

that looks easy. Some current research has been emerging that suggests that taking a more clinical approach to initial teacher education may help to improve its outcomes. This research is focused on the idea of teaching as a practice.

Recent research on the practice of teaching

The term "practice" itself is one that has different connotations. Lampert (2010) identifies four of them: when contrasted with theory, practice refers to anything that is not grounded in theory or research; as a verb, to practise is to do something repeatedly in order to be accomplished in it at a future stage – we may practise the piano or our golf swing or a new language. A term related to this meaning is that of rehearsal; practice is also used to describe the work done by certain professionals – we speak of a medical practice, a dental practice, an architect's practice and we can speak too of the work teachers do in this way; the fourth way in which practice is widely used is in the plural sense of practices, a range of habitual actions that are done constantly and habitually, and the practices can be combined to describe what teachers do.

It is this final meaning of practice that has been used by several researchers to identify high leverage practices (alternatively called core practices (Grossman & McDonald, 2008)). We have used the list of high leverage practices identified by Ball and her colleagues (Teaching Works, 2013) as a working list of practices that are worthwhile for beginning teachers to learn. High leverage practices are practices that are "most likely to equip beginners with capabilities for the fundamental elements of professional work and that are unlikely to be learned on one's own through experience... [They are] practices in which the proficient enactment by a teacher is likely to lead to comparatively large advances in student learning" (Ball, Sleep, Boerst, & Bass, 2009, p. 460). The precise list of practices chosen to be "high leverage" or core is open to debate, and debatable too is the size of a practice (Lampert, 2010).

Nevertheless, these practices appear to offer good use of the available time to prepare novice teachers for the classroom. Among the high-leverage practices identified by Ball and her colleagues are making content explicit through explanation, modelling, representations, and examples; leading a whole class discussion; setting up and managing small group work; and communicating about a student with a parent or guardian (Teaching Works, 2013).

In addition to the work of Ball and colleagues, we also draw on the work of Pam Grossman and her work on professional learning. In particular we are interested in approximations of practice. Approximations of practice are "opportunities for novices to engage in practices that are more or less proximal to the practices of a profession" (Grossman et al., 2009, p. 2058). Approximations offer novices a way to attempt complex practices – in fields from psychotherapy to homiletics – in a relatively safe or controlled setting (Grossman et al., 2007). Often this involves the novices taking part in role plays or other simulations. As a pedagogy in professional education, three stages are involved in implementing an approximation of practice: representation, decomposition and approximation (Grossman et al., 2009). First, representations of the chosen practice are selected and introduced to the novices. They include direct observation of practitioners, professional videos, written cases, an assignment and the accompanying student work, or lesson plans. The representation is used to make an aspect of practice visible to a novice and to make it available for discussion and different representations will do this in different ways (Grossman et al., 2009).

The second stage of the pedagogy is to decompose the practice. The purpose of decomposing the practice is to make visible to novices its constituent parts, to draw their attention to parts that may have gone unnoticed by them when they engaged with the representation of practice (Grossman et al., 2009). Thus in a practice such as introducing and consolidating content through storytelling, learners need to observe how a teacher gained the attention of the class, how the teacher created a storytelling atmosphere, and how the teacher modulated the voice during the telling. Having decomposed the practice the novice needs to combine the constituent parts in order to approximate the practice.

Approximating the practice is the third stage of the pedagogy. This is the stage that bridges the traditional university or college classroom and the field, when the novice attempts to approximate the practice in a safe environment that has features resembling the field (Grossman et al., 2009). One example given by Grossman and her colleagues is how rabbis learn to write a eulogy by preparing one for a man whose father had died several years before. This was an approximation because the student rabbis had to seek the information they would have to request from someone who is bereaved, but the eulogy does not have to be delivered to family who are dealing with raw and recent grief. In teaching, teaching practice has long been used as an approximation of practice. It is arguable, though, the extent to which practices are routinely and deliberately represented and decomposed prior to the approximation.

Research on professional learning in other fields

Helping novices make the transition from college-based courses to field-based experience is something that happens in professional fields other than teaching. Examples include airline pilots, medical doctors, dentists, clergy, lawyers, hairdressers. Approximations can take the form of role play, analyzing a written case, generating a component of practice, enacting the practice with support, simulations (Grossman et al., 2009) and rehearsals (Lampert et al., 2013). Approximations of practice can vary in their level of authenticity. The authenticity depends on the level of participation by the novice, the completeness of the practice and the closeness of what is done to practising in real time (Grossman et al., 2009).

Approximations of practice can also be used to change practice. That is a goal to which Lampert and her colleagues aspire in that they want participants to practise ambitious teaching of mathematics, "a kind of teaching that most experienced teachers are not yet doing" (Lampert et al., 2013, p. 226).

One interpretation of what a module designed around Approximations of practice looks like

The module is a part of the reconfigured Bachelor in Education programme in Marino Institute of Education and as such was part of the proposed programme that was accredited academically by the University of Dublin, Trinity College and professionally by the Teaching Council. It is planned to be offered over two years of the programme – in first year and third year. To date only the first year module has been implemented.

Four high leverage practices identified by *Teaching Works* were selected – setting up and managing a task (which has since changed to "setting up and managing small group work"), making content explicit through explanation, modelling, representations and examples, leading a whole class discussion, providing oral and written feedback to students on their work – and we added our own additional one – introducing and consolidating content

through storytelling. The goal was that students would experience representations of each of these high leverage practices, would decompose them and would then approximate them. Before the module began, we developed 15 videos of teachers implementing the high leverage practices in schools. The teachers on the videos were teacher educators, who were experienced primary school teachers, including some instructors on the module. Five course instructors, all with extensive experience in primary teaching, worked with 110 students on the module. We met for at least two hours per week to plan the classes. Detailed lesson notes were drawn up for each class.

Students met twice a week, first as a plenary and then in small groups. In the first session practices were introduced using various representations and they were decomposed so that students would be able to approximate them in schools. The plenary session also gave us the opportunity to give feedback to students based on their performance in the previous week. Later in the week, groups of 15 students or less approximated the practices either with their peers or in local schools. We liaised with principals and teachers in four local schools. For one hour each week 15 students and a course instructor visited a classroom where five students approximated a practice with the children for about 10 minutes. While one student was approximating the practice, the other 14 students and the course tutor observed in order to provide feedback to the student who was teaching. We developed observation sheets to help focus the students' observation of their peers.

The observation sheets were developed by instructors on the module. The goal here was to identify ten teacher actions that made up the high leverage practice. This was done with reference to relevant research and by studying the videos of colleagues implementing the high leverage practices that were developed prior to the module starting. For each high leverage practice, we identified ten teacher actions that would be essential to the practice. We shared the list of actions with students. They could use the actions to help them plan their approximation of the practice. But the main purpose of the observation record was to help students in their observation of their peers. They, and the course instructor, had to decide if a given teacher action was present or not present in a peer's approximation.

Approximations of practice are not new to teacher education. Teaching practice and micro-teaching are varieties of approximations used as pedagogies in teacher education. However, this module has introduced some features that are missing in other approximations. The module provides specific, detailed criteria for assessment; it requires peer observation and feedback; it reduces complexity of teaching; the instructor observes every student approximating at least once every three weeks; it explicitly connects college work with work in schools; it connects with similar research being conducted in other settings. Although what we are doing falls into the category of approximation of practice, we do not have a more precise title yet for precisely what we do.

Assessing the module

Formative and summative assessment are essential parts of this module. Most of the assessment is formative in nature. When students approximate a given high leverage practice, they receive feedback (on the specially designed observation record) from a module instructor and from fellow students based on explicit criteria laid out on the observation record. Students use the same criteria to self-assess their performances.

With regard to summative assessment, the module is graded as satisfactory/unsatisfactory only. Every student teaches a 20-minute lesson to a group of up to ten children. Each lesson incorporates approximations of practice introduced during the module. Each approximation of practice is graded by a lecturer or a school placement tutor.

Evaluation of the module

Evaluation of the module is conducted in three ways: by seeking views of the students, through ongoing discussion among instructors, and through analysing metrics of the assessment. Students' views of the module were sought at the beginning of the second semester of the module, immediately after their school placement and at the end of the module.

One area on which feedback was sought was in relation to giving and receiving feedback to peers. At the end of the year just under 60% of students acknowledged being initially reluctant or very reluctant to give honest feedback to peers. By the end of the year only 6% were reluctant. And the feedback helped: just under 70% of students ($n = 59$) claimed that the feedback they received from peers influenced either how they prepared for the module assessment or for school placement.

Because the course is taught by a team of five instructors, constant review of feedback and student learning is built into the planning process. This informs the planning of subsequent classes and revisions to the module.

Students are required to pass the Approximations of Practice module in order to proceed to the second year of their programme. Although students may repeat the module if they fail it, the assessment of the module is relatively high stakes. Therefore we intend to review a series of metrics in order to ensure the rigour and quality of the assessment. The metrics will be based on those proposed by Pell and his colleagues (Pell, Fuller, Homer, & Roberts, 2010).

Research on the module

Last year the focus was on designing and implementing the module for the first time. Now, we are beginning to conduct some research on the module. Among the questions that need to be addressed are the following:

How can high leverage content (Teaching Works, 2013) be integrated with high leverage practices?

How should the pass rate of the assessment be determined?

How can the validity and reliability of the assessment be determined and improved?

Are the practices being approximated the optimal ones? Are they of the right grain size?

How can the relationship with schools in relation to the approximations be improved?

To what extent do students transfer what they learn on other modules to the approximations of practice and to what extent do students transfer what they learn on the approximations of practice module to school placement?

How do you ensure that students can re-assemble and integrate the practices they have learned in lessons taught on school placement?

How can the module be scaled up within the institute so that it can be transferred to other programmes of initial teacher education?

Limitations of the module

This module takes place in addition to school placement. We hope that it complements it, but this is something that remains to be seen.

Logistically, teaching the module is complex and expensive compared to other modules with a similar ECTS credit value. Schools must agree to host us at a time that coincides with the college timetable. Students must travel independently to the school. Having fifteen additional people in a classroom can be disruptive and they can put additional demands on already confined spaces. Student feedback suggests that they prefer approximating with children than with peers but initially they are not ready to do so, and extending the period of time student teachers spend in schools is difficult. Students are limited to approximations which are relatively short (typically 8 minutes long) and sometimes this leads to abrupt transitions between mini-lessons for children in the class. It is planned to address this matter by promoting greater coherence among the group of students approximating in a given classroom in a given week. Finally, although it would be desirable to meet with students immediately after their time in the classroom, this has not proved possible with current configurations.

Despite the limitations and difficulties of the module, we believe that it has many benefits for prospective teachers. It introduces students to the practice of teaching very early in their programme. Students gain experience in schools in small chunks prior to a longer period of school placement. Instructors receive almost immediate feedback on how well students have grasped aspects of practice that have been introduced and instructors can respond to students relatively soon after the lesson. Students develop a collegial relationship with their peers, which is a part of professional practice that can be difficult to develop in other modules. Children in the schools have the opportunity to encounter new content or have known content consolidated in a series of intensive mini lessons.

The module will be developed in the students' third year to include practices that are not classroom based such as communicating about a student with a parent or guardian and communicating with other professionals.

References

- Ball, D. L., Sleep, L., Boerst, T. A., & Bass, H. (2009). Combining the development of practice and the practice of development in teacher education. *The Elementary School Journal*, 109(5), 458-474.
- Doyle, W., & Johnson, B. (2012). *Interpersonal spaces in teacher education*. Paper presented at the International Conference on Interpersonal Relationships in Education, Vancouver, B.C.
- Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., & Williamson, P. (2009). Teaching practice: A cross-professional perspective. *Teachers College Record*, 111.
- Grossman, P., Compton, C., Shahan, E., Ronfeldt, M., Igra, D., & Shaing, J. (2007). Preparing practitioners to respond to resistance: A cross-professional view. *Teachers and Teaching*, 13(2), 103-123.
- Grossman, P., & McDonald, M. (2008). Back to the future: Directions for research in teaching and teacher education. *American Educational Research Journal*, 45(1), 184-205.
- Hanushek, E. A., & Rivkin, S. G. (2012). The distribution of teacher quality and implications for policy. *Annual Review of Economics*, 4, 131-157.
- Labaree, D. F. (2004). *The trouble with ed schools*. New Haven, CT: Yale University Press.
- Lampert, M. (2010). Learning teaching in, from, and for practice: What do we mean? *Journal of Teacher Education*, 61(1-2), 21-34.
- Lampert, M., Franke, M. L., Kazemi, E., Ghouseini, H., Turrou, A. C., Beasley, H., . . . Crowe, K. (2013). Keeping it complex: using rehearsals to support novice teacher learning of ambitious teaching. *Journal of Teacher Education*, 64(3), 226-243.
- Lortie, D. C. (1975/2002). *Schoolteacher* (2nd ed.). Chicago: The University of Chicago Press.
- Pell, G., Fuller, R., Homer, M., & Roberts, T. (2010). How to measure the quality of the OSCE: A review of metrics - AMEE guide no. 49. *Medical Teacher*, 32, 802-811.
- Stigler, J. W., & Hiebert, J. (1999). *The teaching gap: Best ideas from the world's teachers for improving education in the classroom*. New York: The Free Press.
- Teaching Works, U. o. M. (2013). High Leverage Practices Retrieved 5 October 2013, from <http://www.teachingworks.com/work-of-teaching/high-leverage-practices>
- Zeichner, K. M., & Tabachnick, B. R. (1981). Are the effects of university teacher education 'washed out' by school experience? *Journal of Teacher Education*, 32(3), 7-11.

WORKSHOP 3

Creative classrooms: Insights from Imaginative and Innovative Teaching in Ireland facilitated by: **Ms Nicola Marlow**, University of Ulster, Coleraine and **Ms Anne McMorrough**, Marino Institute of Education, Dublin

This workshop aimed to explore issues emerging from the early stages of a SCoTENS-funded research project that explores the nature and detail of teaching and learning activities within a number of creative classrooms, north and south.

Contextualising the research project

The project references and draws on understandings of the creative classroom (currently being developed for DG Education and Culture by the JRC-IPTS Information Society Unit, Seville and EUN Schoolnet, Brussels) ahead of recommendations to the EU on how trans-sectoral creative classroom practices can be scaled in a sustainable and meaningful manner. This work is seen as contributing directly to the framing of the upcoming call addressing the objectives of the *Digital Agenda*, the *Innovation Agenda* and the *Europe 2020 Flagship*; "Youth on the move".

The workshop began with an outline¹ of how we intend to make a contribution to this discourse. The research project aims to identify and case-capture good creative pedagogical practice in Ireland, north and south in four primary schools (two north, two south) and eight post-primary schools (four north, four south). A multi-site case study is proposed informed by data collected from classroom observations; interviews with teachers and school leaders; and school documents.

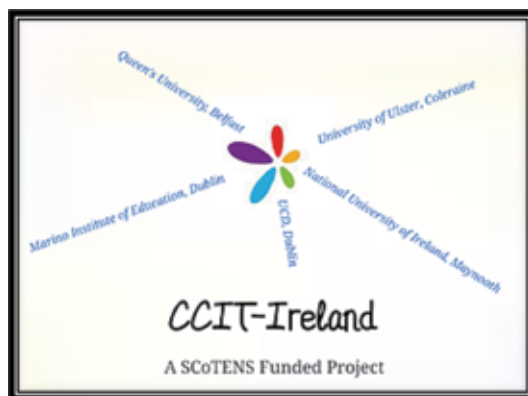


Fig. 1: The CCIT-Ireland Project - Institutions contributing to a European research discourse

Towards a clearer understanding of creativity

One of the emerging initial challenges of the research project centred on definitions and descriptions for what educators and researchers understand by creativity in education especially when it can mean 'many things to many people' (Cachia, Ferrari, Ala-Mutka, & Punie 2010, p.19). A broad body of literature considers this question and often describes

creativity as a skill or an ability to make unforeseen connections and to generate new and appropriate ideas (Cachia et al., 2010; Gibson, 2005). In addition, Gibson (2005) believes creativity is an essential element of childhood development that can be developed in everyone, while Cachia et al. (2010) argue that it is teachers who often have the power to unlock the creative potential in young people. Some comments from the initial interviews with teachers and school leaders concur with these views when creativity is described in terms of inspiring children to ‘think outside the box’ and learn in new and exciting ways.

The research team was interested to extend this conversation by engaging our SCoTENS workshop participants in discussions around building a clearer understanding of what we mean by creativity in this context. With the support of some interactive digital tools and devices², workshop participants considered this question at length and a variety of views and perspectives emerged. In particular, a number of participants identified a need for more active, collaborative learning (for / between learners and teachers) in the creative process. Specifically, participants discussed the importance of teachers and learners being open and adventurous in using innovative tools and methodologies so as to enable clear links between the classroom content and the world outside. This is interesting for the project researchers in light of current European discourses where ‘creativity’ and ‘innovation’ are often inextricably linked (see Kahl, Fonseca & Witte, 2009). One study that we draw upon in our research – the Scale Creative Classroom Initiative (Scale CCR³) – focuses on this theory when it conceptualises creative classrooms as ‘innovative learning environments that fully embed the potential of ICT to innovate and modernize learning and teaching practices’ (Bocconi, Kampylis & Punie, 2012, p. 5; 2012b). From this perspective, that study considers creativity as an innovation of learning and teaching practices through technologies that support collaboration, active learning, personalization etc (ibid). This concept aligns well with our workshop discussions and participants acknowledged the affordances of digital tools to support learning (and teaching). However, they also emphasised the benefits of an approach that blends the innovative use of technologies with more tangible classroom tools and resources. Again this view is expressed by some teachers and school leaders during interviews. A good example of this practice is provided by one teacher when she describes the rich learning that can emerge from an activity such as ‘Mystery Skype’. Here, the curricular focus is Geography and Skype is a digital tool that connects the learners as they ask questions to try and establish each other’s global location. However by blending additional digital tools and tangible resources (books, maps, images etc) the teacher believes considerable value is added to the activity as it enables the learners to better communicate and problem-solve so as to solve the puzzle and create and share new knowledge in an authentic way and beyond the classroom walls.

This ‘Mystery Skype’ activity could usefully be analysed using the Scale CCR frame (see fig 2), a set of parameters that provide reference points for identifying where creativity is emerging. In this example, creativity can arguably be found in the following areas: *curricula and content*; *assessment*; *learning practices*; *teaching practices*; *leadership and values*; and *connectedness*. Nevertheless, the project team has found that this frame does not adequately describe the nature and detail of creative practices and this stimulated rich discussions around how it could be used and adapted in addressing our research questions.

2 Twitter: #CCIT; <http://beta.socrative.com/>; Digital Images.video taken during observations; iPod Touches

3 Scale Creative Classroom Initiative: <http://is.jrc.ec.europa.eu/pages/EAP/SCALECCR.html>

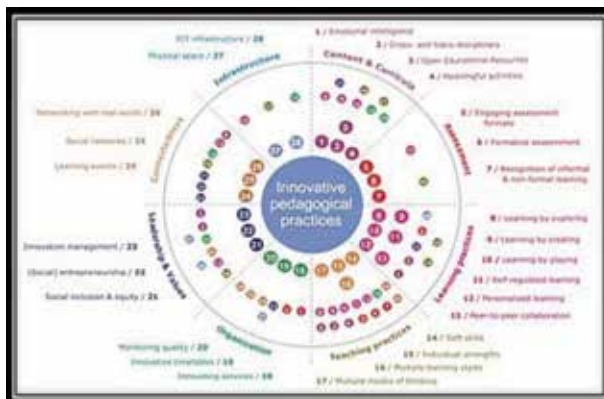


Fig. 2 Scale Creative Classroom (Scale CCR) Reference Parameters

The final part of the workshop engaged participants in considering what enables and hinders creativity in classrooms as this question has led to some intriguing conversations with teachers and school leaders during early school visits. In terms of enabling creativity, the importance of the role of the teacher; trust in teachers by school leaders and parents; and teacher autonomy (ideally supported by an education network for sharing ideas/ resources etc) emerged strongly during school visits. The barriers on the other hand tend to be around time, space, curriculum overload, assessment measures and top-down policy initiatives that can obstruct the creative process in classrooms. Rich discussions followed and our participants suggested that the perceptions and values that teachers and school leaders hold around creativity in the classroom could be an interesting way of refining our research perspective to shed light on issues that support and hinder creativity in action.

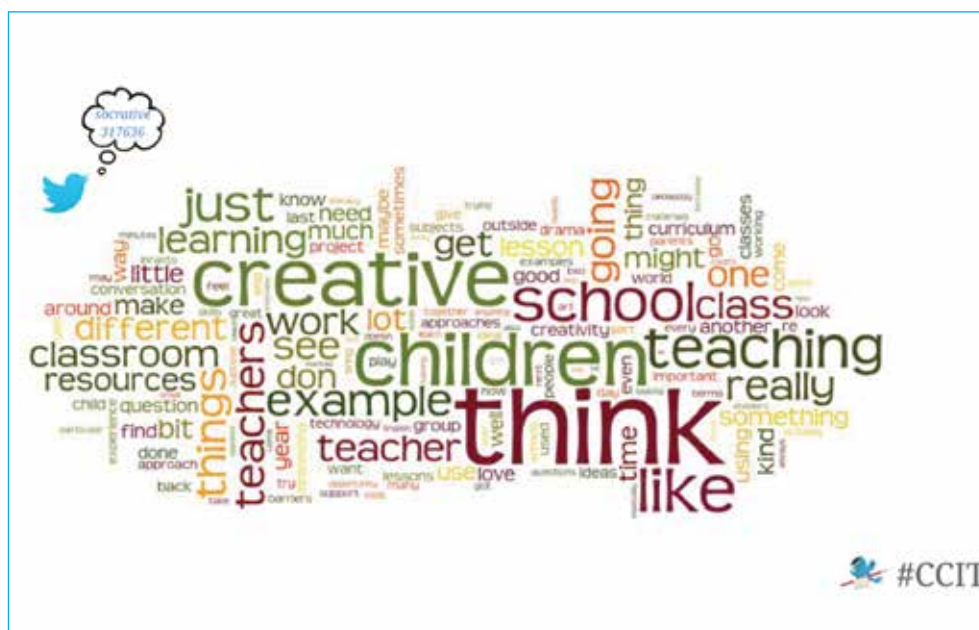


Fig. 3 Word representation of early interview text analysis

Concluding comments

This is a small-scale research project. The workshop experience was invaluable in affording us an opportunity to raise questions around tensions that have emerged in the early stages of the project. We intend to draw upon these discussions as our research evolves so as to

provide a better understanding of creativity in action in contemporary classrooms and the pedagogies that support it.

References

Bocconi, S., Kampylis, P., & Punie, Y. (2012a). *Creative classrooms: A systemic approach for mainstreaming ICT-enabled innovation for learning in Europe*. Seville: European Commission – Joint Research Centre – Institute for Prospective Technological Studies

Bocconi, S., Kampylis, P., & Punie, Y. (2012b). *Innovating learning: Key elements for developing creative classrooms in Europe*. Seville: European Commission – Joint Research Centre – Institute for Prospective Technological Studies

Cachia, R., Ferrari, A., Ala-Mutka, K., & Punie, Y. (2010). Creative learning and innovative teaching: Final report on the study on creativity and innovation in education in the EU member states. Luxembourg: Publications Office of the European Union

Gibson, H. (2005) What creativity isn't: The presumptions of instrumentalism and individual justifications for creativity in education. *British Journal of Educational Studies* 53 (2): 148-167

Kahl, C. H., Fonseca, L.H. d., Witte, E.H. (2009). Revisiting creativity research: An investigation of contemporary approaches. *Creativity Research Journal* (21), 1-5

Workshop 4

Teacher as leader: 'Only when the position of the individual teacher is supported and developed will we ensure that the perspective, potential and talent of each individual child is fostered' facilitated by: **Mr Ronnie Hassard**, Ballymena Academy, Ballymena, Co. Antrim and **Mr Bryan O'Reilly**, Scoil Mhuire Junior Primary School, Ballymany, Newbridge

The key to this fostering is the relationship that each leader has with their colleagues, and the kinds of relationship that colleagues have with each other. In order to share and communicate the developing and evolving methodologies such as Reading Recovery; Literacy Lift Off; Better Basics; Maths Recovery; Stop Ask Listen Tell (SALT). The quality of the relationships that the leaders have is very significant. This workshop discussed the practicalities of implementing programmes while maintaining and fostering relationships. Using examples of feedback from teachers during the school self-evaluation of June 2013.

TEACHER LEADERSHIP



Number One sees all, knows all, does all or tells others what to do to ensure everything is done properly.

1

TEACHER LEADERSHIP



2

TEACHER LEADERSHIP

Personal, Inter-personal, Professional

Attributes

Knowledge & Understanding

Skills

3

TEACHER LEADERSHIP

All Teachers are Leaders

Leading Learners & Learning

External Bodies/Quals.

4

TEACHER LEADERSHIP

Leadership is Developed: OTJ²

Expertise & Experience

Leaders Developing Leaders

5

Workshop1

-A school employs a Beginner Teacher. What leadership will be required from that person from the very outset? What leadership qualities will s/he need to have?

6

Workshop2

- What leadership qualities will be required from those who will support and guide that new teacher?

- How best can they provide such guidance and support?

7

Workshop3

- If the need for guidance and support does not alter with time or professional advancement, how is leadership development to be programmed across the arc of a teacher's career?

8

Training Session: SCoTENS 'Seed Funding' training workshop

**Dr Conor Galvin, Lecturer,
University College Dublin**



Thanks very much for coming to the session. It's a bit daunting to stand up here and talk to colleagues, some of whom have far more experience in terms of bidding for research, and successful bids for research at a large level than I probably have.

The background to this is fairly straightforward. We've seen an increasing number of bids coming in over the last couple of years for SCoTENS Seed Funding, and some were of extraordinarily high quality from the get-go. Others are a little bit variable. So what we thought we would do was lift the shroud a little bit and explain exactly how the decisions are made that actually take a basic idea that someone has, from a basic idea to one of the research reports. So how do you get from your original idea, find a partner, do the piece of research, and end up with a really useful little publication? That's the kind of arc, if you like, that I'm going to try and take us through today.

I'm making no assumptions. I know there are some people in the room that have had successful bids, and some people that are here just to see what I'm going to say. That's fair enough too. I'm going to try and give you the deal as directly as I can. There is no hidden agenda here. We really do want to share the experience of actually putting this thing together, how we go about making the decisions and the challenges that are actually involved in that. Now, there are two steps, and I'm going to spend a little bit of time, initially, talking about our thinking around the type of research bid that we ask for, and where that thinking came from. I'll point you to the two or three sources that are most directly applicable in this case. I'm then going to walk through the actual criteria that we use by distributing examples of the actual application form. I'll take you to the other side of the fence; I'll take you into the side where we make the decisions based on the information that's come to us on those forms. That's my agenda. Okay. I've had a bit of fun putting this together, to be honest, because it's only when you sit down to do something like this that you realise the assumptions that are behind it, so I hope I've done a reasonable job and time will tell.

What is research?

I'm an academic, I have to start with a hard question. Well, research comes in a million different forms, obviously, and the point I'm making is there's a particular type of research that we value in relation to SCoTENS, and that's because it's the kind of research that can be done on a pretty small budget. This is seed funding money. It is not a major budget. But what we have found in the past is that it is useful to get people thinking about the kinds of research that they're going to do, so it acts, literally, as a seed fund. It gets you a bit of a start, it helps you find a partner. It helps you find your feet in a particular topic area or area of interest. And then, where it goes beyond that depends very much on yourself and the luck of the Gods. I always try and keep these three things in the background when I start a research project of any sort; something doable within the timeframe; something worthwhile and something enjoyable. It really should open up professional conversations. It should open

up opportunities. It should open up possibilities that were not there previously, even on a small budget like that. If it's not doing all of these three things, we're doing something wrong. I have actually benefited, myself, from this fund. A number of years ago, myself and a number of colleagues put together a small bid, and we managed to produce a pretty reasonable text at the end of it by a very simple idea. We took an emblematic school in the South, a school that was known for the kind of work it was doing. One of my passions is using technology in education, so we found a school that was doing interesting stuff, but a little bit off-the-wall, a little bit unusual. We found a school in the North that was doing something very, very similar, and we worked with the teachers in both schools to come up with detailed descriptions of what the schools actually do, how they use technology, and then we set that against a literature search. We tried to get a sense of value – what value is and how we can measure value. And that was, basically, it. We ended up by drawing a number of interesting enough conclusions about usage, about value and about evaluating usage – the challenges of actually making sense of when you invest in technology, how you make your money go a certain distance.

It wasn't a huge project but it was beneficial for us. We enjoyed it, and it launched a couple of decent pieces of academic type research and papers and conferences. The key for me, very often, is to decide very early on whether you're doing research on or research with. If you're doing research on, it's a very hard sell. If you're doing research with, it's much easier, in my book, to convince people to put a little bit of money into what you're doing. And again, it's not a hard and fast rule but it's to do with the respect and the working relationship between you and the people that you're actually working with when you do your piece of research. So that's always in the background of my own research.

Sara Delamont, I'm sure, will be familiar to a number of you. A fantastic researcher and academic who's worked out of Wales for a long, long time now, and she has this wonderful expression, "each research project is a mental golden journey". And really, that is what it's all about in so many ways. The point I'm trying to make is a very simple one. The journey is everything in terms of the small scale pieces of research that we actually put forward and that we work on in the SCoTENS environment. We want to see the journey scoped out and we want to see it coming to a conclusion, a successful conclusion.

One of the key features of SCoTENS' funding down the years is we've always had a good mix of new and novice people applying on a bid, and it's one of the kind of hallmarks of a successful bid down the years. It's not just the old reliables putting in for a few quid more to do something else. It very often is a chance for people who have not broken into the research frame before to get an opportunity to start their first minor project. And, in a sense, we would like to see more of that – the novice researcher putting his or her hat in the frame for the first time, supported by colleagues who are slightly more experienced.

Q1 When you talk about novices, does that include people perhaps who would have been on other research teams but would like to become a PI themselves?

A1 Yes, even the use of the term, PI, shows you know more about research than a lot of people who actually, put in their first SCoTENS bid. By novice, I would mean someone who has not really had much opportunity. A lot of teachers do terrific work, then they come on a course, they start doing a Master's programme, something like that,

and they've got their first little small scale piece of research in the bag. They want to know what to do next. Sometimes SCOTENS is a place where you can actually get help.

Q2 Should there be a practitioner as one of the members?

A2 I am a great believer in having a practice base to your work, and you'll see why when I start to actually work through how we look at the criteria. In many ways, we are all practitioners. I think you are always likely to benefit from a practitioner who is included for the right reasons. It's someone who is brought in for the right reasons, because of the quality that they can bring, the access that they can offer. They might be the person in a school that you want to use as a case study or something like that. So yes, it's a good idea, in my view. And if you can get a policy person, that's even better.

Now let's have a look at the application form. The most important pages, in my view, of this particular form, are the first and the last two. People tend to just assume the fly cover is a fly cover and then the last two pages are just the tail end of it. I'm not going to explain in depth and detail why I think they're the most important in many ways, but let me put it to you like this. If you are not intimately acquainted with the first page, you will miss a lot of the opportunities that are there for the taking, in relation to this piece of research. If you are not intimately acquainted with the last two pages of the questionnaire, you will miss some of the leverage points that you can use in terms of constructing your project. Effectively, the last two pages are a statement, if you like, of the beliefs that underpin an awful lot of what we do in SCOTENS, and have done for a number of years. You will find material there that you can actually use to help you strengthen the case that you are making. So, for example, just a very simple example would be if you look at point three on the second last page. The whole notion of applying seed funding is fundamental to the work we do here in SCOTENS. And then, if you flick over or look to any of the other guiding principles – any piece of research that feeds into those principles would certainly be welcome in terms of the kinds of frames we would hope to see when people pitch for the small pot of money that we actually have.

Q3 The amount of funding hasn't changed?

A3 The amount of funding hasn't changed this year. We've managed always to protect, down the years, the small amount of seed funding. Both departments, North and South, see it as a valuable exercise.

First Question - The first one is the background information – North and South. You must have a northern and a southern partner. Both partners must be aligned to the SCOTENS movement. You can have a subsidiary partner, you can have a third partner or somebody from outside SCOTENS, who is not an affiliated partner of SCOTENS. There will want to be a very good reason for them to be there. It is better to work within. The two main partners definitely have to be within the Standing Conference. You may wish to bring in somebody who is from the outside, who is not a full member. Usually you can find an association for them. For example, a teacher who has been doing some really cool work, you can associate with your institution. They may come in and give some talks as part of your teaching

programme, or something like that. They're legitimate partners but they would not be your lead partner. Your lead partner should come from one of the two home institutions. It doesn't have to be just two partners. That's another thing we very often get asked about. You can have two, four, six, whatever. You can have a mix of partners. The key to selecting your partners is that each partner brings something valuable to the table. If she is able to bring something that the rest of the team don't have, then she's a worthwhile partner, in my view.

Second Question - people tend to think of this as the most important one, and perhaps it is in some regards. If you cannot describe your project in five hundred words, you're probably trying to do either too much or too little. The little prompts that are there are not questions that you must answer. They are, simply, guides to help you frame your answer. So it's not a case you must give a direct answer to each of these, but, realistically, if I read through that five hundred words, I should be able to answer all of those at the end of it for myself. They're intended as guides and they're not the full picture. There will be other things that you will want to add over and above the actual prompting questions. So it's a starter pack of prompts, it's not the full picture by any means.

Third Question - the research projects. What are the proposed research questions? Make sure you know the difference between research strategy, research approach and research questions when you try to answer that box. The questions are very, very specific, but they don't have to be behavioural in the sense that they don't have to be things that you're going to find predetermined answers to. You can have open questions; you can have questions that are looking at higher order issues and problems just as adequately as very tightly defined, very restricted questions. So, any of the text that gave good advice on structuring research questions would be valuable to comment on there.

The ethical associations of the project - If you are doing work that involves children or other vulnerable groups, then you should go through the Ethical Clearance Process of the two institutions that are involved. By agreement, in some cases, one of the two lead institutions takes responsible for the Ethical Clearance Process. That's acceptable, provided the other one has agreed. So the Northern partner might lead on the Ethical Clearance. The Southern partner then would have to sign up to the Northern partner's arrangements with regard to Ethical Clearance and Approach. It's a small thing but it's important in some projects, so just don't neglect it. Make sure that you're covered in terms of that area for both jurisdictions.

Dissemination - Where is the message going to go? How are you going to spread it around? Where's it going to go next? So a little bit of thinking about the kinds of conferences that you might hope to speak at in the future, the kinds of publications you might want to come up with. The journals that you might want to – professional journals as well as academic journals – that you might want to target for some of the eventual outcomes from your project would certainly be useful if you could flag it at an early part of the project.

Project costs - Profoundly important. You cannot use SCoTENS seed funding to cover overheads in the institution. You cannot use SCoTENS seed funding money to fund conference fees if you are speaking, even if it's about the SCoTENS project. You cannot use the money directly to cover conference fees. You can, however, use it to help you travel or, perhaps, to eat, in terms of lunches and accommodation, in relation to attendance at the

dissemination events. You cannot use it to directly fund research time. You can't put down, I'm going to put in three hours and it's going to cost SCoTENS 300 quid, or whatever. You cannot use the funding directly in relation to your time or a colleague's time.

Q4 Could you give us some of the dos then instead of the don'ts?

A4 The dos. It has to be very, very clear how the money will be apportioned between the two partners. It has to be equitable in the distribution across the partners. So, if you have major and minor partners, for example, a major partner in the North and a minor partner in the North, a major partner in the South and a minor partner in the South, then we would expect to see a kind of a sliding scale. But if all of them, and again, this is more of a don't, perhaps, in one sense, but if all of the money is going to one partner and very little appears to be going to the other in terms of dissemination costs, in terms of conference venues and stuff like that, then there is a problem. So the do part is, try to get the balance. Try to make it very, very equitable. North/South balance in every regard. Sometimes one side has to get slightly more than the other because they're doing something that the other partner is not doing, but that has to be agreed in advance and it has to be written into the budget. The other point, please make sure you keep very careful track of what you're spending as you're spending it. Just simply open a spreadsheet, track your expenditure, make sure that both partners are feeding into the spreadsheet and keeping it live.

You will get half the money upfront. The first tranche is paid early on in the project, so that's effectively half the funding. The second tranche only comes through at the very end when you have satisfied SCoTENS that you have actually spent the money, that you can account for the money. It doesn't have to be audited as such, but it has to be a good, strong, clear layout explaining where the money has gone so far and where the rest of it will go. And on that particular point, it's then signed off and you get your final tranche. That, again, causes a little bit of confusion. It's 50/50 on the split in terms of money in advance and then money at the end. And you have to produce a satisfactory financial report as well as a satisfactory outcomes or out-turns report to get your final piece of money paid out.

Q5 Can you just clarify about using the money for teaching, because I see you said that you can't use it for research time but on the list here it says, replacement for teaching and research activities.

A5 Yes. You can't, actually, put down six hours for me personally. But you might put down three hours for a substitute colleague to cover some work while I am out doing my field work in such and such a location. It's a subtle difference but it's an important one.

Q6 The second tranche doesn't come through until the report is submitted?

A6 Correct.

Q7 Not just the financial report, the actual narrative?

A7 Yes, the two parts, the two parts to the report. And I perhaps wasn't clear enough

about that. There are two reports that are expected at the end – the financial report and the project report. So both have to come in before you get your final pay-out.

We focus on use-inspired basic research. Now, there are two core texts that we have actually borrowed from, and they've come to us not in text form, they've come to us through people. That is the only kind of high theory piece I'm going to throw at you today. The first is called Pasteur's Quadrant, use-inspired basic research. Think about the kinds of research that Louis Pasteur was actually doing. There was a scientific element to it, but there was a very practical element to it as well. It fed right back into his field of practice, it fed right back into the public conscience. It fed right back into policy, in relation to health issues and so on. In an ideal sense, that's the kind of quadrant we are trying to target in a lot of our funding. The sort of work that's done in terms of pure research, like Bohr – any of you who are interested will know this is the guy who came up with the image of the atom and electrons – quantum physics and atomic theory, basically. We don't fund work on quantum physics or atomic theory or its equivalent in relation to teacher education. We're looking for something that has more field applicability and practical value. Likewise, if you look at the kind of work that Edison did, an awful lot of Edison's work was not original in the sense he just took stuff, fiddled with it a bit and then sold it. We're not interested in that kind of research either. So, if you had to put us on a flag post, that's where we'd be. That's our area of interest. We're interested in that sort of applied and practice based research. That's what is most useful. That's what's seen as most useful by the two departments as well, and that's, consequently, one of the reasons that we go in this direction mostly. There are one or two very, very slight exceptions but, in general, that's the space you need to be kicking the ball around in to be taken seriously in terms of your bids.

Now, let's look at what that really translates into in real terms. There's a kind of a bridging space between the supplied and practical research. There's a bridging space between what's described as the area of academic-led theoretical pursuits. For example, historical research and research informed practice. So where those two bump up against each other: historical issues; historical practices in relation to teacher education; in relation to education generally; in relation to policy work; where the issues are and where the current problems and challenges are. We do not choose only one type of research. It doesn't have to be qualitative research versus quantitative research or whatever. There is no right way to do SCoTENS' research. We are open. It's an open call right across the spectrum. Mixed, qualitative, quantitative – whatever fits best in terms of the research challenge the team is taking on – that's the space we're happy to see you in.

Here are the five criteria areas that are actually scored, and I'm going to go through each in turn to explain as best I can how we score them when we come to actually review the application; scientific robustness and value for use. In most cases, a project is evaluated on one or two. It is not evaluated on both. The evaluation does not necessarily cover both one and two. Some projects that are very academic focused as well as having a practice base do fall into both categories and, consequently, they are evaluated under both headings. It doesn't mean they get more points. It means that the two headings are split equally. So, instead of getting 50 points for one, you get 25 for one, 25 for two. And it comes down to that kind of basic division. Most projects fall very cleanly into one or the other category.

The next then is capacity building. The fourth one is economic value; in other words, are you getting over and above value for the money that's actually going out. And the final one is

how and in what ways the project contributes to mutual understanding in relation to teacher education North and South. So those are the five criteria areas, and each one then breaks down into a subset of questions.

Each of the sub categories is marked out of ten. When you look at each category, it breaks into a number of sub categories, and each sub category is marked on a scale of one to ten. The way that we did it last year, and the way I think it'll be done again this year, is each evaluator, independently, scores each of the project applications, without consultation with the others. We then come together and we compare, contrast and consolidate. If I give a project a seven under a particular sub-head and if most of my colleagues have given it a five or a two or a three, or whatever, we have a conversation about why the difference is there, and then we consolidate on a single mark as a marking panel. So it's individual evaluations initially, followed by a consolidation process. A two-step process, as such. It's modelled, basically, on what's done in EU project evaluation generally. And this is a pretty good learning process to go through in its own way.

- 7-10 = excellence
- 6 = good with one or two recognizable weaknesses
- 5 = good with a balance of weaknesses and strengths
- >5 – below standard

So you need to be going good to very good, and evidencing that, giving us the arguments to believe that you're actually in that space.

So, will the project make an important contribution to the field, in our view? What kind of contribution will that be? Does the project propose to build effectively on what is already known? In other words, if somebody comes in with a really good project next year about cyberbullying and makes no reference to any of the previous work that we know about, it shows they've not really done their homework, if you see what I mean. If, on the other hand, they come in and say this builds on, this extends, this takes further, say, for example, the work that was done on the MVET project, the Value of Education Technology project. So we're taking that as a given and we're building up from that. We're taking that as a starting point, we're taking a recently released report on curriculum innovation and change as a starting point. You're showing that you know what's in the field already and that you're building on that. You're not trying to reinvent wheels that are already there. That's an important point, I think.

Are the research design and methodology of the proposed project trustworthy? Is it the kind of work that you can depend on in terms of drawing conclusions of a robust academic nature? That's effectively what it is in very simple terms. There's no personal prejudice running through it. It's as objective as you can be. It's honest. It's open. Where there are problems, it acknowledges problems. Does the project propose effective ways of disseminating its findings or outcomes? So, from the very get-go, the design of the project has to show how it's going to feed back into practice, how it's going to influence future action in this area. And then the final one, does it conform to appropriate ethical standards? That's not a yes or no. That is, is there evidence in the application that they have gone through the appropriate ethical procedure? Is there proof positive? Is there a covering letter from the Ethical Approval Board in the college?

Criterion two

It's usually an either/or. It's either the first one, which is the scientific robustness, or it's this one, which is to do with value for use. Who are the intended beneficiaries? They may be more than one group. How effectively does the project identify the needs among its users? Is it based in a very carefully constructed, very well-structured analysis of what the field actually needs? Is the project timely from the point of view of its users? You could do a lot worse than talk to colleagues about what is hot. What are the issues of the day from a department perspective? What are the department people and the inspectors starting to get exercised about? It's a good way of seeing where the next generation of research might go. I'm not saying it's the only way, but I'm saying it is one way. More often than not the really good ideas have come from the field. Someone has noticed something in relation to their teacher education practice and they want to say, is it just me or is this something that's experienced more widely? Do other colleagues have the same issues? Do they have the same challenges? And that's a good starting point for a lot of the work that we do. Are the outputs, for example, websites, teaching materials, conferences, etc., likely to be seen as appropriate and of good quality? Again, how will you make your outputs attractive to the people that you want to connect with? There's no sense in building a website if it's not going to be trafficked and if you haven't given some thought about how you might launch it and how you might attract interest in it. And finally, how effectively does the project appear to be in terms of its practical impact? Again, none of this is exactly written in stone. We are second guessing some of this. We're asking you to make a professional judgement about why you think and how you think it will impact on the professional practice of colleagues. And again, it's a difficult call to make in some regards but we think it's a useful one to exercise the team with early on.

Capacity building

This is one that everyone is marked on. There are 40 marks. Who will benefit in terms of capacity building? The notion of capacity building is spelled out quite clearly by Furlong. Most of us have some sense of what we mean by capacity building, but it's spelled out in depth and detail by Furlong and Alice. Who will benefit? Does the project approximately identify the needs of different groups of participants? Is it very, very tightly focused or does it have a wider currency? How will the project enhance capacity among its range of participants? Will it be the same kind of t-shirt fits all? Are you going to differentiate in terms of, you know, some will gain more capacity than others? You can usefully think about how that might be worked through. Overall, how effective will the project be in terms of capacity building? The overall question is the one that we very often have the most conversations about when we come to the actual decisions. It's a judgement call on our part as well, but it is important that we have the evidence to say, well, look, here in the bid they say such and such and such. That's why I think, overall, it will do such and such. You will find you have advocates. We do try to find reasons to give people money rather than hold it back.

Criterion four is economic

Again, there's an irony in this. It's not a whole lot of money, but we have to convince ourselves, and we have to convince the people who put up the funding for us that there is value being had from the amount of money that's being invested. And usually, it goes over and above the value of the money that's put in. You can't really cost the benefit of a young researcher getting her first or his first exposure to a North/South project through something like this. It really does make an awful lot of difference down the line, in my view.

So, is the project likely to be cost effective and transparent? Horrible words, new public management words, yes, but there has to be something in the bid that we can say, yes, this indicates that they're going in that direction. Will the project overall be value for money? What additional resources? Do not underestimate the power of the dark side! Do not underestimate the value that you can actually have by adding a couple of sentences about how your various institutions are supporting you outside the funding arrangement. Now, we do not look for matching funding arrangements. We don't say, you know, the institutions must give X and then we will give Y. It's not like that. But if there is an indication that the institutions are freeing up extra time, they're giving you a little bit of extra space, they're giving you a little bit more time or support in terms of travel, they're funding one or two extra conferences on the back of the proposed project, conference attendances, then that increases the strength of your project. Can you see what I'm saying there? It is important but it's not a game changer. We do look at it. We don't use that as a kind of cast iron criteria because some institutions are far more capable of doing this than others, but it is something that we would look at if we were in a situation, trying to make a decision between two or three different projects.

And then what additional benefits – academic, professional, political – are likely to accrue from the project and for whom? So is there a policy angle to where you're going? Is it going to go beyond just the practice base? Is it likely to feed into policy work, policy development particularly? And that can be hard to stand up early on in terms of arguments, but it is important that you try and show that in relation to your bid.

To what extent does the project build mutual understanding between teacher educators North and South?

Very straightforward at one level, very complex at others. You have to try and make overt the assumptions that we make in terms of why it's a good thing to have North/South connections in relation to small-scale research like this. And finally, does the project explicitly address issues of mutual understanding or reconciliation? And each of those categories, again, is worth approximately ten for each of the bids in each case. It brings up to a total score of about 150 overall. And you really have to be well up over the honours grade mark, as we'd say, to be in the series shakeup. This year we had 25 acceptable proposals. I would love to have funded a good 20 of them. We were only in a position to fund seven... eight as it was eventually, because of a little bit of fund sharing. So that's the kind of hit rate.

Further comments and recommendations

If the reviewers have anything in particular that strikes them – this is really unusual, this is something SCoTENS has never done before. This has a particular extra edge that we've never thought about. Wow, never thought of it like that. That goes down there and it becomes part of the overall conversation about whether a project can be funded or not. Now, that takes us down through the actual process, more or less.

Q8 Thanks very much for that, Conor, it's very useful. It would strike me immediately that the form probably needs to be changed to include some of those criteria so that people could perhaps address them explicitly.

A8 Yes and no, but I hear what you're saying, thank you.

- Q9** I suppose in the interest of fairness. Because if the criteria is obscured, even to those who aren't here and others are aware that those, even if it's only ten marks which might be a deciding factor between closely aligned bids, but that's okay, at least we all know now anyway. I have three quick questions. One is in relation to a bid that might come in very close, say, but just outside the shortlist. Do you give feedback whereby that bid could then go forward the next year or something like that? Would it have any additional support?
- A9** We do not have a formal mechanism to give advice and guidance in that regard, but I do know that colleagues have done that informally down the years. It's something, if a bid comes very close, we would always find a way of encouraging the team to either re-skin the bid a little bit, to make up the gaps and to come back the following year, if at all possible. But it's not part of the formal process at the moment. And that's the reality of it. We just don't have the facility to give the level of feedback that we would really like to. But there is feedback. There is one written piece of feedback given to each of the projects in terms of their strengths and where they might want to, whether successful or not, where they might want to look a little bit more in terms of tightening their perspectives.
- Q10** The second question is in relation to the distribution of funding. One group might look for something at the outer end of the funding allowance, and others may be at the lower end. If there was a proposal that was marginal in terms of its acceptability or criteria, etc., have you ever taken a slice off the proposal?
- A10** Yes, the question is a good one, actually. In a sense, it's not a case of taking a slice off. Sometimes we find ways. People are human and they will, in some senses, overestimate certain aspects of a bid. But yes, the short answer is yes. If we have a project that is, say, you know, if we're short a couple of hundred or a thousand to fund a particular project, and if we can see ways of shaving very slightly across the ones that have already been given the go ahead, then yes, we would do that. It's always a case of being as fair as we can. It would never be the case of taking so much from the project that it is no longer viable. We would make a very, very balanced and carefully weighted call on how much can you really take away from a project and still leave it with enough legs to run.
- Q11** You mentioned hot topics but I wondered if there was any consideration for priority topics at any point in time?
- A11** The short answer – there are no prescribed topics. It is an open call. It is a fully open call. You, as the people in the business, decide what you think might be of interest. I would assume that you are doing it in terms of a watching brief and a watching eye as to what's going on in your jurisdiction. It can't really be just something that's a personal project, in the sense of it must be something that ties into ongoing conversations, professional conversations, public conversations about some aspect of teaching, teacher education, education, community education, whatever. It must link to a hot topic in that sense. If I were sitting where you were sitting I'd be looking at the sorts of things that are actually bubbling up. Now, there was mentioned today earlier about controversies in the press and stuff like that. The jury is still very much out on things like communities of practice. Whether they work, how they work and

whether we should be looking at them. These are not prescribed topics. This is just my own personal position. I think that's one thing that I'd be, certainly, interested in. And it would have a North/South kind of impact. The thing about each of these or all of these is that they have North/South impacts. They're not just jurisdiction specific. There are always cloud issues – computing issues, technology issues, usage issues – in and around that area. We heard an awful lot of the discourse and the rhetoric, and some of it's very empty, very hollow, today about how technology changes the world. I'm always sceptical about that sort of thing and I'm always looking for answers to what might seem very typical questions or problematic questions there.

Creativity, curriculum. Place. I think this is one that we have not resolved, and again maybe I am 20 years out of date. Maybe I am 20 years out of date but, for my money, the whole relationship issue between schools, the institutions, the mechanisms that are used to support teachers and their learning at the school level, and how that intercuts in theoretical and practical ways with what we do in the college and higher education side generally, I still think that's a very, very contentious area. And I'm not a betting man but I'm putting my €10 down and I'm saying that that's going to blow up again one of these days, probably sooner than we expect. Tablets and other forms of technology. Working with groups of teachers, working with groups of teacher educators, you know, to do what we do a little bit better. Anything in that space is always of interest to us. And particularly if it brings in a bit more mutual understanding. The teacher educator as the one man band is another one that's topical. Are we asking too much of ourselves? Are we asking too much of the people who work with us in schools? All of these areas and issues, I think. The way we use teaching and learning spaces right across the system, particularly in terms of creativity and the arts and those areas. Again, I think that's something that has resonance. These are just some ideas.

So please look carefully at the application form. Make sure you look at the front page. Make sure you look at the back two pages. They're profoundly important in terms of getting a sense of what will float and what will not.

Q12 Thanks very much. Is there space for subject specific projects within teacher ed?

A12 Yes.

Q13 Thanks, Conor. A very quick question. For those of us who might have an idea but might not necessarily know who the corresponding person is on the other side of the board?

A13 The staff in the Centre for Cross Border Studies provide a matching service. So, if there's anyone in the room who is looking for a potential possible partner, there will be a form to download from the website in the near future. It literally says, this is my name, this is the email address. This is how you will find me. Here's the kind of thing I'm interested in. A provisional title, very, very loose. A very brief, 20, 30, 40 word description of the kind of area I might be looking for a partner in. And then are you seeking a partner in Northern Ireland, Republic? And then that goes back to Centre.

- Q14** When you submit that form, what happens? How does the matching actually happen?
- A14** What happens then, basically, is the Centre will have a certain number of these forms that come in from different directions. They'll do a very quick look down through them and any obvious matches will be put in touch with each other. All details of people looking for partners will be available on the SCoTENS website.
- Q15** And what is the timescale for that?
- A15** Sooner rather than later. The closing date for your bid is actually the end of January.
- Q16** Does the selection group, consider mentoring and coaching as being part of teacher education? I'm wondering how far out does the fringe go?
- A16** I would see no problem with any aspect of teacher education, whether it's initial, whether it's early stage, or whether it's developmental work at an advanced stage of the career. Teacher education is a continuum. Anything that helps improve the quality of teacher education on the island, regardless of where it falls across that spectrum, I think, would be a potential topic for a bid. So personally, I'd be very interested to see some stuff coming in on mentoring.
- Q17** What would you say is a short CV?
- A17** A short CV? To my mind, a short CV is about a page or slightly less. A short CV – your name, your institution, your background and your core interests, whether they're teaching interests or research interests or both.

Thanks very much for your time and your patience. I hope that was of some use. And please pass out the word.

Appendix 1

Standing Conference on Teacher Education North and South (SCoTENS)

Funding Application Form

In line with its objective of providing a supportive framework for collaborative research and professional activities in teacher education in Northern Ireland and the Republic of Ireland, the Standing Conference on Teacher Education North and South (SCoTENS) provides **SEED FUNDING** for projects such as research, conferences and exchanges which further this objective.

The sums allocated are usually in the region of Stg£3,000 - £6,000 (approx. €3,750 - €7,500). Please submit applications in Sterling and advise if you wish the grant to be paid in Euro. The exchange rate used will be that shown on www.xe.com on the day the payment is made.

SCoTENS **SEED FUNDING** is available **only** to fully-paid up members of the SCoTENS organisation.

The SCoTENS committee is particularly keen to receive proposals from people who have not yet been participants in such projects. **All proposals should be submitted by North-South partnerships of researchers. SCoTENS is not able to cover the cost of an institution's overhead.**

This form is to facilitate people applying for the funds in the context of the SCoTENS objectives set out in the accompanying guidelines (page 6).

THE CLOSING DATE FOR THIS ROUND OF APPLICATIONS IS 30th January 2014

Project Title:

Acronym by which the project is to be known:

Name: 1st Partner _____

Department: _____

Institution: _____

Address (including post code): _____

Telephone number:	_____
Fax number:	_____
E-mail:	_____
Name: 2nd Partner	_____
Department:	_____
Institution:	_____
Address (including post code):	_____

Telephone number:	_____
Fax number:	_____
E-mail:	_____

Project Aims (no more than 500 words)

What are the proposed research questions?

What are the proposed aims of the project?

What area(s) of education does the proposed project relate to?

How is this project important in terms of its contribution to its field (empirical/theoretical/practical)?

How does it build on what is already known?

Project Activities (no more than 600 words):

What proposed activities will fulfil the aims?

What methods will inform your research fieldwork?

Who will be the proposed participants?

What ethical issues are associated with the proposed project and are they addressed?

What types of analysis are proposed?

Project Outcomes (no more than 500 words):

Who are the intended beneficiaries of the project (there may be more than one group)?

Who will benefit in terms of capacity building (there may be more than one group)?

What are the potential outcomes of the proposed project and how will they be measured?

Are the outputs likely to be seen as appropriate by its users?

What ways will the outcomes of the proposed project be disseminated?

What potential benefits will you and your institution (and other key beneficiaries, including policy makers) gain from the proposed project?

Project Timescale (no more than 250 words):

When will the proposed project begin?

When will the proposed project end?

When will each of the associated activities take place?

Project Costs (give a detailed breakdown of the expenditure you expect to incur):
travel?

administration?

research activities, e.g. transcribing, data input etc?

equipment and resources?

subsistence, e.g. meals, accommodation, etc?

replacement for teaching?

dissemination?

invited speakers?

How will you ensure that the use of the funding is cost effective and that the project provides value for money?

How much funding do you require from the Standing Conference on Teacher Education North and South?

Have you received funding from other sources for the proposed project?

If YES, provide details (Please give details of both financial and in kind funding)?

How does the proposed project meet the objectives of the Standing Conference on Teacher Education North and South? (see guidelines on page 6 for list of key objectives)

What will be the benefits of the proposed project for teacher education and/or mutual understanding on the island of Ireland?

Are you aware of any similar projects to the one proposed?

How will your proposed project complement these similar projects?

Signed (1)

Signed (2) (partner)

Date

Name of institution and person who will be responsible for the finances associated with the project:

In order to ensure this application has the support of the applicants' departments and academic institutions, please obtain the necessary signatures

(1) Name of Head of Department (plus Academic Institution)

Signed (Head of Department)

Date

(2) Name of Head of Department (plus Academic Institution) (partner)

Signed (Head of Department)

Date

Guidelines for Completion

These guidelines are to be read by applicants prior to and during completion of this funding application form.

The application form should be completed and submitted electronically rather than hand written – signatures may be scanned in.

Applications submitted to fund a conference must give an indication of the expected number of delegates. SCoTENS is not permitted by the funding Departments to subsidise the cost of conference attendance for individual delegates. Spending must be on hotel booking, catering and related costs.

It is a requirement of the funding that a project narrative report is submitted within one month of the project's completion and a project financial report is submitted within two months of the project's completion. The second and final tranche of funding will NOT BE RELEASED until these are submitted.

Only full paid up members of SCoTENS are eligible to apply for Seed Funding
All enquiries should be made to Eimear Donnelly at 028 3751 8282 (048 from the South)

Email: e.donnelly@qub.ac.uk

Eimear Donnelly
Administrator, SCoTENS
Centre for Cross Border Studies
39 Abbey Street
Armagh BT61 7EB

The closing date for this round of applications is 30th January 2014

The key objectives of SCoTENS are:

1. To provide a supportive framework for collaborative research and professional activities in teacher education, North and South
2. To hold invitational conferences on themes of mutual interest to teacher educators, North and South
3. To provide seed funding for North-South research projects on teacher education issues
4. To promote position papers on issues of mutual concern to teacher educators, North and South
5. To use its good offices to assist in obtaining funding for approved research activities
6. To support North-South exchanges between teacher educators for approved purposes as part of its concern to strengthen inter-professional and inter-institutional linkages
7. To act as an agency for advice and consultation by policy makers in the Education Departments of both jurisdictions
8. To establish and maintain a website which will provide information and resources of interest to teacher educators and researchers, North and South.

GOVERNING BY INSPECTION: INSPECTING AS A LEARNING ACT

Dr Sotiria Grek, University of Edinburgh



It's always a pleasure to be in Ireland. I was here a few months ago at the University of Limerick and, again, it was a very, very interesting experience for me. Apart from the fact that the discussions are very, very productive, the people are really nice, and that's always great. So when I got the invitation for the SCoTENS conference, I couldn't but accept. So thanks again. As Tomás mentioned, what I'm going to be presenting today is really the project I've been working on with colleagues from the Open University, the University of Oxford and the University of Umea in Sweden. It's a comparative project looking at school inspections in three different countries – Scotland, England and Sweden – and we're almost at the end of the project, really, at the stage where we do a lot of the analysis of the findings and the write-up. In fact, I'm one of the two editors of the book, a collaborative book that will come out of the project, so I would be really looking forward to your feedback at the end of this presentation because what I'm going to do is test a lot of the ideas that actually are going into the book.

Just to give you an overview of what we're going to be looking at today, what we're going to be discussing today, I'll start by framing the project a little bit and framing how we have looked at the issue of inspection through this prism of knowledge, in the knowledge society, as a governing resource. I'm going to explain what I mean by that, indeed, as a governing form. Then I will touch upon the case of England. I will be relatively brief on England, simply because of the fact that I've been more in charge of the inspections in Scotland, but also because I think the Scottish case is a little bit more interesting, and something that might interest you more. So the main focus of the presentation will be discussing self-evaluation as the soft governing form. And, in fact, what we may be seeing now in Scotland as a move away, or a building on self-evaluation into what they call the inspectorate education, a collaborative learning project. And I will also try to discuss a little bit the activities of Scottish inspectors moving abroad, not just in Europe but in other countries as well, and trying to teach the self-evaluation paradigm elsewhere.

So I promised I will start with a little bit of theorising, giving a frame to the projects, and here we talk about governing technologies. Very often when we think about government or governance, we consider always the centre. So this is either Westminster or Dublin or the Scottish Parliament. But, in fact, the project has a very different view of what governing is and what a governing technology is, and we follow here Miller and Rose, who are really saying that it's a mix of mundane programmes, calculations, techniques, apparatuses, documents and procedures, through which authorities seek to embody and give effect to governmental ambitions. So if you are looking for where governing is and when governing is happening, it's at these mundane realities, the everyday professional realities that actors engage themselves with. In schools, again, I guess it is the teaching and learning inspections. The meetings they have, the documents they read, the assessments of the work that they do. So, if you're considering governing, look at these very everyday processes.

To move on, there has been a lot of talk about this movement from government to governance and what this is really. We have experienced this broadly in the last 20 – 30

years, and there is this move away from hierarchies to networks, from state to the market. So we see a lot of public/private partnerships, the devolution of responsibility not to just the state any more but to individuals and families. And we've experienced that a lot in education policy, I would say not just in the UK but in Ireland and in Europe more generally.

So the government has moved from being the enabler of provision to a market regulator. It's there to regulate all these different forces that are part of the governing processes. A driver of integration, of action, and delivery. A good example I could give on that is what has happened with integration of children's services. What we had in local authorities before was different departments of education, social work, the police, working separately, in silos. And what we have, really, as a consequence of this governance turn, is them coming together to create children's services that have a far more holistic view of children's needs and deliver accordingly.

The third point, which I think is also really important, is where education becomes key, learning becomes key. I mean, people don't talk about education so much anymore but, in fact, they talk about learning. Precisely because learning gives them the opportunity to talk about a much more fluid experience. Lifelong learning. Learning can be everywhere. And it is there we see very much so, with the Lisbon Agenda, for example, it was one amongst many. With the new agenda, the EU 2020 Agenda, it's one of the five indicators. The focus is on increasing learning, improving learning, both for increasing human capital, so improving economies, but also – very importantly – for maintaining social cohesion. Education is really the only way for these countries that are in crisis, to kind of move out of it.

What I would say is very interesting, at least in relation to this presentation and to my own research interests, learning and knowledge has become key for policymaking. Think of policy learning, for example, and I am sure you have heard the term. What we see is that policymakers more and more work together. They learn from one another, in meetings, through documents, through coming together to decide what the policy directions should be. This is primarily the case when it comes to Europe, but also at the national level. For example, what we're doing here today is a very good example of this kind of learning activity – we learn from one another in relation to what we do.

So again, a little bit of theorising and framing of the project. We used a lot of the work of Jacobson who is really saying that knowledge based governing – governing that is done on the basis of knowledge and evidence – is, first of all, regulative. And we understand that is all the formal laws and legislations and directives. It's also inquisitive. So all the demands for information and auditing and ranking – the whole thing about evidence based policymaking. It's been with us the last 20 – 30 years and it's still growing. But he also says, very interestingly, that it is meditative. So he is saying that it is generating and sharing ideas among experts, presenting ideas and models that design regulations and ranking. In a way you can think about it as really more or less a precondition for regulation and for audit. Actors have to come together to discuss, to agree, to reach a consensus on what they are going to collect evidence on. And then how to form policy and regulation. I think this is really important, and although we should have known that this is the case, it hasn't really been, this idea hasn't really been worked on. It hasn't been looked at very much. The focus, more or less, has been on evidence based policy and on its effects, without looking at that kind of pre-state of how do we really get there.

When we think about inspectors and inspections, it brings you more to the topic of my presentation, they engage in all these three knowledge based activities. So they simultaneously regulate, audit, and mediate, and they do that in increasingly challenging conditions. Conditions that threaten them with extinction at times. And, in fact, leading a lot of people to ask, what is inspection for? When we have so much evaluation at the level of the school, when we have so much data from the national level, from the international level, studies like PISA, etc., why do we need inspections? Why do we need inspectors? Are they an added burden, an extra cost? And this kind of framing, this kind of thinking has very much directed how inspectors have been thinking and readjusting their work and their positions. And I'll come to that later.

I like this quotation. It's from the SICI website. This is the Standing International Conference of Inspectorates, a European association of inspectorates. They are saying that inspectorates are today only one among many institutions and organisations that produce evaluative material on schools, teaching and learning. The place, role and status of inspectorates can no longer be taken for granted. The quality of their products and services will, increasingly, be compared with other sources, and could be challenged by other evaluators. Like all public services, external evaluation of schools will, increasingly, be challenged to show its value for education and for society at large. Failing this challenge will endanger the future of inspectorates, as they will be failing to deliver the information and analysis that our societies need.

So it's a changing context for them. Things have changed a lot. Gone are the times when the inspectors had the authority and power, and influence of the policymaking, in its national context. In fact, the very existence of SICI, of this large association, the fact that it has grown massively during the last ten years, it's proof of that. Inspectors had to come together at the European level. They had to meet and talk and discuss, share their knowledge and expertise, and see how they can deal with these challenges together. And what makes the projects and the Scottish case very, very interesting is that, in fact, Scotland has been at the forefront of this. As Graham Donaldson said a couple of years ago, the Scottish Inspectorate is the leading inspectorate in Europe. And I will show you why and how.

What has been happening in England and Scotland in the last ten years or so? The political devolution in the UK is not settled, there is unfinished business. The UK government, as you all know, is responsible for education in England, whereas the Scottish government is responsible for the education in Scotland. The SNP has governed in Scotland since 2007; more recent elections resulted in a much stronger SNP government. And the core project, as you all know, is independence. We're just a few months away from the referendum, and who knows what is going to happen, but what certainly has happened is that the independence agenda has very much influenced the direction of education policy in Scotland in the last five or six years. The SNP still promotes this social democratic identity, strong state responsibility for public sector provision. In fact, a lot of the referencing is not so much in comparison to England any more as used to be the case in Scotland, but to Europe where they're stressing this arc of prosperity, including Ireland and Iceland in it. Of course, that's all gone now. But certainly a very different referencing and a very, very different project. On the other hand, down south, the Coalition Government formed in 2010 have this resurgence of neo-liberal principles. This is across the government as a whole. And huge public spending cuts to reduce the deficit.

As I said, I'm not going to go into extensive details on England but I think it's just interesting to look at it briefly so as to make the comparison and the contrast with Scotland even starker. So this governing project is marked with the resurgence of neo-liberal principles, a lot of repetition, a lot of contradiction. And I love this quotation by Peck, who describes neo-liberalism and failing and kind of failing forward. And it's the forward fashion, you know, that I really like, this notion of the forward that I like, that it always fails but then it finds a different way to move on, this failing forwards. So really, really interesting, and I think we see that a lot in England. All that really matters for the English education system is how we're doing compared with our international competitors. So, a huge focus on that. That is what really defines our economic growth and our country's future. The truth is, at the moment, we're standing still while others race past. And indeed, England is at the OECD average in the PISA rankings but, obviously, that's not good enough. They're scared that things are not changing fast enough and other countries are improving and moving forward much faster than they do. You all know the story about the academies, the new policy of free schools. A lot of reform. Reform is difficult for anyone to follow. I mean, this project started in 2010, and really it's actually very difficult to conduct any data collection and analysis precisely because things change constantly. In all contexts, in all countries, but especially in England. A lot of private sector involvement, probably more than ever before, and probably, also, it's a more market based kind of system in Europe at the moment. This unprecedented centralisation of powers, was of course there before the Coalition Government came. It really started with New Labour, this education agenda, which more or less meant, really, collecting as much data as possible about the education system. Not statistical data any more, but whole population data. And trying to control the education system from the centre, from Westminster, completely doing away with local authority control.

So we have Ofsted, the unloved organisation, not a unified workforce. There's been a lot of change. It used to be — even before it was actually called Ofsted — the English inspectorate was described by one interviewee as very militaristic, very hierarchical, tremendous power of acculturation. And then, in the '90s, we have Ken Clarke, Secretary of State, who understands the problem of Ofsted, identifies Ofsted with the education establishment, and decides Ofsted needs to change. This is the main message. And what we have here is a new breed of inspectors.

As I said, I won't go into detail. In fact, I'll come right to what is happening at the moment, which is the outsourcing, really, of inspection in England. This is tremendous, I find it tremendous, because I think it is really the outsourcing of the governing of education as a whole. So we have these three large companies, CFBT, Serco and Tribal, who are conducting inspections, or they employ people to conduct them. Of course, there are some people directly employed by Ofsted, but the bulk of the inspections in England are done by these three private companies. They do a lot of other things and inspection, more recently, is just one of them.

Status and pay divisions remain in Ofsted. They cost about three times what I do, and this is a contractual agency work area. Of course, when you bring the marketing, you have this kind of price and the quality, the correlation, according to what the interviewee is saying is that they dropped the quality for the price, here at the very bottom. They didn't know what they were doing for a long time. It takes a long time to understand how to do inspections. They are better, but it's taken time — around two years — before they could even get a handle

on what they had to do. Then how can Ofsted really manage all this work? We are talking about quite a large country, and three different contractor companies, a lot of self-employed people, as I said. So what they tried to do was have a lot of standardisation in the system. Here, another interviewee is saying that the report has to be written on the following day. And there are a number of musts, a number of lists that they have to follow, that they have to fill in. And unless they do that, Ofsted can say no and they are allowed not to sign the inspection report off, and then it becomes a key performance indicator failure for the provider, for the contractual company. So he's saying he gets tied up in these knots, and we're seeing knots everywhere. A very, very complex system and a very standardised system that doesn't really allow for work with a school in a different way, in a more productive way.

Finally, on England and this new framework. There is a lot of uneasiness about the extent to which it is going to work or not. It's very high stakes. If the proportion of failing schools doesn't start to fall, the credibility of inspection as an agent of improvement falls. This is very important because there is this fear that, if they don't do well, what's next for them? And this is in the context of the wider challenges that inspectors face. The second quotation here, and I think that's also really interesting, "Ofsted still keeps an arm's length relationship with a school." They are very much protective of their independence. They are saying "we are going to inspect, not in fear or favour of schools." And we have to be careful not to start instructing the school. So this is a very, as you will see later on, a very different attitude from the one that is taken in Scotland. And this final quotation, I also really think is interesting, because we always think of inspections as the moments of agony and fear and stress for schools, for teachers, for staff, for the head teacher. And we never really think about the inspection as a moment of stress, a daunting moment for the people who conduct these inspections. If you think these are self-employed people who are trying to make a living, to get a day's salary out of the inspection, the task of looking at the Head and saying no, this school is inadequate, is one of the most daunting jobs you could do in education, because the chances are that if that Head has been leading the school for some time, then that Head will go. That's what the statistics tell us. There is an absolute scarcity of people applying for Head Teaching positions in England, and Scotland, for that matter, precisely because this is a very, very difficult job to have these days.

So that's England. Moving to Scotland and, really, the focus of my work over the last couple of years. We need to understand the context, the context is very, very important, and the context has changed in Scotland since 2007, where the governing project, the SNP project, is described as a learning partnership. So for the SNP to promote this independence agenda, they have to win the game, create a national consensus, more or less, to please everyone. The extent to which this has happened, I'm not sure, but in any case it has promoted very much this innovation in governing, which comes through learning. In a sense, we're all in this together. There is a lot of focus on inclusion and the public provision of schooling, the ruling out of market based initiatives, the exclusion of commercial interests. So it's quite a different scenario. Responsibility has slowly but surely — since the '90s, before the SNP came into power — been shifted to individuals and institutions who are classed as autonomous, independent learners and leaders; and they're being supported by this learning government, a kind of modelling, reflective and responsive practice to the people of Scotland.

Performance management remains very, very important and we shouldn't forget that because sometimes there is so much talk about this learning government of Scotland, and people forget that, actually, data evidence is there. It has never really gone away. In fact, it has

increased. So the SNP introduces the National Performance Framework, a new relationship with local government; it establishes concorded agreements with local governments. This is already a shift in the sense that local authorities were really, really important always in Scotland in terms of providing education in the periphery, but still, this is strengthened and it's enhanced even more. The pursuit of economic prosperity is also a strong narrative, and now a recovery, in order to achieve a better Scotland. And that's no different from England. Education and learning is seen as the way to improve the nation through the economy, and it's exactly the same narrative in Scotland. The Scottish Government is saying, focus government and public services on creating a more successful country with opportunities for Scotland to flourish through increasing sustainable economic growth.

In education, what we have seen is this move away from the responsibility of the state towards the responsibility of the learner, the individual learner, the individual teacher, for improvement. It's actually exemplified through this school self-evaluation movement. I had a very interesting discussion last night with John MacBeath. I should have had my tape recorder with me, because he was telling me how the whole thing started in Scotland at the beginning of the '90s. He was one of the key figures that introduced self-evaluation there. What it has done during its now 20 years history is that it has moved the focus away from the regulation of performance through external mechanism to commitment to this kind of constant production and review of knowledge from within the school. And we will come back to that very soon, but the other idea that I want you to really remember and focus on is the effects of SSE, the School Self-Evaluation, as a travelling policy. Since 2003, when the Scottish inspectorate engaged themselves in this big European-wide project on self-evaluation, it has travelled to a number of European and other countries, and has created this internationalisation agenda for the HMIE, for the Scottish Inspectorate, in fact, producing a lot of work for them and giving them a lot of confidence. And, as I was saying it is now considered the best inspection system in Europe. And that's another example I'm saying here of this referencing outwards. So as I said earlier, the comparisons are not with England any more but the reference countries, more in the social democratic countries, for example the Scandics.

As I was saying earlier, in terms of self-evaluation in Scotland, where things used to be, the past, if you want to think about it like that, there's this circle of these questions, the hideous document, *How Good is our School?* the bible of self-evaluation in Scotland. And the questions, how are we doing? how good can we be? and what are we going to do now? These are the questions that drive self-evaluation. And one thing that we shouldn't really forget is that self-evaluation also received a huge amount of criticism in Scotland and elsewhere as, supposedly, being a bottom up mechanism of evaluation and auditing. But, in fact, actually, being quite prescriptive in the sense that, right from the very beginning, there was a list of quality indicators that were given from the top to the schools, and these had to be followed. You couldn't do self-evaluation in a different way. So this has changed, and the quality indicators have changed a lot, but this is where things were. And the evaluation of quality was meant to be done through people's views, direct observation of inspectors, but the qualitative data, collecting that data on performance, was very important and still is. We have this circle of work between the self-evaluation, the school is at the centre, but the self-evaluation and inspections, they have to feed one on the other. Then there are other factors that influence this relationship, like the curriculum, the community, parents, the context, etc. So it's not just about the school but it's about other actors as well being involved in the self-evaluation, like parents or the community. So I would say that self-

evaluation is used as a means of encoding school knowledge and creating compatibilities, a shared project of self-improvement and creating self-managed individuals. Teachers to start with, but also learners and parents.

So how have things changed, or are slowly changing, if you want to think about it like that. Two years ago, at the end of 2011, we had the formation of Education Scotland. And again there is a little bit of history to this. Education Scotland is really a new agency that has a double role. The inspectorate is part of it, obviously, the HMIE, but also what used to be Learning and Teaching Scotland, the agency that was looking after the curriculum for Scotland became one in this new organisation called Education Scotland. When I talk about history, the history, really, is the curriculum for excellence, around which discussions started back in 2002. It took a very long time until we reached the point of its implementation in 2010 when inspections actually stopped altogether for six, maybe nine months at Scottish schools because inspectors were sent out to help schools with the implementation of the new curriculum, precisely because there was so much furore, so much tension amongst teachers. What are they going to do with this new curriculum? They didn't find it easy to actually implement it. So there comes Education Scotland in 2011, suddenly having this double role of both inspecting but also helping schools in the curriculum, but then, much more broadly, in other matters of school life. This in itself is really interesting in the sense if you could contrast it to England and how they are very much saying we're not there to instruct schools, we are independent. This is a very, very different inspectorate here because they are saying explicitly, we're here to inspect you, but also to help you. Of course, there are a lot of questions, and I would be interested to find out what you think about that, as teacher educators. How can you actually do both? Is it possible to do both? So, what Education Scotland is now asking and saying, perhaps not at international level however, they're still talking about self-evaluation. But at least within Scotland they're asking this question: self-evaluation or collaborative learning? So we see a little bit of a move, if not a move away as such from self-evaluation, but a kind of re-think. Is this what we're supposed to be doing? Is self-evaluation enough? Here you see a number of sources and a number of different ways of working to promote this collaborative learning. Action Research, Stakeholder Service, Peer Observation, Learning Round. The list can go on and on. How are teachers meant to self-evaluate? How are teachers meant to learn? As I said, the founding of Education Scotland is introducing a joined and learning process; it's also interesting to understand how inspections happen at the moment in Scotland, with this new inspection framework. Again, it's been running the last couple of years. Inspectors go into a school on a Monday. If things are okay, and it doesn't have to be outstanding, but if things are going relatively well, inspection lasts for two days. Then on Wednesday they don't leave school but they change mode and they go into advice and teaching mode. They stay in the school until Friday. They actually spend more time in the school, three days, working with teachers, and helping them improve the school in the different ways that the school wants to. So they have this teaching role, very much so. Here the MI, the managing inspector, will lead his and her team to carry out inspections which will adopt a learning approach in order to share our knowledge and experience and learn from the knowledge and experience of others. They keep in touch with senior staff throughout the process of sharing findings in a constructive way to encourage ownership and learning to take place. This quotation here comes from the Head of Education Scotland, "this is no micro-management". I'll remind you of the quotation from Ofsted and the contractor saying there is a list of musts. We have to tick everything. If we don't then the report goes back. But actually, he is saying something completely different here. Education Scotland has the role of choreography –

managing careful balance of pressure and support. In fact, he is saying we will build from the bottom. We have invested a lot in capacity, you know, in professionals. And we will steer in a very light touch, a very soft governing mode. External experts suddenly become very, very important. There is a document, *The Involvement of External Experts in School Education*, where they are saying this should become a system where the teacher is very much the leader of learning responsible for networking, planning, and coordinating how other professionals contribute to a high quality learning experience for Scotland's children and young people. They want to create what they call a transformational learning system to challenge very settled relationships and regimes. Focus efforts on ethos and relationships, a safe space for disclosure and leadership. Challenging the status quo. All these things, when you first look at them, they seem wonderful. The question is why, and what is it that they're trying to do? Again, very interestingly, the aims are not much different from England. There, the focus is doing something with the coasting schools; schools that are somewhere in the middle, but where nothing is really changing. And that's exactly the same focus here. Challenging settled relationships and regimes. We have to do something with these people. We have to open up. And maybe what has happened with self-evaluation is that the process became very internal, very closed. Schools were isolated in doing this. They needed to look out. They needed to seek external advice. In England, maybe, this happens through the academies, the coming of business, of market people into the school life. In Scotland it's external experts. The ideas are more or less the same but the ways of doing things are very, very different. Interestingly, they talk about trust. When you talk with the local education authority people — because they are very much there in the process as well — they try to persuade schools not to fake the inspections. They say, "don't change, this is not the Super Bowl. You don't have to look perfect on that day. You can just be yourself, and that will be much more useful for you and much more productive, as a result, for the school."

This is a quotation from a person who is very high up in Education Scotland, and I just find it extraordinary, because inspectors, from being the authoritative figures in education as we all knew them are now turning: they see themselves as knowledge brokers, knowledge managers, knowledge transfer agents. They want to build this learning education system approach. So inspection forms part of that. They don't do away with inspection as the external accountability mechanism, but it feeds the best learning back into the system, combining it with external evidence and research. Again I would like to remind you that these are people who, over the last ten or 15 years, have travelled a lot of road, they have received a lot of recognition. They have done a lot of collaborative work in other contexts, and now they come back wanting to bring this knowledge they have gained from elsewhere, into the system. This is the learning inspector. The key quality that we require of inspectors is humility. That they have the humility to say, "look, I just don't know and I will find out that for you." I don't know about you, but this is not something that you would expect an inspector to say. Or inspectors have even to become affectionate, to become nice. They receive a lot of training, a lot of psychological training on the social skills of inspections. We have some occupational psychologists working with us to develop this framework, working on relationships with people. In fact, how you inspect, they are saying, is almost more important than being right. Again, really interesting. Fantastic quotations when you are doing your research, but interesting for the system itself. Now, it's the social skills of being able to manage inspection to the point where you leave the school, actually able to improve, because they accept and are with you on the agenda. That is the real skill of inspection. It doesn't matter if they know what is right and what is wrong. It doesn't matter, actually,

even what the inspection result is. But what matters is that you leave the school able, leave the school in a capacity to improve, a school that is with you on the agenda. So this all sounds wonderful. I would like to try to do some analysis of why and how this happened. Back then, in the early '90s/late '80s we had fears of the new public management, neo-liberalism, the unintended consequences of collecting all that data, of all that targeting. So they devised self-evaluation as a way to be different, do things differently. They could see that the system wasn't working. What is the case at the moment? In contemporary terms, reduced budgets. One third of the inspectorate in Scotland got made redundant a couple of years ago. So we have a very different picture, and we have political change, the Nationalist Government. They have to find a new way of talking about things, a new way of governing. So there is this absolute need to improve quality, to be up there in the rankings, without a massive investment. And that they could do in a sense, because they were working on self-evaluation for such a long time. They felt that they now needed to capitalise on the fact that schools, by now, should know how to self-evaluate. And there was the need from the SNP to secure broad political support on the bigger independence projects.

Another really important factor, and I'm sure that you resonate with that, Scotland is a very small country. It has a very small policy community. Everybody knows everybody else. This can be negative also, but it's quite positive when you want to work in this way. Here's this person who is really high up in Education Scotland saying there's probably no secondary school in Scotland in which they don't know someone teaching. That is the reality of it. That creates difficulties, as we're saying, but it's maybe one of the reasons why the system has got more chance of working in Scotland than elsewhere. The networks are very tight. They are very close. The project of self-government, of independence is very strong as well. He is describing here someone who said for decades you had this top down approach with civil servants telling ministers, ministers telling local government, the local government telling directors of education, directors of education telling head teachers, head teachers telling teachers, suffocation by direction. We don't need that any more. If you want to move from a state of dependence from Westminster to independence as a country, you need to create self-government. You can't be a confident individual if you expect others to tell you always what to do.

So the result, initially at least, is that self-evaluation brought a substantial change. It didn't just produce knowledge about performance. It did produce that, and quite a lot of it. Teachers were asked to collect all the data, some like to find the data on these quality indicators, but it also slowly co-opted teachers, parents and pupils through the creation of a common language and a common agenda. I think this is what is really important in this project. Sometimes we fail to understand it. I have done research with policymakers, with inspectors, and I've also done a lot of research in schools with teachers and head teachers, and what always strikes me is how everybody is using exactly the same terminology. When you really ask them, what do you mean by excellence? Can you tell me a little bit more about it? They might give you different understandings of it, different meanings of it, but they do use the word excellence all the time. It's the journey to excellence. I mean, the quality indicators, this whole agenda, has given them the same language and, therefore, the same, to an extent, understanding. Or they think that they understand the same things and work together. So it's this common agenda that self-evaluation has created. And, in a sense, probably, that's why now Education Scotland feels that it can take things a little bit further than that.

So the new development, this move to collaborative learning, its orientation to the future is very important. The construction of a story, with a focus on the process. Sometimes it doesn't matter what the outcomes are. As long as you know how you're going to improve, you have a plan about the future, that's very important. Also, this movement away from learning from within the school but also from without. They're not just teachers, you know, teachers, but inspectors themselves. This is for both professions, for both kinds of actors. So the inspectors also have to learn themselves, from within their own profession, from the schools they go to, but also externally from international experiences. And this emphasis on ethos, relationships and trust, I tend not to enforce things, but to discuss, probe and penetrate. Right at the beginning I talked about knowledge-based governing as regulative, inquisitive, but also meditative; this is where we see a lot of this happening. It is really about regulation, obviously. It is about audit, because that's what they are there to do. But it's also about mediating a lot of these ideas to schools. So schools are now open, responsive to their environment, or have to be. They are in need of advice at national and international. In a sense, it's not a matter of if they need it or not, they have to. They have to know what's happening elsewhere. They have to know the PISA results. And what about the inspectors? That's quite interesting in itself if you think of the profession and the challenges that they faced. What did they do? They could see that things weren't really working out, that things were changing, that these tectonic plates were actually moving very fast and under their feet. So they moved into taking a different role. They were quite quick and effective to become teachers and brokers of their relationship, adding their international agenda. The work that they have done with self-evaluation as a travelling policy has ensured that they regained their status and control. If you think of the amount of information that's out there for schools to work with, this role, actually, is a very, very important one. Being able to broker that knowledge, to translate it, to manage it at the local level, according to the needs of the school.

And as I was saying earlier, this is not to be underestimated, because it gave them a lot of confidence but also a lot of funds. As I was saying, they lost a lot of their colleagues. A lot of them were made redundant, but in fact, contractual agreements, bilateral agreements with a lot of countries is actually, now, quite a big source of funding for them. They have regained this momentum. It doesn't look like it's going to wane any time soon.

We get this question a lot – what do you mean, governing by inspection? What do you mean by inspecting as governing? I hope I have tried to explain it a little bit better. You're talking about re-imagining the profession of teaching. I would ask you, can we re-imagine the profession of inspecting? And what does this mean for teaching? Because there will be a lot of effects on how teaching is done if the inspecting work changes. And if, for example, teachers who 20 years ago were asked to become auditors with self-evaluation, are now the auditors themselves becoming teachers? And how is this relationship going to work out? As I was saying earlier, the aim is always the same. It's against coasting. The need to bring constant change and improvement. Not just to the failing schools, but also to the best. The best can become better. This is a never-ending agenda. There is always improvement. A lot of this is also about coasting inspectors. Many of these older inspectors, maybe, still thought they can do with just going and being strict in the school and they don't need to learn from anywhere else. So this is a change within the profession itself. Schools come to learn, schools come together, schools meet with other schools, they meet with the inspectors, they come together and, in a sense, I would say, they come to learn what they want through these meditative activities. They just don't do whatever they like or whatever they think is best. But they come to learn what is necessary. How is the best way to move forward? This

is what the government project is about: teaching them what they need to do, but with them thinking that in fact they, themselves, are deciding what is best for the school. This is their core option – bringing them together in the agenda.

Thank you very much. And hopefully, next year, next September, this book will also come out – Embodied Regulation published by Routledge. The book will cover not just Scotland and England, as I talked about today, but also Sweden, which is another very interesting, very different case in itself. And a lot of papers, working papers, presentations can be found at our website, the website of our project, www.governingbyinspection.com. So, thank you very much.

REIMAGINING THE PROFESSIONAL POLICY PERSPECTIVE

**Mr Peter O'Neill, Department of Education, Bangor and
Mr Eddie Ward, Department of Education and Skills**

Mr Peter O'Neill

Hello Everyone.

Thanks Tomás for the introductions. The Director for Education and Workforce Development, Laverne Montgomery, was to be doing this presentation but unfortunately Laverne sends her apologies to the committee, the SCoTENS committee, to Tomás and Linda, and indeed all the delegates here today.

I want to talk firstly about North, South relations briefly. The department welcomes the opportunity to be involved in a joint North-South collaboration, and I would like on behalf of the department to thank SCoTENS, in particular Linda and Tomás for providing the department with the opportunity to be involved in this presentation. There are many examples of joint working between North and South and at all levels. These would include administrative level through the North-South Ministerial Council, various working groups at official level, joint initiatives and a range of other activities. One such example is the North-South Teacher Qualifications Working Group which looks at issues of mutual interest, relating to teacher mobility and professional development of teachers. And both Laverne and my colleague Eddie are highly involved in that group, and indeed they are the co-chairs of that working group. SCoTENS is another great example of joint working, which as you know brings together a range of organisations with an interest in teacher education. The Departments in both the North and the South have demonstrated their support by way of contribution of funding to SCoTENS. This joint presentation sets out the separate policy interests of the Department of Education in the North, and the Department of Education and Skills in the South. I know there will be common areas which were both grappling with but I'm sure that we will learn from each other as we move forward. I just want to speak briefly about our Minister's vision for education. Minister O'Dowd's vision for education in the North is one which I'm sure we can all share. It is every young person achieving to his or her full potential at each stage of his or her development. Minister O'Dowd wants to deliver high quality education for all young people regardless of their socio-economic backgrounds or status. He is committed to breaking the link between poverty and low achievement. In attempting to realise this vision, we have identified five strategic goals for the Department. Raising standards for all and closing the performance gap in increasing access and equality are our clear goals, objectives with the three other goals viewed as enablers. Laverne, whom I'm speaking for today is responsible primarily for developing the education workforce, therefore today I will concentrate on three key policy areas. Enhancing leadership was debated yesterday, and it was a lively session, which touched upon a number of questions. I will share with you our policy, but before I talk about leadership I would first of all like to talk to you about the wider issue of teacher professional development. The minister recognises the importance of teacher professional development and the key role it plays in ensuring that our children reach their full potential. The Department has, as some of you know, been reviewing teacher education for some time. In 2010 the Department of Education and the

Department for Employment and Learning in the North issued a joint consultation document entitled, *Teacher Education in a Climate of Change*. There was considerable response to the consultation and many of you have provided a response, for which I thank you. The Department has taken these responses on board and is working on a draft strategy for the way forward, which is currently entitled *Improving Teaching, Enhancing Learning – a Strategy for Teacher Professional Development*. And I want to talk a bit more about the strategy. At this point the strategy is still in draft as I said to you, and therefore may be subject to change. But I hope to talk about some of the issues that we are grappling with, and our direction of travel. I'm sure that you will all agree that is set within an increasingly complex environment with many challenges. The context for change therefore includes obviously the need for teaching to be pupil centred. But we also need to take account of a greater social and cultural diversity in pupil intakes, including increasing numbers of pupils with special educational needs and other barriers to learning in mainstream schools. It needs to take into account the need to develop an inclusive perspective which encompasses the central role of the family and the wider community in educational success. It needs to take account of the change in culture from competition to collaboration across schools. It needs to take into account the fact that teachers and principals have longer careers and are working longer. And it needs to take into account the significant resource pressures that we all face. Within this context there are many challenges, but I would like to focus on a few of the key ones. The challenges we face will not be new to you, and they're coming to many education systems. They are firstly, continuing to attract people with the right blend of academic ability and wider experience into the teaching and school leadership and retaining them. Secondly, continuing to strengthen the profession, the professionalism of the teaching workforce, and increasing its capacity to further raise standards in our schools. And thirdly, developing, motivating and managing leadership at all levels of school professionals. I just want to talk a bit about the skills and characteristics that we see the need for within teachers. These are the characteristics that we've identified as being key to developing high-quality teachers and I'm sure that you would recognise these amongst your teaching colleagues. Teachers need to be highly motivated by the vocation to teach. As well as having good academic qualifications, they need to be highly skilled in literacy, numeracy and ICT. They have to have the disposition to teach in a complex and challenging educational environment. The number of personal qualities that they require such as high levels of emotional intelligence, excellent interpersonal skills, considerable resilience, an understanding of the barriers to learning, the ability to sustain high expectations in the face of low attainment and underachievement and the ability to relate well to parents and young people. Our challenge is not only to attract teachers and leaders with the right blend of characteristics and skills but also to develop them and retain them. You will all be familiar with the term, teacher education continuum. In fact it was mentioned many times yesterday. Increasingly, those looking at good educational systems identify the continuous development of teachers throughout their careers as an essential element. We recognise the need to develop in consultation with key stakeholders a single overarching professional development framework to facilitate continuing professional development of the teaching workforce. A framework which enables teachers to take a more structured approach to their professional development, which provides teachers with a number of pathways to development, which allows teachers take personal life long responsibility for their continuing intellectual, emotional and professional development and renewal, which supports and enables teachers to progress from classroom teacher to middle and senior management, and which incorporates the GTC, the General Teaching Council teaching competencies. We all recognise

that within the education system there are a wide range of requirements and that one size does not necessarily fit all. Development needs to be practical, or as far as practicable to be tailored to individual schools and teacher requirements, it needs to meet the needs of all teachers regardless of their sector or phase, it needs to ally the right balance between theory and practice, it needs to provide opportunities for teachers to work together, to share best practice and it needs to ensure that resources are targeted at key priorities, such as literacy and numeracy, school improvement, special education and STEM. In the North as many of you will know there's a new Education Bill going through the Assembly. When implemented, this will introduce the new Education Skills Authority, and within it a single regional school development service. The school development service will be responsible for the provision of teacher professional development, and will seek to address the development issues which I just mentioned.

I just want to talk briefly about strength and accountability. The challenge to improve professionalism, is not as I'm sure you'll realise just about the right professional development but also of course about delivering the best education for our children. I'm sure you will agree that children have to be central to everything we do. Therefore the Department recognises that there is a need to strengthen accountability, and will do so in a number of ways. It will do so by reviewing in consultation with employers and trade unions, PRSD and mechanisms for dealing with underperformance by providing support to teachers who are encountering difficulties at an early stage, by strengthening the role of and support for governors and by widening the powers of the General Teaching Council, which I will talk further about later.

I now want to turn to the second challenge which is of course enhancing leadership, which was debated here yesterday. I know that having discussed some of the issues around leadership you may well have touched upon some of the key points, including the fact that effective leadership and high-quality teaching are central to delivering improvement, the fact that good teachers flourish when they are supported in schools by great leaders, that there are examples of good leadership in our schools but we know there is room for improvement, that the school leader's role is changing and leadership development does not always respond quickly to the new challenges, that we are in a difficult economic climate and have reducing resources to use. How do we provide the right support and development for our leaders within reducing resources? How can we provide flexible relevant support tailored to meet the different needs of our school leavers? How can we attract, grow and retain our prospective leaders, to allow succession planning? How do we support and develop our leaders to balance all the competing priorities in respect of organisation management, accountability and improving education outcomes? How do we get the right balance of experiential and theoretic leadership development? We know in moving forward that we want the solution to include leadership development which lasts throughout a teacher's career, and is tailored to all levels of school leadership, that includes a set of leadership competencies developed by the General Teaching Council to guide our leaders; a high element of leadership to focus on coaching, mentoring and sharing best practice, to grow emerging leaders and allow for succession planning. To allow us to attract outstanding leaders, to lead to improvements in underachieving schools and leadership development to be taken forward in a co-ordinated and cohesive manner through the new school development service. We don't have all the answers to all of these questions, but leadership is an area which we consider is very important, the Department considers and the Minister considers it very important. In examining our leadership development policy we will take

on board input from a number of sources including, the strategic forum school leadership Workstream. The strategic forum is a group including representation from employers and unions, who wish to feed into policy development and who have appointed a Workstream with the task of examining the issue of leadership development. The Workstream have consulted a wide range of stakeholders and will be reporting back in mid November with recommendations. We will be considering the recommendations very carefully when we look to our leadership development policy. I want to finish today by talking about reform of the General Teaching Council. This is essential in order to provide assurance to learners and parents that an effective professional body is overseeing the conduct and the standard of the teaching profession. The General Teaching Council should be responsible for promoting high standards in the teaching profession, and ensuring that the profession is held in high esteem by teachers, other educationalists and indeed the public. The Council has faced criticism that it does not currently perform the role which it was created for. However it has not had the full range of regulatory powers to carry out the functions for which it was created. It is important that it has the full range of regulatory powers to enable it to contribute to the aim of increasing the professionalism of the teaching workforce, driving up standards in our schools, and improving outcomes for our young people. The Department does not have the expertise to regulate the teaching profession on its own. Independent self regulation will bring the teaching profession in line with other professions. Self regulation works in other jurisdictions. It works in the South of Ireland, it works in Scotland it works in Wales, and it works in other professions. The proposed Bill will address these issues. Greater independence from government, what does this mean? Under the reform we will remove or plan to remove the Department's role in appointing members to the Council. We will remove the Department's role in making detailed rules relating to the Council and confer them directly on the Council. Within the parameters set by the legislation, the Council will be free to set its own priorities and organise its core functions to meet the needs of teachers and lecturers. Further down the line the Council will have greater control over its financial affairs. I would however point out that the Council will be accountable to the profession and the Assembly through annual reports on its activities. Wider regulatory functions leading to action short of removal from the register, this includes providing powers to investigate and when necessary take action on grounds of misconduct, serious professional incompetence or where a schoolteacher or lecturer has been convicted of relevant offences. Disciplinary powers may include for example a reprimand, a conditional registration, which would specify conditions to be met in order to remain registered, a suspension order specifying conditions which a teacher must comply with before being eligible to re-register, or a prohibition order, to prevent a teacher from being registered for a fixed period. FE lecturers will be subject to the same broad registration conditions and regulations as teachers. The main functions of the General Teaching Council will include establishing two separate registers in order to register first of all, schoolteachers and secondly, FE lecturers. Studying rules for entry and exit from the registers, this will include setting and overseeing registration criteria including qualifications, refusing to register on the grounds of misconduct, or serious professional incompetence, refusing to register or removing barred individuals. It will include conducting eligibility and fitness to teach investigations and imposing regulatory measures on teachers and lecturers where necessary, setting standards for teacher education, approval of qualifications for entry to initial teacher education and approval of initial teacher education courses. It will include providing advice to sharing information with relevant bodies including the Department of Education and the Department for Employment and Learning. And it will include acting as a representative of the professional voice of the teaching profession. Professional regulation has long been recognised as a means of demonstrating to the public

that it can place its trust in that profession. Again I should point out that employers will continue to be responsible for the conduct and performance management of teachers within their schools. The GTC will only consider removal from the register or other outcomes once employer action has been completed. And finally to conclude I hope the three key areas for us overlap and complement each other. Our direction of travel for the strategy of teacher professional development, our leadership development challenge, and the widening of the powers of the GTC will all contribute to setting the framework for continuous professional development, providing pathways to leadership and increasing the professionalism of teaching. And in doing so will contribute to the strategic goals of raising standards, closing the performance gap and developing the educational workforce, and I believe will move us a little closer to delivering on the Minister's vision of every young person achieving to his or her full potential at each stage of his or her development. We're not claiming we have the resolution to many of the complex issues around teacher education. But by working with other key stakeholders and by learning from events like this, we hope we can move a little bit closer to improving some of them. And that's all I have to say and I'd like to pass you on to Tomás and Eddie. Thank you.

Tomás Ó Ruairc

Thanks Peter for that clear overview of the key policies and priorities of your department, and this wasn't an easy job stepping into the shoes of Laverne at the last moment. So we appreciate you taking the time to do that. You touched on the priorities of CPD, leadership and enhancing professionalism. A very honest acknowledgement that you don't have all the answers, I don't think any one of us does have the answers. Teacher education continuum, emotional intelligence, interpersonal skills were in there as well, and a key challenge of attracting and retaining outstanding teachers to our school. So, I very much appreciate you giving us that overview of all those areas. Can I now call on Eddie Ward from the Department of Education and Skills in the South to give a response.

Mr Eddie Ward

Good afternoon everyone and thanks for staying. At the outset I want to pay tribute to Peter, Peter has referred to the fact that we work together a lot in the North-South project. Peter has always been one of the kind of people who is always available and who always comes back on time. In both of our professional lives, we operate in complex environments, in timeframes and all the rest of it, and not what we would like. But Peter is one of these people who always delivers and I just want to pay tribute, to him for that. I was just thinking about the two days and what I've heard and maybe there are some messages I'd bring back to my colleagues in the Department. And I might just maybe give you a jist of some of them. One of them might be that it's okay to make lots of mistakes because they're learning experiences. I mean sometimes maybe we're making them and people don't ever see them or notice them. I think one of the things we are always preoccupied with as policymakers in the department is the school of the future and I think you know that is something that occupies many people in the Department on a daily basis. The measurement of outcomes always contentious, and how to approach it. I think one of the lines that stays with me from the two days was that a good teacher provides a scaffolding for good learning. And that's a very thoughtful and rich statement. I mean we're obviously all aware of the flaws involved in short-term thinking and good outcomes. I think a lot of what we've been wrestling with is around language. You know the kind of jobs I've had in my life in the public sector, and I've been about a little bit, it always comes back to language. We can talk about performance and managerialism of that, but I think it's all a struggle about language. I suppose a message

from my Secretary General might be that some challenge in policy-making is a very healthy thing. Another piece of learning for me was, that teachers are artists. Now I'm glad that our teachers union colleagues Derbhla, Moira or Bernie, don't come bearing sticks or brushes when they come to visit me, and that's good. And in fact I'll probably see my wife in a totally different light now, but I've never seen her with a brush in her hands. And she's a teacher. Maybe there's hope yet. And maybe a message for our Chief Inspector, you know a challenge as how he's going to make school inspection visits inspiring occasions for schools, bringing humility and affection in the process. I'd like to thank the organising committee, Tomás and Linda for the invitation. I think the advantage of coming to these kind of events, is to participate in the sharing of experiences, you know for practitioners, from the people who are experts in the area. I think that maybe comes back to what Dr. Grek referred to was the learning partnership, the policy learning partnership. I think that is very much what we are part of because policy-making no longer involves people sitting in a citadel somewhere in splendid isolation. I think it involves very much knowing what the experience on the ground is among the practitioners and the experts and the whole variety of information flows that are now available. I think that we do have to try to be very much in charge of it as much as we can. Digesting is can be a challenge. I think also the sharing that has gone on very much reflects the willingness of teachers and experts to share. And I think that's to be welcomed and I really appreciated that over the last two days.

In terms of the Departments, one of the over arching goals is very much about improving the quality of teaching and learning at all levels of education and improving learning outcomes over time. That's not a short term project; it's something that's going to be achieved over time. We strive for improvements in teaching, recognising that improvement in learning outcomes is very much reliant and dependent upon teaching quality. And as the global and technological context in which our students learn is constantly evolving, standing still is not an option. International research shows that whole system reform is the most effective way to deliver meaningful change. Whole system reform involves strategies that impact on all students, all teachers and all schools. While acknowledging a lot of the good work that's already in the system and which we evidenced here in the last two days, we also need to look at other sources of data, national and international to benchmark and improve what we can. This morning I'm going to talk about some of the key reform initiatives that are underway in the South. Many of them resonate with what is going on in the northern part of the island. We do operate maybe in somewhat different policy contexts, but the issues and the challenges that we face are very much in a similar space. I think some of the initiatives and the policy programmes now underway, have the potential over time to reimagine the teaching profession for the betterment of children, teachers and society at large. The changes impact on how teachers learn to teach at the outset and throughout their practice. One of the central drivers of the changes is the policy and regulatory framework that is being carefully constructed, with a large degree of consensus over recent years. Here I'm referring to the enactment and commencement of the Teaching Council Act. We now have a very clear understanding of roles and responsibilities of the continuum of teacher education, the work of the Council and its statutory abilities for maintaining, promoting and improving standards, our key to supporting the overall aim of improving the quality of teaching and learning in our schools.

To say a little bit about some of the key system wide strategies that are in place. The literacy and numeracy strategy published two years ago was a response to concerns about the level of educational outcomes being achieved in the system. These concerns were flagged

internally by our inspectorate, but also by international reports in PISA and OECD. The strategy underpins in turn a number of other key processes that are in play at the moment. The rollout of the Junior Cycle Reform, school self-evaluation, and the restructuring of teacher education programmes. Junior Cycle Reform as most of you will know, is probably one of the most significant reforms that we have had in post primary schools, for quite a while. The need for change was acknowledged because our current junior certificate distorts the learning process, and people learn for the exam. The new Junior Cycle Reform will allow schools much greater autonomy in terms of the programme of study that they offer to students and also in relation to assessment. It places improvement in learning and teaching at the core of work of teachers and school leaders. Assessment for learning and learning how to learn are at the core thus providing all learners with skills and knowledge they need to participate fully in society and the economy. The model of professional development to be used to support the implementation of the Junior Cycle Reform will incorporate significant elements of in-school-led CPD, thus drawing on the leadership capacity of schools to identify their needs around CPD. School self-evaluation has been elaborated upon greatly by Dr Grek and this is one of the programmes or initiatives that is now impacting on all schools, primary and post primary. From where I sit, it is simply a means of taking stock where we are at in terms of achieving goals and mission. Intuitively, this seems to be a very good thing to do on an individual and organisational level. It involves developing a plan to improve performance and learner outcomes. The process focuses, in the first instance, on teaching and learning, offering schools and teachers, a guided process which is collaborative, inclusive and reflective, involving whole school communities and all schools. It's an empowering process, and again, what's involved here is developing a language that everybody shares and you know language and communication are the essence of good leadership. The literacy and numeracy strategy also depends on the reform of initial teacher education programmes for primary and post primary. Guided by the Teaching Council requirements it involves the extension of these programmes, enhancement of the school-based aspect of training to ensure teachers gain more practical, hands on teaching experience during their studies. Initial teacher education programmes also place greater focus on the study of education, literacy and numeracy, inclusion and the integration of ICT as a tool for learning. A key aspect of the new programme is the development of student teachers' capacity to be reflective practitioners, and to adopt enquiry-based approaches to teaching and learning, which as somebody noted here yesterday, are the kind of outcomes we want from our learners in our schools. I'm aware from the discussions with the Council and the colleges that a lot of progress has been made in reconceptualising the new programmes and is proceeding well. Restructuring of initial teacher education provision colleges is another key reform that is now getting underway in the South. I think a similar review is about to get underway in the northern part of the island. This reform is based on the outcome of an international review, which was tasked with recommending a structure which would align our system with those of the best performing education systems in the world. Arising from the review we will have a number of centres of excellence. A small number of high quality, university-based, research driven centres for the provision of teacher education, across a range of disciplines and sectors. I referred a little while back to the role of the Teaching Council, in supporting improvement for teaching and learning. And as I said, the Council provides a regulatory framework for the teaching profession. The Council is guardian to the register of professionally qualified teachers, who adhere to an agreed code of professional conduct as they go about their work, while also committing to ongoing professional development. I think that's a good start in the promotion of quality in teaching and learning and building societal confidence in both our teachers and in our schools. The Council has published a

roadmap that's been referred to on a number of occasions in the last day or two called the *Continuum of Teacher Education*. This links the professional education and training needs throughout the phases of the teacher's career. The Council also offers a professional pathway for newly qualified teachers as they embark on their careers through the induction, the Droichead Project which has been also been referred to over the last few days. I think to show that the system is responding, the Council has updated its code of professional conduct in light of the complexities, and issues arising in very real situations in the schools, both primary and post primary.

ICT in education has been referred to on a number of occasions over the last few days and clearly ICT is another enabler of teaching and learning, if used in the right way. You will have gathered from Minister Cannon yesterday that he is passionate about the use of ICT. And having been to meetings with him, he is really, really passionate about it and can't understand I suppose, the systemic slowness around its adaptation. The Department has in fairness prioritised very significant investment around ICT and all schools have broadband although, the quality may be variable. By the end of next year all post primary schools will have high-speed broadband which will facilitate teachers and students to use ICT in the teaching and learning process, allow for sharing and collaboration online, the use of video conferencing and Skype, and all other online communication tools, including online learning and access to teaching spaces. The theme of the conference has been around leadership, specifically school leadership. The OECD report from last year dealt with the topic of preparing teachers and developing school leaders. It stated that school leaders can make a difference if they are granted the autonomy to make important decisions. It also said that school leaders need to be able to adapt teaching programmes to local needs, promote teamwork among leaders, teachers and engage in teacher monitoring, evaluation and professional development. Many of the policy initiatives that I have outlined this morning that are being implemented set the foundations for very significant developments in this area and providing opportunities for the development of school leadership in every school. For example, the school self-evaluation clearly identifies a central role of the principal in leading improvement in learner outcomes and in the quality of teaching. The Junior Cycle Reform identifies the central role of school leaders in implementing the framework and very much enhances their role as instructional leaders. The Droichead Project is another area where teachers can support newly qualified teachers as they come into the teaching career.

In terms of looking to the future and the policy perspective, I suppose there's one thing that we are certain of, apart from the inevitable two, is that change is inevitable. It is upon us, it is there, it is the one certainty that will follow us. We are at the early stages of a lot of the initiatives and a lot of things that are happening. It is probably much too early to even have an attempt at assessing their impact. But their impact will no doubt be monitored and evaluated and we will be most interested in their impact on the quality of learner outcomes. Measuring outcomes again as has been noted many times over the last few days is a fraught exercise. I think sometimes we can allow the agenda to be dictated outside of the profession and we really need to get a language and a way that we are comfortable with that complements the maybe more crude quantitative tables that appear from time to time. I referred at the outset to the flows of data that are now coming into the system, in every which way. And the task is trying to discern the quality flows. But we have them from our inspectorate, from OECD, from the colleges, from the ESRI and from agencies. I think one of the key agents for change in teacher education will be the reviews of the initial teacher education programmes carried out by the Teaching Council. Strategically I think that is one of

the means by which change will be leveraged over coming years. The full implementation of the regulatory framework of the teaching profession, we still have a number of key sections of the Teaching Council Act to be implemented and the 1st of November will mark another key note in that process but that's the key lever for change. The European dimension, the international dimension, obviously always impacts on the domestic agenda in terms of change. But suffice to say that change will continue and the system has to respond, has to have the capacity to respond, and in this room each one of us share a responsibility for reading that change and responding and leading as appropriate.

In conclusion I think we've had many thoughts on stimulating, inspiring inputs over the last two days. We've also heard many of the challenges that we face in reimagining and developing the teacher profession. How do we develop professional pathways, recruitment and retention processes, to ensure that we get the best people into leadership roles in our schools? How do we support teachers collectively and individually in reimagining their identity? How do we prepare and support our teachers not just to cope with immediate challenges but to enable them to apply their knowledge and skills throughout their careers? At a time of restricted public funding, how can we prioritise investment that would make real and lasting improvement for all learners? Every profession engages in a spot of navel gazing from time to time about who we are, what is our purpose and how we know if we are being effective in our professional roles. While struggling with these questions I think it would be good to avoid getting caught in the headlights of interiority. I am a member of a professional body, the Institute of Chartered Accountants, and I know the profession has adopted a very defensive role following all the clear audit reports that it gave to various banks and insurance companies during the Celtic Tiger years and I know the profession that I belong to have got into a very defensive mode about it. But I think unless they take ownership of where they've come from and come out with something that responds to the needs of society, and that people can see, something will be imposed that might not be very palatable. How do we, as educators, respond to the technological revolution that is happening about us which is transforming the way we live, work and play? Yesterday somebody spoke about relationships, relationships in my view go to the heart of every organisation or society. Good relationships inspire and motivate us to achieve better things, for all. Education is a key enabler for the development of a healthy society that we can all value and want to participate in. A quote that I picked up from one of the proceedings yesterday was that leadership is at the heart of a web of human relationships. It starts with me. Thank you.

PROGRAMME

10 October 2013

Benbulbin Suite, Radisson Blu Hotel and Spa Sligo

Chair: **Professor Linda Clarke**, Head of School of Education, University of Ulster and co-Chair SCoTENS

9.30am Registration – reception area Benbulbin Suite

10.00am Official opening by the NI Minister for Education **Mr John O'Dowd MLA** and the Republic of Ireland Minister of State for Training and Skills, **Mr Ciarán Cannon TD**

10.30am Keynote address: **Professor John MacBeath**, University of Cambridge
Teachers, Teaching and Schooling: Quo vadis?

11.30am Refreshments

12:00pm Debate: **Enhancing leadership in the profession of teaching in the 21st Century**

Chaired by: Dr Tom Hesketh, Director, Regional Training Unit, and with a panel comprising:

Professor John MacBeath, University of Cambridge;

Mr Ronnie Hassard, Principal, Ballymena Academy;

Mr Bryan O'Reilly, Principal Scoil Mhuire Junior Primary School, Ballymany, Newbridge

Professor Linda Clarke, Head of School of Education, University of Ulster and co-Chair SCoTENS; and

Mr Tomás Ó Ruairc, Director, the Teaching Council, Maynooth, Co. Kildare and co-Chair SCoTENS

1.15pm Lunch

2.15pm **Parallel Workshops:** (participants can choose to participate in two of these four workshops)

Workshop 1 – Teachers as consumers and producers of research

facilitated by: **Ms Joanne Brosnan**, Christ King Girls Secondary School, Cork

Ms Rhonda Glasgow, Spa Primary School, Ballynahinch, Co. Down

This presentation/ workshop will contrast the experience of two practising teachers who have recently conducted research in different educational contexts. They have taken issues which affect their teaching and have had the opportunity to review current research, while testing out the findings in their classrooms. The facilitators will draw on their research experience to examine how teachers can benefit from being both consumers and producers of educational research.

Workshop 2 – The practice of teaching

facilitated by: **Dr Sean Delaney**, Marino Institute of Education, Dublin

Ms Mary McHenry, St Louise's Comprehensive College, Belfast

This workshop will explore various aspects of the practice of teaching and how prospective teachers learn to teach. One presenter will describe a new module that bridges the college and school experiences of student teachers. High leverage practices of teaching are represented and decomposed for the novices in college before they in turn approximate the practices with their peers and

with children in local schools. The assessment of the module will also be outlined.

Workshop 3 – Creative classrooms Insights from Imaginative & Innovative Teaching in Ireland

facilitated by: **Mrs Nicola Marlow**, University of Ulster, Coleraine
Mrs Anne McMorrough, Marino Institute of Education, Dublin

This workshop will explore the nature and detail of 21st Century teaching and learning activities within a number of creative classrooms, north and south. For a really interactive experience participants will be invited to contribute via Twitter at #CCIT (* Laptops and/or mobile devices and a Twitter a/c are recommended but not essential!)

Workshop 4 – Teacher as leader: 'Only when the position of the individual teacher is supported and developed will we ensure that the perspective, potential and talent of each individual child is fostered'

facilitated by: **Mr Ronnie Hassard**, Ballymena Academy, Ballymena, Co. Antrim **Mr Brian O'Reilly**, Scoil Mhuire Junior Primary School, Ballymany, Newbridge

The key to this fostering is the relationship that each leader has with their colleagues, and the kinds of relationship that colleagues have with each other. In order to share and communicate the developing and evolving methodologies such as Reading Recovery, Literacy Lift Off; Better Basics; Maths Recovery; Stop Ask Listen Tell (SALT) the quality of the relationships that the leaders have is very significant. The workshop will discuss the practicalities of implementing programmes while maintaining and fostering relationships. It will give glimpses of feedback from teachers during the school self-evaluation of June 2013.

4.45pm

Refreshments

5.15pm

Training Session

SCoTENS 'Seed Funding' training workshop led by Dr Conor Galvin, Lecturer, University College Dublin

7.15pm

Launch of Reports:

Creative Teachers for Creative Learners, Implications for Teacher Education: SCoTENS 2012 Conference and Annual Reports; launched by Professor Anne Moran, University of Ulster and ***The role of research capacity-building in initial teacher education in the North and South of Ireland*** launched by Professor Kathy Hall, University College Cork

8.00pm

Conference Dinner: After Dinner Speaker: **Mr Andy Pollak**, former Director of Centre for Cross Border Studies and former Secretary of SCoTENS

11 October 2013

Benbulbin Suite, Radisson Blu Hotel and Spa Sligo

Chair:

Mr Tomás Ó Ruairc, Director, the Teaching Council, Maynooth and co-Chair SCoTENS

9.30am

Dr Sotiria Grek, University of Edinburgh

10.30am Round Table Discussions

11.00am Refreshments

11.30am Reimagining the professional policy perspective:

Ms La'Verne Montgomery, Department of Education, Bangor and

Mr Eddie Ward, Department of Education and Skills, Dublin

LIST OF CONFERENCE DELEGATES

NAME / TITLE	POSITION	DEPARTMENT / ORGANISATION
Ms. Gillian Beck	Senior Lecturer	Stranmillis University College
Ms. Patsey Bodkin	Lecturer in Education	National College of Art and Design
Ms. Joanne Brosnan	Teacher	Christ King Girls Secondary School
Mr. Clive Byrne	Director	National Association of Principals and Deputy Principals
Ms. Maria Campbell	Lecturer	St Angela's College, Sligo
Mr. Ciaran Cannon	Minister of State	Fine Gael, Department of Education and Skills
Dr. Ann Marie Casserly	Lecturer (SEN)	St Angela's College, Sligo
Mr. Jim Clarke	Deputy Chief Executive	Council for Catholic Maintained Schools
Prof. Linda Clarke	Professor of Education	University of Ulster
Ms. Sonya Coffey	Lecturer	St Angela's College, Sligo
Prof. John Coolahan	Professor Emeritus	National University of Ireland, Maynooth
Ms. Tina Creaney	Administrator	Regional Training Unit
Ms. Deirdre Cree	Co-ordinator of Student Services	St Mary's University College
Ms. Fiona Crowe	Lecturer	St Angelas College, Sligo
Mr. Malachy Crudden	Senior Education Advisor	CCMS
Mr. Diarmaid de Paor	Deputy General Secretary	ASTI
Ms. Evelyn Deacy	Lecturer	St Angela's College, Sligo
Dr. Sean Delaney	Lecturer	Marino Institute of Education
Mr. Enda Donlon	Lecturer in Education	Mater Dei Institute of Education
Ms Eimear Donnelly	Research and Training Officer	Centre for Cross Border Studies
Dr. Patricia Eaton	Head of Continuing Education	University College Union, Stranmillis University College
Ms. Ann Marie Farrell	Special Education	St Patrick's College, Drumcondra
Ms. Catherine Flanagan	Leadership and Planning Advisor	PDST
Mrs. Rita Fox	Chairperson of Northern Committee	INTO
Dr. Carmel Gallagher	Registrar	General Teaching Council
Dr. Conor Galvin	Lecturer and Course Director	University College Dublin
Mrs. Lorna Gardiner	Head of CASS	NEELB
Ms. Marina-Stefania Giannakaki	Lecturer in Educational Leadership	Queen's University Belfast

Ms. Rhonda Glasgow	Teacher	Spa Primary School
Dr. Sotiria Grek	Lecturer in Social Policy	University of Edinburgh
Mr. Paul Gunning	Sectoral Manager	Joint Secretariat, North South Ministerial Council
Mr. Martin Hagan	Education Co-ordinator	St Mary's University College
Prof. Kathy Hall	Head of School	University College Cork
Ms. Dolores Hamill	Director	Kildare Education Centre
Mr. Brian Hanratty	Senior Lecturer in English	St Mary's University College
Mr. Brendan Harron	Senior Official	INTO
Mr Ronnie Hassard	Principal	Ballymena Academy
Mr Thomas Haverty	Intern	Centre for Cross Border Studies
Dr. Céline Healy	Lecturer in Education	NUI Maynooth
Dr. Tom Hesketh	Director	Regional Training Unit
Ms. Mary Hough	Director	Sligo Education Centre
Ms. Fiona Jennings	Lectuer	St Angela's College, Sligo
Ms. Bernie Judge	Education and Research Officer	Teachers' Union of Ireland
Ms. Maxine Judge	Project Manager	Southern Education and Library Board
Dr. Orla Kelly	Lecturer in SESE	Church of Ireland College of Education
Ms. Eileen Kelly-Blakeney	Lecturer	St Angela's College, Sligo
Mr. Michael Kenny	Lecturer	National University of Ireland, Maynooth
Ms. Moira Leydon	Assistant General Secretary	Association of Secondary Teachers Ireland
Ms. Anna Logan	Special Education	St Patrick's College, Drumcondra
Dr. Anne Looney	Chief Executive	National Council for Curriculum and Assessment
Ms. Dolores Loughrey	Lecturer	University of Ulster
Dr. Seán Mac Corraidh	Irish-Medium Post Primacy PCGE Coordinator	St Mary's University College
Mr. Seán Mac Labhraí	Senior Lecturer	St Mary's University College
Prof. John MacBeath	Emeritus Professor	University of Cambridge
Dr. Mary Magee	Lecturer	St Angela's College, Sligo
Dr. Geraldine Magennis	Senior Lecturer in Education	St. Mary's University College
Ms. Clare Majury	President	NAHT
Ms. Nicola Marlow	Lecturer	University of Ulster
Ms. Catherine Martin	Director	Carrick on Shannon Education Centre
Dr. Matthew Martin	English Team Leader	St Mary's University College
Ms. Deirdre Mathews	Assistant Chief Inspector	Department of Education and Skills

Ms. Carol McAlister	Project Manager	ESAIT
Mr. Brendan McCabe	President	IPPN
Ms. Amanda McCloat	Head of Home Economics Department	St Angela's College, Sligo
Mr. Stephen McCord	President	Ulster Teachers' Union
Ms. Dolores McDonagh	Director of SEN Programmes	St Angela's College, Sligo
Mrs. Shauna McGill	Lecturer of Education	School of Education, University of Ulster
Dr. Sam McGuinness	Head of School of Education	University of Ulster
Ms. Mary McHenry	Teacher	St Louise's Comprehensive College
Mr. Chris McIntye		ESAGS
Prof. Harry McMahon	Emeritus Professor	
Ms. Anne McMorrough	Lecturer	Marino Institute of Education
Ms. Miriam Miskelly	Teacher Education Team	Department of Education
Prof. Anne Moran	Pro-Vice-Chancellor	University of Ulster
Dr. Isobel Mullaney	Lecturer in Education	National College of Art and Design
Ms. Regina Murphy	Director of Inservice Education	St Patrick's College, Drumcondra
Mr. Terry Murphy	Head of Educational Standards	Down and Connor
Ms. Sheila Nunan	General Secretary	Diocesan Education Office
Ms. Eileen O'Connor	Director	INTO
Prof. Teresa O'Doherty	Head of Education	Drumcondra Education Centre
Mr. John O'Donnell	Leadership and Planning Advisor	Mary Immaculate College
Mr. John O'Dowd	Minister	PDST
Dr. Anne O'Gara	President	Department of Education
Ms. Ailbhe O'Halloran	Lecturer	Marino Institute of Education
Mr. Denis O'Hara	Northern Ireland President	St Angela's College, Sligo
Mr. Peter O'Neill	Teacher Education Team	NASUWT
Mr. Bryan O'Reilly	Principal	Department of Education
		Scoil Mhuire Junior Primary School
Ms. Kathleen O'Shea	Leadership and Planning Advisor	PDST
Prof. Mary O'Sullivan	Dean	
		Faculty of Education and Health Sciences, University of Limerick
Ms. Melissa Parker	Lecturer	University of Limerick
Mr. Kevin Patton	Visiting Lecturer	University of Limerick
Mr. Andy Pollak		
Mr. John Pollock	President	Association of Teachers & Lecturers

Ms. Sabhael Power	Administrator	Regional Training Unit
Dr. Noel Purdy	Head of Education Studies	Stranmillis University College
Mr. Seamus Searson	Northern Ireland Organiser	NAS/UWT
Mr. Peter Simpson	North Eastern Board TV	ESAG
Ms. Patricia Slevin	Director of Teaching Practice	Marino Institute of Education
Mr. Shay Sweetnan	North Eastern Board TV	ESAG
Dr. Anne Taheny	President	St Angela's College, Sligo
Ms. Ruth Taillon	Director	Centre for Cross Border Studies
Ms. Bairbre Tiernan	Lecturer	St Angela's College, Sligo
Mr. Eugene Toolan	Head of Education	St Angela's College, Sligo Limited
Ms. Mary Torrens	Senior Adviser	Belfast Education and Library Board
Ms. Fern Turner	Regional Officer	National Association of Head Teachers
Ms. Julie Uí Choistealbha	Lecturer	Marino Institute of Education
Mr. Eddie Ward	Principal officer	Department of Education and Skills

Research and Conference Reports



INTERIM REPORTS
FUNDED OR CO-FUNDED BY SCOTENS 2012-2013

Managing Early Years Inclusive Transition Practices

Dr Colette Gray, Stranmillis University College

Dr Anita Prunty, St Patrick's College, Drumcondra

Dr Anna Logan, St Patrick's College, Drumcondra

Dr Geraldine Hayes, St Patrick's College, Drumcondra

Background

This study seeks to investigate the transition practices of schools in Northern Ireland (NI) and in the Republic of Ireland (RoI) for young children with special needs. Here, the term 'Special Needs' (SEN) is employed to denote a broad spectrum of additional needs, defined in the Education for Persons with Special Educational Needs Act 2004 as "a restriction in the capacity of the person to participate in and benefit from education on account of an enduring physical, sensory, mental health or learning disability or any other condition which results in a person learning differently from a person without that condition..." Here the word 'transition' is understood as children's passage or movement from preschool setting or home into formal education.

The start to school for almost any child is 'a highly valued and celebratory event' (Ramey and Ramey, 1998, p.292-295). It represents a major shift in a child's social context as they enter an 'educational casbah full of a rich variety of materials, activities, staff and fellow pupils,' a move into the unknown that fills children with 'fear, hope, anticipation, anxiety and excitement' (Jackson and Warin, 2000, p.381). It marks a significant period of change and adjustment during which the child is transformed and new capacities and abilities emerge such as literacy, social competence and independence. The transition period can also prove confusing and difficult as children move from a smaller setting staffed by larger numbers of adults to a larger school with its own rules and protocols where they receive less adult attention. Although most children adapt well to the transition to school, even the most competent child has been shown to experience a significant dip in confidence during the first weeks and months of schooling (Dunlop, 2007). For others, the start to school is so difficult that 'each day brings too many challenges of the wrong sort' (Brostram 2000, p.3).

International studies suggest the risks associated with poor adjustment are greater for certain groups of children including very young children, children from disadvantaged families and children with additional needs (McInnes, 2002; Brostram, 2000). In identifying the factors that might affect a successful transition process for at-risk children, researchers have focused on the 'readiness of the child to start school' (Dockett and Perry 2003, 2007), on the role of parents in preparing their child for school (Brooker 2003; Peters 2007), on the role of the preschool setting (Mahoney and Hayes, 2005) and more recently on the transition practices or strategies and procedures that the school employ to make the start to school for the child easier. In Iceland the preschool class might visit the primary school or the primary school might extend an invitation to the preschool class to participate in primary school events (Einarsdottir et al., 2008). In Sweden a pre-school class often exists for children aged between six and seven which promotes active and experiential learning and is intended to act as a bridge into formal schooling (Newman 2001). Whilst a study in Australia found that children who had access to a high number of transition activities which helped familiarise the children and their parents with the school environment had a better start to school (Margetts, 1999). Developing the role of the school in facilitating the transition process,

Fabian (2002) advises schools to adopt a child centred approach, including staggered start dates, shorter school days in the initial phase and circle time to ensure children have an opportunity to meet and learn a little about their peers.

Yet despite the plethora of research undertaken to explore almost every facet of the transition process, and in spite of the fact that children with additional needs are particularly at risk, there remains a dearth of literature on the processes undertaken by schools to smooth the transition of this ever increasing group of children. On this premise, this study seeks to compare the transition policies and practices employed by mainstream schools for young children with special needs in NI and RoI.

Research Aims

Specifically, it aims to document the policies (at government, local authority and school level) that direct and influence the transition process; to explore the differing practices and strategies employed by schools to support the transition process in both jurisdictions; to establish how teachers interpret these policies at classroom level; to identify the factors that support or impede successful transitions; and to identify the importance of parental involvement in the transition process and the role of other agencies.

At this point the research team have begun a review of all government policies and educational practices in both jurisdictions in terms of:

- the inclusion of young children in mainstream education in both jurisdictions;
- the management of education transitions;
- the involvement of children, parents and multi-agency support agencies in the transition process.

This review meets the aims stipulated in stage 1 of the research document.

Research Questionnaire Survey

A questionnaire survey (see appendix 1) was completed after a very thorough review of the literature. Areas of focus include:

The school transition policy;

- The management of the transition process for children with special needs at school level;
- The management of the transition process at classroom level;
- The activities and strategies employed to facilitate their transition to mainstream school;
- Factors that impede a child's successful transition;
- The involvement of children, parents and multi-agency support groups in the transition process.

The survey comprised a total of 25 questions organised to offer quantifiable and qualitative responses. For example, questions requiring demographic information on the respondents age, gender and position in school, school size, location (urban, semi-urban, rural) and number of children with special; needs required quantifiable responses. Where closed ended responses (Yes/No) were required, respondents were invited to expand on their responses using the lines provided e.g.

Are you aware of guidelines produced by any other agency relating to the transition to school of children with a SEN? (e.g. health service, charity, an early childhood organisation, education board)

Yes ☐ No ☐

If yes, please specify: _____

An oppositional scale was also employed to offer insight into respondents' views.

How satisfied are you with the support you receive in relation to the transition of young children from early years' settings to formal schooling in terms of the following?

	Very Satisfied	Satisfied	Undecided	Unsatisfied	Very Unsatisfied
A. Guidance from outside bodies (eg. Health Service, Early years organisations, Education Board)					
B. Internal collaboration with colleagues					
C. Classroom support					
D. Resources provided					
E. Specific teacher training					
Other form of support. Please specify: _____					

Several versions of the survey were constructed before it was agreed by the team in NI and the RoI reviewed and piloted using a group (n=25) of Special Educational Coordinators attending a continuing professional development course at Stranmillis University College in

April 2013. Comments were utilised to make the final changes and adaptations to the survey.

This approach meets the aims stipulated in stage 2 of the research proposal.

Interview Schedule

Eight interview questions (see Appendix 2) were developed to explore the areas included in the questionnaire in greater depth. The questions were open-ended to encourage a sharing of ideas e.g.

- What do you believe are the hallmarks of good practice in terms of aiding the transition of pupils with a special educational need?

Two focus groups were conducted in the RoI comprising four participants in each (n=8) and three small group interviews were conducted in NI comprising 3 members in each (n=9). Participants were drawn from an opportunity sample of year 1/early infant teachers and the school special education needs coordinators/ key learning support/ resource teachers (KLS) (see procedure below).

This approach meets the aims stipulated in stage 3 of the research proposal.

Participants

A one in three sample of schools in the Southern and Western Education Library Boards (n=210) was selected on the basis of location (urban, semi-urban and rural), area demographics (disadvantaged, middle-income, affluent) and school size as possible. A similar approach was employed to identify schools in the greater Dublin and Cork area (n=300).

Interviewees

In NI interviewees were drawn from a sample of respondents who completed the information required (name and contact details) to enter them into a prize draw. A telephone call was made to each of the respondents enquiring if they would like to participate in a brief interview session. Six indicated their willingness to participate in NI and a date and time was arranged to suit the interviewees.

In the RoI two focus groups comprising six infant teachers in each (n=12) were arranged using contacts known to the research team. In each jurisdiction every effort was made to ensure the groups comprised teachers from small, medium and large schools in differing locations and catchment areas.

Ethical consideration

Prior to commencing the study permission was sought from the research ethics committees in both Colleges. A copy of the research proposal, questionnaire survey and interview questions were furnished to inform the committee about the aims and objectives of the study, the proposed methodology and the participant groups. Permission was granted by both Colleges.

Procedure

Having designed and developed the questionnaire survey, a letter for schools (see Appendix 3) and an incentive in the form of inclusion in a prize draw for the completion and return of

the survey was offered in the form of entry to a prize draw for £50 in NI and €60 in the RoI to be used to buy classroom resources was included (see Appendices 4 and 5). It was initially proposed to complete the draw in early June, however a low response rate to the survey meant that follow-up to maximise the response rate was undertaken (see below).

It was decided to send the questionnaire at the time of year when schools are preparing for their new intake and transitions procedures and strategies would have begun or been well advanced. Therefore the survey was sent in early May with a closing date of May 13th. Nonetheless, the response rate was disappointing and yielded a total of 94 returns 64 (n=68%) were from Northern Ireland and 32% (n=30) from the Republic of Ireland.

Follow-up RoI: to increase this disappointingly low response, it is intended that a further 75 surveys will be distributed to infant teachers in the RoI through Childcare Ireland who organise training sessions for infant teachers in the month of July to support their efforts in developing techniques for teachers in the successful transition of young pupils into formal education.

Follow-up NI: a further 75 surveys will also be distributed to SENCOs taking additional training at Stranmillis University College in the month of August.

In summary

The literature review has begun. The survey and interview questions were designed, piloted and employed to gain some insight into the transition practices of schools for pupils with special needs. At this point the study is on-going, delayed slightly by ill-health on the part of the principal investigator in NI and because of the unexpectedly low response rate to the questionnaire survey. Two incomplete surveys were returned with the following comments included:

'Sorry but our school doesn't see transition pre or post school as important, we have two feeder nursery classes and can't take all the pupils who apply so we are getting something right and we do have an open day for parents but that's about it.'

Another said, *'I think schools don't want to admit they don't have a policy or any strategies in place and completing the survey might leave them open to criticism, therefore best not to complete it at all.'*

References

Brooker, L. (2003). Learning how to learn: Parental ethnotheories and young children's preparation for school. *International Journal of Early Years Education*, 11(2):117–128.

Broström, S. (2002). Communication and continuity in the transition from kinder-garten to school. In Fabian, H. and Dunlop, A., (eds), *Transitions in the Early Years: Debating Continuity and Progression for Children in Early Education*, (52–63). Routledge Falmer, London.

Dockett, S. and Perry, B. (2003). Children starting school: what should children, parents and school teachers do? *Australian Research in Early Childhood Education*, 10, 2, 1–12.

Dockett, S. and Perry, B. (2007). *Transitions to School: Perceptions, Expectations and Experiences*. UNSW Press.

Dunlop, A-W. (2007). *Transforming transitions*: keynote address at Transforming Transitions International Transitions Research Conference, University of Strathclyde, 11-13th April 2007.

Einarsdottir, J., Perry, B., and Dockett, S. (2008). Transition to school practices: Comparisons from Iceland and Australia. *Early Years: An International Journal of Research and Development*, 28, 1, 47–60.

Fabian, H. (2002). *Children Starting School: A Guide to Successful Transitions and Transfers for Teachers and Assistants*. David Fulton Publishers, 1st edition.

Jackson, C. and Warin, J. (2000). The importance of gender as an aspect of identity at key transition points in compulsory education. *British Educational Research Journal*, 26, 3, 375–391.

McInnes, K. (2002). What are the educational experiences of 4-year olds? A comparative study of 4-year olds in nursery and reception settings. *Early Years*, 22, 2, 119-127.

Mahoney, K. & Hayes, N. (2005). *In search of quality: multiple perspectives*. Dublin Centre for Early Childhood and Education.

Margetts, K. (1999). *Transition to school: Looking forward*, Newman 2001.

Peters, S. (2007) Teachers' perspectives of transition. In Fabian, H. & Dunlop, A-W. (eds). *Transitions in the early years: debating continuity and progression for children in early education*. London. Routledge: Falmer.

Ramey, S. L. and Ramey, C. T. (1998). Commentary: The transition to school: Opportunities and challenges for children, families, educators, and communities. *The Elementary School Journal*, 98, 4, 293–295.

Appendix 1

Transition Practices in the Early Years

This study seeks to compare the transition policies and practices employed by mainstream schools for young children particularly young children with special educational needs (SEN). We appreciate your participation as it will help highlight important aspects of provision particularly for young children with a SEN. Names included for the draw will be removed prior to analysis, with responses treated in strictest confidence.

The term SEN denotes a broad spectrum of additional needs, defined in the Education for Persons with Special Educational Needs Act 2004 as, "a restriction in the capacity of the person to participate in and benefit from education on account of an enduring physical, sensory, mental health or learning disability or any other condition which results in a person learning differently from a person without that condition..." Transitions is understood as children's passage or movement from preschool setting or home into formal education.

Background Details

1. Age: 29 or under 30-39 40-49 50 or over
2. Gender: Male Female
3. How long have you been teaching? _____
4. How long have you worked in your current setting? _____
5. Please indicate the position you currently hold: _____
6. Please state briefly any specific education or training you have received in the area of SEN?

7. The area my school is located in is mainly: Urban Semi-urban Rural
8. The area my school is located in is mainly: Disadvantaged Middle-income Affluent
9. Please include numbers in the table below:

	Your School	Your Class (or caseload)
A. Number of pupils:		
A. Number of pupils with a SEN		
A. Pupils with a suspected SEN in diagnostic process		
A. Number of pupils with English as additional language:		
A. Number of special needs assistants		
A. Number of classroom assistants		

Your School's SEN and Transition Policies

10. Are you aware of any government policy relating to the transition to school of children with a SEN?

Yes No

If yes, please specify _____

11. Are you aware of guidelines produced by any other agency relating to the transition to school of children with a SEN? (e.g. health service, charity, an early childhood organisation, education board)

Yes No

If yes, please specify _____

12. Does your school have specific policies in place in relation to:
A. SEN?

Yes No

If yes, please specify _____

B. Early years' transitions?

Yes No

If yes, please specify _____

C. Transitions for Children with SEN specifically?

Yes No

If yes, Please specify _____

13. Does your school have a member of staff responsible for transitions?

Yes No

If Yes, please specify _____

Your views and practices

14. Please read each of the following statements and select the response that most closely reflects policies and practices at your school.

	Never	Almost never	Sometimes	Almost always	Always
A. Receive the child's records from preschool					
B. Receive other relevant information from the preschool service					
C. Visit the child's previous settings					
D. Communicate with staff of child's pre-school setting					
E. Phone the child's parents					
F. Visit to the child's home					
G. Meet with parents at school					
H. Have contact with outside agencies (e.g. Health service, Education board)					

15. Briefly outline any other activities you undertake to involve the family, pre-school service or outside agencies in the transition process _____

16. What transition practices do you employ for children with a SEN who have not attended pre-school? _____

17. Are there any aspects of supporting SEN children during the transition process in which you would welcome further training? _____

18. How important do you believe the development of effective transitions strategies for young children with a SEN is for your school?

Very important

Important

Not very important

Not at all important

19. Briefly state what you believe are the hallmarks of an effective transition strategy for young children with SEN _____

20. Please rate how important you believe each of the following factors is in terms of the transition of children with SEN from pre-school to a school setting

	Very Important	Important	Somewhat Important	Not Very Important	Not at all Important
A. Developing child-specific strategies					
B. Evaluating the child's progress					
C. Exchanging information with family					
D. Exchanging information with pre-school					
E. Receiving relevant training					
F. Developing a specific school policy					
G. Receiving classroom support (from classroom assistants, special needs assistants)					
H. Support from outside agencies (eg. HSE, Early years organisations, ELB's)					
I. Curriculum continuity from early years to school					
J. Access to relevant resources (e.g occupational therapy)					
k. Other factor. Please specify _____					

21. Which of the factors listed in the table above do you believe to be most important?

22. How satisfied are you with the support you receive in relation to the transition of young children from early years' settings to formal schooling in terms of the following?

	Very Satisfied	Satisfied	Undecided	Unsatisfied	Very Unsatisfied
A. Guidance from outside bodies (eg. Health service, Early years organisations, Education board)					
B. Internal collaboration with colleagues					
C. Classroom support					
D. Resources provided					
E. Specific teacher training					
Other form of support. Please specify: _____					

23. Have you adapted your classroom environment for young children with a SEN? Yes No

If yes, in what way? _____

24. How appropriate are the resources and materials to which you have access? _____

25. What do you think are the main barriers to effective practice that exist in this area?

Please include in the box provided any further comments you wish to make in relation to how best to support children with a SEN through the transition process from the early years' setting to formal education.

Thank you for completing and returning this short survey

Appendix 2

Transition Practices in the Early Years

This study seeks to compare the transition policies and practices employed by mainstream schools for young children with special educational needs (SEN). The term SEN denotes a broad spectrum of additional needs, defined in the Education for Persons with Special Educational Needs Act 2004 as, "a restriction in the capacity of the person to participate in and benefit from education on account of an enduring physical, sensory, mental health or learning disability or any other condition which results in a person learning differently from a person without that condition..." Transitions is understood as children's passage or movement from preschool setting or home into formal education.

Ask Participants to introduce themselves and briefly state their role in the school

1. What do you believe are the hallmarks of good practice in terms of aiding the transition of pupils with a special educational need?
2. Could you explain your school policies in this area?
3. In terms of your current practice, could you explain your approach to:
 - A. Evaluating the child's progress
 - B. Communicating with parents
 - C. Obtaining information from the preschool setting
 - D. Engaging with outside agencies (e.g HSE, Early years organisations, etc)
4. Could you give examples of how you have adapted your classroom practice to aid a pupil's transition? Strategies you have used?
5. Are there any areas of your current practice or current practice at your school you would like to improve on?
6. How appropriate is the level of support you receive?
 - Documentation and guidance
 - Classroom resources
 - Support from fellow teachers
 - Classroom assistance
7. What do you believe is the main barrier to effective practice in this area?
8. Would you like to make any additional comments?

Thank you for your participation

Appendix 3

Dear Principal

Starting school represents the first major transition point in a young child's life. As academics at Stranmillis University College, Belfast and St Patrick's College, Drumcondra working with student teachers we hope to gain insight into the strategies employed by primary schools to aid children's transition to primary school, particularly young children with a diagnosed or suspected special educational need.

To gather as wide a perspective on this topic as possible we enclose a questionnaire survey which should take no longer than 10 minutes to complete with a SAE envelope for return by Monday 13th of May 2013. The survey will take less than 10 minutes to complete.

In recognition of the importance of the research, we are offering all participating schools the opportunity to enter a prize draw. The successful winners [one in the Republic of Ireland and one in the North of Ireland] will each receive a cheque for €60/ £50 respectively which may be used to support the purchase of classroom resources. The draw will take place on Monday 3rd June with the names of the winning schools published on the Stranmillis University College and St Patrick's College websites. Please note, all names and identifiers will be removed prior to analysis and reporting and are required only for entry into the draw.

If you have any questions regarding any aspect of the research then please don't hesitate to contact either of the principal investigators Dr Colette Gray (NI) at c.gray@stran.ac.uk or Dr Anita Prunty (ROI) at Anita.Prunty@spd.dcu.ie.

Yours Sincerely,

Dr Colette Gray & Dr Anita Prunty, Dr Anna Logan, Dr Geraldine Hayes
Principal Investigators.

Appendix 4

Win £50 for your school.



Return with the questionnaire on 'Early Years Transition practices for children with Special Educational Needs' to be entered into a prize draw to win £50 towards classroom resources.

To enter, complete the details overleaf.

Include your details below and return with the completed survey to enter the draw.

Please note that this information will be kept separately from the completed questionnaires, and will not be used to identify respondents.

Name: _____

Position: _____

School: _____

Address: _____

Email: _____

Tel: _____



STRANMILLIS UNIVERSITY COLLEGE
A College of Queen's University Belfast

Appendix 5

Win €60

for your school.



Return with the questionnaire on 'Early Years Transition practices for children with Special Educational Needs' to be entered into a prize draw to win €60 towards classroom resources.

To enter, complete the details overleaf.

Research and Conference Reports



FINAL REPORTS
FUNDED OR CO-FUNDED BY SCOTENS 2012-2013

Early Number Concepts: Key Vocabulary and Supporting Strategies

Dr. Ann Marie Casserly, St Angela's College, Sligo
Dr. Pamela Moffett, Stranmillis University College
Dr. Bairbre Tiernan, St Angela's College, Sligo

Introduction

Competence in mathematics is essential in meeting the demands of the workplace and in successful functioning in everyday life. Mathematics is so critical that some have labelled it the “new civil right” (Moses and Cobb, 2001). However, recent research reports have indicated that many children in the North and South of Ireland are failing to reach the expected levels of achievement in mathematics (DENI, 2011; DES, 2011; Eivers et al., 2009; NIAO, 2006; PAC, 2006). A key plan of national strategies north and south of the border (DENI, 2011; DES, 2011) is to promote literacy instruction across all curricular areas, with the expectation that this will improve overall literacy standards, and support children in acquiring disciplinary knowledge in various subject areas. Part of this entails more effective use of oral language to teach subject-specific knowledge and concepts. The need to identify strategies that can be used to improve oral language is vitally important, given that curricular frameworks (CCEA, 2007; NCCA, 1999) outline specific concepts that young children should know. It is now well established that having a sense of number is a key factor in learning, and subsequently applying, mathematics (Dunphy, 2007). The ability to understand and use the language of number, both spoken and written, is regarded as fundamental to children's learning of number in our culture (Tolchinsky, 2003), and subsequently to the development of their number sense (Dunphy, 2006). Teacher-facilitated ‘math talk’ in the early years significantly increases children's growth in understanding of mathematical concepts (Klibanoff et al., 2006). Although young children may have a beginning understanding of early number concepts, they often lack the language to communicate their ideas. The teacher plays a significant role in guiding children to make connections, to recognise how their thinking relates to key mathematical number concepts and to make further conjectures and generalisations. Teacher modelling and fostering of mathematical language throughout the day and across various subject areas, allows children to articulate their ideas and communicate their understanding. The mathematical knowledge teachers possess has a profound impact on what and how they teach (Bobis, 2004; Ball, 1996; Shulman, 1987). Teachers play a key role in helping children develop number sense through creating a learning environment that encourages children to freely explore numbers, operations, and their relationships in meaningful contexts (Siegler and Booth, 2005; McIntosh, 2004; Yang and Reys, 2001). To “empower students to think mathematically, teachers must first be so empowered” (Ma, 1999, p. 105). Yang et al. (2009) suggest that teachers’ lack of number sense as well as their lack of knowledge on how to help children develop it may account for weak performance in number sense. They argue that teachers empowered with knowledge and appreciation for number sense will be more likely to attend to number sense when working with students. This research project relates to the development of number concepts in the early primary mathematics curriculum with particular reference to Infant classes (Republic of Ireland) and the Foundation Stage (Northern Ireland). The aim of the project was to develop a resource of key vocabulary and teaching and learning strategies to support teachers’ planning and teaching in early number. The two main research questions related to this project are as follows: (1) What is the core vocabulary children require to understand, communicate and apply early number concepts?; and (2) What approaches/strategies could

assist teachers in their planning and teaching of the language of early number? This paper documents the development of the resource. The theoretical perspectives underpinning the development of a resource of key vocabulary and teaching and learning strategies for teachers to support their planning and teaching in early number are outlined with regard to achievement in mathematics, number sense, language and mathematics, a socio-cultural perspective on learning and the role of the teacher. A detailed account of the methodology employed is then presented. The latter part of the paper examines the structure of the resource, and the outcomes and benefits of the project in terms of children, teachers, teacher educators and the researchers themselves.

Achievement in mathematics

Although considerable attention has been devoted to mathematics achievement at primary and secondary levels, the foundations for learning mathematics are established much earlier (Clements and Sarama, 2007; McCain and Mustard, 1999). By the time children enter preschool, they demonstrate wide individual differences in their mathematical knowledge, with children from high and middle socioeconomic status (SES) families showing higher levels of mathematics achievement than their lower SES peers (Klibanoff et al., 2006). Such early differences are a matter of some concern since levels of mathematics knowledge at the time children enter school have been shown to predict later achievement (Duncan et al., 2007). Early mathematics skills are an integral part of the young child's overall school readiness skills (Austin et al., 2011). If children can learn to think mathematically and to express their thoughts in mathematical terms during the preschool years, then they are better prepared to learn formal maths concepts upon school entry (Ginsburg, Lee and Boyd, 2008). Children who have higher levels of mathematics skills as preschoolers have been shown to make the most progress in mathematics during the first years of schooling (Starkey and Klein, 2008; Aunola et al., 2004). Austin et al. (2011) argue that neglecting mathematics in the early years might hamper not only children's mathematical development but perhaps their literacy skills as well. In fact, Duncan et al. (2007) found that early mathematics knowledge is a more powerful predictor of later achievement than early language and reading skills. Success in mathematics in the early years is critical. Early differences have long-lasting implications for later school achievement (Klibanoff et al., 2006). Levels of mathematical competency also impact on the need to meet the demand for high levels of mathematical skills to satisfy growing needs for a scientifically and technologically sophisticated workforce (NRC, 2009).

Number sense

The term 'number sense' has been a notable aspect of mathematics education literature over the last twenty years (Howell and Kemp, 2009). Although the importance of number sense in school mathematics has been highlighted by many national reports (NRC, 2009; NCTM, 2000; AEC, 1991; Cockcroft, 1982), there is no consensus on a precise definition of the term. Over thirty years ago, Cockcroft (1982) established that a 'feeling for number' is an important mathematical requirement of adult life and used the word 'numerate' to imply the possession of two attributes: an 'at-homeness' with numbers and an ability to cope with the practical mathematical demands of everyday life an ability to have some appreciation and understanding of information which is presented in mathematical terms, for instance in graphs, charts or tables or by reference to percentage increase or decrease. (Cockcroft, 1982, p. 11). More recently, 'numeracy' is highlighted in national strategies north and south of Ireland (DES, 2011; DENI, 2011) and is defined as "the ability to use mathematics to solve problems and meet the demands of day-to-day living" (DES, 2011, p. 8) or "the ability to apply appropriate mathematical skills and knowledge in familiar and unfamiliar

contexts and in a range of settings throughout life, including the workplace" (DENI, 2011, p. 3). The introduction of the term 'number sense' was aimed at embracing a range of real-life applications of number as well as balancing the traditional skills-based curricula with approaches which included other aspects of number (Dunphy, 2007). Number sense, in curriculum documents worldwide, refers to "flexibility" and "inventiveness" in calculation and is a reaction to an "overemphasis on computational procedures devoid of thinking" (Anghileri, 2000, p. 2). The National Mathematics Advisory Panel (2008) states that number sense, in its most fundamental form, entails "an ability to immediately identify the numerical value associated with small quantities (e.g., three pennies), a facility with basic counting skills, and a proficiency in approximating the magnitudes of small numbers of objects and simple numerical operations" (p.27). A more advanced type of number sense, which must be acquired through formal instruction, necessitates an understanding of place value, of how whole numbers can be composed and decomposed, and of the four basic arithmetical operations (addition, subtraction, multiplication and division); it also requires understanding the commutative, associative and distributive laws and how these can be applied in problem solving (NAP, 2008). The development of number sense begins long before children begin formal schooling (Anghileri, 2000; McIntosh et al., 1992). McIntosh et al. (1992) identify three core elements in their framework for examining number sense: knowledge of and facility with numbers; knowledge of and facility with operations; and application of this knowledge to computational situations. However, Dunphy (2007) argues that this does not explicitly acknowledge the nature of learning in the early years.

The development of number sense in the early years

Howden's (1989) description of number sense is rooted in children's experiences. She describes children who are developing number sense as those who have "a special feel for numbers, an intuition about how they are related to each other and the world around them" (p. 6). For young children much of their learning will take place in familiar everyday situations, and it is therefore necessary to consider the context as an important aspect of number sense (Dunphy, 2007). Furthermore, Dunphy (2007) posits that an understanding of the everyday uses of number necessitates an awareness of the various uses of numerals. Such knowledge involves recognising that the same symbol can have different meanings in different situations (Gray, 1997; Greeno, 1991). For example, the number '5' can be used to describe a quantity (such as five candles on a birthday cake), to indicate a position (such as a house number), and to help identify something (such as a bus). According to Greeno (1991), children must learn to recognise the ambiguities of symbols and the need to pay attention to the context or situation in which the symbol is being used. This is important from a socio-cultural perspective, since it acknowledges the context as part of the meaning. Research has shown, that objects provide concrete ways for children "to give meaning to new knowledge" (Ontario Ministry of Education, 2003, p. 19). Through reflection and discussion on their actions with objects, children link meaning between their representations and the key mathematical concepts (Clements and Sarama, 2009). Although informal mathematics concepts can develop naturally through play and exploration, purposeful social interaction helps to consolidate and extend children's mathematical understanding (Starkey and Klein, 2008; Saxe et al., 1987). It is argued that formal mathematics skills, which are more dependent on instruction by knowledgeable others, best develop through guided discovery and instruction (Austin et al., 2011). In either case, social interaction appears to be an important facilitator in the development of understanding of mathematical concepts. Greeno's (1991) analysis of number sense explicitly acknowledges the role of the adult, highlighting that "someone who already lives in the environment is an important resource for

a newcomer" (p. 197). Dunphy (2007) supports this view since it places greater emphasis on the conditions of learning rather than the 'what' aspect. In her opinion, "the development of their [young children's] number sense needs to be guided by more experienced others and is intrinsically bound up in everyday experiences" (p. 9). Through guided participation in a range of meaningful mathematical experiences, young children become more skilled in understanding and using number. Disposition is identified as an important aspect of learning mathematics (De Corte et al., 1996). Indeed, Silver (1989, p. 92) contends that disposition towards number activities is "an important, more subtle aspect of number sense" than cognitive competence. Anghileri (2000, p.2) also recognises that "the nurturing of a positive attitude and confidence" is vital in relation to number sense. Children have an active role to play in the development of their own disposition towards number by participating in number-related activities (Dunphy, 2007; Rogoff, 1990). From a socio-cultural perspective, number sense is best described as a multi-faceted concept that, for the purposes of discussion and analysis, can be described as having a number of different aspects (Silver, 1989). Dunphy (2007) identifies five key characteristics of number sense:

- It is a holistic construct that is difficult to define;
- It is concerned with the development of a wide range of understandings, skills and attitudes about number that extend beyond those generally associated with numeracy and encompass everyday uses;
- It is manifested in the ability to think flexibly about number;
- It is closely related to the development of numeric disposition;
- It is developed as a result of participation in everyday experiences with and about number. (p. 11).

Based on the premise that number sense in young children will be different from that of older learners (Carpenter, 1989), Dunphy (2007) presents the following framework for considering number sense as it relates to four year old children: pleasure and interest in number; understanding of the various purposes of number; quantitative thinking (such as counting, subitizing and estimating; and number relationships); and awareness and understanding of written numerals. The framework is consistent with a socio-cultural perspective on learning.

Language

"Communication can be defined as the exchange of thoughts, information, or feelings. The ability to communicate is at the very heart of early learning and development" (NCCA, 2003, p.29). For most children, language is the dominant form of communication. Language is the ability to communicate with others using a system of symbols which is organised into words and sentences and embraces oral, written, and manual communication, and consists of content (or vocabulary and word meaning), form/syntax (or sounds and sentence structure), and social use of language (NCCA, 2003). According to Vygotsky (1978), concepts are first introduced on an interpersonal level through social interaction and then develop, integrate and expand intrapersonally, as children work to understand and use the concept. On both levels – interpersonally and intrapersonally – language serves a primary role in understanding and mastering what is learned. Language, "the primary cultural tool ... is instrumental in restructuring the mind and in forming higher-order, self-regulated thought processes" (Berk and Winsler, 1995, p. 5). Language also plays a crucial role in helping children to use other cultural tools, including the notational systems of writing and counting (John-Steiner and Mahn, 1996), and is necessary to understand (Jordan et al., 2007) and express (Ginsburg et al., 2008) other kinds of mathematical thinking. Although the notational system for numbers

is governed by different rules than those for writing, Austin et al. (2011) argue that the process of developing facility with one cultural tool enables the child to gain better facility with another. Further, it appears that proficiency in language is a key factor in predicting proficiency in mathematics (Austin et al., 2011).

Language and mathematics

Language is fundamental to education because it is the major form of representation of cultural knowledge and the principal medium of teaching. A large part of a child's language experience is verbal and it is through oral language activity that much of his/her learning takes place, both in and out of school (NCCA, 1999). Although studies have shown that specific early language and literacy practices predict later language and reading achievement, much less is known about the nature and frequency of early mathematical interactions, including language, and about the extent to which these interactions affect the development of children's mathematical knowledge. The nature of the relationship between language and mathematical cognition is currently the subject of much debate (Donlan et al., 2007). While some argue that increasing the time spent on mathematics activities could decrease time available to spend on language activities, thus impeding children's development of language, Sarama et al. (2012) argue that this is based on the assumption that mathematics activities have little or no positive effects on language. However, evidence from both educational and psychological research suggests that language and mathematics have co-mutual beneficial influences. For example, development in both domains appears to follow similar pathways (Sarama et al., 2012). Children generally begin learning number words at the same time as other linguistic labels. By the age of two, most children recognize which words are reserved for numbers and use such words only in appropriate contexts (Fuson, 1988). By the age of six, most children have been exposed to both alphabetic and numerical symbol representations and show signs of being able to segment words into phonemes and partition numbers into component parts (Butterworth, 2005). Further, Sarama et al. (2012) suggest that mathematics learning has the potential to make a unique contribution to children's emerging literacy. Over the past twenty years, there has been a noticeable shift in curricula, both nationally and internationally, towards engaging children in mathematical thinking. This is evident in the framework for the OECD Programme for International Student Assessment (PISA), where mathematical literacy is described as being "concerned with the ability of students to analyse, reason, and communicate ideas effectively as they pose, formulate, solve, and interpret solutions to mathematical problems in a variety of situations" (OECD, 2010, p. 14). Likewise, the Northern Ireland Primary Curriculum states: as the development of mathematical language is of fundamental importance, talking about work has a high priority in the early years. Through engaging in a wide variety of activities, children should understand mathematical language and then begin to use the language to talk about their work. (CCEA, 2007, p. 23).

The Republic of Ireland's Primary Curriculum states that: an important aim of the mathematics programmes is to enable the child to use mathematical language effectively and accurately. This includes the ability to listen, question and discuss as well as to read and record. Expressing mathematical ideas plays an important part in the development of mathematical concepts. (NCCA, 1999, p. 12). Communication and language become the primary means by which mathematics is learned (Lampert and Cobb, 2003). Shiel et al. (2012) identify a number of important consequences if mathematics is to be taught through language. First, developing proficiency in computation skills, devoid of context, is no longer sufficient. Second, there needs to be greater attention on mathematical discussion, with

a particular emphasis on children explaining their reasoning as they solve problems set in real-life contexts. Shiel et al. (2012) argue that, in all mathematics lessons, there should be a focus on teaching through discussion, as well as on developing the precise meanings of mathematical terms. A number of studies show that children's language acquisition is related to the overall amount of language input they receive (Weizman and Snow, 2001; Hart and Risley, 1992; Huttenlocher et al., 1991). Furthermore, the specific lexical terms acquired appear to be sensitive to variations in the amount of input. It therefore seems reasonable to suggest that children's acquisition of mathematical language is also related to the amount of 'math talk' they are exposed to. Klibanoff et al. (2006) contend that the amount of teachers' mathematics-related talk is significantly related to the growth of young children's mathematical knowledge. In other words, teacher input that helps children to learn the language of mathematics will have a positive impact on the development of their mathematics skills. Although acquiring the language of conventional mathematics is only a part of developing understanding in mathematics, it is an important tool for fostering mathematical thinking.

Dunphy (2006) highlights the critical nature of children's interactions with adults as the foundation for their understandings about number. The teacher plays a pivotal role in developing number sense: Responding to children's curiosity and interest about numbers, encouraging children to use number as a means of organising and communicating their experiences, modelling of skills related to quantification, and drawing children's attention to the use of numerals in different contexts are also essential pedagogical tasks for the early years' teacher. (Dunphy, 2006, pp. 72-73). Clearly, this requires an emphasis on talking about number. Furthermore, mathematical activities and discussion should be embedded in meaningful and engaging contexts.

A socio-cultural perspective on learning

Both socio-culturalists and constructivists recognise the importance of individual activity in learning. While constructivists prioritise psychological processes, socio-cultural approaches give priority to the context for learning, placing emphasis on "the conditions for the possibilities for learning" (Cobb and Yackel, 1998, p. 184). According to Rogoff (1998), learning arises from both individual activity and participation in social activity. Rogoff's (1995) view is that individual learning cannot be understood outside of an activity or of the people participating in it. She views learning as the development of mind in socio-cultural context. Children's active participation in an activity is regarded as an important element of the process by which they gain mastery. Rogoff (1990) conceives of children as "apprentices in thinking, active in their efforts to learn from observing and participating with peers and more skilled members of their society" (p. 7). As children engage in culturally valued activities, they become more responsible participants. However, Rogoff (1995) argues that children need to be guided in that participation and she explains the term 'guided participation' as: "The processes and systems of involvement between people as they communicate and coordinate efforts while participating in culturally valued activities. This includes not only face-to-face interaction ... but also the side-by-side joint participation that is frequent in everyday life and the more distal arrangements of people's activities that do not require co-presence.... The 'guidance' referred to in guided participation refers to observation, as well as hands on involvement in an activity." (Rogoff, 1995, p. 700). From a socio-cultural stance, learning is seen to be a consequence of collaboration in social activity.

Methodology

The aim of the project was to develop a resource of key vocabulary and teaching and learning strategies for teachers to support their planning and teaching in early number. The proposed research questions included: (1) What is the core vocabulary children require to understand, communicate and apply early number concepts?; and (2) What approaches/strategies could assist teachers in their planning and teaching of the language of early number? Cooper's (2007) model of research synthesis was adapted for the project, namely: step 1, formulating the problem; step 2, searching the literature; step 3, gathering information from literature sources; step 4, evaluating, analysing and integrating the studies; step 5, interpreting the evidence, and step 6, developing the resource. Ethical approval was sought from the Research and Ethics Committees of St. Angela's College and Stranmillis University College at the outset of the project. The ethical guidelines of both institutions were adhered to throughout the project. The research methodology utilised in the project was documentary analysis. During this review, books, papers, research reports and policy documents using library and internet sources were consulted and reviewed. The areas of focus emphasised children's development of number, mathematical language and intervention techniques/strategies used to support the development of number and language. The principal focus of the research was on recent national and international research from an Irish, UK and international perspective. The researchers completed a rigorous literature search examining the role of mathematical vocabulary and language in the acquisition of early number. In addition, evidence-based research was reviewed to identify strategies supporting the teaching and learning of early number concepts. Major Education and Social Science Databases (for example, ARAN-NUI Galway's Institutional Repository; Australian Education Index; British Education Index; Education Research Abstract; ERIC; PsychINFO; SCOPUS-V.4; International Bibliography of the Social Sciences; and the Mathematics Didactics Database; Swetswise; Teacher Reference Centre) were searched using search terms such as mathematical language, language development, development of mathematical language, analysis of number, early number concept, number sense, and so on. Emphasis was given to peer-reviewed sources. Use was also made of national and international statistical surveys of pupils' achievement and progress in mathematics (Eivers et al., 2009; OECD, 2009) and of curriculum documents north and south of the border (CCEA, 2007; NCCA, 1999). These sources provided an extensive basis of documentary evidence and information. Documents were evaluated and critiqued on four criteria, namely: authenticity (genuineness); credibility (accurate, free from bias and errors); representativeness (typical of its type); and meaning (clear and unambiguous) (Denscombe, 2004). The analysis of documentary evidence was the central and exclusive research method. Content analysis was considered the most appropriate approach in analysing the documents. It was important that appropriate categories and units of analysis, both of which reflect the nature of the documents being analysed and the purpose of the research were identified (Cohen et al., 2004). The studies were reviewed and compared and conclusions drawn concerning the nature of early number concepts and language. The findings of the documentary analysis were used to develop a resource in early number concepts for teachers. As already stated, this project gathered data from the analysis of secondary sources, namely document analyses. In this sense, no defined research sample was involved in the project. As this research project centred on the development of a resource, there was need for a cohort of teachers to review it. The resource was piloted and reviewed by teachers of infant classes (Republic of Ireland) and the Foundation Stage (Northern Ireland). This process involved teachers familiarising themselves with the resource, implementing the activities and strategies in their classrooms with a focus on facilitating

'math talk', and subsequently critiquing the resource through the use of an evaluation form. The review process was completed in three stages (February/March 2013; May/June 2013; and September/October 2013) as each section of the resource was completed. Teachers in junior and senior infant classes in the Republic of Ireland and in the Foundation Stage in Northern Ireland were involved in the pilot of sample activities. Teachers in a Special School in Northern Ireland were also involved in the final stages of the project. At each stage of the review process, teachers were provided with a pack which contained an introductory letter explaining the project, a sample of number activities to pilot, and an evaluation form to complete. The evaluation form evolved to meet the requirements of the particular section being reviewed. It included statements which teachers responded to, using a five-point Likert Scale. Qualitative feedback was also sought regarding the strengths of the resource; possible improvements that could be made in relation to presentation, layout and content; and any other recommendations on further activities. The evaluation forms for the three pilot phases are included in Appendix 1. The design process of developing the resource included an invitation to tender in both jurisdictions. Three quotations from design companies were considered and the successful recipient demonstrated the ability to develop a teacher friendly, high quality attractive product. Discussions between the researchers and the design company focused on the presentation and layout of content, use of images and accessibility. This resource is included with this submission.

Outcomes

The principal outcome of the project was the production of a teaching and learning resource for teachers in the area of early number concepts with an emphasis on developing associated language. As such, the resource is entitled: ***'Number Talk: a resource to promote understanding and use of early number language'*** (Casserly, Moffett and Tiernan, 2014). It is important to acknowledge that this resource builds on materials already developed for teachers. Based on the analysis of documentary evidence, it was decided to organise the resource into three core areas: Number and Counting; Number Relationships; and Number Operations.

Operations

The Number and Counting core focuses on the different uses of number and draws attention to the use of number symbols; the five key principles that underlie counting are highlighted, namely: the one-to-one principle, the stable-order principle, the cardinal principle, the abstraction principle and the order-irrelevance principle (Gelman and Gallistel, 1978); conservation of number is also addressed. Key language in this section includes count, counting words (one, two, three, and so on), zero, forwards, backwards, how many, altogether, total, ordinal language (such as first, second, third, last), odd and even. The Number Relationships core focuses on comparing, ordering, partitioning and combining numbers. Particular emphasis is placed on the structure of numbers. Instead of counting-by-ones, children are encouraged to use their emerging knowledge of the five and ten structure of numbers, using five and ten as reference points. Activities with spatial arrangements and finger patterns are also provided to support the development of children's arithmetic strategies. Key language in this section includes more than, fewer / less than, the same as, match, pair, after, before, between, bigger, smaller, one more, one less, pattern, same, different, altogether, make, and, partition, set and subset. Finally, the Number Operations core concentrates on early addition and subtraction. Various structures of each operation are considered. Two main structures of addition are addressed: the aggregation (union of

sets) and augmentation (counting on). Five main structures of subtraction are addressed: partitioning (taking away); comparison (difference between); complement of a set; reduction (counting back); and inverse-of-addition. The main emphasis is on partitioning and comparison in the early years. The relationship between addition and subtraction is also highlighted. Key language in this section includes: and, add, plus, how many, altogether, more, take away, left, subtract, minus, difference between, more, fewer / less, count on, count back, increase, decrease, makes, is, gives, equals, leaves, balances, and matches. With a view to empowering teachers (Yang et al., 2009), each of the three core sections begins with an overview explaining the underpinning mathematical concepts and principles; a table setting out the key vocabulary and examples of learning experiences associated with the important mathematical ideas outlined; and a table indicating the main areas of focus for each of the activities which follow. This allows teachers to identify the language associated with the particular area of early number that they are teaching and to consider possible meaningful contexts for introducing and reinforcing this language. Each of the three sections includes a bank of engaging and interactive activities which can be used in small group and / or whole class situations. Each activity is presented according to the following subheadings: mathematical focus, key vocabulary, resources required, activity and possible interactions, taking ideas further, and assessment opportunities. The structured approach to the activities enables children to learn the correct number terminology from the outset. The activities promote the use of meaningful contexts such as play, games, songs, stories and rhymes. The use of real-life objects as learning tools to help children consolidate their understanding and explain their thinking to others is also recommended. Throughout the activities, children are encouraged to make connections between real-life experiences, pictorial representations, symbols and language (Haylock, 2011).

In addition to the three core sections outlined, the resource also includes introductory guidance material on the provision of a number-rich environment, ideas for developing number across the setting, and suggestions for promoting home-school links.

Feedback from teachers

Feedback from teachers who piloted the resource activities was extremely positive. Their responses and comments have been summarised under the following headings: Layout and presentation; Content; Impact on teacher practice; General comments and Recommendations for improvement.

Layout and presentation Good structure. Easy to follow.

I felt the layout was very clear and the use of italics made it easy to follow in the class context.

The layout of the resource is very teacher friendly. If there are children in the class struggling with a particular concept in number then it is easy to source activities from this resource booklet.

It has been put together in a way that makes it a workable teacher document and allows teachers to add their own findings.

Page set-up perhaps all the same (portrait or landscape). Ring-binder – some of the pages came out after so much use.

Would love activities in book form ... as I would keep it at hand for daily use.

The presentation in this format is very good. A suggestion would be to produce it in a more colourful format using illustrations. If it were produced on card each idea could be used as a single item and would be more durable.

All of the teachers indicated that they understood the purpose of the resource and agreed that it was user friendly and easy to follow. At the first stage of the pilot, teachers were given the activities in a spiral bound booklet. All of the activities were presented on A4 pages; the introductory section was presented landscape whilst the activities were presented portrait. Some of the suggestions were addressed for subsequent stages in the project.

Content

Excellent planning for key language. Lessons very well structured. Varied activities.

Well thought out. Active learning evident.

Very useful bank of activities to support my teaching.

Broad range of ideas, questions, etc. Very comprehensive.

Clear and comprehensive resource. Keeps the teacher in touch with the basic activities that are so important.

The key vocabulary sections are very useful. It allows you to identify key words the children should be able to identify and understand.

We will be integrating this into our maths planning.

Activities appropriate for ability and interest level of children. All activities are exactly pitched and are very consistent with the approach we already use in Foundation Stage classrooms in my school.

Language used is appropriate and nicely laid out. Strengthening and challenging activities included.

I could not use most of these activities [Number Operations] in early Senior Infants. I feel that most of the content of the Number Operations section is not yet suitable for children in Sept/Oct of Senior Infants.

All of the suggested activities teachers can alter themselves.

I initially used it with my weaker children but then I changed the numbers (eg., moved from working within 10 to 20/30 with my top group) and carried out some of the activities with enlightening results. The resource allows for differentiation in each year group.

Teachers indicated that the resource provided excellent material which would serve to support them in their planning for teaching early number. The majority of teachers agreed that the resource was appropriate for children in Infant classes (Republic of Ireland) and the Foundation Stage (Northern Ireland). It is important to note that teachers were invited to pilot the activities at specific stages throughout the project. In some cases, the activities being piloted were too advanced for children as material had not yet been taught. However, teachers did demonstrate an ability to adapt the activities to suit.

Specific feedback was sought regarding content of different sections as detailed below.

Introductory guidance material

Great introduction with focus, vocabulary and learning experiences clearly set out. The introductory section is an excellent reminder of the appropriate mathematical language we should be using. I enjoyed reading the Number and Counting introduction. It was very clear and informative.

Super overview of counting activities. I would keep this with daily notebook. It covers all areas of play based learning and great as a check to ensure children have lots of variety when counting.

Teachers agreed that the introductory guidance material for each of the three core sections was a valuable part of the resource and helped to reinforce the key aspects of number and associated vocabulary in the early years.

Activities

The mathematics focus is very clearly outlined. The associated mathematical vocabulary is also very clear. Key number vocabulary is clearly identified in each lesson plan. Lesson plans are clear and logical. The 'taking ideas further' sections provide opportunities for consolidation work.

The activities are practical, relevant and engaging.

Enjoyable and meaningful contexts. Children engaged in real-life and playful contexts. Well-structured lessons with emphasis on developing mathematical language.

Activities such as these would greatly benefit their understanding of the number concepts. Easy to adapt to resources you have available.

'Rhythmic body counting' essential in Primary 1. A lot of children find co-ordination of movements difficult.... Good to combine with number.

'Human number line' lesson well thought out. Children loved the opportunities to be actively involved. Children engaged in the experience.

The 'Fruit bowls' activity is visual and practical. It is exactly the kind of activity that helps the children to talk about and demonstrate their thinking.

We used 'Number tracks' with number to 20. It was great. Children loved it!! This is an excellent idea.

'Baker's shop' – the extension activity (putting prices up by counting on 1p) is useful for differentiation.

'Ten fat sausages' – this activity produced good interaction, discussion and use of mathematical language ("We are learning to count down." / "We are learning to take away.") Another child linked this with component knowledge. When counting one back from four she suggested, "3 and 1 is the same as 4."

Teachers agreed that the activities were clearly outlined and relevant associated vocabulary was clearly identified. They also welcomed the range of meaningful contexts. Some teachers also indicated that they had adapted the activities to suit the resources available within their classrooms. Some teachers highlighted particular activities that had worked well.

Promoting Number Across the Setting (Introduction section)

Number Across the Setting is a great 'checklist' to ensure that the teacher is covering all of the everyday activities that complement the discrete maths lesson.

Play activities are clearly sorted into various structured play areas. Lots of ideas to promote number through play activities and classroom discussions.

Lots of very useful play activities in this resource which will match many play topics. A useful tool to encourage teachers to promote number across the Foundation Stage setting.

I really like the Number Across the Setting section. It links in very well with the Aistear programme that we have in place in the Senior Infant classroom. It provides a good bank of idea questions to ask during play time.

A wide range of interesting and thought provoking activities. The use of roleplay and suggested activities of children getting actively involved were great.

Highlights maths is all around us. We use maths everyday often without realising it.

This section of the resource was completed in the final stages of the project. Feedback was highly positive. There has been a greater emphasis on playful learning experiences across the curriculum since the introduction of the Northern Ireland Primary Curriculum (CCEA, 2007) and the Aistear Curriculum Framework (NCCA, 2009). Teachers welcomed the wide range of ideas for promoting number across all aspects of the learning environment.

Impact on teacher practice

Activities thoroughly enjoyed by children. Easy to adapt to resources you have available.

Gives confidence and support for what already goes on in the infant classes.

I had not used puppets with number work before. The children really engaged with the puppet and it encouraged quieter children to use more vocabulary.

The resource provides effective support for developing early vocabulary in teaching mathematics. As there is a bank of ideas there is provision for reinforcing this early vocabulary.

Quality of teaching and learning has been enriched thus improving numeracy standards.

Activities provided the children with valuable and quality learning opportunities.

Teachers observed that children enjoyed participating in the activities and some teachers reported that the resource helped to promote their own confidence. Teachers welcomed the resource because it exposed them to new ideas and strategies. All of the teachers in mainstream classes agreed that children in their classes were better able to engage with the vocabulary of number as a result of using the resource. Some teachers felt that the resource had served to enrich the mathematical learning experiences in their classes.

General comments

I will be trying out the rest of the resources in the next couple of weeks.

Any further activities most welcome.

Excellent resource for any teacher of Foundation Stage.

It is important to build up a good bank of resources to stimulate and have fun lessons.

This is a worthwhile project and a valuable resource. My pupils all enjoyed the activities and were very engaged during each lesson thanks to the variety of multisensory teaching strategies employed. A useful tool to encourage teachers to think carefully about the number language used in the classroom setting.

The resource emphasises maths as a 'talking subject' which is key in Year 1.

Teachers appreciated being invited to critique the resource and demonstrated an enthusiasm in continuing to implement the activities beyond the pilot stage.

Recommendations for improvement

One teacher suggested including activities with Cuisenaire rods as this is an important resource within her Year 1 class. Some teachers also felt that more pictures, diagrams, photographs would help to make the resource more attractive. Teachers did demonstrate a willingness to suggest further ideas and activities that could be included within such a resource. These were carefully considered and integrated within the resource where possible.

Conclusion

The aim of this research project was to provide a resource for practitioners to support them in their planning and teaching of early number with a view to developing children's understanding and use of language with regard to early number concepts both in school and in their day-to-day lives. It is envisioned that the resource may also be used by personnel involved in initial teacher education and continuing professional development. The NRC (2009) recommends that number should be emphasised in the development of early mathematics and contends that "improvements in early childhood mathematics education can provide young children with the foundational educational resources that are critical for school success" (p. 331). The NRC (2009) concludes that pre-service preparation and inservice development of teachers in relation to mathematics teaching and learning is essential to effective implementation of early childhood mathematical education. This also links with a prioritised teacher education issue (teaching of numeracy), as identified in the Numeracy Strategies, North and South (DENI, 2011; DES, 2011). Ultimately, the resource aims to facilitate the development of a more numerate society.

The research was made possible by seed funding awarded by the Standing Conference on Teacher Education, North and South (SCoTENS). The research project meets the objectives of the SCoTENS by providing a supportive framework for collaborative research and professional activities in teacher education between St. Angela's College and Stranmillis University College. This project consolidated valuable links from both a professional and interinstitutional perspective and strengthened connections between St. Angela's College and Stranmillis University College. The benefits for the partner institutions have included the development of a collaborative partnership with each other. Frequent meetings between the three researchers involved have resulted in the sharing of knowledge and expertise. The reciprocal nature of this sharing has resulted in the two researchers from St. Angela's College benefiting from the mathematical expertise of the researcher in Stranmillis University College. Conversely, the researcher from Stranmillis gained knowledge in the area of language and special educational needs from her colleagues in St. Angela's. All three researchers enhanced their understanding of the teaching and learning of early number concepts in the two jurisdictions. The developed resource is currently supporting all three researchers in their work with regard to initial teacher training and continuing professional development of teachers. During the course of the meetings, rich mathematical discussion ensued regarding the possibility of further progression of the project. Ultimately, further resources with reference to the other strands of the early mathematics curricula could be developed. Alternatively, the number resource could be developed for all class levels throughout the primary school. The project adhered to the timelines projected with a PDF of the final resource available on the agreed date. Cognisance was taken of the financial budget at all stages of the project, and considered and careful spending was maintained so as to ensure economic value and transparency. The researchers deem that this project provides good value for money as it resulted in the development of a practical and timely resource for early years' teachers. A detailed financial report will attest to this. The resource will be launched in the partner institutions (St. Angela's College and Stranmillis University College) as well as at the SCoTENS Conference (2014). The outcomes of the research project will be disseminated at the following conferences: BCME 8 (Nottingham, 2014), IATSE (Dublin, 2014). It is also intended to present the outcomes at ILSA (Dublin, 2014), NASEN (Belfast) and MEI (Dublin).

References

- Anghileri, J. (2000) *Teaching Number Sense*. London: Continuum.
- Aram, D. and Nation, J. (1980) Pre-school language disorders and subsequent academic difficulties. *Journal of Communication Disorders*, 13, pp. 159–198.
- Austin, A.M.B., Blevins-Knabe, B., Ota, C., Trowe, T. and Lindauer, S.L.K. (2011) Mediators of preschoolers' early mathematics concepts. *Early Child Development and Care*, 181(9), pp. 1181- 1198.
- Baroody, A. J. (2004) The developmental bases for early childhood number and operations standards. In: D. H. Clements and J. Sarama (Eds.), *Engaging Young Children in Mathematics: Standards for Early Childhood Mathematics Education* (pp. 173 – 219). Mahwah, NJ: Lawrence Erlbaum Associates.
- Baroody, A., Lai, M. L., and Mix, K.S. (2006) The development of young children's early number and operation sense and its implications for early childhood education. In: B. Spodek and O. Saracho (Eds.), *Handbook of Research on the Education of Young Children* (pp. 187- 221). Mahwah, NJ: Lawrence Erlbaum Associates.
- Baroody, A.J. and Coslick, R.T. (1998) *Fostering Children's Mathematical Power: An Investigative Approach to K-8 Mathematics Instruction*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Baroody, A.J. and Kaufman, L.C. (1993) The case of Lee: Assessing and remedying a numerical-writing difficulty. *Teaching Exceptional Children*, 25(3), pp. 14-16.
- Benson, A.P. and Baroody, A.J. (2002) *The Case of Blake: Number-Word and Number Development*. Paper presented at the annual meeting of the American Educational Research Association, April, New Orleans, LA.
- Berghout, Austin, A.M., Blevins-Knabe, B., Ota, C., Rowe, T., and Knudsen Lindauer, S. L. (2011) Mediators of preschoolers' early mathematics concepts. *Early Child Development and Care*, 181(9), pp. 1181-1198.
- Berk, L.E. and Winsler, A. (1995) *Scaffolding Children's Learning: Vygotsky and Early Childhood Education*. Washington, DC: National Association for the Education of Young Children.
- Bobis, J. (2004) Number sense and the professional development of teachers. In: A. McIntosh and L. Sparrow (Eds.), *Beyond written computation* (pp. 160-170). Perth, Western Australia: Mathematics, Science & Technology Education Centre, Edith Cowan University.
- Carey, S. (2004) Bootstrapping and the origin of concepts. *Daedalus*, 133, pp. 59–68.
- Casserly, A.M., Moffett, P. and Tiernan, B. (2013) *Early Number Concepts: Key Vocabulary and Supporting Strategies*. Fermanagh: SCoTENS.

Chard, D. (2003) *Vocabulary Strategies for the Mathematics Classroom*. New York: Houghton Mifflin Math.

Clements, D.H. and Sarama, J. (2008) Experimental evaluation of a research-based preschool mathematics curriculum. *American Educational Research Journal*, 45, pp. 443 - 494.

Clements, D. H. and Sarama, J. (2007) Effects of a preschool mathematics curriculum: Summative research on the "Building Blocks" Project. *Journal for Research in Mathematics Education*, 38, pp. 136–163.

Clements, D.H. and Sarama, J. (2007) Early childhood mathematics learning. In: F.K. Lester, Jr. (Ed.), *Second Handbook of Research on Mathematics Teaching and Learning* (pp. 461-555). New York: Information Age.

Clements, D. H. and Sarama, J. (2009) *Learning and Teaching Early Math: The Learning Trajectories Approach*. New York: Routledge.

Clements, D.H. (1999) Subitizing: What is it? Why teach it? *Teaching Children Mathematics*, 5, pp. 400-405.

Cobb, P. and Yackel, E. (1998) A constructivist perspective on the culture of the mathematics classroom. In: F. Seeger, V. Voigt and U. Waschescio (Eds.), *The Culture of the Mathematics Classroom*, (pp.159-189). Cambridge: Cambridge University Press.

Cockcroft, W.H. (1982) *Mathematics Counts: Report of the Committee of Inquiry into the Teaching of Mathematics in Schools under the Chairmanship of Dr W. H. Cockcroft*. London: Her Majesty's Stationery Office.

Cohen, L., Manion, L. and Morrison, K (2004) *Research Methods in Education* (5th edn.). London: RoutledgeFalmer.

Cooper, H. (2007) *Evaluating and Interpreting Research Syntheses in Adult Learning and Literacy*. Boston: National College Transition Network, New England Literacy Resource Centre/World Education.

Cowan R., Donlan C., Newton E. J. and Lloyd D. (2005) 'Number skills and knowledge in children with specific language impairment'. *Journal of Educational Psychology*, 97, pp. 732–744.

Darling-Hammond, L. and Ball, D.L. (2000). *Teaching for High Standards: What Policymakers need to know and be able to do*. (CPRE paper, No. JRE-04). Philadelphia: University of Pennsylvania, Consortium for Policy Research in Education.

Davis, E.A. and Miyake, N. (2004) Explorations of scaffolding in complex classroom systems, *Journal of the Learning Sciences*, 13, pp. 265-272.

Dehaene, S. (1997) *The Number Sense: How the Mind Creates Mathematics*. Oxford: Oxford University Press.

Denscombe, M. (2004) *The Good Research Guide for Small-Scale Social Research Projects* (2nd edn.). Berkshire: Open University Press.

Department of Education, Northern Ireland (DENI). (2010). *Initial Teacher Education: approval of programmes* (DE Circular 2010/03).

Department of Education, Northern Ireland (DENI) (2011) *Count Read: Success – A strategy to improve outcomes in literacy and numeracy*. Belfast: DENI.

Department of Education and Skills (DES) (2011) *Literacy and Numeracy for Learning and Life. The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020*. Dublin: The Stationery Office.

Donlan, C., Cowan, R., Newton, E. J. and Lloyd, D. (2007) The role of language in mathematical development: Evidence from children with specific language impairments. *Cognition*, 103, pp. 23-33.

Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P. and Japel, C. (2007) School readiness and later achievement. *Developmental Psychology*, 43, pp. 1428–1446.

Dunphy, E. (2007) The primary mathematics curriculum: enhancing its potential for developing young children's number sense in the early years at school. *Irish Educational Studies*, 26(1), pp. 5-25.

Dunphy, E. (2006) The development of young children's number sense through participation in sociocultural activity: Profiles of two children. *European Early Childhood Education Research Journal*, 14, pp. 57-76.

Eivers, E., Close, S., Shiel, G., Millar, D., Clerkin, A., Gilleece, L. and Kiniry, J. (2009) *The 2009 National Assessments of Mathematics and English Reading*. Dublin: Educational Research Centre.

Feigenson, L., Dehaene, S. and Spelke, E. S. (2004) Core systems of number. *Trends in Cognitive Sciences*, 8, pp. 307-314.

Feigenson, L., and Carey, S. (2003) Tracking individuals via object-files: Evidence from infants' manual search. *Developmental Science*, 6, pp. 568–584.

Fuson, K.C. (1988) *Children's Counting and Concept of Number*. New York : Springer - Verlag.

Fuson, K.C. (1992a) Research on learning and teaching addition and subtraction of whole numbers. In: G. Leinhardt, R.T. Putnam, and R.A. Hattup (Eds.), *The Analysis of Arithmetic for Mathematics Teaching* (pp. 53-187). Hillsdale, NJ: Erlbaum.

Fuson, K.C. (1992b) Research on whole number addition and subtraction. In: D. Grouws (Ed.), *Handbook of Research on Mathematics Teaching and Learning* (pp. 243-275). New York: Macmillan.

Gelman, R. and Gallistel, C.R. (1978) *The Child's Understanding of Number*. Cambridge, MA: Harvard University Press.

Gelman, R. and Butterworth, B. (2005) Number and language: How are they related? *Trends in Cognitive Sciences*, 9, pp. 6–10.

Gersten, R. and Chard, D. (1999) Number sense: Rethinking arithmetic instruction for students with mathematic disabilities. *Journal of Special Education*, 33, pp. 18–28.

Ginsburg, H.P., Lee, J.S. and Boyd, J.S. (2008) Mathematics education for young children: What it is and how to promote it. In: J. Brooks-Gunn (Assoc. Ed.) and L. Sherrod (Ed.), *Social Policy Report*, 22(1), pp. 3–22. Ann Arbor, MI: Society for Research in Child Development.

Gordon, P. (2004) Numerical cognition without words: Evidence from Amazonia. *Science*, 306, pp. 496–499.

Greeno, J. (1991) Number sense as situated knowing in a conceptual domain. *Journal for Research in Mathematics Education*, 22(3), pp. 170–218.

Griffin, S. (2002) The development of math competence in the preschool and early school years: Cognitive foundations and instructional strategies. In: J. Royer (Ed.), *Mathematical Cognition* (pp. 1– 32). Greenwich: Information Age Publishing.

Hannula, M. M. (2005) *Spontaneous Focusing on Numerosity in the Development of Early Mathematical Skills*. Turku, Finland: University of Turku.

Hiebert, J., and Grouws, D. A. (2007). The effects of classroom mathematics teaching on students' learning. In F. K. Lester (Ed.), *Second Handbook of Research on Mathematics teaching and learning* (pp. 371–404). Charlotte, NC: Information Age Publishers.

Hodent, C., Bryant, P. and Houde, O. (2005) Language-specific effects on number computation in toddlers. *Developmental Science*, 8, pp. 420–423.

House of Commons Committee of Public Accounts (PAC) (2006) *Improving Literacy and Numeracy in Schools* (Northern Ireland). London: TSO.

Howell. S. and Kemp, C. (2009) A participatory approach to the identification of measures of number sense in children prior to school entry. *International Journal of Early Years Education*, 17(1), pp. 47– 65.

Jeong, Y. and Levine, S.C. (2005) *How do Young Children Represent Numerosity?* Paper presented at the biennial meeting of Society for Research on Child Development, Atlanta, GA.

John-Steiner, V. and Mahn, H. (1996) Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist*, 31, pp. 191–206.

- Jordan, N.C., Kaplan, D., Locuniak, M. N. and Ramineni, C. (2007) Predicting first-grade math achievement from developmental number sense trajectories. *Child Development*, 22, pp. 36–46.
- Klibanoff, R., Levine, S., Huttenlocher, J., Vasilyeva, M. and Hedges, L. (2006) Preschool children's mathematical knowledge: The effect of teacher "math talk". *Developmental Psychology*, 42, pp. 59– 69.
- LaFevre, J., Smith-Chant, B. L., Fast, L., Skwarchuk, S., Sargla, E., Arnup, J.S., Penner-Wilger, M., Bisanz, J. and Kamawar, D. (2006) What counts as knowing? The development of conceptual and procedural knowledge of counting from kindergarten through grade 2. *Journal of Experimental Child Psychology*, 93 (4), pp. 285-303.
- Lampert, M. and Cobb, P. (2003) Communication and language. In: J. Kilpatrick, W.G. Martin and D. Schifter (Eds.), *A Research Companion to Principles and Standards for School Mathematics* (pp. 237- 249). Reston, VA: National Council of Teachers of Mathematics.
- Landerl, K., Bevan, A. and Butterworth, B. (2004) Developmental dyscalculia and basic numerical capacities: A study of 8–9-year-old students. *Cognition*, 93, pp. 99–125.
- Levine, S.C., Whealton, L., Suriyakham, Rowe, M.L., Huttenlocher, J. and Gunderson, G.A. (2010) What Counts in the Development of Young Children's Number Knowledge? *Developmental Psychology*, 4, pp. 1309–1319.
- Linder, S.M., Powers-Costello, B. and Stegelin, D.A. (2011) Mathematics in Early Childhood: Research-Based Rationale and Practical Strategies. *Early Childhood Education Journal*, 39, pp. 29–37.
- Lipton, J.S., and Spelke, E.S. (2006) Preschool children master the logic of number word meanings. *Cognition*, 98 (3), pp. 57-66.
- Lonigan, C.J., Schatschneider, C., Westberg, L., with National Early Literacy Panel. (2008) Identification of children's skills and abilities linked to later outcomes in reading, writing, and spelling. In: *Developing Early Literacy: Report of the National Early Literacy Panel* (pp. 55–106). <http://www.nifl.gov> (Accessed 24 May 2013).
- McCain, M. N. and Mustard, J.F. (1999) *Reversing the Real Brain Drain: Early Years Study, Final Report*. Toronto: Publications Ontario.
- McIntosh, A. (2004) Where we are today? In: A. McIntosh and L. Sparrow, (Eds.), *Beyond Written Computation* (pp. 3-14). Perth, Western Australia: Mathematics, Science and Technology Education Centre, Edith Cowan University.
- McIntosh, A., Reys, B. and Reys, R. (1992) A proposed framework for examining basic number sense. *For the Learning of Mathematics*, 12(3), pp. 28.
- Miller, K.F., Smith, C.M., Zhu, J., and Zhang, H. (1995) Preschool origins of cross-national differences in mathematical competence: The role of number naming systems. *Psychological Science*, 6, pp. 56- 60.

National Council for Curriculum and Assessment (NCCA) (1999) *Primary School Curriculum*. Dublin: NCCA.

National Council for Curriculum and Assessment (2003) *Towards a Framework for Early Learning: A Consultative Document*. Dublin: NCCA.

National Council for Curriculum and Assessment (2009) *Aistear: The Early Childhood Curriculum Framework*. http://www.ncca.ie/en/Curriculum_and_Assessment/Early_Childhood_and_Primary_Education/Early_Childhood_Education/Aistear_Toolkit/Aistear_and_PSC_audit.pdf (Accessed 12 February 2014).

National Council of Teachers of Mathematics (NCTM) (2000) NCTM: Draft Guidelines 2000. Reston, VA, National Council of Teachers of Mathematics.

National Mathematics Advisory Panel (2008) *Foundations for Success: The Final Report of the National Mathematics Advisory Panel*. Washington, DC: Department of Education.

National Research Council (2009) *Mathematics Learning in Early Childhood: Paths Toward Excellence and Equity*. Committee on Early Childhood Mathematics. Christopher T. Cross, Taniesha A. Woods, and Heidi Schweingruber (Eds.), Centre for Education, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

National Research Council (2001) *Adding It Up: Helping Children Learn Mathematics*. Mathematics Learning Study Committee. J. Kilpatrick, J. Swafford, and B. Findell (Eds.). Centre for Education, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

Northern Ireland Audit Office (NIAO) (2006) *Improving Literacy and Numeracy in Schools*. London: TSO.

OECD (2010) *PISA 2009 Results: What Students Know and Can Do – Student Performance in Reading, Mathematics and Science (Volume I)* <http://www.oecd.org/pisa/pisaproducts/pisa2009/pisa2009keyfindings.htm>. (Accessed 23 May 2013).

O'Neill, D. K., Pearce, M. J. and Pick, J. L. (2004) Preschool children's narratives and performance on the Peabody Individualized Achievement Test – Revised: Evidence of a relation between early narrative and later mathematical ability. *First Language*, 24(2), pp. 149–183.

Ontario Ministry of Education (2003) *Early Math Strategy: The Report of the Expert Panel on Early Math in Ontario*. Toronto: Queen's Printer for Ontario.

Piaget, J. (1941/1952/1965). *The Child's Conception of Number*. New York: Norton. (Original work published 1941).

Pianta, R.C., La Paro, K., and Hamre, B.K. (2007) *Classroom Assessment Scoring System™ (CLASS™)*. Baltimore, MD: Paul H. Brookes.

Pica, P., Lemer, C., Izard, V. and Dehaene, S. (2004) Exact and approximate arithmetic in an Amazonian indigene group. *Science*, 306, pp. 499–503.

Rogoff, B. (1990) *Apprenticeship in Thinking: Cognitive Development in Social Context*. New York: Oxford University Press.

Rogoff, B. (1995) Observing sociocultural activity on three planes: participatory appropriation, guided participation and apprenticeship. In: J. Wertsch, P. Del Rio, and A. Alvarez, (Eds.), *Sociocultural Studies of Mind*, (pp. 139-164). New York: Cambridge University Press.

Rogoff, B. (1998) Cognition as a collaborative process. In: W. Damon, D. Kuhn and R. Siegler (Eds.), *Handbook of Child Psychology. Vol. 2: Cognition, Perception and Language* (pp. 679-744). New York: Wiley.

Sarama, J., Langeb, A. A., Clements, D. H. and Wolfe, C. B. (2012) The impacts of an early mathematics curriculum on oral language and literacy. *Early Childhood Research Quarterly*, 27, pp. 489– 502.

Sarama, J. and Clements, D. (2009) Building blocks and cognitive building blocks: Playing to know the world mathematically. *American Journal of Play*, pp. 313–337.

Saxe, G.B., Guberman, S.R. and Gearhart, M. (1987) Social processes in early number development. *Monographs of the Society for Research in Child Development*, 52(2), Serial no. 216.

Shiel, G., Cregan, A, Mc Gough, A. and Archer, P. (2012) *Oral Language Learning in Early Childhood and Primary Education*. Dublin: National Council for Curriculum and Assessment (NCCA).

Shiel, G., Surgenor, P., Close, S. and Millar, D. (2006) *The 2004 National Assessment of Mathematics Achievement*. Dublin: Educational Research Centre.

Shiel, G. and Kelly, D. *The 1999 National Assessment of Mathematics Achievement*. Dublin: Educational Research Centre, 2001.

Siegler, R.S. and Booth, J. L. (2005) Development of numerical estimation: A review. In: J. I. D. Campbell (Ed.), *Handbook of Mathematical Cognition* (pp. 197-212). New York: Psychology Press.

Sophian, C. (1998) A developmental perspective on children's counting. In: C. Donlan (Ed.), *The Development of Mathematical Skills*, (pp. 27-46). East Sussex: Psychology Press.

Snowling, M., Adams, J. W., Bishop, D. V. M. and Stothard, S. E. (2001) Educational attainments of school leavers with a preschool history of speech-language impairments. *International Journal of Language & Communication Disorders*, 36, pp. 173–183.

Starkey, P. and Klein, A. (2008) Sociocultural influences on young children's mathematical knowledge. In: O.N. Saracho and B. Spodek (Eds.), *Contemporary Perspectives on Mathematics in Early Childhood Education* (pp. 253–276). Charlotte, NC: Information Age Publishing.

Starkey, P., A. Klein, and A. Wakeley (2004) Enhancing young children's mathematical knowledge through a pre-kindergarten mathematics intervention. *Early Childhood Research Quarterly*, 19, pp. 99–120.

The Teaching Council (2011) *Initial Teacher Education: Criteria and Guidelines for Programme Providers*. Maynooth: Author.

Thomson, S. (2004) Numeracy in the early years: Project Good Start Australian. *Primary Mathematics Classroom*, 9 (4), pp. 14-17.

Vygotsky, L. S. (1978) Interaction between learning and development (M. Lopez-Morillas, Trans.). In: M. Cole, V. John-Steiner, S. Scribner, and E. Souberman (Eds.), *Mind in Society: The Development of Higher Psychological Processes* (pp. 79-91). Cambridge, MA: Harvard University Press.

Weizman, Z.O. and Snow, C.E. (2001) Lexical input as related to children's vocabulary acquisition: Effects of sophisticated exposure and support for meaning. *Developmental Psychology*, 37, pp. 265- 279.

Yang, D.C., Reys, R.E. and Reys, B.J. (2009) Number sense strategies used by pre-service teachers in Taiwan. *International Journal of Science and Mathematics Education*, 7(2), pp. 383-403

Appendix 1: Evaluation Forms

Developing Early Counting Vocabulary

Please indicate the year group you used the resource with.

Year group: _____

Based on your experience of using the resource, please indicate the extent to which you agree with the following statements by ticking the appropriate box. Please tick one box only.

SD – Strongly Disagree, **D** – Disagree, **U** – Undecided, **A** – Agree, **SA** – Strongly Agree

1. I understand the purpose of the resource
2. The introductory section is interesting to read
3. The resource is clear and easy to follow
4. The resource is user friendly
5. The resource provides a useful bank of activities to support my teaching
6. The counting activities are clearly outlined
7. The resource highlights the key vocabulary of counting
8. As a result of using the resource, I have a greater awareness of how to promote the key vocabulary of counting
9. The resource helped me to facilitate children's discussion of counting
10. Children enjoyed the counting activities
11. As a result of using the resource, children in my classroom are better able to engage with the vocabulary of counting
12. As a result of using the resource, I have observed children in my classroom spontaneously using the vocabulary addressed in this resource

We would appreciate any additional comments/suggestions in the section below.

Overall, what do you consider to be the strengths of this resource?

Can you suggest any improvements to this resource? For example, you may wish to recommend improvements in relation to content, layout, presentation, etc.

Any other comments

Thank you for taking the time to critique this resource. Your feedback is greatly appreciated.

Dr. Ann Marie Casserly Dr. Pamela Moffett Dr. Bairbre Tiernan

Developing Early Vocabulary in Number Relationships

Please indicate the year group you used the resource with.

Year group: _____

Based on your experience of using the resource, please indicate the extent to which you agree with the following statements by ticking the appropriate box. Please tick one box only.

SD – Strongly Disagree, **D** – Disagree, **U** – Undecided, **A** – Agree, **SA** – Strongly Agree

1. I understand the purpose of the resource
2. The introductory section is interesting to read
3. The resource is clear and easy to follow
4. The resource is user friendly
5. The resource provides a useful bank of activities to support my teaching
6. The activities are clearly outlined

7. The resource highlights the key vocabulary of number relationships
8. As a result of using the resource, I have a greater awareness of how to promote the key vocabulary of number relationships
9. The resource helped me to facilitate children's discussion of number relationships
10. Children enjoyed the activities
11. As a result of using the resource, children in my classroom are better able to engage with the vocabulary of number relationships
12. As a result of using the resource, I have observed children in my classroom spontaneously using the vocabulary addressed in this resource

We would appreciate any additional comments/suggestions in the section below.

Overall, what do you consider to be the strengths of this resource?

Can you recommend any further activities in relation to number relationships?

Can you suggest any improvements to this resource? For example, you may wish to recommend improvements in relation to content, layout, presentation, etc.

Any other comments

You may wish to provide additional feedback on individual activities in the table below.

Activity Comments

Thank you for taking the time to critique this resource. Your feedback is greatly appreciated.

Dr. Ann Marie Casserly Dr. Pamela Moffett Dr. Bairbre Tiernan

Promoting Number across the setting

Please indicate the year group you used the resource with. Year group: _____

Based on your experience of using the resource, please indicate the extent to which you agree with the following statements by ticking the appropriate box. Please tick one box only.

SD – Strongly Disagree, **D** – Disagree, **U** – Undecided, **A** – Agree, **SA** – Strongly Agree

1. The resource is user friendly
2. The ideas are clearly presented
3. The resource provides a useful bank of activities to support my teaching
4. The ideas are appropriate for children in Foundation Stage
5. As a result of using the resource, I have a greater awareness of how to promote number across a range of learning contexts

We would appreciate any additional comments/suggestions in the section below.

Overall, what do you consider to be the strengths of this resource?

Can you suggest any improvements to this resource? For example, you may wish to recommend improvements in relation to content, layout, presentation, etc.

Any other comments

There may be some further ideas which you wish to recommend for inclusion. Please feel free to note these below.

Threshold Concepts in Language Teacher Education: *Practice versus Policy*

Dr. Ann Devitt, Trinity College Dublin

Dr. Eugene McKendry, Queen's University Belfast

Introduction

This report presents the findings of a SCoTENS funded study with practicing language teachers in Ireland, within the framework of Threshold Concepts (Meyer, Land et al. 2010), to identify the core but troublesome knowledge and practices of language teaching and the conditions that facilitate the integration of these concepts over a teaching career. The project draws on the voice of professionals in the two jurisdictions, North and South, articulating key points of learning in their careers. Qualitative analysis of participant interviews suggests that, while the threshold concepts identified are quite consistent across both jurisdictions, their articulation and implementation are contingent upon the local and broader policy context in which teachers work. The concepts are expressed as a belief system where contextual factors mediate the degree to which teachers can teach in accordance with their beliefs.

Theoretical Framework

Threshold Concepts (TCs) have emerged over the last ten years as a useful metaphor and tool for curriculum design and research with work conducted in higher education settings in the UK and USA (Meyer, Land et al. 2010). TCs are defined as those without which it is not possible to engage in the practices and discourse of a discipline, such as for example, "opportunity cost" in economics or "care" in nursing. Often, these concepts constitute troublesome knowledge that when integrated has a transformational and potentially irreversible effect on the learner and their world view, integrating existing knowledge to open up new horizons of thought:

"... akin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress." (Meyer and Land 2003, p. 414)

The TC paradigm offers a framework which is quintessentially integrative, facilitating the generation of insights for the field of professional learning, and specifically here teacher education, through the juxtaposition of key theories. In particular, TCs focus on transformative aspects of learning (Mezirow and Taylor 2009), the nature of conceptual change (Carey 1999), in particular adaptive change that entails a change to beliefs (Heifetz, Grashow et al. 2009) and the importance and role of communities of practice in professional learning (Wenger 1998). This framework holds the promise of providing a new lens through which to explore the notion of teacher cognition, defined by Borg as "what teachers think, know and believe" (2006, p.1). Woods and Çakir (2011) contend that teacher knowledge encompasses at least the two dimension from personal beliefs to impersonal "truths" and from experiential to theoretical knowledge. The potential for threshold concepts to change not only learner's knowledge but also their beliefs, subjectivity and even identity resonates with this model of teacher knowledge. This study extends existing work in the area of threshold concepts for teaching (Cove, McAdam et al. 2008; Atherton, Hadfield et al. 2012)

exploring the transformative, reconstitutive and irreversible nature of concepts identified by language teachers as fundamental to their practice.

Methodology

The study was conducted as an exploratory qualitative case study in 2013 with practicing language teachers in Ireland, both North and South. The key research questions outlined below derive from previous work carried out by the authors on threshold concepts in teacher education and are a response to a competencies-based approach to teacher education and knowledge:

- What do experienced teachers articulate as threshold concepts (TCs) underlying good language teaching?
- Are these concepts dependent on the policy context within which teachers work?
- What are the conditions and encounters that facilitate or challenge the integration and practice of these TCs?

In order to address these questions, participant language teachers took part in interviews to elicit their understanding of what knowledge underlies good language teaching in the context of their personal narratives as teachers and learners of language. There were 17 mid-to-late career language teacher participants in total: nine teachers in Northern Ireland and eight teachers in the Republic of Ireland. The sampling for this study was purposeful drawing from teachers with at least five years experience teaching in different school types (selective vs. non-selective, high vs. low socio-economic status) and teaching one of the main languages taught in both jurisdictions (Irish, French, German and Spanish). The sample size is in line with indications of appropriate theoretical sampling for qualitative research with expert participants (Guest, Bunce et al. 2006). Interviews were transcribed and a thorough thematic analysis of participant interviews was conducted using MaxQDA to address the project research questions. The analysis was driven by a priori themes derived from the literature on language teaching methodologies (e.g. Long and Doughty 2009) and on threshold concepts and but was also open to themes identified in the data.

Findings

Two core principles were identified in the data as critical to the practice of good language teaching. In some cases these principles had had a transformative and/or reconstitutive effect on the participant. These two core principles could be classified as threshold concepts of language teacher education.

Real Language Use

The first of these concepts relates to facilitating authenticity of communication for language learners, summarised by a number of teachers as *“real language use”*. *“Real language use”* encompasses a number of sub-themes: a focus on meaning rather than exclusively form; generating an immersive environment through the use of the target language (TL); providing opportunities for meaningful language use inside and outside the classroom; authenticity of materials; integration with other curricular subjects. All participants raised at least some of these sub-themes in their interviews and a few discussed all of them in varying levels of detail. The dominant sub-theme here was certainly the use of the target language (TL) in the classroom. One teacher (MET) recounted the transformative experience during Initial Teacher Education (ITE) of coming to believe that using the target language in the classroom could work:

MET: But it was an amazing experience to watch somebody teach a very unusual language to a group of people and have them speak it within an hour

AMD: And what did you get out of that?

MET: Oh it completely transformed my way of thinking about languages. I would speak the language, but I didn't really believe that you could teach a language through the target language at that stage

AMD: And how did that affect how you taught?

MET: It radically changed it!

For another teacher (LBA), this principle was based on a core belief, not related to teaching:

LBA: I should say that, this was for me sort of holy cause because I am a great believer in the necessity for the Irish language ... and the implication of that was that in teaching in the classroom I would never, almost never use English.

A number of language teachers identify teaching English as a foreign language (TEFL) as the site of integration of the concept and practice of TL use.

The majority of teachers in the South expressed maximal TL use as an article of faith.

Teachers in the North, on the other hand, indicate that while optimal or maximal TL use is desirable, they take a more pragmatic approach to use the TL, reflecting the difference in policy on TL use in the two jurisdictions.

Fostering Learner Autonomy

The second concept relates to empowering learners to manage and develop their own learning, summarised as "learner autonomy" by a number of participants. The sub-themes here include building learner confidence and motivation, fostering error tolerance, scaffolding learners' strategy use, target setting. One participant identified a transformative experience on a Master's programme during which she encountered the theory, put it into practice and integrated this concept.

MFE: And I studied the work of Leni Dam in Denmark and I suppose that was a huge moment for me because I hadn't heard of the concept of the autonomous learner before that. And it was something, because while I was studying I was also teaching at the same time, I tried to introduce, you know, some of the methods that she spoke about. And I think that is crucial to have an autonomous learner.

Another expressed integrating this concept from a different perspective, a revised understanding of her role as facilitator rather than sole transmitter of knowledge:

MET: one of these colleagues... said to me "MET the day I became a good teacher was the day that I stopped being afraid of saying I don't know." And that was real, that was an amazing moment ... I'm much better at saying it now and I'll go ... "I need to go and research that and by the way, so do you"

Mediating Threshold Concepts and Beliefs

In the data the threshold concepts identified above are usually articulated as beliefs. Phipps and Borg suggest that core beliefs are those which are "experientially ingrained" (2009,

p.388) and indeed most of the participants identify “seeing what works” as the major catalyst for change over their career. While the original stimulus for change might be external, this stimulus is reinforced by direct observation of the effect of a practice, as in the example above on learner autonomy.

In many cases participants express tensions between what they believe and what they are constrained or empowered to do by contextual factors (see Table 1). Primary among the contextual supports is dialogue with like-minded or inspirational peers:

RMG: I think they [these concepts] are with you forever, I think they are there, but I think that this whole thing of, ... that they're there and I think you need to be with other like-minded people to get that buzz and to get that energy and to like, maybe build them further

The main contextual barrier was an interaction between assessment policy and local school culture:

RMG: In a school like ours, like that it's almost, it's just some people are just interested about the exam results.

Interestingly, education policy is viewed by teachers as a positive catalyst for change. For example, impending curriculum changes in the South are currently perceived as a validation of teachers' beliefs about good teaching and policy changes in the North in relation to assessment for learning are identified as a causal factor in successful facilitation of learner autonomy.

Supports or Catalysts	Barriers
Dialogue with like-minded peers	Assessment regime
Curriculum or assessment changes	Lack of peer support/dialogue
Involvement in research	School culture (including parental pressure, student expectations)
Courses and CPD	Logistics and time

Table 1: Supports or Barriers to Implementation of Beliefs (in descending order of frequency)

Revisiting the Liminal Space

Within the framework of Threshold Concepts, concepts are characterised as irreversible, once an individual has passed through the creative and potentially frustrating liminal space within a “threshold” and gone over to where new knowledge has been fully integrated there is no turning back (Land 2012). The tensions between knowledge, beliefs and practice identified here and in the literature suggest that knowledge must be sustained and validated by practice. In the absence of this, the teachers experience frustration and possibly even a sense of impostorship where there is a gulf between idealised and actual practice (Brookfield 2006). Taking the threshold metaphor, they re-experience the liminal, pre-threshold space with its characteristics of frustration, limitation and mimicry, using the discourse but not following through in action. In this sense, concepts may be irreversible but their associated practices are not.

Conclusions

The study presented here was intended to explore possible threshold concepts of language teaching and how the articulation and practice of these concepts is influenced by the policy context in which teachers operate. Real language use and learner autonomy were identified as potentially transformative and reconstitutive concepts in teacher education. The findings however suggest that the notion of threshold concepts as irreversible may be too simplistic in the context of professional learning where concepts must be put into practice within specific local and policy contexts.

Dissemination

The findings from this study were presented at AERA and ESAI in April 2014:

- Ann Devitt and Eugene McKendry, Threshold Concepts in Language Teacher Knowledge: Practice versus Policy, *Annual meeting of the American Educational Research Association, Philadelphia, 3-7 April 2014*, 2014.
- Ann Devitt and Eugene McKendry, Threshold Concepts in Language Teacher Education: the Voice of the Professional, *ESAI (Educational Studies Association of Ireland) Annual Conference 2014, Athlone, Ireland, 10 April 2014* 2014.

References

Atherton, J., P. Hadfield, et al. (2012). *Troublesome Thresholds and Limiting Liminality: Issues in Teaching in Vocational Education*. 4th Biennial Conference on Threshold Concepts: From personal practice to communities of practice, Trinity College, Dublin.

Borg, S. (2006). *Teacher Cognition and Language Education: Research and Practice*. Loindon, Continuum.

Brookfield, S. (2006). *The Skillful Teacher: On Technique, Trust, and Responsiveness in the Classroom*. San Francisco, CA, Jossey-Bass.

Carey, S. (1999). Sources of conceptual change. *Conceptual development: Piaget's legacy*. E. K. Scholnick, K. Nelson and P. Miller. Mahwah, NJ, Lawrence Erlbaum Associates: 293-326.

Cove, M., J. McAdam, et al. (2008). Mentoring, teaching and professional transformation. *Threshold Concepts within the Disciplines*. R. Land, J. Meyer and J. Smith. Rotterdam: Netherlands, Sense Publishing: 197-211.

Guest, G., A. Bunce, et al. (2006). "How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability." *Field Methods* 18: 59-82.

Heifetz, R., A. Grashow, et al. (2009). *The practice of adaptive leadership : tools and tactics for changing your organization and the world* Boston, Mass. , Harvard Business Press.

Land, R. (2012). Keynote: A Closer Look at Liminality: incorrigibles and threshold capital. *4th Biennial Conference on Threshold Concepts*. Dublin, Ireland.

Long, M. H. and C. J. Doughty, Eds. (2009). *The Handbook of Language Teaching*. Chichester, UK, Wiley-Blackwell.

Meyer, J. H. F. and R. Land (2003). Threshold concepts and troublesome knowledge: linkages to ways of thinking and practising. *Improving Student Learning - Theory and Practice Ten Years On*. C. Rust. Oxford, Oxford Centre for Staff and Learning Development (OCSLD): 412-424.

Meyer, J. H. F., R. Land, et al. (2010). *Threshold Concepts and Transformational Learning*. Rotterdam and Taipei: , Sense Publishers.

Mezirow, J. and E. Taylor, Eds. (2009). *Transformative Learning in Practice*. San Francisco, Jossey-Bass.

Phipps, S. and S. Borg (2009). "Exploring tensions between teachers' grammar teaching beliefs and practices." *System* 37: 380-390.

Wenger, E. (1998). *Communities of practice : learning, meaning, and identity*. Cambridge, Cambridge University Press.

Woods, D. and H. Çakir (2011). "Two dimensions of teacher knowledge: the case of communicative language teaching." *System* 39: 381-390.

3 PLY – Exploring the Potential for Transformative workplace learning for and by teachers

Executive Summary

Dr Annelies Kamp, Dublin City University

Ms Dorothy Black, University of Ulster

Dr Lesley Abbott, University of Ulster

In the context of changes to the educational settlement (Vickers 2008) and an increasing overlap of education and work, this research project concerns the learning that happens on the part of teachers and students ‘around’ workplace learning initiatives associated with the senior years of second level schooling across the island of Ireland. The researchers were based in the School of Education Studies at Dublin City University and the School of Education at the University of Ulster. The field research was undertaken in two schools in the Republic of Ireland and four schools in Northern Ireland during the period between September and November 2013. Further data was generated by way of desktop research of policy documents and extant research, and through the circulation of online surveys with the support of the Institute of Guidance Counsellors in the Republic of Ireland and the Northern Ireland Schools’ Careers Association. The central research questions asked:

- How do teachers conceptualize the work experience and/or part-time work activities of students as part of the senior school curriculum in each jurisdiction?
- How embedded is workplace learning into any careers programme and across school subjects?
- To what extent does the learning generated in and through the organization, delivery and experience of workplace learning of students diffuse throughout the broader school setting? How does this happen?
- Does it make a difference who arranges the workplace learning experience (that is, school organized or organized by the student, or occurring within a part-time job)?

Research and Conference Reports



CONFERENCE REPORTS
FUNDED OR CO-FUNDED BY SCoTENS 2014

All-Ireland Doctoral Conference May 2013

Prof Dympna Devine University College Dublin
Prof Janette Elwood Queen's University Belfast

Organisation and planning of the conference

A joint committee was established between the Schools of Education UCD and QUB to plan and prepare for the conference. This consisted of two academic leaders Prof Dympna Devine UCD and Prof Janette Elwood QUB along with doctoral students from UCD, QUB, UU, NUIG and NUIM. In addition Dr Declan Fahie – an IRC funded Post-doctoral scholar was also a key leader of the team in UCD. In the make up of the committee, we included one student from UCD and QUB who had each been involved in the organization of the conference in the previous year. This ensured transfer of learning and building of capacity across the two schools in hosting and organizing the conference. A meeting was held in QUB between core members of the committee where it was agreed following much deliberation about the purpose and history of the conference to entitle this year's theme:

'Understanding, collaboration and synergy – Building a community of doctoral researchers in Education'.

The keynote speaker were discussed and identified. Professor Martin Mills, University of Queensland kindly accepted the invitation and the topic of his presentation was agreed. In the following months a poster to advertise the conference was designed by the students and this was circulated to all higher education institutions North and South through the doctoral programme directors and school managers/administrators in each of the institutions. It was also advertised in the ESAI newsletter and the prior network of attendees in the previous conferences. A full team planning meeting was held in QUB in March 2013 to sort through and review the 65 abstracts received from doctoral students North and South and from across nine HE institutions including QUB, UCD, TCD, UU, St Patrick's College of Education, DCU, UL, NUIG and NUIM. Considerable care and attention was given to structuring the presentation sessions into appropriate thematic clusters providing the doctoral students with a very clear understanding of the process of review and selection involved. In total 16 parallel sessions were planned structured under the following themes, itself illustrative of the depth and breadth of research being conducted across the island of Ireland at doctoral level:

- Parental involvement in education
- Research Methodologies
- Pedagogy
- Citizenship
- Inclusive education
- Initial Teacher Education
- Intercultural education
- Shared Education and cross community links
- Critical approaches to educational policy reforms
- Evaluation and interventions
- Curriculum and Assessment
- Digital literacy and life long learning
- Leadership
- Mental health and emotions in education

- Education and younger children
- Assessment in Higher Education
- Continuing professional development
- Rights and Equality in Education

There was considerable liaison between committee members by email in the final period leading up to the conference. A conference brochure with full details of abstracts, delegate information and timetable was developed and professionally printed for circulation in prepared conference packs. Participation in the committee was a considerable learning experience for the students – as they sorted and selected abstracts and organized the layout and timing of the conference itself. The joint nature of the co-operation between the lead institutions also helps to consolidate links that have extended to include other institutions over the years.

The Conference: Sessions, roundtables and Key Note Presentation

The conference was held in the School of Education, UCD on May 17th and 18th, 2013. In addition to the 16 parallel sessions detailed above it also consisted of ten round table sessions – facilitated by colleagues from the School of Education and QUB as well as recent graduates of the Doctoral programme in UCD who had themselves attended the conference as students in previous years. These round tables have emerged as one of the key ways to bring delegates together in mixed groups interacting and connecting around shared concerns and challenges in completing their PhD. Themes covered in these sessions and based on preferences indicated prior to the conference by delegates and included:

- How to get published
- Academic writing
- Preparing for the viva
- What to expect from your supervisor
- Ethics in educational research
- Researching in the field – challenges

The key note was address delivered by Professor Martin Mills from the University of Queensland, Australia. His research interests include the sociology of education, social justice in education, alternative schooling, gender and education, school reform and new pedagogies. The title of his address was “Building Inclusive School Communities: Learning From The Margins” and was very well received, giving rise to lively discussion for 30 minutes afterwards. Prof. Mills had attended many of the presentations and referred to these during his keynote, as appropriate. That was a wonderful validation to the students themselves and something they commented on subsequently during conference feedback. These discussions were also carried through during the wine reception and into the conference dinner where again Prof. Mills engaged and interacted with the students.

The Conference: An Academic and Social Event

Throughout the conference time was scheduled in for regular breaks over tea, coffee and tray bakes. As in previous years, this proved to be a valuable opportunity to chat informally to fellow delegates about the everyday experiences of life as a doctoral student. The poster display was situated in the same space and again provided a good template for discussion. The atmosphere during these coffee breaks was particularly noted as being friendly, welcoming and relaxed, and the feedback from delegates has been almost unanimously positive on their value for setting the atmosphere of the conference as a whole.

On the Friday afternoon of the conference following the key note speech, a wine and cheese reception, sponsored by the host school UCD, was provided for all delegates. This was an extremely well attended and much enjoyed part of the day. Feedback received noted the great atmosphere and opportunity to get to know fellow delegates during this part of the conference. The conference dinner in a local hotel also provided an important social networking venue, enabling colleagues and students to expand on earlier connections and conversations, and to form new friendships. Live music was provided by Phyllis Clegg – a doctoral student in UCD – and her country and western band. It proved to be an extremely successful evening with many new links being made and in-depth discussions had, as well as plenty of fun and laughter.

Feedback on the conference

As in previous years feedback was obtained through follow up contact with delegates two weeks after the conference. The majority of the delegates found the roundtable sessions useful, describing it as participative, engaging and informative. The keynote address was also enthusiastically commented upon as was Prof Mills' availability to talk and mingle with students for the remainder of the evening and at the conference the following morning. In addition delegates commended the smooth level of organisation of the conference, the positive and constructive feedback received during presentations and the spirit of collegiality and support that permeated the event. For many this was the conference where they felt most comfortable trying out (for many for the first time) their ideas and presentation skills in an environment where that was encouraging and relaxed. They also enjoyed obtaining an overview of the type of research that was being conducted at Doctoral level North and South and identifying many of the similar challenges that existed across both jurisdictions. A number of students commented that attendance at the conference had given them the confidence to keep going – and many found the interaction with students at a later stage of their PhD, or who had recently completed their studies to be an important reference point and source of inspiration for their own work ahead. Students found the travelling to and from the hotel – which was located in Stillorgan a little awkward and would have preferred a restaurant option rather than the hotel itself for the conference dinner.

North/South Student Teacher Exchange 2014

The 2013-2014 North-South Student Exchange Project involved eleven students from four colleges of education: Stranmillis University College, Belfast; St Mary's University College, Belfast; St Patrick's College, Drumcondra, Dublin; Church of Ireland College of Education, Dublin.

The participating student teachers spent three weeks in colleges of education and on school placements in the other jurisdiction. Students completed their exchange between Monday 17 March 2014 and Friday 4 April 2014. The Southern students were hosted and accommodated by Stranmillis University College in Belfast. The Northern students were hosted and accommodated by Church of Ireland College of Education, Dublin.

It is good to be able to report that this year's North/South Student Teacher Exchange once more offered student teachers from colleges in Belfast and Dublin the opportunity to carry out their teaching practice placements in primary schools in 'the other jurisdiction'. This exchange initiative has been in place for 11 years, and has been an unequivocal success in each year of its operation. Great tribute is due to those who contribute to its success. These include the cooperating colleges and their Directors of Teaching Practice, the personnel from The Centre for Cross Border Studies in Armagh, and of course the participating student teachers. Teaching Practice represents a vital component of a student teacher's professional development. Students and their tutors alike, place great emphasis on its centrality in the overall programme of education studies. It is a courageous decision for students to opt to carry out this practical component of their undergraduate studies in an unfamiliar environment. It would be much easier to work supported by customary props, but yet, year on year, students from the participating colleges in Dublin and Belfast choose to make the leap into a new setting. For that they deserve admiration.

The findings from this year's cohort of exchange students match very much those of previous years. In general terms, students were of the view that they learned a lot about the education system in the host jurisdiction. They were able to comment with confidence on areas of similarity and of difference in the curricula north and south. They also noted different emphases on certain strands of the curricula and on the allocation of times to various subject areas. Students debated the merits of each system and showed a critical awareness in doing so. The thematic approach in the northern system was of appeal to the southern students as was the attention to literacy and numeracy. Northern students working in Dublin found that the areas of Gaeilge and Religious Education took up a lot of time in contrast to the situation in their Belfast schools. The availability of teaching resources and planning time seemed to be more favourable in the north than that experienced by the visiting students in Dublin schools. All students found that the experience made them more self-reliant and independent in ways that gave them an increased sense of professional competence.

At a personal level, the students learned that they could survive very well away from the security of family and college. For many involved in the exchange, the move away represented a 'first', so there was personal discovery and insights gained that were very valued by the students. They wrote about increased confidence and an inner resilience that came through their separation from the habitual and the predictable. This is a gain within the project that should not be underestimated.

At a professional level, students felt that their pedagogic skills had been honed. They referred in particular to the adoption of new approaches to best implement the 'other' curriculum. They also felt that both their time management and pupil management had improved. For northern students the task of teaching a whole day was a challenge, but one that they coped with well, and felt the worth of it in terms of professional development. The students were of the view that pupils north and south differed very little, and that was a source of reassurance to them. Their interactions with their pupils and the staff in their host schools were very satisfying. Students appreciated how welcome they were made to feel in their host schools. Many have tangible plans to keep up the newly created friendships and linkages. They would have liked more out-of-school contact with people, but acknowledged that their day was busy and their evenings filled with preparation, thus limiting the opportunity to interact with the wider community.

There were some practical suggestions on how the exchange could be improved. More pre-teaching observation and more detailed clarification about on-the-job expectations would have been helpful. Also deemed to be of benefit would have been some discussion with students in the colleges who had been involved in the exchange in earlier years. Closer attention to travel and accommodation was mentioned by a few students as an area where improvement could occur.

All in all, there was a high level of satisfaction with the 2014 exchange. It was stated clearly that the project should continue, as it was 'life-changing' in a very positive sense for the 2014 beneficiaries. The opportunity should be open to others in the years ahead if the resources can be obtained to make the north/south exchange available to future students.

Maeve Martin
Facilitator, Summer 2014

New Research



AND SECTORAL CONFERENCE PROJECTS
FUNDED OR CO-FUNDED BY SCoTENS 2014

Citizenship Education North and South: Learning and Progression

Dr. Lee Jerome, Queen's University Belfast
Dr. John Lalor, Dublin City University

Understanding our subjects and the nature of subject knowledge and progression in learning are essential aspects of Initial Teacher Education but, in the Republic of Ireland and Northern Ireland, as in most areas, models of Citizenship Education (CE) are heavily dependent on the official definitions of citizenship developed by curriculum officials, with varying levels of political control and teacher consultation. Whilst there are networks of teachers bringing together CE teachers (for example the Five Nations network funded by the Gordon Cook Foundation) there has been little work developed by teachers to identify a comprehensive model of what it is that CE teachers actually do in the classroom and what young people do (and should) learn in the subject. We believe this makes CE particularly vulnerable to political influence and that it can become a repository for wider social policy concerns. Whilst there is always a need to identify a form of CE that suits the context in which it is being taught, this must be balanced by a more informed sense of what the core of the subject entails and how young people actually learn citizenship.

In other comparable subjects there have been teacher-led initiatives in the past such as the Humanities Curriculum Project (Stenhouse, 1983), and project CHATA (Lee & Ashby, 1987), which identify key concepts, skills, questions and areas of factual knowledge that together comprise the 'subject lens' that young people can apply to think about the world from a particular perspective. This project would begin to develop such a model for CE, focusing on what is distinctive about seeing the world as a citizen, and thus developing a clear model for how teachers structure their teaching and how young people learn in CE. This will facilitate a discussion about attainment and progression within the subject as a school subject, and help to further distinguish CE from citizenship, as a political construct.

This small project is intended to generate a working model to underpin a larger scale research project, and as such we anticipate it will enable us to pilot a methodology and yield some initial working models for conceptual and skills progression.

SCoTENS grant awarded £5994

Reconceptualising school placement as part of Initial Teacher Education in Ireland, North and South: the role of specialist school placement.

Ms. Dolores McDonagh, St. Angela's College, Sligo

Dr. Jackie Lambe, University of Ulster

Dr. Pauline Kerins, St. Angela's College, Sligo

Dr. Deirdre Harvey, St. Angela's College, Sligo

While the development of positive attitudes towards inclusion is regarded an important part of Initial Teacher Education (ITE) programmes (Norwich & Nash, 2008), it has been argued that preparation for inclusion is often inadequately addressed (Winter, 2006). In its document, Policy on the Continuum of Teacher Education (2011), the Teaching Council (TC) identifies inclusion as a current educational priority and states that ITE programmes should provide newly qualified teachers with a set of competencies in this regard. In Northern Ireland (NI), a policy of inclusion is underpinned by the Special Educational Needs and Disability Order (SENDO, 2005), and ITE providers are required to prepare teachers for the development of more inclusive classrooms (Lambe & Bones, 2008).

School placement is a critical part of ITE programmes and plays a key role in the development of knowledge, skills and competencies (TC, 2013; Lawson, Norwich & Nash, 2013). The TC has called for the development of "new and innovative school placement models" (TC, p. 3, 2013) as part of a reconceptualisation of school placement. There is evidence to suggest that experiences of school placement can influence attitudes towards inclusion (Lambe & Bones, 2008; O'Toole & Burke, 2013). In NI, Lambe & Bones' (2006; 2008) study of the impact of special school placement on student teacher beliefs about special education indicated that, while placement in a special school setting did influence attitudes, some of these were expressed by participants in a negative sense. The proposed study hopes to build on these findings, North and South.

The aim of this study is to investigate student teachers' attitudes towards inclusion and their perceptions of competence in meeting the needs of students with SEN, before and after teaching placement in a specialist setting, on concurrent and consecutive ITE programmes for post-primary teachers, North and South.

SCoTENS grant awarded £5000

Video In STEM Teacher Assessment

Dr. John McCullagh, Stranmillis University College Belfast
Prof. Colette Murphy, Trinity College Dublin

This project seeks to explore the affordances provided by the use of video and in particular, re-evaluate the value of micro-teaching as a valuable form of pedagogy within Initial Teacher Education. Although the value of students watching video recordings of their own teaching has been long established the potential for video to enhance practice and nurture a positive disposition towards the challenging notion of reflective practice is not always fully realised within current teacher education programmes at both pre and in-service level. This is especially the case regarding the use of micro-teaching where there may prevail a belief that this activity lacks authenticity and the focus is too narrowly focussed on the more technical aspects of teaching. Our pilot research conducted independently at Stranmillis University College Belfast and Trinity College Dublin indicates that the considerable benefits arising out of even a brief experience of micro-teaching extend beyond actual classroom teaching to planning, evaluation and critical reflection. Data from questionnaires and semi-structured interviews suggest that micro-teaching attends to both the cognitive and affective domains of learning to be a teacher and, crucially provides a rich context to facilitate meaningful and purposeful collaboration. Our data also indicate that these micro-teaching activities continue to add value to subsequent learning experiences. Crucial to the learning outcomes from a micro-teaching activity is how it is designed and managed by the teacher educators involved. Our project aims to seek direct evidence for student learning and examine exactly what are the features of micro-teaching which contribute to effective learning; what is the most effective way to bring this about; what does this tell us about the process of learning how to teach? The project also aims to include peer teacher educators from both institutions and representatives from the GTCNI (NI) and the Teaching Council (RoI) in order to further disseminate the project outcomes.

SCoTENS grant awarded £4286

RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE AREAS OF SPECIAL EDUCATION AND INCLUSION				
No	Title	Date	Author/Organiser Project leaders	Institutions
1	Special Education Needs and Initial Teacher Education in Ireland	2003-2004	Mr Hugh Kearns	Stranmillis University College, Belfast Trinity College Dublin
2	Preliminary evaluation of a teaching package for children with Profound and Multiple Learning Difficulties	2003-2004	Dr Jean Ware Dr Colette Gray	St Patrick's College Drumcondra Stranmillis University College
3	Together Towards Inclusion: a toolkit for trainers (1)	2004-2005	Ms Mary Yarr Ms Barbara Simpson Prof. David Little	Southern Education & Library Board Trinity College Dublin Trinity College Dublin
4	Teacher Education for Special Educational Needs in the North and South of Ireland	2005-2006	Mr Hugh Kearns Dr Michael Shevlin	Stranmillis University College Trinity College Dublin
5	Together Towards Inclusion: a toolkit for trainers (2)	2005-2006	Ms Mary Yarr Ms Barbara Simpson Prof. David Little	Southern Education & Library Board Trinity College Dublin Trinity College Dublin
6	The Professional Development Needs of teachers working in Special Educational Needs	2008	Ms Elizabeth O'Gorman Ms Mairin Barry Professor Sheelagh Drudy Ms Eileen Winter Dr Ron Smith	College Dublin University College Dublin University College Dublin Queen's University Belfast Queen's University Belfast
7	Consulting pupils on the assessment and remediation of their Specific Literacy Difficulties	2008-2009	Ms Louise Long Dr Michael Shevlin	St Mary's University College, Belfast Trinity College Dublin

8	Student Teachers' perceptions of their competence to meet the needs of pupils with Autistic Spectrum Disorder in mainstream primary schools	2008-2009	Ms Mary Greenwood Dr Patricia Daly Ms Anne O'Byrne	St Mary's University College Mary Immaculate College, Limerick Mary Immaculate College
9	Facing Autism Ireland Conference	2009-2010	Dr Karola Dillenburger Dr Geraldine Leader	Queen's University Belfast NUI Galway
10	Conference: Dyslexia, Literacy and Inclusion	2009-2010	Ms Louise Long Dr Therese McPhillips	St Mary's University College St Patrick's College, Drumcondra
11	Development of North/South cast studies identifying key features of good practice in the teaching of pupils from ethnic minorities	2009-2010	Mr Ken Wylie Dr Mark Morgan	Stranmillis University College St Patrick's College, Drumcondra
12	Dyslexia in Ireland: Views regarding the provision for pupils with dyslexia since the publication of the Task force Reports, North and south (2002)	2013-2014	Dr Therese McPhillips Dr Ann Marie Casserly Mrs Donna Hazzard Mrs Gillian Beck Dr Bairbre Tiernan	St Patrick's College, Drumcondra St Angela's College, Sligo St Mary's University College Stranmillis University College St Angela's College, Sligo
13	Reconceptualising school placement as part of Initial Teacher Education in Ireland, North and South: the role of specialist school placement.	2014-2015	Ms. Dolores McDonagh Dr. Jackie Lambe Dr. Pauline Kerins Dr. Deirdre Harvey	St. Angela's College, Sligo University of Ulster St. Angela's College, Sligo St. Angela's College, Sligo

RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE AREA OF CITIZENSHIP AND DIVERSITY

No	Title	Date	Author/Organiser Project leaders	Institutions
14	North/South Conference on Education for Diversity and Citizenship (1)	2003-2004	Ms Una O'Connor Mr Gerry Jeffers	University of Ulster NUI Maynooth

RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE AREAS OF SPECIAL EDUCATION AND INCLUSION

No	Title	Date	Author/Organiser Project leaders	Institutions
15	North/South Conference on Education for Diversity and Citizenship (2)	2005-2006	Ms Una O'Connor Mr Gerry Jeffers	University of Ulster NUI Maynooth
16	Bringing School Communities together to promote education for diversity	2007-2007	Dr Ron Smith Prof. Keith Sullivan	Queen's University Belfast NUI Galway
17	Inclusion and Diversity Service post primary initiative	2008-2009	Ms Mary Yarr Ms Barbara Simpson	NEELB Trinity College Dublin

RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE AREA OF TECHNOLOGY AND MATHS

No	Title	Date	Author/Organiser Project leaders	Institutions
18	Current Practice in ICT within teacher education	2005-2006	Dr Roger S P Austin Ms Deirdre Graffin Dr Paul Conway Dr Joe O'Hara	University of Ulster University of Ulster University College Cork Dublin City University
19	Measuring the value of Education Technologies in Ireland North and South (MVET – Ireland)	2008-2009	Dr Conor Galvin Prof John Gardner	University College Dublin Queen's University Belfast
20	A cross-border comparison of student teachers' identities relating to Mathematics	2008-2009	Dr Patricia T Eaton Dr Maurice O'Reilly	Stranmillis University College St Patrick's College, Drumcondra
21	Evaluation of the implementation of Realistic Mathematics Education (RME) within primary schools in the North and South of Ireland	2010-2011	Dr Pamela Moffett Dr Dolores Corcoran	Stranmillis University College St Patrick's College, Drumcondra

RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE AREA OF TECHNOLOGY AND MATHS				
No	Title	Date	Author/Organiser Project leaders	Institutions
22	An exploration of mathematical identity using narrative as a tool (MINT)	2011-2012	Dr Maurice O'Reilly Dr Patricia Eaton	St Patrick's College, Drumcondra Stranmillis University College
23	Early number concepts: Key vocabulary and supporting strategies	2011-2012	Dr Ann Marie Casserly Dr Bairbre Tiernan Dr Pamela Moffett	St Angela's College, Sligo St Angela's College, Sligo Stranmillis University College
24	Navigating the Continuum: from student teacher to professional practitioner	2013-2014	Dr Fionnuala Waldron Dr Richard Greenwood Dr Maeve Liston	St Patrick's College, Drumcondra Stranmillis University College Mary Immaculate College, Limerick
25	The Programming Studio	2013-2014	Dr Pamela Cowan Dr Elizabeth Oldham Dr Ann Fitzgibbon	Queen's University Belfast Trinity College Dublin Trinity College Dublin
26	Video In Stem Teacher Assessment	2014-2015	Dr John McCullagh Prof. Colette Murphy,	Stranmillis University College Trinity College Dublin
RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE PEDAGOGY OF SCIENCE, HISTORY AND GEOGRAPHY				
No	Title	Date	Author/Organiser Project leaders	Institutions
27	All-Ireland survey of student perceptions of History, Geography and Science (1)	2004-2005	Dr Colette Murphy Ms Fionnuala Waldron	Queen's University Belfast St Patrick's College, Drumcondra
28	All-Ireland survey of student perceptions of History, Geography and Science (2)	2005-2006	Dr Colette Murphy Ms Fionnuala Waldron Dr Janet Varley	Queen's University Belfast St Patrick's College, Drumcondra St Patrick's College, Drumcondra

RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE PEDAGOGY OF SCIENCE, HISTORY AND GEOGRAPHY				
No	Title	Date	Author/Organiser Project leaders	Institutions
29	All-Ireland survey of student perceptions of History, Geography and Science (3)	2006-2007	Ms Susan Pike Mr Richard Greenwood	St Patrick's College, Drumcondra Stranmillis University College
30	Conference on findings of all-Ireland survey of student perceptions of History, Geography and Science	2008-2009	Ms Colette Murphy Mr Neil O'Conaill Ms Susan Pike	Queen's University Belfast Mary Immaculate College St Patrick's College, Drumcondra
31	Teaching controversial history: a symposium on the teaching of 1916 and the battle of the Somme	2011-2012	Dr Fionnuala Waldron Dr Pauric Travers Dr Alan McCully	St Patrick's College, Drumcondra St Patrick's College, Drumcondra University of Ulster
32	Science enhancement and learning through exchange and collaboration among teachers (SELECT)	2011-2012	Dr John McCullagh Dr Colette Murphy Dr Cliona Murphy Mr Greg Smith	Stranmillis University College Queen's University Belfast St Patrick's College, Drumcondra St Patrick's College, Drumcondra
33	Teaching Political History at Primary level	2013-2014	Dr Fionnuala Waldron Dr Alan McCully	St Patrick's College, Drumcondra University of Ulster
RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE AREA OF TEACHER EDUCATION				
No	Title	Date	Author/Organiser Project leaders	Institutions
34	North/South Directors of Teaching Practice Study Group	2004-2005	Mr Paraig Cannon Ms Sandra McWilliams Ms Margaret Farrar	Coláiste Mhuire, Marino Stranmillis University College Church of Ireland College of Education, Dublin

RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE AREA OF TEACHER EDUCATION				
No	Title	Date	Author/Organiser Project leaders	Institutions
35	Diversity in Early Years Education North and South: Implications for teacher education	2005-2006	Dr Barbara McConnell Dr Philomena Donnelly Ms Louise Quinn	Stranmillis University College St Patrick's College, Drumcondra Stranmillis University College
36	North-South Conference on initial teacher education: The Competences Approach to Teacher Professional Development	2005-2006	Mr Barry Burgess Dr Andy Burke Ms Claire Connolly Ms Rose Dolan	University of Ulster St Patrick's College, Drumcondra St Mary's University College NUI Maynooth
37	Developing Reflective Skills in Student Teachers	2006-2007	Dr Gerry MacRuairc Dr Juidith Harford Mr Dermot MacCartan	University College Dublin University College Dublin St Mary's University College
38	Cross border exploration of CPD needs of heads of year in a sample of comprehensive and integrated schools	2006-2007	Mr Patrick McNamara Prof. Tom Geary Ms Caryl Sibbett	University of Limerick University of Limerick Queen's University Belfast
39	School based work in the North and South of Ireland: a review of policy and practice	2006-2007	Dr Brian Cummins Ms Bernadette Ni Aingleis	Stranmillis University College St Patrick's College, Drumcondra
40	A study of work based learning models and partnerships in support of post-compulsory programmes of teacher education	2008-2009	Prof. Gerry McAleavey Mrs Celia O'Hagan Mr Walter Bleakley Ms Sylvia Alexander Mr Harry McCarry Dr Ted Fleming	University of Ulster University of Ulster University of Ulster Belfast Metropolitan College NUI Maynooth
41	Peer Mentoring in post-compulsory teacher education	2009-2010	Ms Celia O'Hagan Dr Ted Fleming	University of Ulster NUI Maynooth

RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE AREA OF TEACHER EDUCATION				
No	Title	Date	Author/Organiser Project leaders	Institutions
42	Directors of Teaching Practice research group for CPD for teacher practice supervisors	2010-2011	Ms Claire Connolly Mr Séamie Ó Néill	St Mary's University College Froebel College of Education
43	Comparative study into further education North and South: towards a framework for FE teaching qualifications	2010-2011	Mrs Celia O'Hagan Prof. Gerry McAleavey Ms Violet Toland Dr Jennifer Cornyn Dr Ted Fleming	University of Ulster University of Ulster University of Ulster University of Ulster NUI Maynooth
44	Understanding the potential for capacity-building in Initial Teacher Education programmes. North and South: a baseline comparative study, Phase 1	2010-2011	Dr Jim Gleeson Dr Ruth Leitch Dr Ciaran Sugrue	University of Limerick Queen's University Belfast Cambridge University
45	Assessment in teacher education north and south (ATENS)	2011-2012	Dr Tracey Connelly Dr Geraldine Magennis	University College Cork St Mary's University College
46	Teachers' views on the factors influencing their professional development: perceptions, experiences and motivation	2011-2012	Dr Helen O'Sullivan Dr Barbara McConnell Dr Dorothy McMillan	Trinity College Dublin Stranmillis University College Stranmillis University College
47	Developing effective mentor pedagogies to support pre-service teacher on teaching practice	2012-2013	Ms Fiona Chambers Mr Walter Bleakley Prof Kathleen Armour	University College Cork University of Ulster University of Birmingham

RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE AREA OF TEACHER EDUCATION

No	Title	Date	Author/Organiser Project leaders	Institutions
48	Managing early years inclusive transition practice	2012-2013	Dr Colette Gray Ms Anita Prunty Dr Anna Logan Dr Geraldine Hayes	Stranmillis University College St Patrick's College, Drumcondra St Patrick's College, Drumcondra St Patrick's College, Drumcondra
49	3 PLY- Exploring the potential for transformative workplace learning for and by teachers	2013-2014	Dr Annelies Kamp Ms Dorothy Black	Dublin City University University of Ulster

RESEARCH AND CONFERENCE PROJECTS FUNDED IN THE AREA OF LANGUAGE LEARNING

No	Title	Date	Author/Organiser Project leaders	Institutions
50	English as an Additional Language in undergraduate teacher education programme in Ireland	2008-2009	Mr Frank Quinn Mr Martin Hagan Dr Anne Ryan	St Mary's University College St Mary's University College Marino Institute of Education, Dublin
51	North-South Language Educators Conference	2008-2009	Dr Eugene McKendry Mr Patrick Farren	Queen's University Belfast NUI Galway
52	The spoken Irish of pupils in Irish-Medium Schools	2009-2010	Mr Pádraig Ó Duibhir Ms Jill Garland	St Patrick's College, Drumcondra St Mary's University College
53	Lift off Literacy programme for the Irish-Medium School	2009-2010	Dr Gabrielle Nig Uidhir Sr Elizabeth Connolly	St Mary's University College Monaghan Education Centre
54	Threshold concepts in language teacher education	2012-2013	Dr Anne Devitt Dr Eugene McKendry	Trinity College Dublin Queen's University Belfast

RESEARCH AND CONFERENCE PROJECTS FUNDED IN OTHER AREAS				
No	Title	Date	Author/Organiser Project leaders	Institutions
55	Art and Science in Education: Moving towards creativity	2006-2007	Mr Ivor Hickey Ms Deirdre Robson Mr Donal O'Donaghue	St Mary's University College St Mary's University College Mary Immaculate College
56	Building Effective Science Outreach Strategies North and South	2006-2007	Dr V McCauley Dr C Domegan Dr Kevin Davison Dr Sally Montgomery Ms Eileen Martin Ms Emma McKenna Dr Billy McClure Dr Ruth Jarman	NUI Galway NUI Galway NUI Galway W5 Interactive Discovery Belfast Queen's University Belfast Queen's University Belfast Queen's University Belfast Queen's University Belfast
57	Social Justice Education in Initial Teacher Education: a cross border perspective	2006-2007	Dr Marie Clarke Dr Audrey Bryan Prof Tony Gallagher Dr Margaret Reynolds Dr Ken Wylie	University College Dublin University College Dublin Queen's University Belfast St Mary's University College Stranmillis University College
58	Investigation into the experiences of primary school teachers with regard to their teaching of healthy eating guidelines within the curriculum	2008-2009	Ms Elaine Mooney Ms Eileen Kelly-Blakeney Ms Amanda McCloat Ms Dorothy Black	St Angela's College, Sligo St Angela's College, Sligo St Angela's College, Sligo University of Ulster
59	Building North-South links in whole college initiatives in global justice education	2008-2009	Mr Brian Ruane Dr Gerard McCann	St Patrick's College, Drumcondra St Mary's University College

RESEARCH AND CONFERENCE PROJECTS FUNDED IN OTHER AREAS				
No	Title	Date	Author/Organiser Project leaders	Institutions
60	Contribution of Primary School Physical Education to health enhancing physical activity	2009-2010	Dr David McKee Dr Elaine Murtagh	Stranmillis University College Mary Immaculate College, Limerick
61	Developing all-Ireland research capacity in Arts-based Educational Research	2009-2010	Dr Ruth Leitch Ms Shelley Tracey Ms Caryl Sibbett Dr Mary Shine Thompson	Queen's University Belfast Queen's University Belfast Queen's University Belfast St Patrick's College Drumcondra
62	Digitisation of three volumes of Irish Education Documents	2009-2010	Prof Áine Hyland Prof Tony Gallagher	Church of Ireland College of Education, Dublin Queen's University Belfast
63	Sixth form/sixth year religion in Northern Ireland and Republic of Ireland	2009-2010	Dr Andrew McGrady Dr Christopher Lewis	Mater Dei Institute of Education University of Ulster
64	Disablist Bullying: an investigation into teachers' knowledge and confidence	2010-2011	Dr Noel Purdy Dr Conor McGuckin	Stranmillis University College Trinity College Dublin
65	Images and Identity (collaborative art and design education project within teacher education)	2010-2011	Ms Dervil Jordan Dr Jacqueline Lambe	National College of Art and Design University of Ulster
66	Effective Mentoring within Physical Education Teacher Education	2010-2011	Dr Fiona Chambers Mr Walter Bleakley	University College Cork University of Ulster

RESEARCH AND CONFERENCE PROJECTS FUNDED IN OTHER AREAS				
No	Title	Date	Author/Organiser Project leaders	Institutions
67	Exploring Japanese Research Lesson Study (RLS) as a model of peer to peer professional learning	2010-2011	Prof John Gardner Mr Gerard Devlin Dr Debie Galanouli Dr Mary Magee Ms Kathryn McSweeney	Queen's University Belfast Queen's University Belfast Queen's University Belfast St Angela's College, Sligo St Angela's College, Sligo
68	Children exposed to Domestic Abuse: helping student teachers understand their role in a primary school setting	2010-2011	Dr Bronagh McKee Dr Stephanie Holt	Stranmillis University College Trinity College Dublin
69	Exploring and developing spaces among adult education practitioners for online and arts based reflection	2011-2012	Ms Shelley Tracey Mr Jim Mullan Ms Irene Bell Ms Geraldine Mernagh Ms Margaret McBrien	Queen's University Belfast Queen's University Belfast Stranmillis University College Waterford IT Waterford IT
70	A critical analysis of north-south educational partnerships in development contexts	2011-2012	Prof Peadar Cremin Prof Peter B Finn	Mary Immaculate College St Mary's University College
71	Spiritual education: new challenge, new opportunity	2011-2012	Dr Anne O'Gara Dr Bernadette Flanagan Mr James Nelson	Marino Institute of Education, Dublin Marino Institute of Education Stranmillis University College

RESEARCH AND CONFERENCE PROJECTS FUNDED IN OTHER AREAS				
No	Title	Date	Author/Organiser Project leaders	Institutions
72	Writing as a professional development activity in ITE	2011-2012	Ms Rose Dolan Dr Judith Harford Mr Billy McClune	NUI Maynooth University College Dublin Queen's University Belfast
73	Nuns in education, North and south: historical sources and interpretations on Sacred Heart convent schools	2012-2013	Dr Deirdre Raftery Dr Michéal Mairtín	University College Dublin St Mary's University College
74	Cyber-bullying and the law: What schools know and what they really need to know	2012-2013	Dr Noel Purdy Dr Conor McGuckin	Stranmillis University College Trinity College Dublin
75	The creative education infrastructure of Ireland	2012-2013	Dr Patrick Collins Prof. Nola Hewitt-Dundas	NUI Galway Queen's University Belfast
76	Creative Classrooms: Insights from imaginative and innovative teaching in Ireland North and South	2013-2014	Dr Anne McMorrough Dr Nicola Marlow	Marino Institute of Education University of Ulster
77	Addressing fundamental movement skill training: Learning to move, moving to learn	2013-2014	Dr Susan Crawford Dr David McKee	University College Cork Stranmillis University College
PROMOTION AND DISSEMINATION OF RESEARCH				
No	Title	Date	Author/Organiser Project leaders	Institutions
78	Irish Association of Social Scientific and Environmental Education (IASSEE) Conference (1)	2003-2004	Dr Janet Varley Dr Colette Murphy	St Patrick's College, Drumcondra Queen's University Belfast
79	Educational Studies of Ireland(ESAI)/British Education Research Association (BERA) joint conference (1)	2004-2005	Mr Denis Bates Prof John Gardner	University of Limerick Queen's University Belfast

PROMOTION AND DISSEMINATION OF RESEARCH				
No	Title	Date	Author/Organiser Project leaders	Institutions
80	IASSEE Conference (2)	2004-2005	Dr Janet Varley Dr Colette Murphy	St Patrick's College, Drumcondra Queen's University Belfast
81	ESAI and BERA joint conference (2)	2005-2006	Dr Anne Lodge Prof John Gardner	NUI Maynooth Queen's University Belfast
82	Doctoral Research in Education North and South conference – links, challenges and opportunities (1)	2008-2009	Dr Dympna Devine Prof Jeanette Ellwood	University College Dublin Queen's University Belfast
83	Doctoral Research in Education North and South conference – links, challenges and opportunities (2)	2009-2010	Dr Caitlin Donnelly Dr Dympna Devine	Queen's University Belfast University College Dublin
84	Cross-border conference on Integration of Academic and Personal Learning in Post-Primary Religious Education	2010-2011	Mr Vincent Murray Mr Norman Richardson	St Angela's College, Sligo Stranmillis University College
85	Doctoral Research in Education North and South conference – links, challenges and opportunities (3)	2010-2011	Dr Caitlin Donnelly Dr Dympna Devine	Queen's University Belfast University College Dublin
86	Cross Border Conference for Promoting Doctoral Research in Education: Expanding the horizons of Doctoral Research in Education: Comparing, Adapting, Advancing	2012-2013	Dr Patrick Walsh Dr Dympna Devine	Queen's University Belfast University College Dublin

PROMOTION AND DISSEMINATION OF RESEARCH				
No	Title	Date	Author/Organiser Project leaders	Institutions
87	All Ireland Doctoral Student Research Conferene	2013-2014	Dr Dympna Devine Professor Jannette Elwood	University College Dublin Queen's University Belfast

Published Reports

No	Title	Date	Edited by Authors and/or editors
1	SCoTENS Annual Report	2003	Andy Pollak and Patricia McAllister
2	SCoTENS Annual Report	2004	Andy Pollak and Patricia McAllister
3	Teacher Education for Citizenship in Diverse Societies: Conference and annual reports	2005	Andy Pollak and Patricia McAllister
4	Teacher Education and Schools: Together towards improvement: Conference and annual reports	2006	Andy Pollak and Patricia McAllister
5	Together Towards Inclusion: Toolkit for Diversity in the Primary School (published out of SCoTENS project by Southern Education and Library Board and Integrate Ireland Language and Training	2007	Mary Yarr, Barbara Simpson and David Little
6	The Competences Approach to Teacher Professional Development: Current Practice and Future Prospects	2007	Rose Dolan and Jim Gleeson,
7	Teaching in the Knowledge Society: Conference and annual reports	2007	Andy Pollak and Patricia McAllister
8	Education for Citizenship and Diversity in Irish Contexts (published out of SCoTENS conference report by Institute of Public Administration, Dublin)	2008	Una O'Connor and Gerry Jeffers

No	Title	Date	Edited by Authors and/or editors
9	A review of Science Outreach Strategies, North and South	2008	Kevin Davison, Veronica McCauley, Christine Domegan, William McClune, Eileen Martin & Emma McKenna, Sally Montgomery
10	School Leadership Policy and Practice, North and South: Conference and annual reports	2008	Andy Pollak and Patricia McAllister
11	Becoming a Teacher: Primary Student Teachers as learners and teachers of History, Geography and Science – an all-Ireland study	2009	Fionnuala Waldron, Susan Pike, Richard Greenwood, Cliona Murphy, Geraldine O'Connor, Anne Dolan, Karen Kerr,
12	Professional Development for Post-Primary Special Education Needs in Northern Ireland and the Republic of Ireland	2009	Elizabeth O'Gorman, Mairin Barry, Sheelagh Drudy, Eileen Winter, Ron Smith
13	Valuing Education Technology in Schools in Ireland, North and South	2010	Conor Galvin, John Anderson, John Gardner, Anne McMorrough, Stephanie Mitchell, Kathryn Moyle,
14	Reflective Practice: Challenges for Teacher Education North and South: Conference and Annual Report	2010	Andy Pollak and Patricia McAllister
15	Disablist Bullying: an investigation of student teachers' confidence and knowledge	2011	Noel Purdy, Conor McGuckin
16	An investigation into the experiences of primary school teachers with regard to their teaching of healthy eating guidelines within the curriculum	2011	Elaine Mooney, Eileen Kelly-Blakeney, Amanda Mc Cloat, Dorothy Black
17	Teacher Education for Inclusion: Conference and Annual Report	2011	Andy Pollak and Patricia McAllister

No	Title	Date	Edited by Authors and/or editors
18	Three reports for the Standing Conference on Teacher Education North and South (SCoTENS) - Effective mentoring within physical education teacher education; Domestic abuse – using arts based education to help student teachers learn about the context and impact on children; Exploring Japanese lesson study as a model of peer-to-peer professional learning	2012	John Gardner, Debie Galanouli, Gerry Devlin, Mary Magee, Kathryn McSweeney, Mary McHenry, Ita McVeigh, Stephanie Mitchell, Fiona Chambers, Sinead Luttrell, Kathleen Armour, Walter Bleakley, Deirdre Brennan, Frank Herold, Bronagh McKee, Steph Holt
19	Promoting Literacy and Numeracy through Teacher Education: Conference and Annual Reports	2012	Andy Pollak and Patricia McAllister
20	Creative Teachers for Creative Learners: Implications for Teacher Education and Annual Reports	2013	Ruth Taillon and Patricia McAllister
21	The role of research capacity-building in initial teacher education (ITE) in the North and South of Ireland	2013	Dr Jim Gleeson, Dr Ruth Leitch, Dr Ciaran Sugrue, Mr Robin McRoberts
22	Learning Teaching: Reimagining the Future	2014	Ruth Taillon and Eimear Donnelly
23	Supporting the Role of the Supervising Tutor on School Placement	2014	Patricia Slevin, Claire Connolly, Geraldine O'Connor, Gail Eason, Bernadette Ní Áingléis, Neil Ó Conaill, Margaret Farrar and Séamie Ó Néill

This Report was designed by

Leslie Stannage Design
Arbor Building
71-75 Donegall Pass
Belfast BT7 1NR

Tel: 028 9022 4455

Email: info@l-s-d.com

Web: www.l-s-d.com

Report published by The Centre for Cross Border Studies for
The Standing Conference on Teacher Education North and South
(SCoTENS)

Tel: 028 3751 1550 (048 from Republic of Ireland)

Email: eimear.donnelly@qub.ac.uk

Websites: www.scotens.org and www.crossborder.ie