

# Research Newsletter



St Mary's  
University College  
Belfast  
A College of Queen's University

## NEWLY ESTABLISHED RESEARCH CENTRES/GROUPS

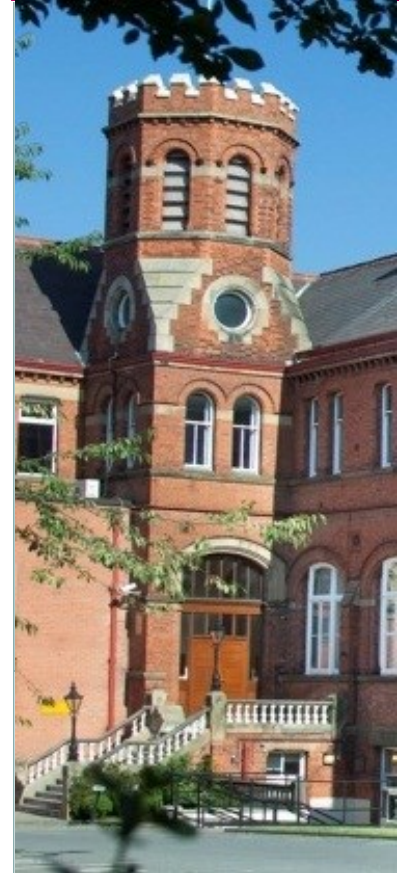
Integrated STEAM education is defined as the interdisciplinary teaching and learning of Science, Technology, Engineering, Art and Mathematics (STEAM). The **STEAM Research Centre (SRC)** promotes the synergy of these areas of learning in an educational context, with the development of resources, concepts of pedagogical practice, reviews and evaluations set within a research-informed and research-driven framework. Its mission is founded on the understanding of the need to enthuse and empower future generations as effective innovators, contributing to the wider society and economy through the study and application of STEAM education.

The **Centre for Curriculum, Pedagogy and Assessment (CCPA)** brings better understanding to the increasing complexity and challenges of teaching and learning at all levels from early years through to higher education. Its aim is to promote a rich and rewarding intellectual environment in which staff, students and partners feel motivated and supported to develop their ideas and advance their thinking and practice. The members are engaged with different aspects of educational practice at local, national and international levels. The research generated is aimed at making a valid contribution towards practice, policy and theory.

The **Centre for Global Justice (CGJ)** is an interdisciplinary forum for research, public dialogue and education on global justice issues. It explores fundamental questions facing us as scholars, citizens and policy-makers, principally aimed at the following concerns: How can we make sense of justice in a global world? How do we understand global issues pertaining to collective life in areas such as culture, economics, education and politics? How do we advance a global justice agenda?

The **Irish-medium Education Research Group (IMERG)** engages in enquiry-led scholarship in the area of Irish-medium education. It undertakes research informed teaching and learning that enriches the student experience on academic programmes. The work of its members is aligned with the College's mission statement and ethos. It supports the College's strategic plan for research development, collaborating with other research centres/groups and contributing to the wider Irish language community.

The **Research Group for Catholic Education (RGCE)** encourages and supports research by members and associates of the College in the field of Catholic education. It focuses, for example, on: the history and culture of Catholic schools; issues of ethos, curricula, leadership and 'effectiveness' of Catholic education, nationally and internationally; and issues relating to social justice, ecumenism and inter-faith dialogue. It has a particular focus on issues relating to Catholic education in Ireland.



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## INTERDISCIPLINARY ART AND SCIENCE: THE CHALLENGES FOR SCHOOLS

Deirdre Robson (SRC) presented a paper at the International Journal of Art & Design Education 2014 Conference under the theme Collaborative Practices in Arts Education. It took place at the Tate Liverpool between the 24<sup>th</sup> – 25<sup>th</sup> October 2014 and the title of the paper was ***Piloting Art Science Collaboration in Secondary Education***. It was based on an Esmée Fairbairn Foundation funded pilot project to explore interdisciplinary teaching and learning of art and science with pupils aged 11-14. It was inspired by: the success of The Leonardo Effect teaching methodology in primary schools; the existing art science collaborations such as STEAM originating from Rhode Island School of Design; projects including Catalytic Clothing by fashion designer Helen Storey and physical chemist Tony Ryan; and an increasing prevalence of incubators for nurturing art science collaborations such as David Edwards' Le Laboratoire in Paris.

The presentation reported on the responses from pupils and teachers to interdisciplinary art and science and the challenges for teachers and school managers. It also focused on whether it is beneficial for the teaching and learning of art via a collaborative approach and whether there is a realistic future for collaborative teaching in secondary education.



Scottish teachers during their training for the SCIART 11-14 pilot

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### RESEARCH ON STEM IN PRIMARY SCHOOLS

Kieran McGeown and Dr Katrina Mulholland (SRC) are part of a team collaborating with researchers from Stranmillis University College Belfast and other members of the College's STEAM Research Centre on a research project titled, ***STEM in Primary Education: The Microbot Project***. The project has been in the planning stages since September 2014 and research will commence in schools in February 2015.

The Microbot Project has been running in primary schools for the past three years in collaboration with Sentinus, a not-for-profit educational charity, which works with schools and colleges throughout Northern Ireland to deliver programmes which promote engagement in STEM. The main research question will focus on the impact on pupils' learning from participating in the STEM oriented Microbot Project. Since STEM education is a priority in the programme of Government, it was considered appropriate that such research should be conducted. The research will involve a series of surveys and observations with pupils in Key Stage 2 classes.

### ADDRESSING GENDER BALANCE FOR SCIENCE EDUCATION

The College has three representatives - Joe Hughes, John Rafferty and Dr Catherine Quinn (SRC) involved in an Erasmus+ funded project titled, ***STEM Teacher Training Innovation for Gender Balance***. It aims to foster quality improvements, innovation excellence and internationalisation in teacher training for Science, Technology, Engineering and Mathematics (STEM) teachers. This will be achieved through enhanced transnational cooperation between schools, science centres, teacher training organisations and policy makers. It will involve universities and science centres from Spain, Denmark, Norway, Northern Ireland, Slovenia, Netherlands, Cyprus and Turkey. The main objective of the project is to raise and share good science education practices for gender balance through innovative teacher training modules.

The partners will implement and design an innovative modular teacher training programme in a toolkit format, so that it will be easily applied and disseminated by all the partners, associated partners and target groups. The project will involve collaboration with local schools and undergraduate teachers to produce relevant resources to address gender diversity and balance in the classroom to support career choice. The main aims of the project will be: to develop, test and publish an innovative professional development programme for teachers; to train educational agents at an institutional level; and to disseminate the toolkit at a European level.

The quality of the project's activities and results will be monitored by evaluating the project using summative as well as formative assessments and providing feedback to the project partners. This will be achieved through research via an independent evaluation of the activities and a project quality evaluation.

## POETRY THAT OFFERS THE POTENTIAL FOR PUPILS TO EXAMINE IDENTITY AND QUESTION ATTITUDES

Dr Brian Hanratty (CCPA) presented a research-based paper at the Reading Association of Ireland 38th Annual Conference in the Marino Institute of Education, Ireland between the 25<sup>th</sup> – 27<sup>th</sup> September 2014. The theme of the conference was Literacy, Texts and Contexts: Looking Towards the Future and the title of Brian's paper was ***Teaching Heaney's 'Troubles' Poetry to Upper-Secondary School Pupils in Northern Ireland's Divided Schools: Some Explorations.***

Brian outlined in the paper that in his essay, 'Among Schoolchildren', the late, great Seamus Heaney articulated an emblematic ideal of education. Heaney argued that: "Educators have ... the duty of explicating the world in which we the citizen lives, the world conditioned by history and politics and cultural heritage". But then Heaney adds, tellingly: "But I would argue that an ampler dimension exists, an ideal of divesting oneself of the world, which is as critically important as the skills for investing in it". That creative tension between facts and the imagination underpinned the argument in Brian's paper, focused as it is both on encouraging pupils to respond to the creative energy in selected 'Troubles' poems but also on using these poems as a catalyst for change. The five key poems Brian used were: 'The Other Side', 'A Constable Calls', 'The Toome Road', 'The Strand of Lough Beg' and 'An Ulster Twilight.' Brian argued that while the choice of poems is somewhat arbitrary and certainly not exclusive – nonetheless, as well as having great intrinsic literary merit, the poems, cover a fascinating spectrum and represent an interesting variety of politico-cultural representatives.

In addition to providing a literary-critical analysis of the five poems, the paper focused on the opportunities which the poems offer, both individually and collectively, for pupils to critically interrogate the identities and allegiances of their respective communities. Brian suggested that the poems indeed present an excellent opportunity for encouraging a cathartic questioning of inherited attitudes and prejudices. Given the continuing sectarianism just below the surface of life in Northern Ireland, these opportunities and questions are anything but merely academic. Finally, the paper also argued that the model of reconciliation through an exploration of relevant literature is one that could be transported to many conflict situations elsewhere.



## HOW STORY DEVELOPS PUPILS' VOCABULARY AND PERCEPTION OF THE WORLD

Catherine Gilliland (CCPA) gave a presentation at the most recent annual conference for the Reading Association of Ireland held in the Marino Institute of Education, Ireland between the 25<sup>th</sup> – 27<sup>th</sup> September 2014. The theme of the conference was Literacy, Texts and Contexts: Looking Towards the Future and the title of Catherine's presentation was ***Tell Children a Story, Show Them the World.*** It explored the role that story has in the development of children's understanding of their world and how central it is to the enhancement of tier three vocabulary. During the presentation Catherine suggested that a child with a wide repertoire of vocabulary across a range of subject areas is at a major literacy advantage. If children do not hear and engage with high quality texts rich in language, they are immediately disadvantaged in their linguistic development. The importance of educators using enhanced vocabulary in their teaching was both emphasised and exemplified during the presentation. There was an emphasis on children's understanding of narrative as key to their confidence and performance in story writing which is undeniably linked to vocabulary and a sense of story. The importance of the use of story organisers was explored in this context. It was a lively and engaging presentation with a variety of high quality children's literature used as the vehicle for exploration of the themes. It concluded with an analysis of the text, 'The Giving Tree' by Shiel Silverstein and modelled how this amazing text can be used to develop vocabulary and thinking through oral language, reading and writing activities.

## THE GTCNI COMPETENCE FRAMEWORK: PROMOTING THE PRACTICE OF CRITICAL REFLECTION

Martin Hagan (CCPA) presented a research paper at the European Educational Research Association Annual Conference held in the University of Porto, Portugal between the 1<sup>st</sup> – 5<sup>th</sup> September 2014. The theme of the conference was The Past, The Present and Future of Educational Research in Europe and the title of Martin's paper was **'Professionalism' and the Governance of Teacher Education: A Northern Irish Perspective**.

In his paper Martin outlined that before the devolution of powers in the late 1990s, the governance of teacher education in Northern Ireland was broadly in line with that in other parts of the UK. Divergence emerged when the strands of neo-liberalism and neo-conservatism which increasingly characterised policy in England and Wales, ensured a move away from a discourse of 'teacher education' towards one of 'teacher training' with

a focus on competence-based approaches. In 2002 the General Teaching Council for Northern Ireland (GTCNI) was established and in 2005, the GTCNI reviewed the existing teacher competences model and what emerged was 'Teaching: The Reflective Profession'. Central to this landmark document was the concept of teaching as a values-based profession underpinned by continuous professional learning and development. Martin's paper examined the extent to which the GTCNI Competence Framework offers a mode of professional governance which promotes critically reflective practitioners and rejects the technical-rational approaches to teacher learning, which are increasingly characteristic of trends in other parts of the UK. It also identified a range of factors: contextual; political; and ideological which mitigate the potential of teacher education in Northern Ireland to develop on the basis of 'active trust' in order to build a world-class system of teacher education.

*“Martin's paper examined the extent to which the GTCNI Competence Framework offers a mode of professional governance which promotes critically reflective practitioners and rejects the technical-rational approaches to teacher learning...”*

### TEACHER EDUCATION SEMINAR SERIES

1 Oct 2014 **STEM and teacher education**. Kieran McGeown (SRC), St Mary's University College

5 Nov 2014 **A walk through time in the Belfast hills**. Dr Des O'Reilly, formerly of St Mary's University College

12 Nov 2014 **Student-centred one-on-one tutoring in writing: a practical approach**. Jonathan Worley (CCPA), St Mary's University College

19 Nov 2014 **Tá nead [ne:d] thuas ar an díon: teaching and learning the pronunciation of the Irish language**. Dr Sean Mac Corraidh (IMERG), St Mary's University College

3 Dec 2014 **Pedagogical strategies for teaching Wordsworth's 'Tintern Abbey'**. Jonathan Worley (CCPA), St Mary's University College

10 Dec 2014 **Joined up thinking – building up a head of STEAM**. Gerry Trainor (SRC), St Mary's University College

17 Dec 2014 **Irish-medium schools: is there a best model?** Dr Gabrielle Nig Uidhir (IMERG), St Mary's University College

21 Jan 2015 **Disablist bullying: a North/South study of student teachers' knowledge and confidence**. Dr Noel Purdy, Stranmillis University College

### EXISTING AND NEW APPROACHES TO THE STUDY OF BORDERS

Dr Angela Vaupel (CGJ) and Dr Tracey McKay (CCPA) are representing the College in a new Erasmus+ funded project titled, **Border Education: Space, Memory and Reflections on Transculturality**. Recognising the close interrelationships between social change and paradigm shifts, the project aims to contribute to the discussion and interpretation of conceptual change in the study of borders by linking it to memory narratives and by adapting the discourse for applied educational environments. Research will focus on the representations of 'borders' in national educational frameworks, Initial Teacher Education (ITE) programmes and cultural media. It will focus on the collection of relevant data that ultimately will lead to an evaluation of existing, and the development of new, approaches regarding the understanding of education on 'borders' which may challenge more traditional, mainly spatial, conceptions.

The project approach is multidisciplinary but anchored in ITE and, by extension to the general field of educational/social sciences, is adopting a bottom-up approach. This means that student and in-service teachers, curricula and textbooks, as well as the collection of border related life-stories/memories will be included in and form the basis of analysis. Both qualitative and quantitative research methods will be employed for project data collection including: a survey in the form of an electronic/computer assisted questionnaire targeted at students on their perceptions of and experience with 'borders'; the establishment of focus groups consisting of students, staff and in-service teachers; and individual case studies by project members.



Erasmus+

## ASSESSMENT OF THE CAMPAIGNING AND OUTCOME OF THE RECENT EUROPEAN ELECTION IN NORTHERN IRELAND

Dr Gerard McCann (CGJ) co-authored a research article with Paul Hainsworth, which was published in the journal *Irish Political Studies* on the 28<sup>th</sup> November 2014. The title of the article is ***The Renewal of Mandates: The 2014 European Election in Northern Ireland***. When summarising the article, the authors outlined that the 2014 European election in Northern Ireland, while containing a greater field of candidates than ever before, returned the three sitting Members of the European Parliament (MEPs) without too much disruption to the status quo. Sinn Féin (SF) topped the poll with their candidate Martina Anderson increasing the party's vote and the Democratic Unionist Party's Diane Dodds came in second with a comfortable margin over the third successful candidate, the Ulster Unionist Party's Jim Nicholson. Following up the three MEPs with challenging performances were the Social Democratic and Labour Party's Alex Attwood and the Traditional Unionist Voice leader Jim Allister. Anderson was new to the European elections and regained the seat for SF with ease, being the only candidate to pass the quota on the first count. The tussle between Nicholson, Attwood and Allister turned out to be more competitive for the third seat with only 7,000 first preference votes separating the three. In the end, it was a result that was largely expected. Drawing upon party political manifestos and leaflets, media coverage and other relevant sources, the report assesses the campaign, outcome and consequences of the 2014 European election in Northern Ireland.



### RESEARCH GRANT AWARD

Dr Birgit Schippers (CGJ) received news of an award in September 2014 for a research grant from the Northern Ireland Community Relations Council to work on a project titled, ***After the War: Identity, Human Rights and Commemoration***. The project involved organising and hosting two public lectures as part of the 2014 Northern Ireland Human Rights Festival. The talks were delivered by Professor Noel Sharkey (University of Sheffield), a leading authority in robotics and artificial intelligence, and Professor Louise Mallinder (Ulster University), an expert in transitional justice and amnesty laws. The lectures received coverage in the local and national media, including BBC Radio Ulster, the Irish News and the Irish Times. An interview was also conducted with Professor Sharkey for NVTV, a local TV station, and will be made available on the NVTV website.

## TWO PAPER PRESENTATIONS AT INTERNATIONAL RESEARCH CONFERENCE

Dr Birgit Schippers (CGJ) attended the International Studies Association (ISA) Annual Convention in New Orleans, USA between the 18<sup>th</sup> – 21<sup>st</sup> February 2015 to present two research papers. The ISA is a most respected and widely known scholarly association in the field of international studies, and the theme of the conference was Global International Relations and Regional Worlds: A New Agenda for International Studies. Birgit's first paper, titled ***Liveable Lives and Grievable Deaths: Theorizing the Body in Global Politics***, aimed to explore the question of how liveability and grievability, framed through ethnic or gendered lenses, are distributed unequally in global contexts. By developing an intertextual reading of Arendt's phenomenology of appearance and Butler's notion of performativity, Birgit planned to delineate liveability and grievability's contribution towards a global theory and politics of embodiment. Her key argument championed the significance of performative interpretations of corporeal politics, as she suggests these constitute important critical resources to challenge the unequal framing of bodies in global politics.

Birgit's second paper, titled ***International Studies and the Widening Participation Agenda in Higher Education***, examined the role of International Studies, specifically the role of the subject curriculum, in the widening participation agenda. Based on a small-scale empirical study conducted on a widening participation programme, the paper asked how students from non-traditional backgrounds engage with International Studies and what role the discipline plays in the social stratification in higher education.

### BOOK REVIEW

Dr Peter Collins (CGJ) carried out a book review published towards the end of 2014 in *Familia: Ulster Genealogical Review*, which is the journal of the Ulster Historical Foundation's membership association – an historical research cooperative, known as the Ulster Genealogical and Historical Guild. The review was of the book ***Locked Out: A Century of Irish Working-Class Life*** edited by David Convery.

## RESEARCH CONFERENCE PRESENTATION

Seán Mac Labhraí (RGCE) made a presentation at Éigse Loch Lao Annual Conference held in the William Conor Lecture Theatre, Belfast Campus at the Ulster University between the 3<sup>rd</sup> – 4<sup>th</sup> October 2014. The theme of the conference was The Literature of Oriel and Seán's presentation was titled, *Pilib Ministir alias Parson Brady: Saol agus Saothar*.

## RESEARCH-BASED CHAPTER PUBLISHED

Dr Seán Mac Corraidh (IMERG) has had a recent chapter featured in the book *Teangeolaíocht na Gaeilge XIII*, edited by A. Ó Corráin and M. Ó Néill, which was published by Uppsala University Press, Sweden. Seán's chapter is titled, *Gnéithe den Ghaeilge a labhair Seán Bán Mac Grianna as Rann na Feirste* and focuses on aspects of lexis, morphology, syntax, phonology and semantics in the Irish of Seán Bán Mac Grianna, a well-known storyteller and songwriter from County Donegal.

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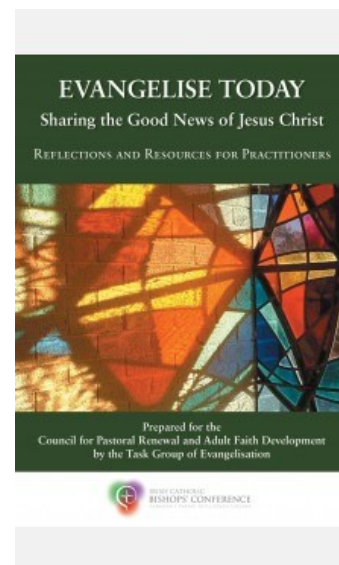
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## TASK GROUP PRODUCES RESOURCE BASED ON RESEARCH TO HELP SHARE THE GOOD NEWS OF JESUS CHRIST

As a member of a task group on evangelisation, Rev Dr Niall Coll (RGCE) contributed to a recent publication with other members for the Council for Pastoral Renewal and Adult Faith Development. It is titled, *Evangelise Today: Sharing the Good News of Jesus Christ* and was published by Veritas Publications in September 2014. In the introduction to the publication, reference is made to its goals which include the framework document on evangelisation supporting the work of bringing to life in practice the vision of Share the Good News. It explores the implications of this vision through the expertise, research and reflection of its members. It is offered as a resource manual for all those involved in the variety of roles envisaged in Share the Good News at every level throughout the Church.



## STAFF PROFILE



Rev Dr Niall Coll (RGCE) joined the College's community of researchers in 2001 and has since produced research publications and presented at research conferences. He lectures in the Religious Studies department and is the current chairperson of the College's Research Group for Catholic Education.

In 2013 Niall had two book chapters published that focused on *Irish identity and the future of Catholicism*, as well as on *Religious pluralism and educational practice in Northern Ireland*. During this same year he had two articles published in *The Furrow*, a journal for the contemporary Church. He is also managing editor of *Le Chéile*, which is a Catholic school ethos journal that seeks to celebrate and promote the values and work of Catholic education locally.

Niall was also involved in various groups that have produced reports based on research for the Irish Inter-Church Committee and the Council for Pastoral Renewal and Adult Faith Development. He delivered conference papers in 2013 and 2014 at, for example, the Annual Diocese of Kilmore Theological Conference and the Annual Conference of the National Primary School Diocesan Advisors. Niall also writes book reviews for such journals as *Doctrine & Life* and *The Furrow*.

Currently, Niall's focus for research is on inter-faith education. He is also editing a volume to mark the 50<sup>th</sup> anniversary of the closing of the Second Vatican Council (1965). Dealing with the scope, impact and future implementation of the Council in Ireland, it will be published this autumn.