

*Report of the Review Panel to the
Teaching Council following a review of
an Initial Teacher Education
programme*

Name of HEI: **University of Galway**

Name of Programme: **Bachelor of Education (Computer
Science and Mathematical Studies)**

Date: 06 January 2023

Publication of this Report

The Teaching Council routinely makes information available to the public in relation to its functions and activities and, in line with that practice, this report will be available on the Council's website, www.teachingcouncil.ie.

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Programme Overview

This report relates to the review of the following programme provided by University of Galway:

Bachelor of Education (Computer Science and Mathematical Studies), hereinafter referred to as ‘the programme’.

Background

Céim: Standards for Initial Teacher Education sets out the standards which programmes of initial teacher education in Ireland must meet in order to gain accreditation from the Teaching Council. It is also a benchmark for anybody seeking to register as a teacher in Ireland.

The Teaching Council’s *Procedures for the Professional Accreditation of Programmes of Initial Teacher Education* (hereinafter referred to as the *Procedures*) sets out the process by which programmes are reviewed.

University of Galway submitted a completed pro forma, toolkits and appendices which mapped the programme against each of the standards outlined in *Céim: Standards for Initial Teacher Education*. The programme was reviewed by the Review Panel following the *Procedures*.

Particular requirements for post-primary programmes

In November 2020, the Council published *The Teaching Council Registration Curricular Subject Requirements (Post-Primary)*, which set out the Council’s revised subject criteria requirements for approved curricular subjects. The requirements may be met through studies incorporated into a concurrent programme of initial teacher education or may be met through undergraduate studies prior to completing a consecutive programme of initial teacher education. This also guides providers of post-primary consecutive programmes in determining suitability of entrants, outlining which curricular subjects, entrants can ultimately be registered to teach, as well as matching students to appropriate methodology modules.

The Review Process

The review of **Bachelor of Education (Computer Science and Mathematical Studies)** at University of Galway took place between May 2022 and December 2022 in accordance with the Council's *Procedures for the Professional Accreditation of Programmes of Initial Teacher Education*.

Notification	The Council notified University of Galway of the Review and accreditation of the Bachelor of Education (Computer Science and Mathematical Studies) on 11 November 2021.
Preliminary Meeting	A preliminary meeting was held between the Council executive staff and University of Galway on 9 December 2021 to provide an overview of the submission documentation and answer queries from University of Galway.
Submission	University of Galway submitted the proforma and supporting documentation for the Bachelor of Education (Computer Science and Mathematical Studies) on 03 June 2022.
Desk-based Review	A desk-based review was conducted by the Council staff and a letter requesting clarifications was sent to University of Galway on 27 June 2022. University of Galway submitted their response on 09 September 2022.
Appointment of Review Panel	The process was formally initiated when the Review Panel (hereinafter referred to as 'the panel') was appointed by the Teaching Council's acting director, with Professor Sheelagh Drudy as Chairperson and Professor Jim Gleeson and Dr Seán Ó Coighligh as panel members. The panel was briefed by Teaching Council staff.
Rapporteur	<p>The review panel was supported by Jean Harrington in their role as a rapporteur.</p> <p>The Rapporteur's functions included liaison with University of Galway, maintaining records of meetings and drafting and finalising the panel's report in conjunction with the panel Chairperson. The panel was also supported in its deliberations by external subject experts and by the Director of the Teaching Council and their executive staff nominees.</p>

Review panel meeting 1	The panel met on 19 October 2022 to consider the submission. They requested clarifications from University of Galway on 26 October 2022. University of Galway responded to this request on 11 November 2022.
Engagement with the HEI	<p>The Panel Chair and Rapporteur held a pre-meet with the Head of School of Education and the Head of Discipline of Education on 17 November 2022 to discuss the personnel the Panel wished to meet and to arrange a schedule.</p> <p>The full Review Panel conducted a site visit to University of Galway on 24 November 2022. This was also attended by the Rapporteur and Higher Executive Officer from the Council, who attended in an observatory capacity.</p> <p>The following attended on behalf of the university:</p> <ul style="list-style-type: none"> • President • Head of School of Education • Head of Discipline of Education • Incoming Head of School of Education • Director of BME (Education) • Director of CSM (Education) • Director of Teaching and Learning • Programme staff from the programme • Director PME1 • Director PME2 • Director PME Pedagogy • Ceann Bhliain 1 MGO • Ceann Bhliain 2 MGO • Registrar • Bursar • Students and graduates from the programme • Director of School Placement • School Placement Tutors
Review panel meeting 2	The panel met to consider these clarifications and agreed recommendations immediately after the site visit on 24 November 2022.
Reporting	The report was drafted and issued to the HEI for the 30-day feedback period. It was finalised when the final response was received from University of Galway.

Education Committee

The Chair will present the report to the Education Committee on 16 January 2023. They may decide to; accredit the programme, accredit the programme with requirements or not accredit the programme.

Overall Findings

The Panel was very impressed with the seriousness and professionalism with which the School of Education in the University of Galway engaged with the Review process. A very substantial amount of documentation and evidence was submitted in support of each of the *Céim* standards. There was ample evidence of staff research, publication and international involvement with professional bodies working on research and development in teacher education. The value of this was reflected in the emphasis in the submission on the fostering of student teachers as research informed professionals and as researchers on their own practice.

Commendable aspects of this programme include the strong emphasis on linking campus-based activities with school experience and on relevance to current issues (e.g. COVID-19, inclusion and diversity). This is exemplified by student participation in HEI 'Access to Post-Primary Education: The Diversity in Initial Teacher Education National Study'.

Other positive features include the spiral design of the programme, the inclusion of microteaching, treatment of learning and teaching strategies, professional workshops, use of a wide range of assessment methodologies, the focus on social justice and professionalism, and the emphasis on key skills as defined by NCCA.

The arrangements for School Placement, including the criteria for the assessment of students' classroom practice and Taisce, are well structured and organised. Students inevitably focus on their classroom performances in their reflective portfolios.

Foundation Studies are well catered for with Philosophy, History, Sociology (EDSJ) and Psychology of Education sharing two modules.

There was ample evidence of programme team members being engaged in research with associated refereed publications.

Programme Design

	Comment	Standard addressed?
1.1.1 The Programme	The Programme received academic accreditation from the Academic Council on 8 April 2014, prior to being submitted to the Teaching Council for professional accreditation. Up to date accreditation was sought as a clarification by the Teaching Council and was received on 8 August 2022.	Yes
1.1.2 Conceptual Framework	<p>The review process determined that the submission demonstrated how the conceptual framework is developed in the context of the provider's mission and ethos and that the programme seeks to 'foster a vibrant community of students and staff, where distinguished learning, impactful research, creative thinking and innovative education practices are shared with the local and global education community.'</p> <p>University of Galway demonstrated how the programme is informed by research, the <i>Council's Policy on the Continuum of Teacher Education</i>, and the <i>Code of Professional Conduct for Teachers</i>.</p> <p>The submission clearly articulates how it identifies the University's principles, beliefs and values about education, which have been shaped by its 'values-based culture which has Openness, Excellence, Ambition, Sustainability and the Wellbeing of our communities, at its core. This ethos aligns with the ethical values of Respect, Care, Integrity and Trust, which underpin the standards of teaching, knowledge, skill, competence and conduct set out by the Teaching Council (2016).'</p> <p>The review process determined that the submission demonstrated how the conceptual framework provides a rationale for the model of ITE which has been adopted.</p> <p>'The CSM is a bespoke programme designed to qualify excellent post-primary Computer Science (CS) and Mathematics teachers. It was the first specialist teaching programme of its kind and was developed with the intention of preparing teachers to meet current Teaching Council curricular subject requirements in Computer Science and Mathematics.'</p> <p>It demonstrated how the programme enables student teachers while on placement to demonstrate the link between the sites of practice (University and school).</p>	Yes

	<p>The review process determined that the submission demonstrated how the conceptual framework and programme design supports school placement as the fulcrum of the continuum of teacher education. It also shows how key themes are revisited over the programme. The programme demonstrates how the professional studies aspect of the programme gives student teachers sufficient opportunities to actively learn from practising teachers about relevant and innovative methodologies, appropriate to their practice.</p> <p>‘In line with our conceptual framework and ethos which emphasise reflection, inquiry, the contextual nature of teaching and the importance of a dynamic relationship between theory and practice, student teachers are enabled, through our CSM programme design, delivery and assessment, to link their learning in university with their learning in the school placement context. These links are made throughout the programme in lectures where lecturers and student teachers identify and reflect on examples from practice to apply theory, on the one hand, and to test theories and/or theorise, on the other hand. This process acknowledges the fact that placement is the fulcrum of the continuum of teacher education.’</p>	
<p>1.1.3 Programme Aims</p>	<p>The review process determined that the submission clearly defined the aims of the programme, demonstrating where the aims are closely aligned with the conceptual framework and are reflected in specific learning outcomes.</p> <p>The review process determined that the submission demonstrated how the programme caters for curriculum development, to include the learning outcomes-based curricula and national priorities.</p> <p>The review process determined that the submission demonstrated how the programme aims will enable newly qualified teachers to facilitate quality teaching and learning for all pupils.</p> <p>‘The CSM is a programme designed to support the development of computer science and mathematics teachers who are passionate about their subject, who understand the conceptual constructs deeply, and who can teach these subjects in a positive and inclusive learning environment. The CSM programme aims to develop post-primary teachers who can function as effective facilitators of their students’ learning.</p>	<p>Yes</p>

	<p>Furthermore, graduates of the CSM will be committed to professional development, research and reflection and will demonstrate that they are able to engage collaboratively with colleagues in the profession and with the various members of the education community.'</p> <p>The programme fosters student teachers' agency and mind-set to be open to professional growth and learning over the course of their careers, to reflect on their own professional learning and that of their pupils, and to support their pupils in achieving their full potential.</p>	
1.1.4 Programme Duration & Balance	<p>The review process determined that the submission demonstrates that the programme meets the criterion of a minimum of 4 years duration, and demonstrates how the models of teaching, learning and assessment set out in the conceptual framework are evident in the programme structure.</p> <p>University of Galway demonstrated that all areas of study are relevant to students' future work as teachers, that the programme will facilitate student teachers' personal development and their growth and wellbeing into their professional role, thus enabling them to become responsible, trustworthy, and reflective practitioners.</p> <p>The Panel is satisfied that the submission demonstrated that the programme prepares student teachers for life in the classroom and for active engagement in teaching within a professional learning community, reflecting the core values of trust, care, respect and integrity.</p>	Yes
1.1.6 Integration and Diversity of Programme Content	<p>University of Galway has demonstrated that foundation studies are integrated into the programme in a way that is meaningful for student teachers and their practice; that the programme design follows a spiral learning approach, and that the programme allows student teachers to experience a variety of teaching, learning and assessment modes.</p> <p>The submission demonstrated that small group work and tutorials are a central feature of the programme, and the programme provides opportunities for individual and collective reflection by student teachers and programme staff.</p>	
Aptitude test	University of Galway completed an 'Aptitude test' declaration form, confirming that the programme design allows for the	Yes

	provision of 'aptitude tests' for teachers who have qualified outside of the State.	
1.1.7 Required Areas of Study	<p>The review process determined that the submission demonstrated how the Foundation Studies, Professional Studies & School Placement elements of the programme meet the requirements of this standard.</p> <p><u>Foundation Studies</u> The programme provides research informed insights to support student teachers' understanding of the practices of teaching, learning and assessment for all pupils with research-informed practice across all education and discipline modules.</p> <p>The Panel is satisfied that the programme provides the basis of a strong professional ethic in teaching and learning, including curriculum studies, the history and policy of education, philosophy of education, psychology of education & sociology of education, enhances students' understanding of the Irish education system, locates it in context and enables students to think critically about it, and explores key dimensions of the professional context in which the thinking and actions of teachers are carried out.</p> <p>However, the Panel noted that, whereas Curriculum Studies is identified as a Foundation Discipline in <i>Céim</i>, Curriculum and Assessment is categorised as a Professional Studies module (ED6101). This module also includes three other topics: Inclusive Teaching and Learning; ICT in Education; Literacy, and Numeracy.</p> <p>'The foundation studies elements of our programmes are firmly based upon relevant theory and empirical research. We emphasise to student teachers the importance of drawing upon research to explore the practices of teaching, learning and assessment. Staff who teach on these elements of the course are experienced researchers in Philosophy, Psychology, Sociology, and History of Education. They bring their own research to bear on the issues explored and design their 'content' based on up-to-date and high-quality research in their respective areas. Materials provided to students include extensive reading lists and students are required to cite relevant literature in their assignments.'</p> <p><u>Professional Studies</u> University of Galway demonstrated that the Professional Studies elements of the programme develop the pedagogical</p>	Yes

expertise of student teachers, including subject specific pedagogical content knowledge as evidenced in their Professional Studies modules.

The submission demonstrated how the programme ensures that opportunities shall be provided for students to experiment with and explore new and emerging technologies for teaching and learning throughout their initial teacher education. Further, it demonstrated how the Professional Studies elements of the programme ensure that teaching itself is understood and practised as a form of self-critical learning by student teachers, with ample opportunities for individual and collaborative reflection, and engagement in and with research.

School Placement

University of Galway demonstrated how the school placement provides opportunities for student teachers to experience a high support/high challenge model of placement as placements are carefully scheduled throughout the academic year and are designed to give student teachers opportunities to integrate theory garnered in coursework with practice in a variety of settings.

The review process determined that the submission demonstrated how student teachers engage in research on their own practice which demonstrates the connection between the sites of practice (University and school). The review process also demonstrated how student teachers plan for, and undertake, class teaching, learning and assessment using a wide range of strategies in a diversity of class settings and subject levels, establish classroom management strategies that support suitable and effective learning for all pupils and that promote and maintain positive behaviour; observe experienced teachers teaching; are involved in a wide range of school activities; reflect critically on their practice and programme of study and how both inform and shape each other; receive and respond to feedback on their practice, and identify areas for further professional learning for *Droichead*.

Core elements of programmes of ITE

The review process determined that the submission demonstrated that the following elements underpin all aspects of the programme.

1. Inclusive Education

The School of Education demonstrated a strong commitment to inclusion and diversity:

‘The centrality of inclusive education to teacher education in the School of Education is illustrated through the Inclusive Teaching area of study which is jointly delivered across 3rd year CSM (part of the 10 ECTS ED305 Psychology, Sociology, and Inclusive Teaching module). The Inclusive Teaching aspect is deliberately timed to follow foundational learning of key theoretical perspectives and empirical research findings in both the Psychology and Sociology of Education, the latter which critically examines issues of diversity and social justice in schooling and education more broadly, from social class, ‘race’/ethnicity, and gender perspectives.’

The programme also enables students to discuss causes and factors contributing to additional educational needs arising from individual differences, disabilities, learning difficulties, home and school factors.

2. Global Citizenship Education

‘The key pedagogical approach adopted throughout the global citizenship education component is a student-centred active teaching and learning approach. Global citizenship education is predominantly facilitated through student participation in global citizenship education focused workshops, with theoretical concepts further highlighted and addressed in lectures. Facilitators of these workshops (SoE staff and students, practicing and retired teachers and representatives of global citizenship education non-governmental organisations such as World Wise Global Schools, Galway One World Centre, Self Help Africa, Trocaire, Waterford SLí, Financial Justice Ireland) model active teaching and learning methodologies and students are encouraged to work collaboratively using inquiry/problem-solving based approaches and a variety of interesting and innovative resources.’

3. Professional Relationships and working with parents

‘One of the objectives of our teacher education courses is to promote and support participants in understanding the rationale and processes of, and developing the skills for, positive relationships and interactions with all members of the school community including colleagues, auxiliary professionals, school leaders, professionals from outside agencies, and parents.’

'Once equitable and successful teacher-parent relationships have been theorised, grounded in social justice principles, the focus shifts to practical skills training.'

4. Professional identity and agency

'Recognising that student teacher identity and agency is built on positive relationships, our BME/CSM cohort are encouraged to develop such relationships with peers, colleagues and management in their placement schools, and staff in the School of Education. The small intake on the programmes enables a supportive class dynamic and with peer groupings forming and remaining in place throughout the programme(s). The peer groups provide a support network with group members working together to complete activities such as their micro-teaching and team-teaching (ED292) and larger collaborative projects (ED2003). The class also have the opportunity to collaboratively complete their action research projects within ED3003 and ED4001.'

5. Creativity and Reflective practice

'The NUI Galway University Strategic Plan (2020-2025) identifies Creativity as a key attribute for our graduates. Our ED2004 and ED2005 methodologies evoke shared learning and development of authentic, powerful ideas that can be used to solve real-world problem and connect understanding across the disciplines. We believe creativity inevitably arises from the process of students engaging in collaborative research. Research design and data analysis in ED3003 and ED4001 requires innovative approaches to complex and intersectional problems in the classroom. Ultimately, the resilience of our students, demonstrated across diverse assessments, is a product of our commitment to both reflective practice and the honing of a creative mindset.'

6. Literacy and Numeracy

'It is essential to provide student teachers with the necessary knowledge and understanding; teaching strategies; and expertise to embed and develop, literacy and numeracy in their everyday practice. Student teachers are supported in developing their pedagogical knowledge of literacy and numeracy, so that they, in turn, can support their own students' literacy and numeracy needs through evidence-based practice.

'The development of ITE students' own pedagogical literacy and pedagogical numeracy is considered as a crucial step in our ITE programmes. This development is supported throughout the teacher education journey at University of Galway through

	<p>lesson planning, micro teaching, Taisce submissions, practitioner-based research and school placement. Feedback is provided on pedagogical literacy and numeracy across all subject disciplines.'</p> <p><u>7. Digital Skills</u></p> <p>'There is an increasing awareness and necessity to prepare student teachers to understand and use technology embedded throughout the CSM programme. The CSM programme is characterised by effectiveness, quality and relevance for meeting the challenges of education for next generations, aiming at creating opportunities for learning and development with the support of a globally networked human and ICT environment.'</p>	
Post-primary: Curricular subject criteria registration requirements	<p>The programme is Level 8 on the National Framework of Qualifications (NFQ). The entry selection processes and computer science and mathematics subject curricula are aligned with the Council's curricular subject specific registration requirements.</p> <p>The review process determined that the submission demonstrated that subject discipline components include subject specific curricular studies and pedagogies (methodologies) for the subjects.</p>	Yes
1.1.8 Learning and Assessment Strategies	<p>University of Galway demonstrated how the principles, beliefs, and values about teaching, learning and assessment which are set out in the conceptual framework are evident in the teaching, learning and assessment modes used in the programme.</p> <p>It demonstrated the relationship (constructive alignment) between the learning opportunities and the assessment criteria which student teachers are expected to meet, and how the assessment processes and procedures are coherent and integrated using a variety of assessment modes.</p>	Yes

Programme Resourcing

	Comment	Standard addressed?
1.2.2 Staffing	<p>The review process determined that the submission demonstrated that the programme meets this standard by providing:</p> <ul style="list-style-type: none"> • programme staff qualifications and experience • evidence that at least 50% of all School Placement Tutors are registered as teachers with the Teaching Council, with 63% registered. • evidence that the staff distribution mechanisms the College has in place to show that prior to qualification, while on school placement, a student teacher will be summatively assessed at least once by a registered teacher. • It also demonstrated how the student:staff ratio of 15:1 is achieved, with the programme demonstrating a ratio of 4:1. <p>University of Galway demonstrated the staff development policies that are in place to ensure that staff continue to enhance their knowledge and expertise including that relating to reflective practice, research, curriculum development, inclusive education, and professional development. The University's Continuing Professional Development Policy outlines their commitment.</p>	Yes
1.2.3 Facilities	<p>University of Galway demonstrated that appropriate facilities are available to support research, teaching, and learning, providing the following: Libraries, Library Supports for students with disabilities, Digital Technology resources, Sports and Art facilities, Science Labs, and Microteaching labs.</p>	Yes
1.2.4 Student Support and Guidance Systems	<p>The review process determined that the submission demonstrated that provisions are in place for the personal and social development and pastoral care of student teachers.</p>	Yes
1.2.5 Communication and Decision-making Structures	<p>The review process determined that the submission demonstrated the structures that are in place to facilitate the participation of staff and students in relevant deliberation and decision-making processes.</p>	Yes
1.2.6 Financial Resources	<p>University of Galway has demonstrated that the programme is adequately resourced to ensure that programme aims are met through student fee income and state grants.</p>	Yes

School Placement

	Comment	Standard addressed?
1.3.1 A Shared Vision for School Placement	The University of Galway school placement model supports the shared vision for school placement. The review process determined that the submission demonstrated that student teachers experience a supportive model of placement which facilitates professional conversational engagement between all partners.	Yes
1.3.2 Duration	The review process determined that the submission demonstrated that the duration of the school placement is in compliance with the Teaching Council's requirements and includes both school-based and HEI-directed activities, thus meeting the requirements of this standard.	Yes
1.3.3 Elements of School Placement	<p>The review process determined that the submission demonstrated that the school-based and HEI-directed activities included as part of the placement experience are as outlined in the <i>Guidelines on School Placement</i> and regarding the stage the student teacher is at on the programme.</p> <p>'School placements are structured to allow student teachers to gradually take on the professional responsibilities of a practicing teacher. After being introduced to the theories and practice of teaching through lectures, workshops, tutorials, lesson observation, small-group teaching, micro-teaching and team-teaching during the first two years of the programme, student teachers begin their school placement in semester 2 of year 2.'</p>	Yes
1.3.4 School Placement Models	<p>The review process determined that the submission demonstrated that school placement models are developed using a partnership approach, whereby the HEI and schools actively collaborate in the organisation of the school placement.</p> <p>'School placement uses a partnership approach between NUI, Galway and various partner schools. All the schools are recognised schools and placements take place mainly in the West, Mid-west, North-west and West-midlands counties Galway, Mayo, Sligo, Leitrim, Clare, North Limerick, North Tipperary, Westmeath, Offaly and Donegal.'</p>	Yes

1.3.5 Securing of Placement	The review process determined that the submission demonstrated that University of Galway assumes overall responsibility for the placement of student teachers.	Yes
1.3.6 Diversity of Placement Settings	The review process determined that the submission demonstrated that the programme meets the requirement of a minimum of two placement settings incorporating a variety of teaching situations, class levels and school contexts, including Irish medium schools.	Yes
1.3.7 Taisce in School Placement	<p>The review process determined that the submission provided evidence of the approaches University of Galway is utilising to enable the student teacher to demonstrate, using their Taisce,</p> <ul style="list-style-type: none"> • an understanding of inclusive education as applicable to that context • an understanding of working with parents <p>‘Student teachers on the CSM programme build a Taisce (Professional Practice Portfolio) in each year of school placement, which offers them the opportunity to critically analyse and reflect on their practice and to explore issues that are central to their teaching. These issues align with the core elements in Toolkit B. Students are supported in the development of their Taisce through regular check-ins and are provided with individual feedback on thematic reflections from their school placement tutors.</p> <p>‘Students are supported in the development of their Taisce through regular check-ins and are provided with individual feedback on thematic reflections from their school placement tutors. An overarching educational aim of the Taisce is that student-teachers will develop the knowledge, attitudes, and capacity to think more critically and reflectively about their learning and teaching as well as about wider educational issues and thereby develop a strong professional identity and approach to practice.’</p>	Yes
1.3.8 Research in School Placement	University of Galway demonstrated that the student teacher engages in research on their own practice that demonstrates the connection between the sites of practice during at least one school placement module.	Yes
1.3.9 School Placement: Evaluation and Assessment	The review process determined that the submission demonstrated that all student teachers are supported and assessed by two or more Placement Tutors, and at least once by a registered teacher. It outlined the teaching enrichment and mentoring support offered to students who fail a module of school placement.	Yes

	<p>'Student teachers receive regular visits whilst on placement across the duration of the CSM programme. During these visits they are provided with qualitative feedback by their school placement tutor. Advice on opportunities for improvement and feedback on performance is offered. The feedback process is iterative and student teachers are expected to contribute and respond to feedback they receive. In cases, where a student is struggling or failing, the University, in co-operation with the placement school, devise an intervention strategy aimed at enabling the student to improve their performance.'</p>	
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Recommendation

Having regard to the documentation that was submitted, the panel adjudges that the programme meets the standards set down by the Teaching Council in *Céim: Standards for Initial Teacher Education* and in the *Curricular Subject Requirements (Post-Primary)*.

Appendix 1 - Review Panel Membership

Chair

Professor Sheelagh Drudy

Professor Drudy is a former teacher, educational researcher and teacher educator. She was a member of the first Teaching Council appointed by the Minister in 2005 and has also been a Council member of the National Council for Special Education (NCSE). She is the author and co-author of books and papers on education, including *Education in Ireland: Challenge and Change* (2009), Dublin: Gill and Macmillan. She is currently an external reviewer for a number of international journals and an assessor for international research organisations. She has been involved in quality assurance reviews in various HEIs.

Panel Member

Professor Jim Gleeson

Jim Gleeson was a teacher in the Vocational Education sector and has worked on various curriculum development and evaluation projects. He worked in teacher education at Thomond College of Education/University of Limerick (1981-2011). Jim was an IUA nominee on the Teaching Council from 2005-2012. He was Professor of Identity and Curriculum at Australian Catholic University, Brisbane, from 2013-2018, and he is currently an Adjunct Professor at the Institute of Education, Dublin City University. Jim's main research interests include curriculum policy and practice; teacher professionalism and development; faith-based education.

Panel Member

Dr Seán O Coigligh

Seán Ó Coigligh was a secondary school teacher in Dundalk, Co. Louth where he taught Gaeilge, Religious Education and CSPE through the medium of Irish and English. His background is firmly rooted in human rights' education, having spent some years working with the Redemptorist Congregation in the Philippines on Basic Christian Community Projects. He was a member of the Education for Reconciliation Pilot Group, a cross-border schools' initiative aimed at fostering understanding among teenagers through collaborative classroom activities. His post-graduate studies focussed on the evolution of the teaching of Irish through the Gaelic Colleges in the early years of the twentieth century.

Appendix 2 - Teaching Council Registration: Curricular Subject Requirements (Post-primary) Effective for registration on or after 1 January 2023

Computer Science

In order to meet the registration requirements set down in the Teaching Council [Registration] Regulations in respect of the curricular subject of Computer Science an applicant must meet all of the following criteria:

1.
 - a) Applicants must hold a degree-level qualification, with Computer Science studied up to and including third-year level or higher (or modular equivalent).
 - b) The qualifying degree must be equivalent to at least Level 8 on the National Framework of Qualifications (NFQ) and with a minimum pass result in all examinations pertinent to the subject of Computer Science.
 - c) The qualifying degree must carry at least 180 ECTS (European Credit Transfer System) credits (or equivalent) with the specific study of Computer Science comprising at least 60 ECTS credits (or equivalent).

2. The study of Computer Science during the qualification must show that the holder has acquired sufficient knowledge, skills and understanding to teach the Computer Science syllabus/specification to the highest level in post- primary education (see www.curriculumonline.ie).

To meet this requirement the degree must include the study of modules in all of the following areas:

Essential areas¹

- 1) Software Engineering and Project Management (may include software design and development systems analysis, design process, testing)
- 2) Programming (including algorithms and data structures)
- 3) Computer Systems (including hardware or architecture)

Optional areas: The study must also include a minimum of 2 of the following areas:

- 4) Web development
 - 5) Animation/ games/ multimedia development
 - 6) App development
 - 7) Robotics
 - 8) Embedded systems
 - 9) Modelling/ simulation
 - 10) Data analysis
 - 11) Databases
 - 12) Machine learning/AI
- (a) Practical assignment work must be completed throughout the degree course (e.g. programming assignments).

¹ There is an expectation that societal impact of computing technologies underpin all areas.

Mathematics

In order to meet the registration requirements set down in the Teaching Council [Registration] Regulations in respect of the curricular subject of Mathematics an applicant must meet all of the following criteria:

1.
 - a) Applicants must hold a degree-level qualification, with Mathematics studied up to and including third-year level or higher (or modular equivalent).
 - b) The qualifying degree must be equivalent to at least Level 8 on the National Framework of Qualifications (NFQ) and with a minimum pass result in all examinations pertinent to the subject of Mathematics.
 - c) The qualifying degree must carry at least 180 ECTS (European Credit Transfer System) credits (or equivalent) with the specific study of Mathematics comprising at least 60 ECTS credits (or equivalent).
2. The study of Mathematics during the qualification must show that the holder has acquired sufficient knowledge, skills and understanding to teach the Mathematics syllabus/specification to the highest level in post- primary education (see www.curriculumonline.ie).

3.

To meet this requirement the degree must include the study of all of the following:

Essential areas of study

- a) Analysis (must include a module or modules in multi variable calculus)
- b) Algebra (must include a module or modules in linear Algebra)
- c) Geometry (must include a module or modules in Euclidean and Non-Euclidean Geometry)
- d) Probability
- e) Statistics (must include a module or modules in Statistical Inference)

The remaining credits (or equivalent) may be in any of the above essential areas, or be drawn from the following optional areas:

Optional areas of study

- f) Dynamical Systems and Chaos
- g) Calculus of Variations
- h) Numerical Analysis or Computational Mathematics
- i) Mathematical Modelling
- j) Discrete Mathematics
- k) History or Philosophy of Mathematics
- l) Mathematical Logic
- m) Set Theory and Cardinality