Opening Remarks



Good morning and thank you for the opportunity to speak with you today. The Irish Mathematics Teachers' Association welcomes the chance to put forward the views of our members, who have serious concerns about recent developments in the direction of mathematics pedagogy. WE are an extremely open organisation that benefits from rigorous discussion and debate, while backed up by statistics, research and anecdotal evidence. Mathematics teachers in this country care deeply about their subject and know how crucial it is to the continuing development of a strong, vibrant educated workforce and we are acutely aware of its importance in the realm of STEM subjects. Mathematics teachers, in the main, embrace change well and are open to reflecting on their teaching practice and embracing new approaches, ideas, technologies and resources. Mathematics teachers rolled in behind changes to the mathematics syllabi under the umbrella of Project Maths. Mathematics teachers embraced the use of digital technologies in their classrooms for pedagogical purposes long before covid made them necessary. Visual and digital manipulatives, online tools like GeoGebra, Desmos and OneNote as well as the use of flipped classroom, recorded lessons, teacher generated websites etc were all utilised by many of our members for a long time, with many of the online CPD offerings during covid being led by IMTA members for teachers of all subjects.

The IMTA believes that STEM education is essential for the future of our country, and we are committed to playing our part in ensuring that Irish students have access to the highest quality STEM education possible. Given that mathematics education is our primary area of concern and the basic importance of mathematics in STEM, our submission primarily focuses on mathematics education.

Our submission includes a range of recommendations aimed at improving the teaching and learning of mathematics in post-primary education. We have focused on five key areas related to mathematics education: Junior Cycle mathematics, Leaving Certificate mathematics, teacher education, female participation in STEM, and mathematics at primary level. Regarding Junior Cycle mathematics, the IMTA expresses concerns over the revised Junior Cycle specification, which we believe is too long and cannot be adequately delivered due to

decreased class contact time in many schools. The IMTA also notes a demotion in the importance of fully understanding the topic of algebra in the new specification and calls for the reintroduction of a second exam paper at Higher Level with adequate choice. Furthermore, the removal of the Foundation Level mathematics course and examination at Junior Cycle level is a matter of concern for the IMTA, and our members believe that it has adversely affected the education of students who find numeracy and literacy challenging. Regarding classroom-based assessments, the IMTA suggests that only one assessment (on statistics) should be completed in a coordinated timetabled fashion with other subjects, rather than the current nine assessments across all subjects in each of second and third years.

In the case of Leaving Certificate mathematics, the IMTA believes that the syllabus is too long to be completed in the allocated time and that some elements of choice should be introduced into exam papers. Additionally, we would call for a review on the impact of bonus points for Higher Level mathematics.

The IMTA is concerned about the shortage of qualified mathematics teachers in Ireland and recommends incentivising teachers through financial arrangements. We also suggest that we ringfence places for STEM education courses and provide more support to newly qualified teachers.

We call for more investment in and resources for encouraging female participation in STEM subjects in general and mathematics, in particular. The IMTA recommends launching a large-scale advertisement campaign to attract more women to the profession.

We believe that our recommendations, if implemented, can help to ensure that Ireland remains a world leader in STEM education and that our students are equipped with the knowledge, skills, and confidence they need to succeed in the 21st century economy.

March 16th 2023

Ciarán Duffy

IMTA Council Chairperson