

Welcome

Welcome to the second issue of the JCT Mathematics Newsletter. The 2018-2019 academic year saw the introduction of the [Junior Cycle Mathematics Specification](#) to your classrooms and the continuing CPD of teachers across the country through the rollout of the [2018/2019 CPD day](#). Some of the highlights of the year include our inaugural symposium, two webinars and our participation in the JCT STE(A)M initiative. We have been busy working with our Associates to see how the specification is translating into practice and to determine how we can continue to support teachers in 2019-2020, and beyond.

JCT Mathematics Symposium

Our inaugural Mathematics Symposium took place on the 23rd of March 2019. Close to one hundred teachers attended the event in Microsoft DreamSpace in Leopardstown. We were fortunate to have Dr Sinéad Breen deliver the keynote address on the use and development of rich mathematical tasks in classrooms. Dr Breen provided valuable insight into the frameworks and taxonomies available to teachers to evaluate the levels of cognitive demand of the rich tasks we use in our day-to-day practice. You can access the slide deck from Dr Breen's keynote [here](#).

A variety of interactive workshops were on offer, including a digital technologies workshop that examined the use and functionality of OneNote as a tool to provide efficient formative feedback using its voice recording function. The workshop also explored how we can engage learners with further educational needs using the read aloud function. In our Levels of Cognitive Demand workshop teachers examined a variety of geometry tasks and explored ways of increasing their cognitive demand. The use of classification of geometrical shapes as a gateway to the topic of Sets was explored and the workshop finished with a discussion on challenging the more able student in our classes. We were delighted to have Stephen Gammell (PDST Post Primary Mathematics Team Leader) with us to facilitate a workshop on Algebra Through the Lens of Functions.

The symposium concluded with a panel discussion with three of our Associates and JCT Mathematics Team Leader, Shane Flanagan. A lively and enriching discussion took place around Junior Cycle Mathematics reform and what it looks like in the classroom. The resource booklets and presentations used on the day can be accessed [here](#).

We would like to acknowledge the support, dedication and assistance of our Associates (Caroline Doherty, Sarah Barnicoat, Emer Brady, Lynn Anderson, Orlagh Ní Fhaolain, Dominic Phillips,



Clíodhna Devitt, Keith Howley, Glenn Webster and Neil Butler) in organising the symposium, the delivery of CPD and for their engagement throughout the year.

Webinars

Our first webinar of the academic year, 'Planning with the Mathematics Specification', took place on the 12th December 2018. This webinar explored how we could use a conceptual approach to plan using the specification and ultimately help students see connections within and between strands. The process of connecting learning outcomes using a concept and the development of units of learning were explored. The importance of teacher collaboration within departments for this process was highlighted.

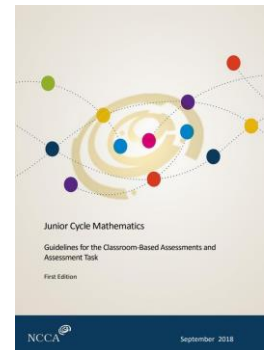
Our second webinar, 'Supporting Deeper Learning in the Mathematics Classroom' took place on the 2nd of April 2019. We were joined by teachers Peter Fitton and Audrey Byrne, and researcher Aidan Fitzsimons. The webinar began with a discussion about the meaning of the term 'Deep Learning'. Teachers in attendance shared their practice and methodologies via Mentimeter. This spring boarded the panel into a discussion focused on the sharing of their insights and experiences as they engaged their students in deep learning. The evening finished with some well received words of wisdom and advice on enacting the specification from the panel. Recordings of both webinars are available on the website to view at any time [here](#).

How do you create opportunity for deep learning?



Classroom Based Assessment

The [assessment guidelines](#) are a must read for teachers as we engage with new assessment practices in Junior Cycle Mathematics. Further supports for both CBAs have also been recently developed by the Mathematics Team. A [frequently asked questions](#) document is available on our website and teachers are encouraged to engage with this document for any queries they might have. Placemats of the Features of Quality for both CBAs are available [here](#). In addition, there is an [interactive resource on the Junior Cycle Mathematics Guidelines for the Classroom Based Assessments and the Assessment Task](#) which teachers are encouraged to engage with as a department.



STE(A)M

The JCT Mathematics Team were delighted to be involved again this year in the JCT STE(A)M elective CPD programme. Workshops took place in Galway Atlantaquaria, Tayto Park, Wexford Education Centre, Athlone Education Centre, Dublin Zoo and Dingle Oceanworld Aquarium. At these elective CPD events, teachers explored how the process of mathematical modelling can foster an investigative mindset in our students and how mathematical modelling can underpin interdisciplinary responses to societal challenges. We will continue our involvement with upcoming STE(A)M events throughout the next academic year. Keep an eye out for upcoming STE(A)M events in 2019-2020 and be sure to follow @JCTSteAm on twitter.




Tacaíocht le h-aghaidh múineadh trí mhéan na Gaeilge

Tá achmainní i nGaeilge ar fail [anseo](#).

Continuing Professional Development

During September and October close to two thousand teachers engaged with their second subject CPD. They took time to consider Junior Cycle reform and its underpinning principles, further familiarised themselves with the Mathematics specification and explored pedagogical approaches that support the implementation of the specification.

November saw the beginning of cluster CPD and the national rollout of a second subject specific day of CPD for teachers of Mathematics. The use of effective questioning in mathematics classrooms was examined and strategies such as the use of open-ended questions was considered in the context of deeper learning for students. Developing an investigative mindset supported by a mathematical skill set is essential as students and teachers prepare for the first Classroom-Based Assessment in second year. Learning experiences and a bridging toolkit were explored on the day. Planning using concepts featured in the afternoon session.

We will meet teachers again in second subject CPD in September and October and we look forward to facilitating a third day of subject specific CPD from November. There will also be several elective CPD opportunities during the next academic year. Follow us on Twitter [@JCforTeachers](#) and directly on the Mathematics Team handle [@JctMaths](#). 

Kind regards,

The JCT Mathematics Team

