Education Review Office
Te Tari Arotake Mātauranga

National Report Summary

ERO publishes evaluation reports on education issues of national importance. This summary of a recent national report captures the key points and highlights findings which you may find useful. The full report is available on www.ero.govt.nz.

On Your Marks…Get Set…Go! A Tale of Six Schools and the Digital Technologies Curriculum Content

From January 2020 all schools are expected to be implementing the new Digital Technologies (DT) curriculum content for students in Years 1 to 10. The rationale for the new curriculum content is to ensure that all students up to Year 10 have sufficient opportunities to develop their understanding and capabilities about digital technologies. The intent is that students become designers and not just users of technology in order to better equip them for their future.

What we did

In Term 1, 2019, ERO conducted case studies of six schools' journey towards implementation of the digital technologies curriculum content. The evaluation sought to understand how schools were responding to the DT curriculum content, and the changes they were making to support implementation. This report follows ERO's *It's Early Days for the New Digital Technologies Curriculum Content* which found, in Term 3, 2018, that only 7 percent of schools felt they had sufficient knowledge and skills to implement the new content.

This case study phase drilled deeper into questions around the enablers and barriers to awareness, foundational knowledge, and early implementation for schools. ERO determined the pre-conditions that led to successful journeys, and the characteristics of the schools which had progressed further into their journey of implementing the DT curriculum content.

ERO identified stages of readiness similar to a three-command start when racing: *on your marks*, *get set*, and *go!*

What we found

Leaders set the conditions for implementation

In the '*go!*' schools, senior leaders had established a culture within the school where teachers were open to new learning. They had a growth mindset. Senior leaders understood their role in curriculum change and making sure they supported the requirements to implement the DT curriculum content. They identified key curriculum leaders for the DT curriculum content, while they also made sure internal and external support was provided for teachers. Senior leaders also made sure to keep parents informed about the DT curriculum content and how they planned to implement it. Resourcing of devices in these schools was aligned to the school's context and needs. These resources included, for example, products that provide early coding experiences such as Scratch, Micro:bits, Sphero, and Bee-Bots.

Senior leaders and curriculum leaders in '*on your marks*' schools had little time resourced for them to work with the DT curriculum content. These leaders had not yet considered the professional development (PD) needs of staff or engaged them in PD related to the delivery of the DT curriculum content.

Teachers' and students' engagement reflected enablement by leaders

Across the three stages, the extent to which teachers and students had engaged with the DT curriculum content reflected the extent of leadership support mechanisms in place. Teachers' and students' understanding of the DT curriculum content was variable. Teachers and students in '*go!*' schools had greater understanding of the DT curriculum content compared to the other schools. These teachers integrated the content in a variety of learning areas. An established school-wide culture of openness to learning gave teachers at least the confidence to start to work with the DT curriculum content.

In '*on your marks*' schools, teachers often had not been introduced to the DT curriculum content and were unaware of its structure and progress outcomes. Most students in these schools were not aware of the DT curriculum content vocabulary. Students who did experience aspects of the DT curriculum content belonged to coding clubs or had teachers with an interest in the DT curriculum content. There were limited opportunities for the students with an interest in the DT curriculum content to extend their learning in class in these '*on your marks*' schools.

Leaders had a variety of external connections to support implementation

The connections included professional development providers, industry partnerships, and across-school networks including Communities of Learning | Kāhui Ako.

Leaders and teachers in '*go!*' schools worked closely with their PD provider to tailor to their school's context and needs. For most '*on your marks*' schools, professional development focused on digital fluency, and not yet the DT curriculum content. These schools targeted digital fluency as leaders wanted to build teachers' fluency before introducing the DT curriculum content. They intended to shift to DT curriculum content PD in the future.

Teachers in '*get set*' and '*go!*' schools were increasingly taking on leadership roles in networks focused on digital technologies. These included national networks, such as Code Club, as well as international networks where teachers learn how other countries are implementing their DT curriculum in schools. More than one leader in a '*go!*' school brokered partnerships with industry experts to support implementation.

Conclusion

These case studies show that schools were implementing the DT curriculum content in different ways. The DT curriculum content was implemented in specific Digital Technology classes, integrated across different learning areas or, as in some cases, a mix of both approaches.

This illustrates the importance of schools' careful planning to implement the DT curriculum content in ways that suit the context of their school and community.

In summary, ERO found that:

- Leaders' involvement with the DT curriculum content is critical for effective implementation
- An established growth mindset helps teachers be open to new learning
- Timely professional development supports leaders and teachers to effectively implement the DT curriculum content
- Community connections – to parents, networks, and industry – can greatly benefit implementation
- Infrastructure and devices should be carefully tailored to the school's needs and requirements.

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For more ideas and information, you can read the full report online at www.ero.govt.nz/publications