Towards Digital Fluency

The digital environment has the power to transform teaching and learning in our schools. We’re committed to taking full advantage of the opportunity to become a world-leading education system through changes to our infrastructure, practices and pedagogy. The range of initiatives for Digital Technologies in Education will ensure all New Zealand schools are equipped with state-of-the-art infrastructure, teachers get the support and resources they need to be digitally fluent, and every student benefits from the advantages of digital technologies for learning.

State-of-the-Art ICT Infrastructure

- Learning anywhere, anytime • High-speed broadband for all schools • Fully funded uncapped data • Integrated IT systems
  - Equip all schools with the infrastructure they need to take full advantage of digital technologies by the end of 2016
  - Complete delivery of fibre or alternative technology to remaining 3% of state/state-integrated schools by the end of 2015
  - Enable all state/state integrated schools and kura to connect to the Managed Network by the end of 2016
  - Complete ICT Network Upgrades in all state/state integrated schools by the end of 2015
  - Complete wireless refresh in more than 400 schools by Dec 2016
  - Leverage opportunities afforded by new technologies to streamline systems and improve access to data and information
    - Enable schools to migrate ICT into the Cloud
    - Design an Identity and Access Management system for teachers and leaders
    - Enable student information to move easily between schools through interoperable student management systems
    - Align ICT investments across education agencies and with the wider sector to create an integrated, seamless system that better serves the learning needs of students

21st Century Teaching & Learning

- Digitally fluent teachers and students • Innovative teaching and learning practices • Robust evidence base
  - Make digital fluency a priority
    - Complete the review of the position and content of digital technologies in the curriculum
    - Provide specialist advice to schools via the Connected Learning Advisory service
    - Provide a glossary of terms that describe modern learning practices (ERO)
    - Include digital literacy as an indicator in ERO reviews from mid-2016
    - Provide in-depth professional development for learning with digital technologies
    - Prioritise digital fluency in future professional development provision
  - Build capability through collaboration
    - Support innovative teaching through the Teacher-led Innovation Fund
    - Promote collaboration and innovation through Investing in Educational Success
  - Move to digital assessments of NCEA
    - By 2018 at least 3 digital examination subjects online; by 2019 NZQA external moderation service fully online; by 2020 NCEA external examinations online (where appropriate); after 2020 move progressively to online exams on demand, anytime, anywhere
  - Build a robust evidence base
    - Commission national reports from ERO on how schools are adapting teaching and learning practices to take advantage of digital technologies and flexible learning spaces
    - Partner with Melbourne University to research innovative learning environments and teacher change

Access to Quality Content & Resources

- Accessible online content • Smart digital tools • Safe online environments
  - Make online content easy to find, share and create
    - Redevelop Te Kete Ipurangi (TKI) so teachers can find, use and share valued, quality-assured content more easily
    - Digitise education resources and create resources for schools using a range of digital formats
    - The National Library is transforming its supports to schools to increase the reach and impact of its services
  - Promote resource development by teachers and students
    - N4L Pond is acting as a central hub for digital discovery and participation; enabling teachers to collaborate; and educational resources to be created, accessed and shared easily
  - Develop and promote smart online tools
    - Promote the use of the Progress and Consistency Tool (PaCT)
    - Build on the Assessment Resources Banks (ARBS) for English, mathematics and science
    - Upgrade e-asTTe
  - Ensure safe, secure online learning environments
    - Firewalls and content filtering systems to be in place across all schools
    - Complete delivery of fibre or alternative technology to remaining 3% of state/state-integrated schools
    - Develop advice to schools on the implications of the Harmful Digital Communications Act

Equitable Access

- Digital learning for every learner regardless of location, learning needs or family background
  - Provide guidance on implementing digital devices
    - Develop further online guidance to help schools decide when and how to implement devices, how to engage their communities and how to ensure no student misses out
  - Transform learning for students with special needs
    - Apply Universal Design for Learning principles as new resources are developed so that they can be used by all students, including those with disabilities, without having to be adapted
    - Provide assistive technologies to give students with special education needs access to the same learning opportunities as their peers
  - Identify and share ways to ensure equitable access to digital devices and opportunities to learn digital skills
    - Support schools and communities of schools to share models of effective practice that are achieving equitable access, such as ManaiaKalan1
    - Support the adoption of initiatives to enable students to use the internet out of school hours, such as schools as digital hubs
    - Encourage schools to work in partnership with the private sector, iwi, local government and philanthropists to help ensure students have access to digital devices; can acquire digital skills and have access to online learning resources out of school hours