Digital technologies are having a positive impact on student achievement

Eight-in-ten principals report that digital technologies are having a positive impact on student achievement, according to the latest research results from the Digital Technologies in Schools survey, prepared by Research New Zealand for the 20/20 Trust. This special supplement is a summary report card on selected key results from the 2016/17 survey. A copy of the complete report is being sent to every school in May.

The framework used for the survey is based on the key elements of future-focused learning environments, including planning for digital technologies, digital tools for learning, teacher confidence in managing digital classrooms and integration of digital resources with the curriculum. The survey also obtains feedback from principals on learning impacts and barriers to use.

Future-focused schools:

• have an ICT strategic plan that covers more than just the technology infrastructure – access to personal learning devices, change management and a strong underlying pedagogy are equally important for schools seeking to deploy digital technologies to enhance learning outcomes. Smart schools are even consulting their students on the most effective ways to use technologies in learning;

• encourage their students to find ways to access the internet outside the school – preferably in their homes, but in communities where families struggle to afford an internet connection, at public hotspots in libraries and other community facilities;

• support teachers to not only be confident users of digital technologies themselves but also have the skills to manage classes where all students have access to a personal digital device;

• are already starting to see digital technologies having a measurable impact on student achievement;

• engage with their communities using digital technologies.

So, how future-focused is your school? How do you rate in terms of tackling these new challenges? Compare your school with this report card, which represents the average for all schools. If you score in the green zones, you are up with the leaders and understand well the benefits and opportunities for your students. If you are scoring in the orange zone, you clearly know where you want to be and are working hard to get there. However, if you are scoring in the red zones, you might want to consult with other schools in your area about how to lift your game.
Digital technologies in New Zealand schools

2017 REPORT CARD

**SCHOOLS WITH ICT STRATEGIC PLAN**
NATIONAL AVERAGE: 74%

**SCOPE OF ICT PLAN**

- Safe digital learning environment
- Teacher professional development
- Network infrastructure
- Pedagogy
- Equipment & software upgrades
- Change management
- Sought feedback from students
- Inclusion of personal digital devices

**BARRIERS TO USE OF DIGITAL TECHNOLOGY IN SCHOOLS**

- Cost of digital technology equipment
- Cost of upgrades
- Affordability of personal digital devices
- Cost of online services
- Speed of technological change
- Extracting value for money
- Professional development among staff
- Support for use of digital technology
- Student access to internet at home
- Technical support
- Insufficient knowledge to make decisions
- Potential risk and harm online
- Managing student usage
- Network infrastructure
- Integration into the curriculum

**INTERNET ACCESS AT HOME**

- Safe digital learning environment
- Teacher professional development
- Network infrastructure
- Pedagogy
- Equipment & software upgrades
- Change management
- Sought feedback from students
- Inclusion of personal digital devices

**STUDENT PROVIDED DIGITAL DEVICES**

- In all classes
- In most classes
- In a few classes
- Never

**SCHOOL PROVIDED COMPUTERS**

- National average: 1 computer for every 3 students

**STUDENTS WITH ACCESS TO PERSONAL DIGITAL DEVICES AT SCHOOL**

- National average: 74%

**USE OF PERSONAL DIGITAL DEVICES**

- National average: 31%
Digital technologies in New Zealand schools

2017 REPORT CARD

SCOPE OF ITC PLAN

- Safe digital learning environments
- Teacher professional development
- Network infrastructure
- Pedagogy
- Equipment & software upgrades
- Change management
- Sought feedback from students
- Inclusion of personal digital devices

NATIONAL AVERAGE: 74%

BARRIERS TO USE OF DIGITAL TECHNOLOGY IN SCHOOLS

- Cost of digital technology equipment
- Affordability of personal digital devices
- Cost of online services
- Speed of technological change
- Extracting value for money
- Professional development among staff
- Support for use of digital technology
- Student access to internet at home
- Technical support
- Insufficient knowledge to make decisions
- Potential risk and harm online
- Managing student usage
- Network infrastructure
- Integration into the curriculum

INTERNET ACCESS AT HOME

- Full time
- Part time
- No internet

ENGAGEMENT OF FAMILIES WITH THEIR CHILDREN’S LEARNING

- Access to philanthropic support
- Access to technology

PROPORTION OF 2015 SCHOOL BUDGET SPEND ON DIGITAL TECHNOLOGIES

- National average
- 1 computer for every 3 students

STUDENTS WITH ACCESS TO PERSONAL DIGITAL DEVICES AT SCHOOL

- None
- 1–5%
- 6–10%
- 11–15%
- 16–20%
- 21–25%
- 26–30%
- 31–35%
- 36–40%
- 41–45%
- 46–50%
- 51–55%
- 56–60%
- 61–65%
- 66–70%
- 71–75%
- 76–80%
- 81–85%
- 86–90%
- 91–95%
- 96–100%

STUDENT PROVIDED DIGITAL DEVICES

- Never
- A few classes
- Most classes
- All classes

SCHOOLS IMPLEMENTING RECOMMENDATIONS FROM FUTURE-FOCUSED LEARNING REPORT

- Already done
- Planning to do
- Not planning to do
- Don’t know

SCHOOLS WITH ITC STRATEGIC PLAN

- National average

USE OF PERSONAL DIGITAL DEVICES

- Never
- A few classes
- Most classes
- All classes

ACCESS TO PHILANTHROPIC SUPPORT

- None
- 1–5%
- 6–10%
- 11–15%
- 16–20%
- More than 20%

PROPORTION OF 2015 SCHOOL BUDGET SPEND ON DIGITAL TECHNOLOGIES

- None
- 1–5%
- 6–10%
- 11–15%
- 16–20%
- More than 20%

EMAIL BETWEEN TEACHERS AND PARENTS

- National average
- 93%
- 91%
- 89%
- 80%
- 74%
- 72%
- 33%
- 31%

PUBLICATION ON THE SCHOOL’S WEBSITE

- National average
- 91%
- 89%
- 80%
- 74%
- 72%
- 33%
- 31%

EMAILING NEWSLETTERS

- National average
- 91%
- 89%
- 80%
- 74%
- 72%
- 33%
- 31%

TELEPHONES INCLUDING VOICE MESSAGING

- National average
- 80%
- 74%
- 72%
- 33%
- 31%

BLOGS OR OTHER SOCIAL NETWORKING SERVICES

- National average
- 74%
- 72%
- 33%
- 31%

TEXT MESSAGING (E.G. FOR TRUANCY)

- National average
- 72%
- 33%
- 31%

PARENT PORTALS

- National average
- 33%
- 31%

STUDENT/_PARENT ACCESS TO SCHOOL SERVERS FROM THEIR HOMES

- National average
- 33%
- 31%
- 31%

STUDENT/_PARENT ACCESS TO SCHOOL SERVERS FROM THEIR HOMES

- National average
- 31%
- 31%
- 31%

ACCESS TO TECHNOLOGY TO COMMUNICATE WITH PARENTS

- National average
- 93%
- 91%
- 89%
- 80%
- 74%
- 72%
- 33%
- 31%
SCHOOLS’ POLICIES & STRATEGIES FOR PROVIDING A SAFE DIGITAL LEARNING ENVIRONMENT

Proactive priorities of safe online practices
Active management of site blocking filters
Incident management
Rely on ISP to block inappropriate sites
Other
No specific policies

CHALLENGES FOR TEACHERS WHEN USING DIGITAL TECHNOLOGIES FOR LEARNING

- Student engagement in learning
- Student wellbeing
- Leadership in use of technology
- Technical support
- Access to suitable technology into teaching
- Inequity of student access to technology at home
- Pedagogical change
- Time for upskilling

ADOPTION BY TEACHERS OF DIGITAL TECHNOLOGIES

<table>
<thead>
<tr>
<th>Skill</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>0%</td>
</tr>
<tr>
<td>Learning the process</td>
<td>5%</td>
</tr>
<tr>
<td>Understanding and application of the process</td>
<td>11%</td>
</tr>
<tr>
<td>Familiarity and confidence</td>
<td>40%</td>
</tr>
<tr>
<td>Adaptation to other contexts</td>
<td>31%</td>
</tr>
<tr>
<td>Creative application to new contexts</td>
<td>13%</td>
</tr>
</tbody>
</table>

TEACHER SKILLS TO MANAGE USE OF PERSONAL DIGITAL DEVICES

IMPACT OF DIGITAL TECHNOLOGY ON STUDENT ACHIEVEMENT

CHALLENGES FOR TEACHERS WHEN USING DIGITAL TECHNOLOGIES FOR LEARNING

IS NOT A PROBLEM | NEUTRAL | IS A PROBLEM | DON’T KNOW
---|---|---|---
Student engagement in learning | 74 | 21 | 5
Student wellbeing | 73 | 21 | 5
Leadership in use of technology | 59 | 25 | 16
Technical support | 49 | 30 | 21
Access to suitable technology into teaching | 49 | 31 | 20
Inequity of student access to technology at home | 41 | 23 | 36
Pedagogical change | 31 | 27 | 56
Time for upskilling | 17 | 22 | 56

IMPACT OF DIGITAL TECHNOLOGY ON STUDENT ACHIEVEMENT

- QUITE A SIGNIFICANT IMPACT
- A MODERATE IMPACT
- VERY LITTLE IMPACT
- NONE
- DON’T KNOW

SCHOOLS’ POLICIES & STRATEGIES FOR PROVIDING A SAFE DIGITAL LEARNING ENVIRONMENT

- Proactive priorities of safe online practices
- Active management of site blocking filters
- Incident management
- Rely on ISP to block inappropriate sites
- Other
- No specific policies