



# DEVELOPING IN DIGITAL WORLDS

Findings from parents with children in early childhood education

Phase One  
2015-2017



**EDUCATION AND SOCIAL WORK**

**WOOLF FISHER RESEARCH CENTRE**

## Project Overview

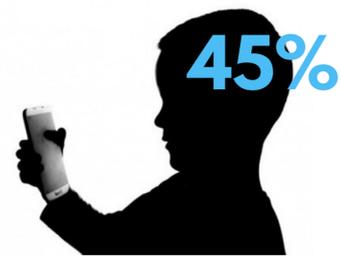
- Developing in Digital Worlds is a four-year project conducted by the University of Auckland's Faculty of Education and Social Work and funded by the Ministry of Business, Innovation and Employment
- This is the first study in the world to identify links between teaching, family participation and game-based learning in order to promote educational outcomes and equity
- The project focuses on children aged 4-17 years to test how to promote cognitive and social development in the '21st Century' digital world

## Study Aims

- How does participation in the digital world influence children's cognitive development (e.g. critical thinking and critical literacy) and social development (e.g. self-regulation and collaborative reasoning)?
- What skills, knowledge and capabilities do children need to manage, engage and benefit from participating in the digital world?
- How can family, educators and society effectively support children's involvement in the digital world?

# PARENT QUESTIONNAIRE RESPONSES

## Uses of Digital Devices

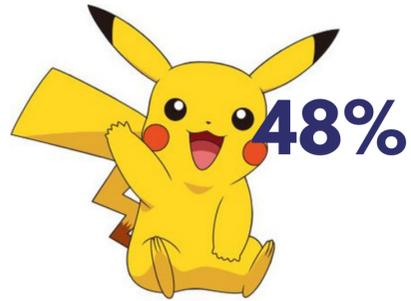


- 45% of the 4-5 year olds used digital devices daily

31 parents participated  
4-5 year old children  
4 local early childhood centres, including a mix of bilingual and English-language centres



- Almost all the children watched videos or played educational games



- 48% of children used digital devices to play leisure (non-educational) games

- 62% of parents would not like their child's centre to use more digital devices



## Effects of Digital Devices



- Most parents were positive about the effects of digital devices on their child's social and cognitive development

- Some identified negative effects such as the difficulty of controlling children's time spent on digital devices



## Skills needed for digital devices

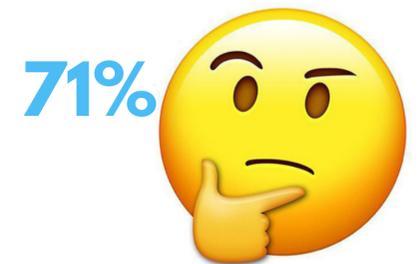
- 50% of parents thought that their child needs to learn specific skills for digital devices, such as internet safety,



while the other 50% did not think specific learning was needed but that children would pick up the skills by observing others and through trial and error

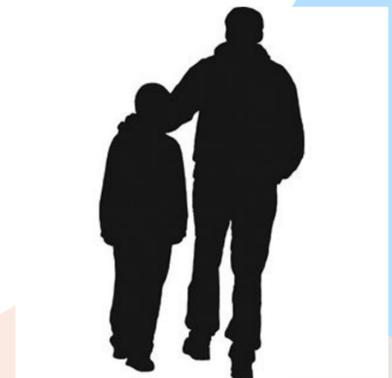
- More parents thought their children had the necessary thinking skills to use digital devices than the necessary social skills

- 71% of parents reported that their child was able to decide what to watch or listen to



- 58% of parents thought their child was able to think about others' feelings e.g. when playing a digital game

- Parents reported a range of strategies to help children develop skills, including showing, setting rules and monitoring



- 65% of parents would like information on how to help their children to better use digital devices

Thank you to all those  
who contributed  
to this research.

## Recommendations

- There was a mixture of views about the use of digital devices at home, and about their effects including the balance between leisure and educational use, and amount of time spent on digital devices.
- Most of the parents would welcome advice on how to best use digital devices. Early childhood centres and schools are important sources for this advice.
- For some children, more deliberate development of social skills such as thinking about others and being aware of the effects of using digital devices is suggested.
- It is recommended that parents develop strategies to help children. Opportunities for parents to share their strategies would be very useful.

## Where to next?

We encourage you to discuss these findings with the staff members and other parents at your early childhood centre. Your collective understanding of the research will help advance the knowledge of children's digital skills and how children benefit from whanau support.

We will be sharing our findings with the Ministry of Education, among others, and suggesting how digital skills can be linked to Te Whariki, the New Zealand early childhood curriculum.

## More Information

If you have any queries, you are most welcome to contact the project manager, Angela McNicholl, at [a.mcnicholl@auckland.ac.nz](mailto:a.mcnicholl@auckland.ac.nz) or 09 923 8978, or email the principal investigator Professor Stuart McNaughton on [s.mcnaughton@auckland.ac.nz](mailto:s.mcnaughton@auckland.ac.nz)

Visit the Developing in Digital Worlds website to find out more:

[developingindigitalworlds.blogs.auckland.ac.nz](http://developingindigitalworlds.blogs.auckland.ac.nz)



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