

The use of iPads in Kindergarten: An exploratory survey study

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<https://www.flickr.com/photos/mikeoliveri/6300500597>

- TechnoLink: EdTech Service of Luxembourg-City
- Pilot phase of mobile ICT deployment
- Technical & Pedagogical Reasons in favor of iPads in Kindergarten
- Questions about success of this initiative
- Inform policy makers & budget holders

- Questions about enabling & hindering factors for ICT integration
- What did Kindergarten Teachers do with the devices in terms of teaching models?
- What did they expect the tool to change?
- What changes did they observe?
- Why did certain K-Teachers NOT use the devices?

- “Big Questions” were negotiated with TechnoLink
- Survey was designed and included a mix of types of questions: multiple choice and open text
- Common & specific Qs for Users vs. Non-Users
- Online
- Email invitation to 210 K-Teachers sent out by TechnoLink

■ Common Questions

- Gender
- Age, Experience
- Number of Students
- Self-Declared ICT-Competencies
- Private Ownership & Uses of ICT
- Professional Uses of ICT
- Good K-Teaching?
- Paintbrush Game

Find the Odd-One-Out

Television

Computer

Paintbrush

- SPECIFIC QUESTIONS:
USERS
 - Preparation
 - Why?
 - Expected Effects
 - What for?
 - Apps
 - When & How? (Classroom Management)
- Subjects
- Learning & Teaching Events (Leclercq & Poumay, 2005)
- Documentation & Evaluation
- How did you experience it?
- Advantages & Changes
- Satisfaction
- Issues & Wishes

▪ SPECIFIC QUESTIONS: NON-USERS

- Why not?
 - Informed choice?
 - Information from colleagues about their use of iPads?
 - Conditions to eventually use them in the future?
 - How would you prepare yourself?
- Would you be willing to have a look at a colleague's practice?
 - What for and how would you want to use them?
 - Expected effects and changes?

- Two portraits: users (n=63) vs. non-users (n=28)
- No claim to depict “reality”
- Qualitative analysis
- Exploring interesting patterns
- Basis for future research



Users (n = 63)

- **Gender:** Large majority women (55/4/4)
- **Age / Experience:** average 42 yrs / 18 yrs
- **Number of Students:** average 13.8 children (range: 7-17)
- **Self-Declared ICT-Competencies:** above average
- **Private Ownership & Uses of ICT:** Smartphones & Laptops - Communication, News and Search Activities
- **Professional Uses of ICT:** Lookup Information, Lesson Plans, Learning Materials, Communication, Production of Worksheets - Very rare uses of ICT by children, Desktop & Photo camera used by teacher
- **Good K-Teaching:** Respecting interests of kids, developmentally appropriate, playful, interactive, based on sensory experiences, social, manipulation, fun, practical
- **Odd-One-Out:** Computer largely seen as a consumption device (like TV)

▪ SPECIFIC QUESTIONS: USERS

- **Preparation:** mainly trying out
- **Why?** because available, nice change, motivation, easy to use, documenting by photo, audio & video
- **Expected Effects:** kids enthusiasm, motivation, curiosity, learning to use iPads
- **When & How? (Classroom Management)** during freeplay < guided activities (early morning), but rather rarely
- **Subjects:** mostly math and languages
- **Learning & Teaching Events (Leclercq & Poumay, 2005):** mostly exercising
- **Documentation & Evaluation:** rarely, audio for speech
- **How did you experience it?** kids were enthusiastic, motivated, but quarrels about who gets to use the iPads first, easy to handle
- **Advantages & Changes:** easy to use, based on children's interests, fun, motivating, more concentration, more documentation, otherwise few changes in teaching practices
- **Satisfaction:** Average
- **Issues & Wishes:** Quarrels, Need for usage rules, need for training, addictive, not enough devices, appropriate apps, many “no issues” answers, more iPads

Non-Users (n = 28)

- **Gender:** only women (28)
- **Age / Experience:** average 37 yrs / 12,5 yrs
- **Number of Students:** average 13.9 children (range: 4-17)
- **Self-Declared ICT-Competencies:** above average
- **Private Ownership & Uses of ICT:** Smartphones, Desktops & Laptops - Communication, News and Search Activities
- **Professional Uses of ICT:** Lookup Information, Lesson Plans, Learning Materials, Communication, Production of Worksheets - Very rare uses of ICT by children & teachers, Photo camera sometimes used by teacher
- **Good K-Teaching:** active, motivating, playful, language & communication, social, child-appropriate, fun, learning by doing, movement-based, practical, manipulation, concrete, interactive
- **Odd-One-Out:** Computer largely seen as a consumption device (like TV)

■ SPECIFIC QUESTIONS: NON-USERS

- **Why not?** enough media consumption at home, too young, other priorities, concrete experiences, social learning more important, forgot to use them, quarrels, too attractive
- **Informed choice?** no intention to prepare for use of iPads
- **Information from colleagues about their use of iPads?** No, or still not interested

- **Conditions to eventually use them in the future?** Nothing seems to convince them
- **How would you prepare yourself?** Try out myself
- **Would you be willing to have a look at a colleague's practice?** not really
- **Expected effects and changes?** Children would learn to use the tools, motivation, documentation, hope to be able to use in meaningful ways

- **Majority** of respondents did **try the iPads**
- **Children** were **happy** about it. Too much?
- Most did **not extensively use** them; lack of training? other priorities?
- It's not enough to put out the device; **ecosystem** must be favorable to its spreading (Zhao & Frank, 2003).
- Some discovered them as **speech documentation tools**
- **Many commonalities between those who used the iPads and those who did not:** similar beliefs about good teaching in Kindergarten, see computers as TVs, not heavy users of EdTech in general
- **Non-Users:** stronger anti-media consumption position? Importance of teacher pedagogical beliefs (Ertmer, 2005)
- **Future Research:** Deeper Insights via Interviews & Observations

THANK YOU FOR YOUR ATTENTION!



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