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Partnership for Understanding the Ecosystem, the Adaptability, and the Transfer of Digital Competencies

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APTICA

FI NB IF
INNOVATION

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Context and rationale

- Professional development of teachers is a key factor of successful integration of the ICT (Information and Communication Technology) in schools (Buabeng-Andoh 2012).
- New Brunswick is one of the first provinces in Canada to pioneer ICT and Internet in the classroom. Lately it was found that New Brunswick teachers, along with their colleagues from Saskatchewan and British Columbia, use more frequently ICT than their colleagues in other Canadian provinces (Paquin).
- APTICA (Association for the educational advancement of information technology and communication in the Atlantic), a non-profit organization, was established to organize annually a conference to encourage and facilitate the educational integration of information technology and communication.
- For the past 15 years, the APTICA congress has united the Francophone Learning Community of the Atlantic Provinces to share and to develop educational resources using ICT.

From APTICA to CompéTICA: new partnerships – extending the best practices

Aim: to study life-long digital competences, their transferability, adaptability, as well as ecosystemic aspects across educational institutions, families, and work places.

Objectives: to establish collaboration between family and school, between elementary school and high school, between high school and post-secondary institutions and, finally, between educational institutions and the workplace, in order to

- define the continuum of digital competences in varied contexts of life such as education, work, community and family;
- identify and describe best practices that develop these competences over the lifelong period, and finally;
- develop and implement new initiatives as result of increasing collaborative efforts.

Partnership development

- Three year initiative
- Partnership between experts from different pedagogical intervention levels and partner agencies
- First year, Delphi method (Linstone & Turoff, 1975, Mamaqi et al 2010)
- 21 interviews (on going)

Interviews

- Home economists (Family) and pre-school teachers (4)
- Primary school teachers (4)
- Secondary school teacher (1)
- Post secondary professors (5)
- Education department (1)
- Post-secondary education, training, and labor (4)
- Adult literacy (2)

Partial Results

LeBlanc, M., Léger, M.T., Godin, J., Freiman, V., Robichaud, X., Larose F., Chukalovsky, R. & Bourgeois Y. (2015). A Strategic Partnership to Understand the Ecosystem, Adaptability and Transfer of Digital Skills - A Focus on the Educational System. SITE proceedings, 1-6.

6 interviews from Primary to post secondary level

Preliminary Results: Attitude

Miles & Huberman (1994).

- Open minded
- Positive
- Patient
- Autonomous
- Motivated
- Collaborative
- Risk taking, adventurous
- Curious
- Attentive to details
- Mistakes are not failures
- Not influenced by past bad experiences

How did you become competent?

Formal training

- High school or post secondary course
- Teacher
- Webinars

It is a day to day, lifelong learning (Participant C)

Informal training

- Trial and error and self taught
- 'Youth I am in charge of.' (Participant B)
- Friends
- Family members
- Secretary
- Grand children
- On-the-job-learning

Families

- Less socialization and communications
- Younger generation teaches older generation
- Focus on educational aspects of technology and time limits
- Presumption that all families have access (rural vs urban) and financial capacity
- Parent education
- “The 35 year old and older have difficulty “ living virtually” (Participant J)
- “My mother is 97, she does not need to have digital competencies” (Participant K)
- “The older generation is more apprehensive about using the computer while the younger generation is not scared enough” (participant D)

Preschool Before 5 years old

- Find games (photos, videos, Youtube)
- Play learning games such as alphabet, colors
- Learn how to use the basics of the computer (turn it on, use the mouse)
- Develop social and personal skills (before digital skills)

“There is no age to learn computer skills, we should teach them when they are ready”
Participant C

“We should heighten their awareness of technologies by teaching them how to manipulate the mouse, etc. This should be done in moderation- focus on the global development of the child” Participant E

“Some children can navigate on the computer better than the adults” Participant G

References

- Buabeng-Andoh, C. (2012). International Journal of Education and Development using Information and Communication Technology (IJEDICT), 8(1), 136-155.
- LeBlanc, M., Léger, M.T., Godin, J., Freiman, V., Robichaud, X., Larose F., Chukalovskyy, R. & Bourgeois Y. (2015). A Strategic Partnership to Understand the Ecosystem, Adaptability and Transfer of Digital Skills - A Focus on the Educational System. SITE proceedings, 1-6.
- Linstone, H.A. & Turoff, M. (1975). The Delphi Method : Technique and Application, Londre, Addison-Wesley.
- Miles, M. B. & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. Thousand Oaks, CA: Sage.
- Mamaqi, X., Miguel, J. & Olave, P. (2010). The e-DELPHI Method to Test the Importance Competence and Skills: Case of the Lifelong Learning Spanish Trainers. World Academy of Science, Engineering and Technology, (4), p. 1204 – 1212.
- Paquin, M. (...). L'intégration des TIC au Canada français. Éducation Canada, retrieved at: <http://www.cea-ace.ca/fr/education-canada/article/l%E2%80%99int%C3%A9gration-des-tic-au-canada-fran%C3%A7ais>