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The Role of the Digital Technology Coach

PURPOSE

To investigate the impact of the support that elementary and secondary teachers received from a Digital Technology Coach as she forged her new role within the school district

RESEARCH QUESTION

How does a Digital Technology Coach support teachers with educational technology integration while defining the role and engaging in selfdetermined professional learning?



Instructional technology professional development that is on-site, individualized and includes continuous support has a direct influence on students' ability to use technology effectively (Nelson & Webb, 2016; Sugar, 2015)

Professional learning supports teachers' growth fosters educational improvement (Fullan, Hill & Crevola, 2006) and enhances student achievement (Elish-Piper & L'Allier, 2011)





8-month long professional learning project



1 Southern Ontario School District



There were 4 professional learning meetings facilitated by the DT coach

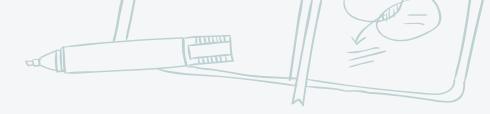
> These were opportunities for participants to come together to share new strategies, reflect, and discuss their practices



The DT Coach provided site-based, individualized support to teachers

- > Teachers were coached in the integration of technology
- With the support of the DT coach, teachers co-planned and cotaught lessons focused on a variety of literacy-based lessons that were cross-curricular in foci





PARTICIPANTS

18 Teachers



1 Digital Technology (DT) Coach





DATA COLLECTION



Interviews

- ▷ Interviews were audiorecorded and transcribed prior to data analysis



Fieldnotes

Researchers typed fieldnotes on their devices during their observations of 4 large group sessions and the 16 coaching interactions



Artifacts

Artifacts of the teachers' work were gathered such as instructional resources and slideshows from group sessions



DATA ANALYSIS

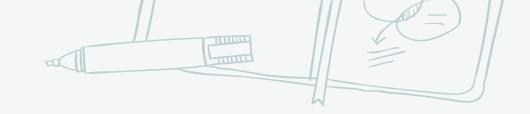
- Qualitative software NVivo (QSR International, 2015) was used to import all field notes and interview transcripts
- → Data were read and coded
- Nodes were created and run through software program to find common themes
- The findings were clustered into categories to find larger themes
- Quotes were extracted from the raw data to illustrate each theme





- o DT coach regarded herself as an educator & approached teachers as her peers
- Followed the lead of the teachers with respect to what they desired to learn about technology
- Embraced self-determined professional learning
- Made the learning developmentally appropriate in accordance with the students' prior knowledge and experience







FORGING THE ROLE OF THE DT COACH

Coach: When I got the job, I have to say, I thought there would be a little bit of a checklist. Apparently not. Okay. You know what I mean?

Researcher: Define your own job. And the coaching part of the it, you've had no PD or resources on how to work with teachers or coach...

Coach: No. Not that I feel like I'm at a loss, but I feel...

Researcher: No, no, definitely not at a loss, you have a lot of infinite knowledge

Coach: I feel it would be something I would benefit from, right.

(Coach Interview, June 22 2018)

"On a personal level I did a lot of training outside...I took some courses and things because I found on the professional level with regards to my role, I wanted to make sure that I was very proficient in what I was doing..."

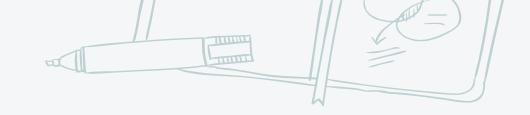
(Coach Interview, June 22 2018)





- Provided needs-based, differentiated coaching
- Provided teachers with discreet and manageable sets of skills for using technology in the classroom
- Teachers were affirmed when they saw immediate motivation and engagement in their students
- o Teachers reflected on their year of work with the DT coach; noted that relevance to their students' needs and their pedagogy is what sustains changes in their practice







BEING RESPONSIVE TO TEACHERS

"[Coach] is good at anticipating what the teacher might need to know when she is gone" (Fieldnote, Jan 12 2018)

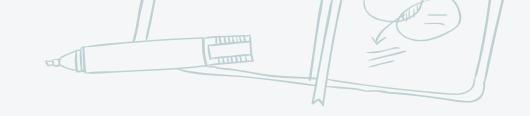
"I loved when [Coach] came in. [Coach] has a...wonderful way of not making you feel stupid...She makes you feel like you are both on a journey, learning together about technology...which is refreshing!" (Teacher Interview, June 11 2018)





- DT coach adeptly infused technology into any curricular area as requested by the teacher participants
- Technology was integrated to introduce a new concept, solidify learning, or as a platform for a culminating task
- Such broad use of technology across the curriculum inherently presented opportunities for focusing on success criteria and assessment





#3

TECHNOLOGY ACROSS THE CURRICULUM

"The teachers are very engaged in hearing about different ways this project might be integrated into the curriculum." (Fieldnote, Jan 17 2018)

"They are planning the lesson details on the fly....This dialogue covers the purpose, expectations and lesson plan execution. There is even a bit of assessment here in how and what they will be looking at in the product." (Fieldnote, Dec 15 2017)



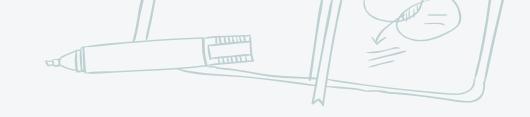


Findings



- On-site technological resources varied and the digital technology coach needed to be flexible and creative when supporting teachers with minimal resources in their classrooms
- Access to adequate technology was a recurring issue and dilemma for the coach and for teachers
- o The digital technology coach used her own portable resources liberally







"Drawbacks and difficulties with technology are apparent — [Coach] is unflustered by this" (Fieldnote, May 3 2018)

"Many things keep going wrong (tech), approx. 50% of teachers are disengaged, time restraints, [Coach] is not flustered by any of this" (Fieldnote, Nov 17 2017)

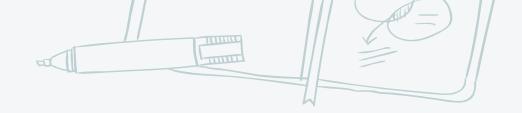
"Coach is willing to admit when things don't work for her and troubleshoot on the spot – she appears unflustered by errors or tech problems." (Fieldnote, Nov 20 2017)





- #5 TROTESSIONAL LEARNING TACILITATION
- DT coach regarded her most successful coaching as those cases of teachers who have had no technology integration in their classrooms and she moved their practice to successfully include technology
- She was flexible for teachers who called on her frequently for support and others who were periodic
- The coach followed up with teachers on a consistent basis to ensure that they continued to use tools





#5

PROFESSIONAL LEARNING FACILITATION

"I've personally found that teachers feel more comfortable when we work together and present it to their students and then there's both of us there...They expressed to me that they don't feel the pressure of having to be an expert right away, not that I'm an expert either, but it's kind of like for them it's a comfort level and that's what I'm there for I guess." (Coach Interview, June 22 2018)

"There was a couple people I followed through with... I emailed her this morning and got the email back saying 'oh thanks, I didn't expect...' It's like they didn't expect [me to]...and like well I told you I was going to email you back...so now I'm just happy that she's happy."

(Coach Interview, Dec 8 2017)

"Afterwards we did debrief, and she would give, like she just sent me an email following up what I could do with what she taught last time. So, she did give me a follow up email." (Teacher Interview, June 13 2018)



Educational Significance

- Establishing the role and scope of practice for the digital technology coach is essential to ground meaningful relationships with teachers (Skues & Cunningham, 2013)
- The role is often twofold: to support teachers' professional learning and to resolve issues with technology on-site (Sugar, 2015)
- O Teachers who receive mentoring on technology improve in its use, are confident, and they can navigate some of the usage barriers (Kopcha, 2012)
- o However, sustaining the effects of coaching after this dedicated time is a challenge, teachers need a supportive, collegial school environment to do so



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