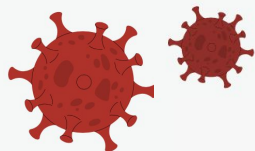


Digital Technology Coaches' Covid-19 Pandemic Experiences:

Supporting Teachers through Responsiveness, Resourcefulness, and Relationships



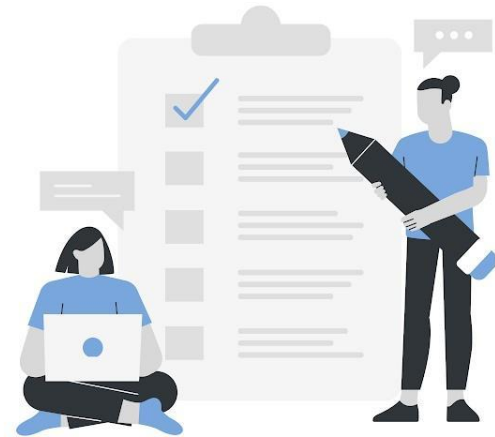
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- Background Literature
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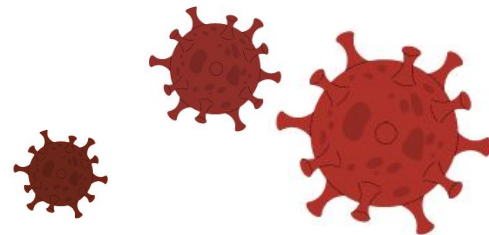


Objectives

The impact of digital technology (DT) coaching is underexplored ([Lofthouse, 2019](#)), yet the COVID-19 pandemic revealed it has the potential to play an integral role in education, ([Reich, 2021](#)).

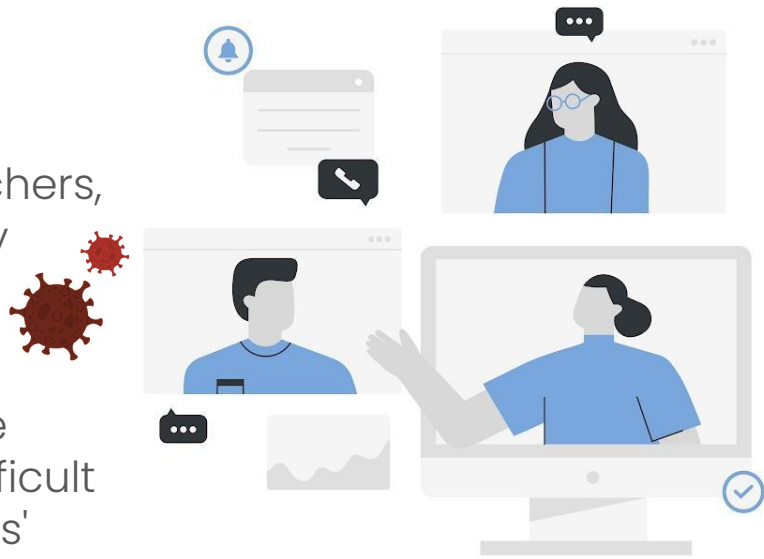


This study focuses on this issue by investigating the lived experiences of two DT coaches from two different Ontario school boards, as they forged their unexpected roles supporting teachers in their transition to emergency remote learning during the pandemic. It sought to enhance understandings of the factors that affected their experiences supporting teachers.



Background Literature

- COVID-19 profoundly affected the lives of teachers, who faced unprecedented challenges as they endeavored to provide socially distanced education using technology (Kim & Asbury, 2020).
- Pre-pandemic, it was well established that the integration of educational technology was difficult and impacted by obstacles including teachers' technological competence, self-efficacy, and comfort with risk-taking, as well as the availability of effective professional learning (PL), technical support, and resources such as devices (Alenezi, 2017; Kopcha, 2013; Woo, 2016).
- Professional development (PD) that is specifically focused on technology integration, on-site, and includes continuous support, holds the potential to assist teachers in overcoming many of these barriers (Kopcha, 2012; Nelson & Webb, 2016; Sugar, 2005; Woo, 2016)



Background Literature – DT Coaching

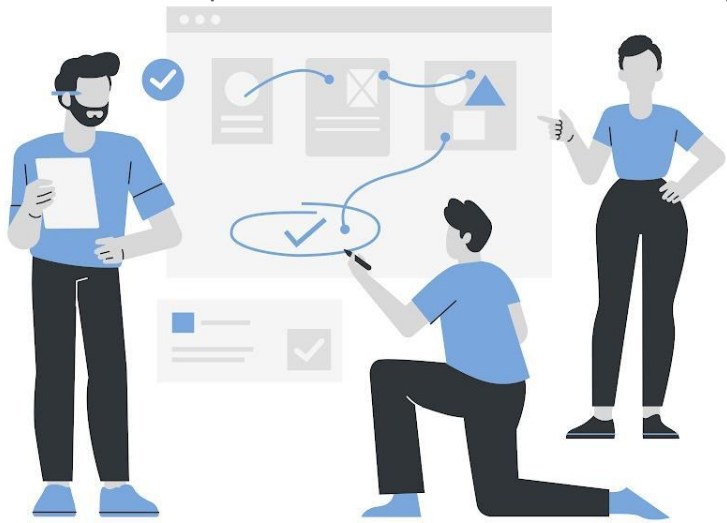
- DT coaching is a long-term endeavor; teachers require time to develop trusting relationships with their coach, who is then able to provide support as they gradually acquire competence & confidence (Skues & Cunningham, 2013; Woo, 2016).
- Effective DT coaching requires a coach to be adept at identifying teachers' needs and addressing them in a non-intimidating manner (Campbell et al., 2014; Wang et al., 2014; Woo, 2016).



- Critical to this is allowing teachers to self-determine the DT coaching agenda (Giamellaro & Seigel, 2018; Nelson & Webb, 2016).
- Such individualized PL requires a significant investment of time and funds, which can be a barrier for some districts (Blanchard et al., 2016; Giamellaro & Seigel, 2018; Kopcha, 2012), that is potentially overcome by the use of technology (Gregory et al., 2017; Leighton et al., 2018).

Background Literature – COVID 19 Dilemmas

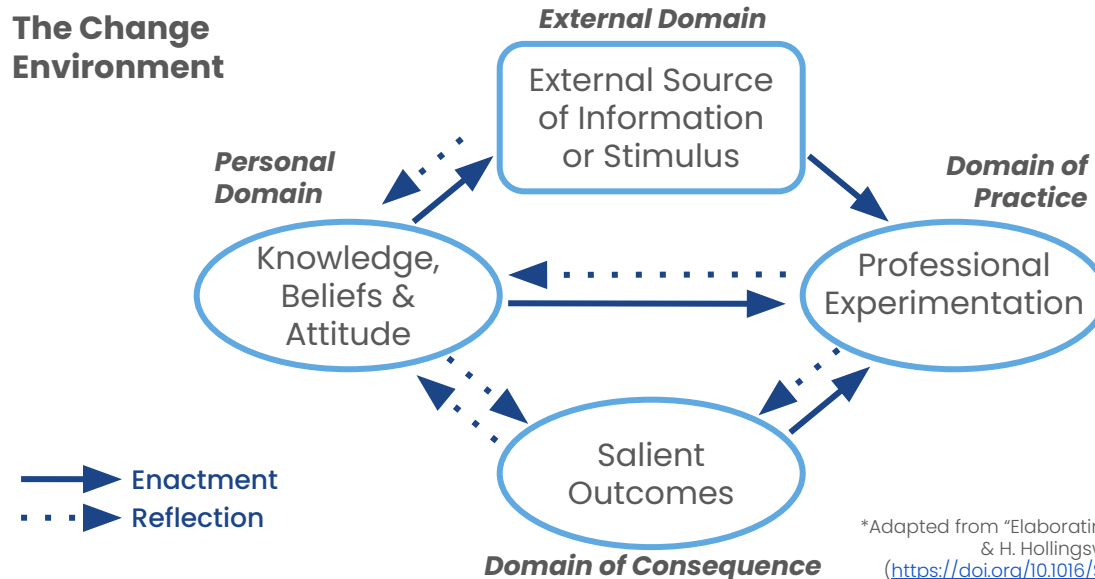
- The COVID-19 pandemic upended and disrupted educational systems ([OECD, 2020](#))
- Teachers faced enormous technological, pedagogical, emotional, and social challenges as they navigated the move to emergency remote learning ([Denden, 2020](#))
- Nonetheless, lessons learned during the Covid-19 pandemic present the potential to envision change in long-term use of educational technology. ([Barnhart, 2020](#))
- Requisite to this is teachers' opportunity for effective professional learning ([OECD, 2020](#))



- Post-pandemic teachers' PL should be collaborative and might be provided through virtual professional learning communities and/or virtual coaching ([Brown et al., 2021](#))
- COVID-19 may not be the only educational emergency – to prepare for future emergencies, educational systems need to ensure teachers have the support required through PL ([OECD, 2020](#))

Theoretical Framework

The study was conducted within a social-constructivist research paradigm, guided by Clarke and Hollingsworth's (2002) *Interconnected Model of Teacher Professional Growth (IMTPG)* depicting growth as mediated by the processes of critical reflection and enactment on information from four domains: teachers' beliefs, sources of external information, salient outcomes, and teaching practices.



*Adapted from "Elaborating a model of teacher professional growth" by D. Clark & H. Hollingsworth, 2002, *Teaching and Teacher Education*, 18, p. 951 ([https://doi.org/10.1016/S0742-051X\(02\)00053-7](https://doi.org/10.1016/S0742-051X(02)00053-7)). Copyright © 2022 Elsevier B.V.

Methods

Qualitative case study methods ([Merriam, 2009](#); [Yin, 2014](#))

Participants: 2 Digital Technology coaches (different Ontario school districts)
“Helen” and “Jenna” (pseudonyms)
8 teachers (4 supported by each DT coach)

Data Sources: As part of a larger study of professional learning, these two coaches were observed as they worked with teachers within their districts over two years, with field notes gathered during coaching sessions, and individual interviews each year, with coaches and teachers.

The data sources for this paper, were a subset of the larger data set:

- Individual sixty-minute interviews in June 2020 with the 2 coaches and a sampling of 8 teachers (four supported by each DT coach)
- Questions probed these ten participants’ lived experiences, challenges, and successes navigating the provision of emergency remote learning

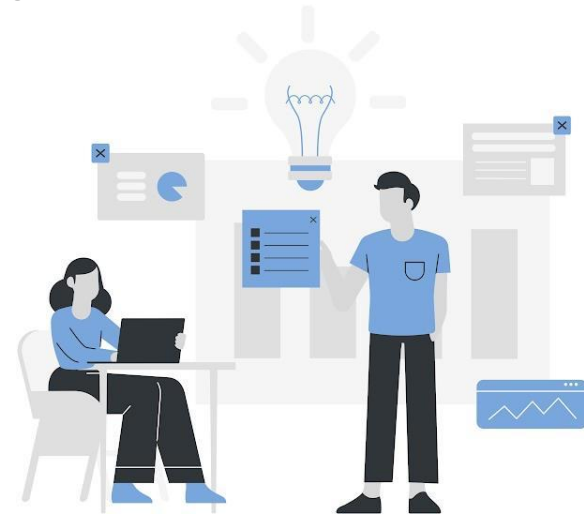
Data Analysis: These data were analyzed through coding and categorizing as described by Creswell ([2014](#)).



Findings

Findings documented three interconnected, interrelated themes: the importance of both DT coaches'

- ★ **responsiveness,**
- ★ **resourcefulness,** and
- ★ **relationships.**



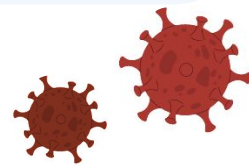
Findings: Responsiveness

Both coaches were extremely responsive and worked tirelessly to support the unprecedented situation of transitioning all teachers within their districts to remote learning.

“ March break hit and all 1200 teachers needed help... Every single person needed you. It felt good because you are needed but we are answering emails 24/7... It has been non-stop. (Helen Interview June 9)

My biggest challenge is getting people up online, then my biggest accomplishment is getting everyone online. (Jenna Interview June 8).

”



Findings: Responsiveness

These DT coaches had been in their roles for several years. However, pre-pandemic, teachers were not required to use digital tools or engage in coaching. Teachers noted how familiarity with DT platforms and tools eased the transition to remote learning. Both DT coaches were extremely responsive to all teachers and the families they served, irrespective of their DT skills.

“*The teachers who embraced [technology] from previous years...They knew how to upload assignments. It wasn't panic but there were some [teachers] who didn't do anything. They were reaching out for help, and panicked. Helen has been fantastic not just 8 to 4, we are into the evening with families and parents, through phone calls and emails to access things.*

(Teacher, Interview June 10)

”



Findings: Responsiveness

These coaches were charged with supporting teachers, students, and students' parents as they moved quickly to using digital technology for all learning experiences. In some cases, teachers, students, and/or parents had little, if any prior experience using these tools and platforms, and lacked confidence and competence doing so. Digital tools were used to successfully mentor them.

“

I haven't engaged with her (Helen) until this online learning.... The initial piece where we were expected to be up and running was challenging... I was overwhelmed... We Face-Timed and showed each other screens... she went through the apps and D2L (platform). Every time I had a question, she would get back in touch with me. I feel like she was the parent role, and I was on the bicycle until she let go. She was great... met me at my level and moved me along. (Teacher Interview June 15)

”

Findings: Resourcefulness

Meeting teachers' needs and those of their students and parents necessitated procuring a plethora of resources such as devices, software, as well as teacher access to publisher developed materials. Both coaches were resourceful and undertook unusual roles such as securing copyright from publishers, scanning textbooks, and assisting parents with device access and use.

“

We needed to be aware of copyright...you don't have permission...Then working with the publishers...They made an open-access site, that came after many emails and meetings...we were given permission to scan....We sat and scanned all of the textbooks, it was awful. (Jenna, Interview, June 8)



An issue for me is working with ELL students... we had to get them technology, we've had to teach them how to use the technology in the evenings because that's when the parent is not working ... an interesting aspect that hadn't happened before. (Helen, Interview, June 9)

”

Findings: Resourcefulness

Both coaches also assumed leadership roles in the development of webinars for teachers' PL, which were well attended.



“...it is different but it is still the role of support. We have had webinars with 90 people and so in a week’s time we hit 300 to 400 people with no cost of supplies. I have enjoyed the webinars we have a chat and webinar going. Then we go to a live screen and work it through. I think it is pretty efficient. (Jenna, Interview June 8)

”

Findings: Resourcefulness

They were also resourceful expanding their districts' shared learning management system (LMS) platforms, as a wide-ranging repository for system-wide teachers' use.

“ We created an elementary LMS page. ...there is a page created just for teachers. We wanted a spot to share everything, we put the contents... it went from everything to resource topic...So, people could come in and get right on to that. It was linked to our board webpage...How do I support my class, it links to video and resources... They were all put here together...We had within our board already...then we had it supersized. (Jenna, Interview, June 8) ”

As teachers gained skill, these coaches encouraged them to use one another as resources, building networks of teacher support and collaboration.

“ Teachers are coming to me for tech support, so a lot of collaboration where it never happened before. This atmosphere is contagious. (Teacher Interview, June 9) ”

Findings: Relationships

Teachers quickly built trusting relationships with these coaches and turned to them for support.

“

I am used to the way I teach. I haven't engaged with her [Helen] until this online learning.... The initial piece where we were expected to be up and running was challenging... I contacted Helen, she was friendly, open and patient. Met me at my skill level...She took a step back, and she said no pressure...I was overwhelmed and hit the ground running. She was very patient. Her demeanour is excellent for her role, take the time to show me. She would go back and it was useful for me. She kept me engaged too... She said... don't put pressure, you will be fine. That was helpful for me. (Teacher Interview June 15)

”



Findings: Relationships

In addition to providing technology assistance and resources to facilitate emergency remote teaching and learning, both coaches provided emotional support for teachers who also needed a nonjudgmental listener with whom to share their trepidations and frustrations.

“ *Just trying to calm them down and get them to realize that it's going to be okay.... I listen to a lot of people just talking through their feelings and trying to wrap their minds around what they're trying to do and trying to help them with their classroom. (Helen, Interview June 9)*

Sometimes teachers need someone to talk to...People know you and start to trust you. So, I think that has been a huge change, realizing it is not the PD piece. You have to be there to listen too. (Jenna, Interview June 8)

”

Conclusions



- These two DT coaches held an integral role during the pandemic and exemplified responsiveness, resourcefulness, and caring relationships with teachers – the 3 R's of DT coaching during the pandemic.
- These two DT coaches met teachers' emotional, pedagogical and technical needs – all identified as important during the pandemic ([Denden, 2020](#)).
- This inquiry affirmed the importance of DT coaches ([Reich, 2021](#)), who we contend may be regarded as essential educational workers in this pandemic era.
- Use of technology reduced barriers of time and location proximity, thus enhancing the coach-teacher interactions, leading to changes in teachers' practices ([Gregory et al., 2017](#); [Leighton et al., 2018](#)).
- Teachers' need for the support of these coaches fast-tracked their development of trusting relationships with them.
- This study demonstrated that virtual DT coaching can be effective, as asserted by Brown et al. ([2021](#)).

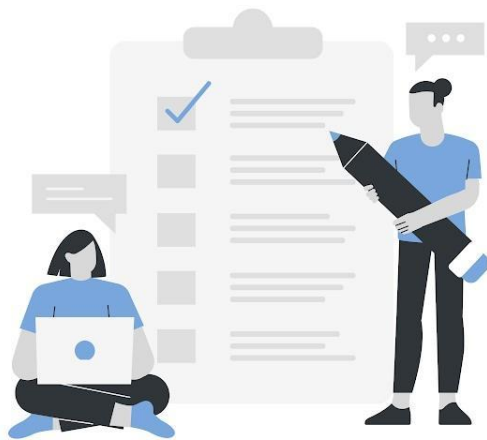
Scholarly Significance

The findings of this study document the promise of DT coaching in this pandemic era.

This study supports the assertion that teachers benefit from support through DT coaching. ([Reich, 2021](#))

Policymakers and practitioners need to ensure that DT coaches have the skills and attributes required to be responsive, resourceful, and build non-judgmental relationships with teachers.

This study illustrates that the provision of DT coaches may aid districts in preparing for future emergencies and cultivating more equitable education systems for the 21st century.



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