Learning Anytime, Anywhere: Online Teacher Professional Development

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TOPIC FOCUS

At the turn of the millennium, Ontario's public education system experienced a shift in priorities for its educators which resulted in a drastic change in the availability and focus of the professional development (PD) offered to teachers. The resulting top-down, prescribed professional development was found to be sporadic, myopic, and often pointless (Darling-Hammond, Chung Wei, Andree, Richardson, & Orphanos, 2009). Past research indicates that a more effective and systematic approach is needed in order to support, develop, and mobilize close to 115, 000 full time elementary and secondary educators in Ontario (Ontario Ministry of Education Factsheets, 2013-2014, 2015) who teach in and lead our school communities. It is the authors' assertion that availability of ICT in many of Canadian schools provides a value added benefit when used as a mean of providing anytime, anywhere online PD for educators (oTPD).

"Other fields, from medicine and management to the military, do a far better job of providing ongoing learning opportunities and support for their professionals" (Darling-Hammond, et al., 2009, p. 2).

LITERATURE

A broad sweeping review of existing research dealing with effective teacher PD; availability of online teacher professional development (oTPD); the nature of the oTPD; record keeping and tracking of PD; as well as the effects of oTPD on instructional practice and student achievement was conducted over the past few months. More than 200 research publications encompassing experimental, quasi-experimental and quantitative methodologies along with dozens of literature reviews on the topic were considered in order to gain a better understanding of the wicked problem of prescribed teacher professional development and explore alternate solutions for addressing this wickedry.

"Teachers often have little or no choice in the type and timing of their PD" (Francis & Jacobsen, 2013, p. 321).
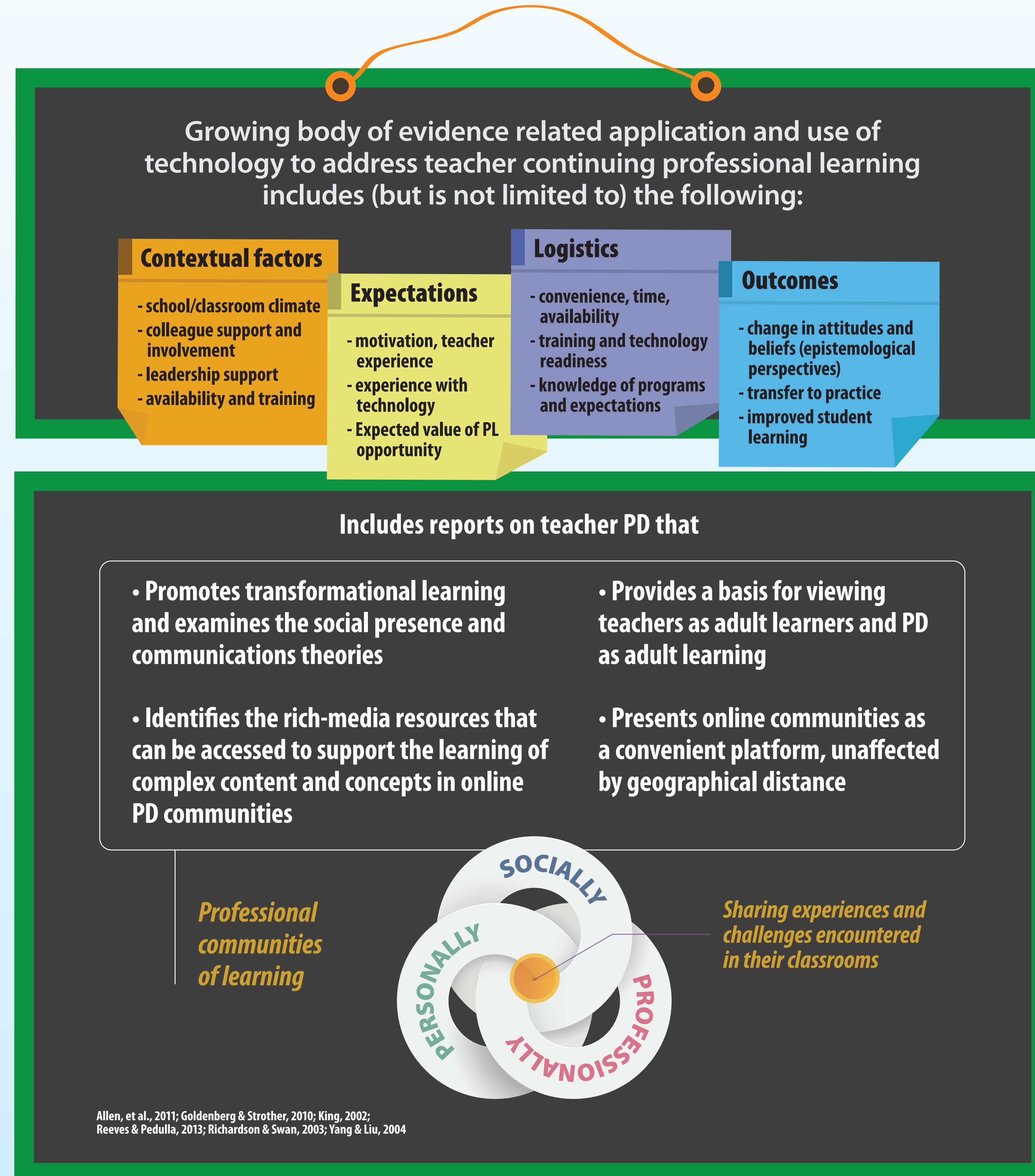
- Teachers are expected to continually expand their knowledge and skills to implement the best educational practices with the goal of improving student learning. The 1990 Ontario Education Act specifies that, as part of their duties, teachers must participate in "professional activity" as designated by the board under the local regulations (Section 264[1h], Education Act, 1990; Canadian Legal Information Institute, 2008).
- Day and Sachs found (as cited by Hardy, 2009) that different viewpoints and perspectives on PD occur, with considerable tension between advocates of PD for broad, systemic (especially accountability oriented, aka prescribed or mandated PD) purposes and PD for more localized, profession oriented purposes.
- Research suggests that PD is likely to be of a higher quality when it takes into account the varied needs of teacher-learners, is carefully structured and purposefully directed, involves a significant amount of time, incorporates scheduled opportunities for collaboration and is sustained through a series of follow-up activities that unfold over a year or more (Darling-Hammond, et al., 2009; Garet, Porter, Desimone, Birman, & Yoon, 2001; Guskey, 2009; Guskey & Yoon 2009; Nelsen & Cudeiro, 2009).
- Allen, Fischer, Robbins, Moore, Buck, McKinniss, & Hanson (2011) suggests with almost every Canadian school now connected to the Internet, offering more opportunities for online collaborative PD for teachers could "increase the efficacy of PD and offer a means of reducing cost substantially" (p. 1).
- Researchers, Dede, Breit, Ketelhut, McCloskey, and Whitehorse (2009) assert that there is a need for PD that can fit with individual teacher's busy schedules, that draws on powerful resources often not available locally, and can create an evolutionary path toward providing real-time, on-going, work-embedded support.
- A study conducted by Yang and Liu (2004) to investigate the value and effectiveness of online workshops as a tool for creating professional learning communities revealed that most participants benefited emotionally and intellectually from using telecommunications networks for PD and support.
- In a 2014 ETFO Teacher Workload and Professionalism study, 66.4% of respondents (n = 2536) reported not having enough time to participate in PD activities.

PERSPECTIVES: CONSTRUCTIVISM AND SOCIAL CONSTRUCTIONISM

Young & Colin (as cited by Andrews, 2012) puts forward that constructivism proposes that each individual mentally constructs the world of experience through cognitive processes while social constructionism has a social rather than an individual focus. Prytula, Hellsten, & McIntyre, (2010) posit "to say that knowledge is constructive and co-created implies that mastering the skills of teaching requires working in community with other professionals, creating interactive learning environments, and sharing with and learning from one another" (p.5). Distinct from the epistemology that knowledge is accessible and exists beyond the individual, a constructivist epistemology implies that greater knowledge exists within a group of people, rather than in a single individual (Mitchell & Sackney, 2001). Like Dede and his colleagues (2009), my research into the effectiveness of oTPD and nature of the online interactions revealed that "overall there are indications that meaningful ways of engaging in dialogue can emerge and that desirable thinking skills can develop through online interaction" (p. 36). These perspectives and understandings of the epistemological constructivist nature of learning must come to the surface when constructing oTPD programs whether it is offered fully online or in a blended fashion.

Growing body of evidence related application and use of technology to address teacher continuing professional learning includes (but is not limited to) the following:

Contextual factors
- school/classroom climate
- colleague support and involvement
- leadership support
- availability and training

Expectations
- motivation, teacher experience
- experience with technology
- Expected value of PL opportunity

Logistics
- convenience, time, availability
- training and technology readiness
- knowledge of programs and expectations

Outcomes
- change in attitudes and beliefs (epistemological perspectives)
- transfer to practice
- improved student learning

Includes reports on teacher PD that

- **Promotes transformational learning** and examines the social presence and communications theories

- **Provides a basis for viewing teachers as adult learners** and PD as adult learning

- **Identifies the rich-media resources** that can be accessed to support the learning of complex content and concepts in online PD communities

- **Presents online communities** as a convenient platform, unaffected by geographical distance

Professional communities of learning

SOCIALLY — PERSONALLY — PROFESSIONALLY

Sharing experiences and challenges encountered in their classrooms

Allen, et al., 2011; Goldenberg & Strother, 2010; King, 2002; Reeves & Pedulla, 2013; Richardson & Swan, 2003; Yang & Liu, 2004

ASSUMPTIONS

- Teacher professional learning is believed to be a contributing factor to student learning and success.
- Teachers have different professional learning needs throughout their careers as their understanding of teaching, tools, students and practices change.
- The ability of teachers to access individualized, meaningful professional learning has been limited by geographical distance and time.

Online professional learning may be presented under any of the following categorizations:

oTPD	PLC	PLN	ALN	OLC
Online teacher professional development	Professional learning communities	Professional learning networks	In higher education, asynchronous learning networks	Online learning communities

Francis and Jacobsen, 2013

EFTO Teacher Workload and Professionalism: Main Study, 2014

24.8% of the professional learning time was teacher-initiated, while the remaining 75.2 % was reportedly initiated by others, n=2519

Further development of alternate models of teacher PD such as online seminars, tutorials, workshops and collaboration can serve to overcome constraints of convenience, time and location.

Initiated Professional Learning Time

- School Board activities 32.7%
- Teacher 24.8%
- Union 5.4%
- Staff collective 6.5%
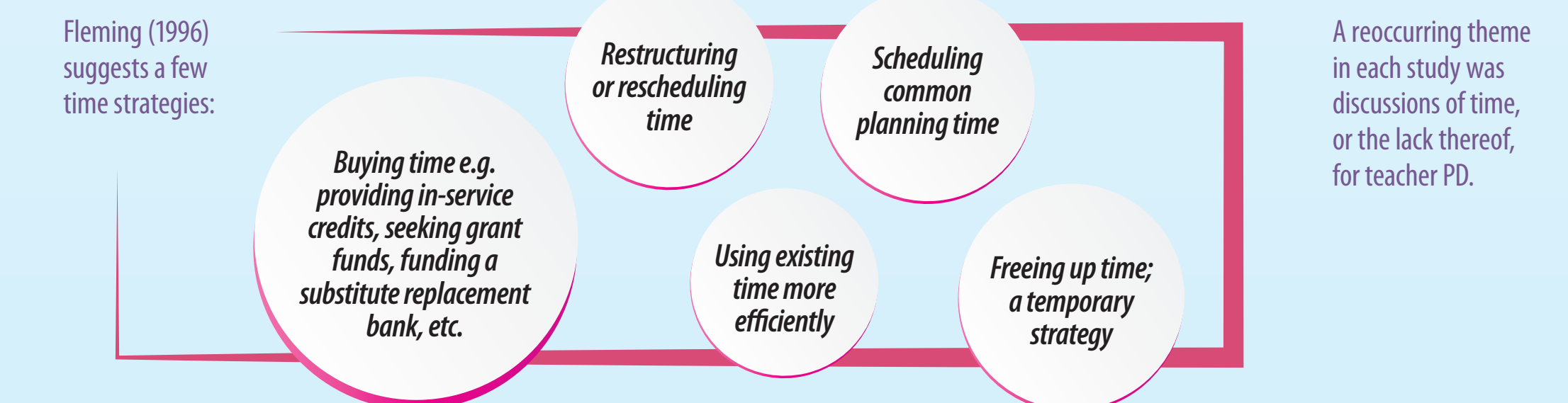- Ministry 14.9%
- Principal/Vice Principal 19.6%

GAPS

- While, Darling-Hammond et al. (2009) reports that […]districts spend millions of dollars on academic courses disconnected from the realities of the classroom and an Alberta Teacher's Association (2012) survey on the status of PD learning in the province detailed that jurisdictions associated with the PD chairs budgeted approximately $11.7 million to support professional development, it is serving to be a difficult task to uncover how much of Ontario tax-payers dollars is allocated to teacher professional development for the provinces teachers.
- Unlike the Taiwanese department of education and some OECD countries where educators are required to participate in PD for licensure, promotion or certification (Yang & Liu, 2004), the Ontario College of Teachers does not require that continued professional learning be incorporated into the formal structure of teacher accreditation; licensure and renewal.

Online teacher professional development is believed to be more cost effective and convenient than the conventional face-to-face professional learning environments offered to educators (Richardson & Swan, 2003).
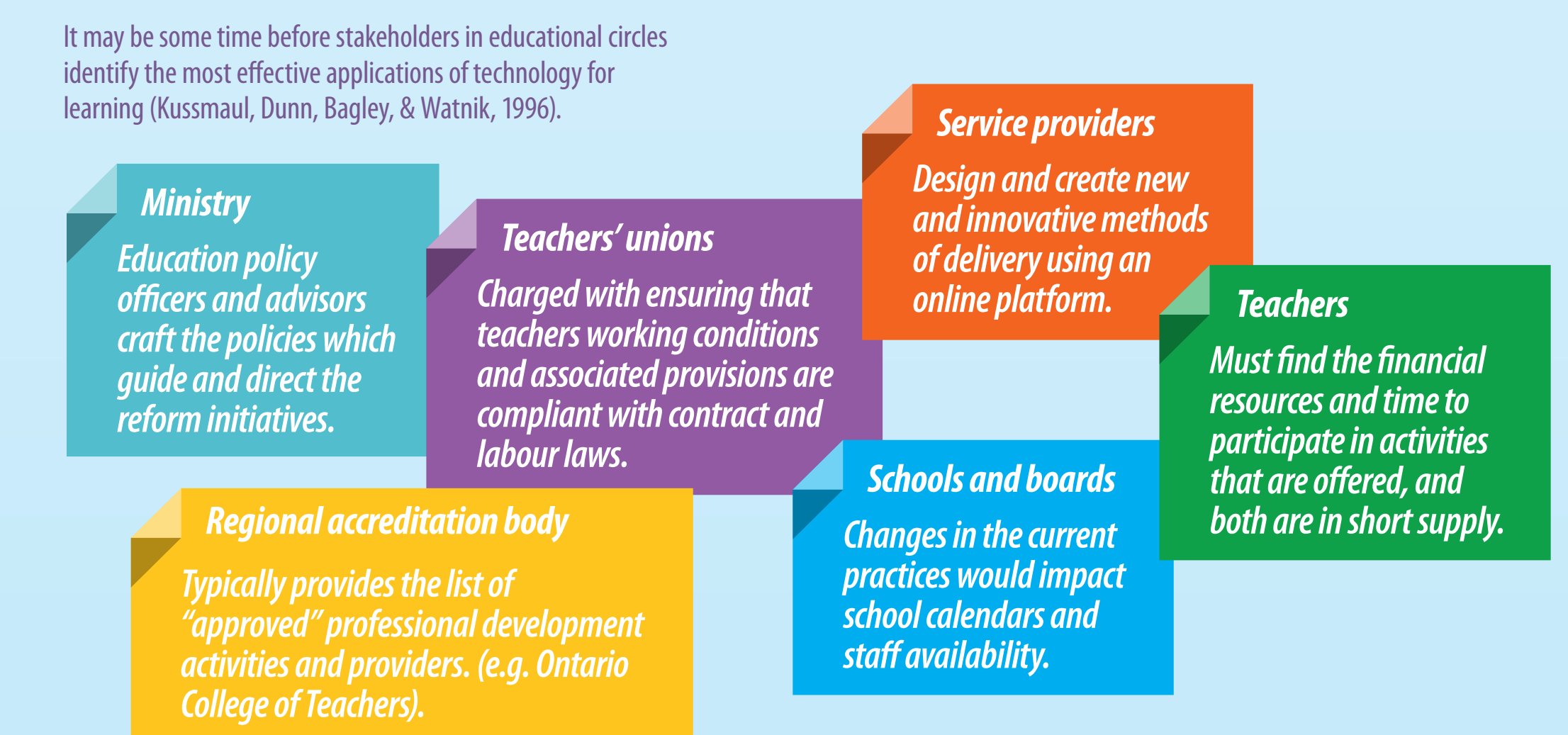
FINDINGS

oTPD is not limited with respect to the kinds of subject matter that can be addressed

- An investigation by Russell, Carey, Kleiman, & Venable (2009) provided evidence that an online **mathematics** course designed as an interactive learning experience can impact teachers knowledge, and instructional practices in a positive way and that the magnitude of the effects are similar to those that occur in a face-to-face setting.
- Goldenberg and Strother (2010) research findings showed that an oTPD course was successful in increasing teacher's **biology** content knowledge (CK) and pedagogical knowledge (PCK) and knowledge of digital resource use.
- A Wearmouth, Smith, & Soler (2004) study indicated that online computer conferencing has the potential to facilitate the professional development of **special education** coordinators as reflective practitioners and researchers in unique ways that would otherwise be unavailable without it.

oTPD provides a means for the development of communities of practice

- The main findings of a comparative study conducted by Harlen & Doubler (2004) revealed that on-line participants experienced, appreciated and commented on their **collaborative learning** and they did not feel they were working alone.
- Results Yang and Liu's (2004) study aimed at investigating the participation and perspectives of 128 teachers engaged in online PD activities showed that most participants found the online workshop useful and reported **benefiting emotionally and intellectually** from using the telecommunications networks for PD and support. The investigation also revealed that reflective **professional discourse must be nurtured** and does not simply grow out of professional relationships.
- The Remote Networked Schools (RNS) platform was shown in the Hamel, Allaire, & Turcotte, (2012) investigation to successfully offer onsite and online professional development activities; specifically **"just-in-time" online support for teachers** to address the challenges that many rural schools face given their geographic isolation, and professional isolation.

Fleming (1996) suggests a few time strategies:

- Buying time e.g. providing in-service credits, seeking grant funds, funding a substitute replacement bank, etc.
- Restructuring or rescheduling time
- Scheduling common planning time
- Using existing time more efficiently
- Freeing up time; a temporary strategy

A reoccurring theme in each study was discussions of time, or the lack thereof, for teacher PD.

CONCLUSIONS

Decades-old approach to teacher development, built mostly top down, reform driven directives, does not provide for sufficient differentiated instruction and therefore is not helping teachers as it should. Moving from prescribed/mandated PD to teacher-focused model steered by personalised goals will involve a multitude of stakeholders playing various roles:

It may be some time before stakeholders in educational circles identify the most effective applications of technology for learning (Kussmaul, Dunn, Bagley, & Watnik, 1996).

- **Ministry** — Education policy officers and advisors craft the policies which guide and direct the reform initiatives.
- **Service providers** — Design and create new and innovative methods of delivery using an online platform.
- **Teachers' unions** — Charged with ensuring that teachers working conditions and associated provisions are compliant with contract and labour laws.
- **Teachers** — Must find the financial resources and time to participate in activities that are offered, and both are in short supply.
- **Regional accreditation body** — Typically provides the list of "approved" professional development activities and providers. (e.g. Ontario College of Teachers).
- **Schools and boards** — Changes in the current practices would impact school calendars and staff availability.

When professional development is framed as opportunities for deeply rooted change, the measure of success extends beyond that of test scores and student achievement, but instead is embedded in personal and professional perspectives, teaching communities, communities of practice and lifelong learning (King, 2002).

NEXT STEPS

Further research is necessary to better understand the participation levels of licensed teachers in the province in online professional learning, what kinds of (models) online programs are being offered and their effectiveness, as well the level of financial investment being made in oTPD programming and availability by schools and school board throughout the province.

REFERENCES

To view reference page *click here.*