



Editorial: the call for a digital pedagogy

I am Marcel van Der Klink and I have recently been appointed to the Editorial Board. I would like to express my thanks to my fellow, and supportive board members for the warm welcome they have extended to me and for allowing me a very smooth induction into the work of the Editorial Board. This is the first time for me as a member of the board to edit an issue, and on this occasion, together with my Editorial Board colleague Alex Alexandrou, the process of reading and selecting articles, discussing their order and considering how to introduce the articles to readers has been a collaborative project.

I shall use this editorial to express my mixed feelings about the COVID-19 pandemic that affected our lives strongly, personally and professionally, in very different ways for over two years. Going back to our schools, colleges and universities, without even wearing facemasks, sometimes feel a bit unfamiliar. This unfamiliarity also touches upon the way we think and act in our daily work. We are virtually standing at a crossroads: are we returning to our previous routines or moving ahead by incorporating our new pandemic-related experiences into our routines?

Going back to how it was may feel quite tempting for many of us. However, can we ignore our personal and professional experiences with COVID-19 and the imprint these experiences have left on us? A feature of life is that we keep on developing and adapting, sometimes in an implicit way that we are not even consciously aware of. Sometimes we are urged to change in a rather disruptive way because of unforeseen circumstances and events that force us to change overnight. And to be honest, at the beginning of the pandemic we managed to change overnight!

Until COVID-19, face-to-face delivery on campus had been the standard in almost all types of education, including higher education and in-service education, perhaps with the exception of distance learning models offered by universities and schools operating in very remote rural areas (see various articles in PDiE, for example, Charteris *et al.* 2021, Coker 2021). With no real background or formal training, most of us were able to adapt our teaching and coaching to basic online delivery models. Moreover, as the pandemic continued, many reluctant users felt less reluctant or even somewhat enthusiastic when they became more experienced and familiar with the advanced use of the new technologies that became available.

However, this radical shift to online education had its costs. There is no need in my view to become over-enthusiastic when it comes to online education. The quick turnaround to full-scale online education caused high levels of frustration, anxiety and stress among teachers, accompanied by lower levels of self-efficacy concerning their abilities in relation to online teaching and coaching, especially during the first months of the lockdown. The shift to exclusively online learning activities, such as lectures, small-group meetings, individual supervision and coaching sessions caused very mixed feelings among pupils and students. They reported higher levels of stress, feelings of depression and experienced increased social isolation.

This negative impact is caused by various factors. For example, few were prepared to deliver or attend online education. There was a lack of support, expertise and hands-on experience, shortage of equipment and slow internet connections. Communication systems (such as Zoom and Microsoft Teams) were not always accessible in an easy manner. In general, during the first months of the pandemic the delivery of online education consisted mainly of digital versions of conventional face-to-face classroom practices. However, what works in the classroom does not necessarily work effectively in online delivery settings. As experiences continued to develop, online delivery became more advanced, resulting in fewer linear substitutions of the traditional face-to-face classroom practices.

The enforced use of online education led not only to experiencing some negative effects but also to the discovery of advantages of utilising learning with technology. For example, video-recorded massive online lectures that could be played repeatedly at times and places preferable for the students themselves. The online accessibility enhances frequent (short) interactions, synchronous and asynchronous, between students and their teachers for coaching and tutoring purposes. Next to educational advantages, reducing travelling to the campus saves time and expense for teachers and students, which makes it more feasible, for example, to combine education with other duties and/or jobs.

Our involuntarily engagement with online education during COVID-19 has prompted us to experience new ways of learning and teaching that may have value for the years ahead. Let us take into consideration the (im)possibilities of online education. The future is not full-scale online, nor restricted to conventional classroom-based, but hopefully richer blends of online and offline teaching and learning that will become manifest in our education in the years ahead.

Personally, I now try to seek a new balance between online and on-campus activities. The pandemic did not change the major part of my work fundamentally, since my work at the university mainly consists of advising teachers and teacher teams on educational topics, coaching researchers and supervising PhD students. These activities during the pandemic were performed with the use of online tools, and I will continue to utilise them. However, I experienced that it was and is far more difficult to become spontaneously engaged in activities like brainstorming, thinking outside of the box and generating innovative ideas. Most innovative ideas, at least in my work, arise informally during incidental gatherings, pop-up during talks in the corridors or in front of the coffee machines. These kinds of activities are far more difficult in online settings.

For the professional development of teachers, attending meetings and conferences outside the campus becomes easier since the online nature of such activities makes it more convenient to fit them into their daily agendas and to avoid the costs of travelling and lodging. In that respect, online conferences, or hybrid versions, will have a bright future. It is questionable, however, whether online professional development activities are always a sound equivalent of face-to-face activities.

There is a need for a digital pedagogy that allows us to consider the value and the possibilities of online learning. Such a digital pedagogy helps to develop, in a thoughtfully attractive manner, effective and efficient blends of online learning activities with face-to-face activities on campus. A digital pedagogy entails far more than the use of technology as such, rather it entails the role of technology in relation, for example, to the educational goals, the characteristics of the participants, the learning activities and how to monitor and assess the learners' professional growth. Moreover, a digital pedagogy also addresses issues that refer to possible shadow sides of the use of technology in education, such as access to tools and the internet, and issues related to inclusion and deprivation.

Or to put it differently, it is not a matter of teachers becoming more familiar with the use of technology as such; there is a need for a broader view that aims at providing sufficient context that enables us to make sense of the possible role of technology. It goes without saying that this demands wider and deeper approaches to professional learning from the wider community of teachers and teacher educators. Moreover, a digital pedagogy demands research that enables a thoughtful approach to technology.

The notion of a need to strive for a richer blend is a striking metaphor for this issue of the journal. It offers variety in terms of the research subjects studied from different theoretical lenses and with the use of a range of research designs, both quantitative and qualitative.

We now move into an overview of the articles on this issue. The first article is entitled *Towards a Virtuosity of School Leadership: clinical support and supervision as professional learning* by Alan Bainbridge, Hazel Reid and Gaia Del Negro. It discusses a clinical support and supervision support project set up in an English context that, as the authors state, was '... designed as a response to the concern for how senior school leaders are increasingly being expected to manage the escalating demand to care for the social, emotional and physical health of pupils, families and often the wider

community'. This qualitative study is apt for our times, as although it was researched and written prior to the onset of the Covid-19 Pandemic, its key themes are based around professional learning, health and well-being and the wider school culture and resonate much with a number of the observations above. Based on the outcomes of their research, the authors present the reader with a professional learning model of supervision which encompasses collaboration, reflection and dialogue that has implications for both educational and school leadership.

A faculty-in-residence programme: enacting practice-based professional development in a STEAM-focused middle school by Danielle Herro, Shanna E. Hirsch and Cassie Quigley, is a qualitative study based on a school–university partnership in the USA that explores how a group of middle school teachers enhanced their ongoing professional learning and development (PLD) through this partnership. The authors utilised a practice-based professional development (PBPD) model to analyse and present their results. The study highlighted the positive impact such partnerships can have on teachers' PLD as well as a number of implications for their practice, notably, how they '*... increased their use of technology for communicating, collaborating, and learning*'. This took participants out of their comfort zones, increasing their use of technology, integrating more student-centred technologies, increasing peer collaboration with colleagues through professional learning communities, offering students technology-enhanced collaboration opportunities as well as video-conferencing to assist and connect students with staff. This was achieved pre Covid-19, so will have stood the research participants and their colleagues in good stead once the pandemic hit.

Zehavit Kohen and Hilda Borko's article – *Classroom discourse in mathematics lessons: the effect of a hybrid practice-based professional development programme*, argues there '*... is a need to strengthen the theory-practice connection, particularly for early-career mathematics teachers, through effective professional development (PD) programmes that integrate theory and research with the implementation of classroom practices*'. This article resonates with the journal's aim of developing the PLD theory-practice discourse, so is a welcome addition to the literature. This mixed-methods study examined the online coaching component of a PLD programme that focussed on supporting teachers' facilitation of classroom discourse and picks up on the theme of the increased use of technology in both teaching and PLD. The article's findings confirm the positive impact it can have on teachers' practice. Notably, as the use of classroom video-recorded lessons that acted as a basis for PLD coaching, discussions with the teacher participants had a positive impact upon them both personally and professionally. Currently, this is particularly pertinent, as interacting and developing through technology from a PLD and teaching perspective is becoming the norm.

Psychometric properties of the design-based professional learning for teachers survey by Man-Wai Chu, Barbara Brown and Sharon Friesen is a quantitative study that as the authors state '*... describes the development process and provides psychometric properties of the Design-Based Professional Learning (DBPL) for Teachers Survey to measure teacher leaders' ratings of collaborative design and evidence-based work in their schools*'. The authors examine teacher leadership and PLD from a Canadian and different analytical perspective that adds to the literature. The outcome of the study, based on the participant responses, significantly led to the authors refining the original four-factor model they initially used to develop the survey tool into a three-factor model based on learning designs, assessment and teacher collaboration. This helped to ensure that the PLD community has a robust, tested and revised DBPL survey tool that can enhance the quantitative measurement of teacher PLD and goes beyond the digital elements of PLD that have come to the fore since Covid-19. The same can be said for the next article.

The article by Alexander Kurz, Linda A. Reddy, Ryan J. Kettler, Todd A. Glover, Meghan K. Velasquez and Lyle Kirtman entitled *Workstyle attributes and their relations to instructional coaching behaviours* is a quantitative study that '*... examined the relations between 16 workstyle attributes as measured by the Workstyle Personality Inventory (WPI) and six-effective coaching behaviours as measured by the Instructional Coaching Rating Scales (ICRS) based on a sample of 27 full-time coaches across 14 high poverty charter schools*' in the USA. The authors argue that increasingly in the USA, teacher PLD is delivered by instructional coaches so identifying, selecting

and recruiting such coaches requires a robust, rigorous and scientific approach. The study aims to examine how this can be achieved through the aforementioned quantitative research instruments, notably in identifying key traits required to ensure effective instructional coaching that does not undermine the PLD programmes that they are a key part of delivering and enhancing.

The professional development needs of beginning and experienced teachers in four municipalities in Sweden by Martin Karlberg and Christopher Bezzina is an Open Access Article that from a quantitative perspective examines teachers' perceptions of PLD in light of what the authors describe as the '... growing concern that current models of in-service training in Sweden are not leaving the desired impact on teacher motivation and student achievement; that the teaching profession feels disengaged, disempowered, distrusted'. A critical issue that is no doubt was exacerbated by the onset of Covid-19 and links to the negative impacts highlighted above. As the authors conclude, their study '... seeks to push our thinking and challenge the way we currently view professional development in Sweden. It encourages us to reflect more widely on developments in the field of professional development regionally, nationally and internationally which will contribute to advancing new and fresh thinking'. An ongoing challenge indeed for all of us involved in education and PLD.

Sally Windsor, Jeana Kriewaldt, Melanie Nash, Annika Lilja and Jane Thornton's Open Access Article – *Developing teachers: adopting observation tools that suspend judgment to stimulate evidence-informed dialogue during the teaching practicum to enrich teacher professional development*, is based on international research collaboration based in Australia and Sweden. It is a case study approach utilising qualitative observational tools to examine PLD, notably through dialogue between pre-service and experienced teachers. The importance of professional conversations as highlighted in this article enforces the point about the importance of face-to-face interactions that cannot be lost through the online transformation of teaching and PLD that we are currently witnessing. This is emphasised by the authors who conclude that '... the provision and utilisation of descriptive observational tools, such as those used in these two case studies, has led to deeper, more supportive dialogue during post-lesson professional conversations between pre-service teachers, mentor teachers and initial teacher educators'.

The third Open Access Article featured in this issue entitled *Teacher educators reflecting on case-based teaching – a collective self-study* by Marit Ulvik, Helene Marie Kjærgård Eide, Liv Eide, Ingrid Helleve, Vigdis Stokker Jensen, Kristine Ludvigsen, Dag Roness and Lars Petter Storm Torjussen, is based on a qualitative collective self-study undertaken by Norwegian teacher educators seeking to improve their teaching practice with the aim of better supporting student teachers and addressing a perceived gap between theory and practice. This article adds further weight to the importance of face-to-face interactions that can only enhance PLD activities. As the authors state, 'Teacher education is complex and often fragmented, but teacher educators have a shared responsibility that makes it necessary to work together'.

Judith Haymore Sandholtz and Cathy Ringstaff's article – *Offering modest supports to extend professional development outcomes and enhance elementary science teaching* discusses the findings from a mixed methods study underpinned by a conceptual framework based on a theory of action, that examined teachers from the USA who participated in science-focussed PLD programmes. The study's findings highlighted the importance and positive impact that face-to-face PLD activities had on the teachers. In fact, they wanted and favoured more collaborative face-to-face activities, rather than electronic and social media support. As the authors noted '... technology may not be an easy, straightforward solution to providing ongoing support for teachers after professional development ends'. The article was written pre-Covid, and it would be interesting to read post-Covid reflections on the findings.

The article, *Promoted widely but not valued: Teachers' perceptions of team teaching as a form of professional development in post-primary schools in Ireland* by Thomas Walsh is based on research through surveys that collected both quantitative and qualitative data from cohorts of a Professional Master of Education programme. The study is based around the following four themes: teacher

preparedness for collaboration through team teaching; shared vision and understandings; teacher agency and self-efficacy; and teacher and school structures and culture. Whilst gaps and limitations were identified along with positive impacts of adopting team teaching, a key observation from the research is that ‘... participants reported the benefits of articulating and discussing their practice with colleagues and the improved self-efficacy they experienced in their professional practice, enhancing their decisional and professional capital’.

The final article of this issue entitled, *Teachers’ perceptions of professionalism: a top-down or a bottom-up decision-making process?* by Farzaneh Dehghan, is a welcome addition to the PLD literature in terms of an under-represented national context. It is based on a mixed methods study that examined how a group of Iranian state school language teachers perceived professionalism in their careers. The study examines participants’ self-efficacy and self-worth, and the author highlights how ‘... the personal decisions they made to promote their professional competences had caused a significant difference in the way that they perceive their professionalism and professional development’.

As we were preparing this editorial, a fatal school shooting incident occurred at the Robb Elementary School in Uvalde, Texas, where the lives of 19 children and two teachers were so tragically and prematurely ended. Our thoughts and prayers are with their families, friends and community.

References

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