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Exploring ‘Next Practice’: Principals’ Perceptions of Graduate Skills and Attributes for Future Classrooms

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Abstract: The phrase ‘next practice’ was coined to indicate a shift from the notion of best practice to thinking more broadly about the needs of future learners and the ways in which teaching practice might align to support these needs. In understanding what next practice means for the classroom, this study was particularly interested in examining how initial teacher education (ITE) could respond through their graduate preparation. The presented data presented is derived from an Australian small-scale qualitative study that sought to explore principals’ perceptions of graduate skills and attributes for future classrooms which captured the perspectives of six primary and secondary school principals using in-depth interviews. Emerging from these subsequent narratives were seven themes that could be clustered around areas such as affective attributes, pedagogical considerations and personal wellbeing. In providing insights into the skills and attributes required by future teachers, this work raises questions how ITE providers might respond.

Introduction

The term ‘next practice’ was coined to indicate a shift from the notion of best practice to thinking more broadly about the needs of future learners and the ways in which practices might align to support the development of the skills and attributes required in a somewhat unknown future (Spencer & Balacco, 2009). While learner profiles and ways of learning change to suit the characteristics of a generation (e.g., Gen Y, Millennials) (Miller & Slocombe, 2012), the reality is that workplaces are also required to morph and change to suit the times, which is particularly pertinent as workplaces manage the COVID-19 recovery process. Change such as this, however, can be slow to filter down. The requirements of future workplaces are challenging universities to reconsider how they prepare graduates for both their chosen profession and an uncertain workforce (Burbach, Matkin, Gambrell & Harding, 2010). Teacher education is not immune to this need to think differently.

While many other industries have responded to and pre-empted workplace change in ways that are effective, timely and innovative, the education profession has not been so agile (Yeigh & Lynch, 2017). Instituting system-wide change is a challenge, especially in the Australian context, for a number of reasons including not having a federated approach to education and the sheer scale of reaching out to large numbers of schools and teachers across the country (Smith & Lynch, 2010). In the context of initial teacher education (ITE), the challenge is preparing teachers of the future to educate and nurture the workforce of the future (The Royal Society, 2017). While ITE providers are in a position to innovate and lead positive change in this space, a key question that remains unanswered is: what is ITE preparing future teachers for? (Ingvarson, Reid, Buckley, Kleinhenz, Masters & Rowley, 2014). With many teacher educators and ITE leaders removed from the classroom context

directly, there is often a disconnect between what they perceive as being required to prepare classroom-ready teachers and what teachers and school leaders view as the necessary skills, attributes and capabilities of future educators (Craven et al., 2014). Shared understandings of future classrooms need to be developed between teachers and teacher educators as well as school systems and ITE providers to continue to enhance how they preparing graduates for future classrooms and students.

This project was positioned within a unique context as it was informed by the ITE programming at Monash University (located in Melbourne, Australia) being offered for the first time on a different campus. With a cohort of pre-service teachers relatively contained in size (approximately 300 students) and many of the teacher educators in the team being new to the institution, the time was right to explore opportunities to innovate in this space. This project was particularly interested in investigating the perspectives of local, metropolitan school principals in terms of what skills and attributes they believed future teacher graduates required and how these capabilities could be subsequently developed and nurtured through our ITE offerings. The focus of this paper was determined by the following research question: *What are principals' perceptions of the skills and attributes required by graduate teachers to prepare them for classrooms of the future?*

Positioning the Research

It is not uncommon for school principals to participate in educational research as they play a vital role in education systems. Typically, though, they been positioned as a cohort of research interest rather than acting as research informants as they are in this study. However, there has been a shift in recent years with educational researchers placing greater value on incorporating principals' voices as contributors to research stories with much written about the impact of principal leadership on educational outcomes of schools (Garcia-Garduno, Slater, & Lopez-Gorosave, 2011), the role of principalship (Elliott & Hollingsworth, 2020; Gentilucci, Denti & Guaglianone, 2013;), and the impact that principals have on their schools (Al-Safran, Brown & Wiseman, 2013; Bellibas & Liu, 2018).

This shift sits comfortably with the notion that in our daily lives that we do turn to our leaders, regardless of whether their proximity and connection to us be local, national or international for their wisdom and insight. In the context of an education community, the principal occupies a key leadership role both formally (e.g., governing a school) and informally (e.g., a community role model) that cannot be overlooked. Research (e.g., Richards, 2007) suggests that there are a number of key behaviours that are consistently noted and appreciated in principals, which adds further weight to the potential worthiness of their commentary. These positive traits include: respecting and valuing teachers as professionals; being fair, honest and trustworthy; and upholding high standards (Richards, 2007). With this grounding, the voices of principals are valued as informative sources in this research as a means to better understand what might constitute 'next practice' for future graduates and, in particular, what skills and attributes they will require to support learners and their learning in this context.

Conceptually, this research is informed by two key bodies of knowledge: (i) the skills and attributes required of graduate teachers and (ii) the classroom readiness and preparedness of graduates. These areas will be explored in relation to perceived needs of future classrooms and their learners.

In considering these areas to be explored, it is important to also acknowledge that the changing nature of the landscape informing the notion of next practice needs to be briefly unpacked. The impact of the worldwide COVID-19 pandemic has changed the landscape for

educational settings (Allen, Rowan & Singh, 2020) since the data were collected. It must be acknowledged that COVID-19 also impacts the research data and analysis, which is still relevant as there is now an increased need to identify how the requirements of future teachers might now be imagined (Reimers & Schleicher, 2020). This is particularly pertinent as education jurisdictions, schools and teachers move to accommodate online learning and teaching, leverage expertise and experience from multiple stakeholders, and utilise a toolkit of reactive and proactive skills and approaches (Australian Institute for Teaching and School Leadership [AITSL], 2020), all positioned within significantly intensified workloads (Allen, Rowan & Singh, 2020). This research adds to the narrative in terms of the classroom practices that will be necessary to support learners in the ongoing and post-COVID context and beyond as teachers and school leaders balance dealing with the immediate, while at the same time continuing to focus on the future.

Skills and Attributes of Future Teachers

At the core of thinking about the future of education and the role of teachers within it is a clear sense that meeting community expectations and students' needs will require less focus on teaching content and to 'the test' and a greater emphasis on the development of skills (social and technical) and relational connections (Donaldson, 2010). This is not to suggest that the role of teachers in supporting conceptual understanding is to be abandoned altogether. Instead, this shift acknowledges a need to ensure that the ways in which knowledge in classroom contexts is shared and developed leads to deep foundational insights that allow for further exploration and innovation (Varkey Foundation, 2018). McLaughlin (2018) referred to this as "connectedness, collaboration [and] co-creation" (p.1). She does, however, push this thinking further by suggesting that increasingly it will become the "teacher's responsibility to empower students to take risks, be innovative and seize any opportunity thrown their way" (p.2). For McLaughlin (2018), this is characterised by acknowledging that (a) learning takes place anywhere and at any time, (b) customisation of teaching practices will be required to prioritise a learner-first approach and (c) the education system needs to question current testing regimes and their role in best preparing students for the future. All points that are particularly prescient in the current COVID-19 educational climate. In achieving this notion of empowerment, there is a recognition that a move towards a more personalised approach to the learner experience is necessary as echoed in the OECD's (2018) *Education 2030* vision. This report questions what skills and knowledges students will need in the future and explores ways in which instructional systems can support them in getting there. The OECD (2018) highlights that building learner agency is key in assisting them to navigate an increasingly complex and uncertain world. To achieve this, their work also points to the need for personalised learning environments and the development of a solid foundation of knowledge and skills. Barnett (2018) also looked to the year 2030 and considered the skills and attributes that will be sought after at this time. In acknowledging that teaching will be an occupation in demand in the next decade, he recognised that the profession is complex and has intangible outcomes that require uniquely human attributes. Some 'automation' of education may be possible, but Barnett (2018) identified the following skills and practices that future teachers will need to foster to ensure their students themselves have the necessary skills to navigate and negotiate the demands and challenges of the future: fluency of ideas, active learning, learning strategies, originality, coordination, and teamwork.

Preparedness of Graduates for Future Classroom

While there might be a sense that ITE has not changed markedly over the decades (Natalicio & Pacheco, 2000), there have certainly been recent moves in the Australian context to change this perception. The report *Action Now: Classroom Ready Teachers* from the Teacher Education Ministerial Advisory Group, known locally as the TEMAG report, (Craven et al., 2014) was significant in terms of the laying down a road map for raising the quality of both ITE programming and education graduates nationally. Some of the initiatives emerging from TEMAG and currently impacting on the quality of future teachers include: rigorous ITE program accreditation; non-academic selection processes for entry into ITE programs; mandatory literacy and numeracy testing of pre-service teachers; professional standards for graduate teachers; and the completion of a teaching performance assessment prior to graduation (Craven et al., 2014). With a focus on best practice in ITE, the work of Ingvarson et al. (2014) identified a gap in the TEMAG agenda: the transition of graduates from ITE to the classroom. These macro perspectives of preparedness, while rigorous and quality focused, act to highlight a missed opportunity to grapple with notions of ‘next’ over ‘best’ practice. Improving the preparation (and selection) of future teachers is not necessary the same as preparing teachers for future classrooms. Bahr and Mellor (2016) provide a more micro perspective of this significant change agenda in ITE through their shift in thinking about quality as the effective preparedness of graduates to instilling and nurturing affective attributes in our future teachers. They identified that ITE programming should be preparing graduates to: have high expectations for their students, demonstrate kindness and care, bring a positive attitude to teaching, and to maintain a sense of humour. Emerging from this work was the following equation, “quality = (competencies + productive behaviours) x personal attributes” (Bahr & Mellor, 2016, p. 64). Achieving this outcome in ITE is certainly a noteworthy goal, but requires a large-scale change in both practice and culture if such ways of thinking and being are going to be embedded within our approaches to future classroom readiness. Yeigh and Lynch’s (2017) work around innovation in ITE identifies the need for different models and approaches to be considered if we are to truly prepare graduates for reality of the future classroom. Their focus on two alternative ITE programs – one in Australia and one in England – uncovered the particularly critical role of reciprocal and genuine school-university partnerships in fostering next practice.

Research Design

With the intention to value the voice of the participants, grounding this study in qualitative traditions seemed to be an appropriate fit (Atkins & Wallace, 2012). In particular, interpretive approaches are foregrounded as a lens for examining lived experiences and subsequent insights leading to the generation of observable outcomes such as recommendations or themes (Elliot & Timulak, 2012). A qualitative research approach drawing on the traditions of narrative inquiry and analysis methods, has been adopted in this paper to represent and critically examine the emergent themes in a way that would reflect and honor the participants’ stories (Clandinin & Connelly, 2000). By narratively situating this work in a particular context, this study scrutinises the dynamic qualities (Crouch & McKenzie, 2006; Vasileiou et al., 2018) of insights into sampled principals’ perceptions of the skills and attributes required by graduates to prepare them for classrooms of the future. While it is acknowledged that the small data set – one-off interviews with six principals – impacts on the ability of this research to adopt in a full-scale narrative study as this approach requires the development of a relationship with participants over time, and as such are not able to be

generalised. However, the small sample size provides meaningful insights into the perspectives of the principals within the study, and by drawing on aspects of narrative inquiry this paper still has the ability to genuinely forefront the voices of principals as valued informative sources (Guest, Bunce & Johnson, 2006). This section will detail the participants involved and how they were selected before describing the data collection and analysis processes.

Participants

The study was situated in the south-eastern suburbs of a capital city in Australia. This particular area is a known corridor of diversity with established communities accompanied by areas of significant development. This subsequent and significant growth has led to an increased population driven by young families and migrant cohorts seeking affordable housing while maintaining a large-scale city lifestyle. In terms of the education context, these developments have resulted in high demand in local schools driving student numbers up and leading to the construction of several new facilities in the past decade. There are many primary schools with student numbers over 1000 and secondary schools of 2000-plus students in this region, which would constitute very large numbers in the Australian context. This setting became the focal point of this study as the suburban campus of the university initiating this research was located in the centre of this context.

The study was informed by six school principals who responded to an invitation to contribute. Sample members were not selected at random from the total principal population and were instead drawn from a possible convenience sample of 19 locally situated government primary and secondary schools (e.g., within a 10km radius of the university campus). Convenience sampling allowed the researcher to access individuals who were conveniently available, easily accessible and willing to participate in the study (Jager, Putnick, & Bornstein, 2017; Wilcox, Peterson & McNitt-Gray, 2018). It is acknowledged that the narrow sample of Australian principals is not meant to quantify perceptions for all principals and instead is meant to merely document a snapshot of what this group of principals were thinking at the time.

Table 1 below captures key information, particularly about the participants' backgrounds in education and school leadership with pseudonyms used. The sampled participants are all experienced, older males from a metropolitan area with many years in principal leadership which is not unusual in the Australian context and in particular in metropolitan-based contexts (Burton & Weiner, 2016; Morrison, 2018). While this sample has not been selected to be representative of the population of all principals, characteristics of the sample participants also mirror aspects of the principal population as a whole. The average Australian principal age is 53.2 (Freeman, O'Malley & Eveleigh, 2014), and despite an increase in primary school female principal leadership from 33.8% in 1998 to 66.4% in 2018 (McGrath, 2019) and secondary female principal leadership from 22.0% in 1998 to 48.4% in 2018 (McGrath, 2019), women still remain underrepresented in leadership positions (AITSL, 2019) when compared to the number of females in the Australian teaching workforce, which sits at 73%, (Australian Bureau of Statistics [ABS], 2018).

Name	School setting	Years in education	Years in school leadership
Andy	Primary	47	26
Ewan	Secondary	33	18
Gareth	Primary	28	10
Noel	Primary	37	18
Robert	Secondary	34	15
Tom	Primary	40	20

Table 1: Background information on contributing school principals

Data Creation

The key data source informing this research were semi-structured interviews. This approach to data collection involves an intensive individual interview with the intention of exploring their participant's perceptions of the phenomenon under interrogation (Boyce & Neal, 2006). The open-ended conversational style has the advantage of a sense of familiarity and comfort for the interviewee (Guest, Namey & Mitchell, 2013), but involves careful planning and enactment to minimise bias and to elicit a range of perspectives (Boyce & Neale, 2006). While this study is reliant on a single source of data, this approach was seen as an appropriate way to gain a set of rich insights that would result in a meaningful and authentic response to the research question. Each principal was interviewed at their school during a time that suited them. Interviews ranged from one hour to 90 minutes in length and were audio-recorded before being transcribed. Two key questions shaped the discussions:

1. What skills and attributes do you think future education graduates will need and why?
2. What is required from initial teacher education to prepare graduates for future classrooms?

Data Analysis

The intent of qualitative studies such as this is to allow for the emergence of rich, 'thick' descriptions of the phenomena being experienced (Merriam, 1998). Rather than informing the meaning making process with existing theories, the use of emergent interpretations is an appropriate way to approach data analysis steeped in grounded theoretical understandings of research (Corbin & Strauss, 2008). In this case, the data set--the transcripts from the in-depth interviews with the six principals--was scrutinised using the approach described as follows. Firstly, the transcripts were read and reread to identify key themes in direct response to the research question and locate quotes exemplifying the themes. The themes were then reduced to broadly aligned with findings from the literature. The aim was to identify significant ideas about the types of skills and attributes required by graduates for future classrooms evident (or not) in the principals' dialogue. There was, however, an openness to identifying ideas and insights that were not featured in the literature. From this process of analysis, the seven themes that emerged as representing the principals' perceptions are identified and detailed below.

Findings

Analysis of the data revealed a range of perspectives from the participating principals regarding the skills and attributes they perceived that future graduates will need to experience

success in the classroom. The data showed how these insights can be characterized by the following seven themes, which are unpacked below:

1. Prioritising relationships;
2. Possessing a range of competencies and attributes;
3. Having a contemporary understanding of what it means to be teacher;
4. Being a team player;
5. Understanding the role of technology for learners and learning;
6. Engaging with an interdisciplinary approach to curriculum; and
7. Maintaining personal wellbeing.

Within each theme, illustrative quotes from the interviews are used to represent the diversity of ideas captured and provide a holistic perspective of the skill set potentially required by future teachers as a way of understanding the construct of ‘next practice’ and what it means in context. Again, it is important to recognize that these themes may seem somewhat dated as we consider the educational responses and changes that have rapidly occurred as a result of COVID-19. This critical incident, in fact, highlights how crucial these themes are to preparing future teachers for the classroom and that the need to consider how they are nurtured through ITE is perhaps more pressing than first imagined.

Prioritising Relationships

For all six principals, a highly developed ability to relate to learners was a key skill in supporting future learners, which continues to remain a priority in a COVID-19 environment. It was, however, acknowledged as a difficult attribute to hone and develop with Tom identifying that “personal traits are really important in that the ability to be able to develop relationships”. While there is a differentiation between forming relationships with students and the ways relationships might be formed in general, as Gareth articulates in the quote below, the principles are essentially the same.

You don't have to treat the kids as your friends, but you would certainly speak to them as you would speak to a friend. There's got to be that respect and that relationship built there in the classroom and can be very challenging, but it's got to be a respectful relationship.

One of the features of developing and maintaining respectful relationships with students is that in knowing a child the teacher is gathering a sense of where they are at in their learning and what is needed to encourage and extend them. A number of teachers referred to this approach as ‘personalized learning’ and that, as Andy stated, having an “emphasis on personalising the learning for children” is a key component of relationship building. This notion of personalized learning was a common thread through several of the principals’ interviews with the sentiment further unpacked in the following quote from Ewan.

[Graduate teachers] have responsibility in any class that they go into to get to know their kids. And that is to form relationships that are based on a knowledge of where the child is at, where the child expects to be able to go to and processes how they can reach the gap between the two.

While knowing where students’ learning journeys are at and ultimately heading was considered an important feature of the teacher-student relationship, the principals also viewed knowing what makes a student tick in terms of their personal interests and drive to learn as equally important. This sentiment was best expressed through a quote from Noel.

It's understanding the importance of getting to know your students and identifying what their strengths are, opportunities for improvement, what

they're passionate about, because I think through passion comes the motivation to learn.

The personal attributes of graduate teachers were highlighted by the principals as helping with relationship building, but other considerations such as the classroom environment and the conditions created to support learning also have critical role to play. The following quote from Robert provides a different lens from which to view the impact of relational factors.

It's that learning community that you've created in your classroom that's really important. If you've got that happening, the kids will be excited, they'll be wanting to be at school, and you'll have learning despite the kind of teacher you are. [Graduates] don't have to be the best teacher [and] they don't have the highest [Tertiary Entry Ranking] score, they just have to excite those kids, make them want to be there, and see the value of being part of something bigger.

Possessing a Range of Competencies and Attributes

As with the theme above, all six principals identified a range of competencies and attributes that teachers would be required to navigate and negotiate future classrooms in a COVID-19 context that will require enhanced problem-solving skills, creativity, and innovation. Rather than capturing the full breadth of these features shared through the interviews, the key aspects of the principals' perspectives will be identified. The following quote from Tom is a good starting point as it identifies that there are particular attributes that underpin what will be required to operate as an informed citizen in general in the future, not just in the domain of school-based learner and teachers. "It's really no different to what we say we want in our learners. We want [graduate teachers] to be curious, to be engaged, to demonstrate initiative, to know how to research and continue to learn".

For Gareth, it was important to acknowledge that graduates will be joining school communities with a "fairly sophisticated basket of skills [and] a sophisticated repertoire to deal with [a range of] issues". The challenge will lie in how teachers harness those skills and apply them to the myriad of complex situations that can arise. Gareth identified, for example, "collaboration and conflict management in dealing with parents and you know the heightened emotional stuff that goes with teaching". He was particularly conscious of "how to help graduates deal with that sort of thing" to bridge the gap between their skill set and the school context.

As Robert stated gone are the days where principals were "looking for someone who can control a class and write on the whiteboard". The work of the teacher is already multi-faceted and may be perhaps more so in future classroom contexts. The quote below from Robert further highlights the shift from the focus on the remit of teachers as knowledge delivery to the kinds of attributes that are required to nurture knowledge development.

So the attributes are people who can engage, are a natural leader, can work in teams, who are flexible and just look, good all round people. When we interview people it's not about what they know, it's all about what sort of person they demonstrate themselves to be.

Similarly, Noel referred to the types of people who identify teaching as their chosen profession – "obviously they're in teaching because they want to make a difference" – as having a set of core attributes, such as "open-mindedness", "team orientated skills", "flexibility" and "being open to people providing constructive feedback about them as a professional". While he noted that it is easy to name these key features as requirements for future teachers, Noel couched his insights by adding that "they're not easy things to define"

or quantify. He also listed the capabilities that his school was focused on developing in their students – cognition, communication, collaboration, creativity, and connection – and that could be focus for graduate teachers. Again, Noel recognized that when referencing human attributes that not everything can be neatly captured and categorized. “There are things that I look for in people but they’re not necessarily something that you can teach them”.

Like Noel, Andy identified some high-level capabilities that would be required to future proof the teaching professions as well as support the learning needs of future students. Graduates should identify as “life-long learners”, “be risk takers” and “able to handle change”. This notion of change management was particularly important to Andy as believed that there is a need “to be ready to embrace change because change in an educational world is a necessity if we’re going to meet the needs of [future] students”.

Finally, while Ewan considered the need for a similar range of graduate attributes (e.g., confidence, openness, collaborative, professionalism, communication skills), he focused on a particular skill that for him epitomized future thinking: time management. Ewan focused on time management as he noted this skill as a key difference in how graduates experienced their time in schools as a pre-service teacher and how it was experienced as a classroom teacher as he shared in the following quote.

I think time management is a key and critical issue, where being in a school in a rounds environment is a touch of what goes on, but when you get in to the classroom and close the door for the first time it can be a very lonely place.

This also speaks to graduates possessing traits such as resilience and initiative to ensure they are seeking out ways to meet the needs to their learners and find ways to grow as professionals themselves.

Having a Contemporary Understanding of What it Means to be Teacher

For five of the principals (all except Andy), there was a strong sense that future teachers will have moved a long way from the notion of “a teacher’s job as filling the bucket” (Gareth), a reference to the outdated view of a teacher as being a transferrer of knowledge from themselves to their students. One aspect of shifting to a more contemporary understanding, as Ewan explained, is “breaking down the island mentality” of working in isolation within the classroom walls by instead actively collaborating with colleagues to improve student outcomes (described in more in following theme below). Another aspect is re-envisioning the learning needs of future students and the teaching approaches that will best support them where in a COVID-19 context the ability of teachers to keep adapting and innovating will be crucial (ATSIL, 2020). Noel referred to this changed focus, as captured in his quote below, particularly in terms of an articulation of how learning is occurring and why it matters.

You do have to teach your kids [21st century] skills and provide opportunities to apply them, but you’ve also got to be able to talk about why they’re important and demonstrate and model how you actually do those sorts of things. This is a bit different from teachers I grew up with and teachers I’ve worked with in the past - they were content driven. I’m not saying that’s a bad thing but it’s more to do with how you learn and understanding that process.

Intertwined with a contemporary view of the teacher and teaching is a reimagining of what schools might look like in the future. This can be a challenging concept to consider, but as Robert acknowledged “schools are a lot different now than they were when [he] was at university” and will continue to adapt and change into the future. Though he struggled to

identify how to prepare graduate teachers for what the construct of a future school might entail when “there’s a variety of models going on”.

In a similar vein, Gareth referred to the “19th century when we had the factory model of schools” and the relatively more recent approach driven by an “economic and societal need for babysitting between nine and three so [the population] can get some work done”. These notions raised a question for Gareth in relation to future teachers and how these models will continue to evolve to deal with the complexities ahead. He posed, “How has your school changed in order to address these challenges and issues?”, before providing his own response, “I wish I had an answer for that one too [as] I don’t think we can move fast enough”.

Tom shared a more advanced perspective of what schools will be like for future graduates and their students. His sense was that schools will be a “universal platform to deliver wrap-around services for family and children”, which suggests a more holistic perspective towards what the role of a school is and what can be achieved. Tom predicts a “fundamental shift in how [schools and teachers] engage and work with community with a school at the centre”, but that for graduates this would require significantly “redefining the parameters or the limits of where we start [our work as teachers] and where we end”.

Being a Team Player

As above, all but one of principals (Andy) referred to the importance of graduate teachers having strong collaborative skills to effectively support and grow their practice in future classrooms and work collaboratively and leverage expertise and experience from multiple stakeholders (AITSL 2020), particularly when navigating a future following COVID-19.

Resoundingly, their focus was on working with colleagues to develop and implement authentic and coherent learning experiences for students. For example, in Robert’s context, he was focused on graduates being prepared to engage in meaningful team teaching opportunities – “it’s fair dinkum team teaching ... because a lot of the graduates still think it’s just taking the class together, and it goes a lot deeper than that”. Whereas in Ewan’s context, it was about connection to professional learning teams and being “coached or mentored” as part of transitioning into their role as a classroom teacher - “being as much as anything else a sponge to absorb as much information from colleagues that they can possibly get”. Tom and Gareth echoed similar sentiments with the quote below (from Gareth) further highlighting the notion of being able to achieve more, such as improved learning outcomes, when working as part of a team rather than as an individual.

We know that collaboratively people can work so well together. One person can only do so much, but the collaborative basis that underpins a whole team acts as a multiplier and yet in many schools, including my own, there are classrooms here that don't fully take advantage of that collaboration.

Noel, however, took a slightly different angle. He connected the focus on preparing students for an unknown future with graduate teachers “understanding their role as a teacher in the context of 21st century learning”. For Noel, this meant the need for teachers to have mastered these skills personally, such as “team orientated skills”, before “teaching others to develop these skills too”.

Understanding the Role of Technology for Learners and Learning

The role of technology in enhancing learning in future classrooms, perhaps surprisingly, was only mentioned by half the principals (Andy, Gareth and Robert) in relation to the skills that graduates would need to develop. This would undoubtedly be considered differently as a consequence of COVID-19, where new ways of working will require graduates to have the ability to operate at pace in primarily digital environments (AITSL, 2020). In the context of the research, however, Andy viewed information and communication technologies (ICTs) more broadly as a “big enabler”, but an area that future teachers would still need to grapple with as a teaching tool to effectively meet the needs of learners. The following quote expresses this sentiment.

Because it is the big enabler, [ICT] allows us to do things that we haven't been able to do. Now, ICT in many ways has changed, it has influenced our children so dramatically. Our children are different, they're coming to school with different expectations.

For Andy, the advances in ICT fundamentally shift what it means to teach. The imperative is to allow “children to take responsibility for their learning and there are some teachers who find that really hard”. Graduate teachers will need to adapt their practice to accommodate this need.

Similarly, Gareth viewed children as “conditioned to learn differently” in comparison to the experiences of their teacher with “everything that they do at home connecting them to the wider world”. Children have the ability to use and manipulate technology to inform much of their learning outside of school that future graduates will need to consider how to leverage this approach in their classrooms. As captured in the following quote from Gareth even current graduates, so-called digital natives, are unprepared for this way of learning because of their own learning experiences at school.

Even our young teachers are nearly totally unprepared for this way of learning because the successful ones ... they've mastered the book, they've mastered the text, they've mastered traditional literacy. They were the masters of that field and few of our kids learn that way [or] are comfortable with that way. There's a whole new way of learning for a whole lot of kids, and we're so not prepared for it.

Gareth, like Andy, viewed technology as “an enabler” that graduates will need to master because “kids are so much more connected [and] we're missing lots of [learning] opportunities”. The quote below encapsulates the level of importance he attributes to adapting how technology is used in the classroom, which goes beyond simply being a learning tool to being critical to how students learn.

And if we don't adapt to their way of learning, the school will be irrelevant, they won't learn the curriculum, they'll only go through the motions of being here, they'll get no satisfaction and enjoyment out of it and they won't be learning, they won't love learning and we've got to turn that around.

Robert picked up on similar points to Andy and Gareth. He believed that the ubiquity of technology will have to “change fundamentally how the teachers are teaching”, but also found it challenging to achieve this at the classroom level. “We're struggling with getting the teachers to get the kids to do the work [using technology to assist], instead of the teachers delivering it to the kids”. Ultimately, graduate teachers will need to be positioned with the appropriate pedagogical skills and approaches to meet learners where they are at in relation to their use and knowledge of technology for learning.

Engaging with an Interdisciplinary Approach to Curriculum

For both Andy and Gareth, future-focused classrooms would be preparing students to deal with and solve complex problems in interdisciplinary ways, signaling a shift from content-focused practices and unidimensional tasks. Approaching learning in this way would require graduates to engage with curriculum implementation in a more holistic and integrated manner. Gareth highlighted the need for future teachers to focus on the development of “rich tasks” in their classroom. This could be achieved by drawing on “complex conceptual frameworks” to build the skills required in students to navigate through “changing and dynamic times” ahead. Andy articulated his understanding of this approach through the phrase “passion projects”, which he articulated as “enabling more authentic learning” to take place. Interestingly, he placed value on both teachers and students bringing their passion projects to the classroom as a context for stimulating in-depth and multi-faceted learning opportunities. Andy linked this thinking to educational priorities encouraging increased “interdisciplinarity” in terms of how curriculum is enacted at a classroom-level. This focus suggests at the need for graduate teachers to be able work with curriculum documents that are presented as individual learning areas and apply high-level critical thinking skills (e.g., evaluating, analyzing, synthesizing, applying) to repackaging them as integrated learning opportunities.

Maintaining Personal Wellbeing

Many of the principals identified increasing levels of accountability and ever competing demands on teachers as leading to additional workplace pressures and stress. Noel, however, was the only principal who made the connection between the requirements of future classrooms and graduates having skills to manage their own wellbeing. His sentiments are articulated in the following quote:

... An awareness that teaching can be all consuming and that the expectation is always that you have to approach it in a professional way, not just for the school but for you to get the best out of yourself. But there needs to be a balance in that because it's quite easy to get burnt out and that has implications further down the track.

In supporting graduates to achieve an appropriate work-life balance, Noel recognized that monitoring and modelling these practices (e.g., not staying at work late, having a life outside school) needed to come from the leadership down, in a sense giving “permission” for sustainable practice.

Discussion

While it might seem somewhat obvious that ITE programming should be working differently to equip education graduates with the skills and strategies appropriate for meeting the needs of future learners, systemically, we seem to be at a stalemate regarding what ‘different’ might actually look like. This might be partly due to the period of rapid change that ITE, in the Australian context at least, finds itself in currently. The focus of this reform is very much about big picture improvements to the quality of ITE, however, this may be to the detriment of what is required at the classroom level. In an attempt to break this inertia, this research turned to educational leaders for their insights as a way to invigorate thinking and generate conversation to inform ‘next’ practice. In this case, this work draws on the wisdom

of school principals, who have collectively accrued over 200 years of educational experience as classroom teachers and school leaders.

It is however, important to acknowledge that the small sample size of study participants and the characteristics of the particular cohort, all experienced, older, male and metropolitan-based principals, prevents research findings being extrapolated (Faber & Fonseca, 2014) to the larger principal population with emergent findings shaped and informed by this lens. Although the intentional subgroup of principals yielded information, it is acknowledged that this only provides a narrow snapshot in time of what this group of Australian principals think. As such generalizability is reduced, with inferences unable to be made about the general population of principals. The views of women in leadership, those new to a principalship, principals from diverse cultural and linguistic backgrounds, or those working in rural and remote geographic contexts may have uncovered different ways of thinking about or making sense of the notion of next practice.

However, in speaking directly to the research shaping this paper, this research does provide some insights into the types of skills and attributes perceived as necessary for graduate teachers to hold if they are to meaningfully support learning in their future classrooms. Overwhelming, the principals participating in this study referred to graduate capabilities and competencies that are relational and affective in nature, which suggests that the realities as experienced at the ‘chalkface’ are accurately reflected in what is emerging from the literature (e.g., Barnett, 2018; OECD, 2018). Three of the seven themes spoke to these human elements. Firstly, the prioritization of relationships was front and centre from the perspective of the principals, which highlights the need for future teachers to not only be prepared to build positive and productive relationships with their students, but hone the attributes required to do this in an authentic way. As an off-shoot to this point, being a collaborative colleague was also viewed by the principals’ as a critical element with the achievement of outcomes in future classrooms requiring sustained teamwork rather than working in isolation. These two themes speak directly to McLaughlin’s (2018) notions of connectedness and collaboration as key features of next practice. In relation to the third affective-focused theme – possessing a range of competencies and attributes – graduates will need to be equipped with the skills to negotiate and navigate complexity in the classroom with their work situated, as the OECD (2018) identifies, within an increasingly uncertain future. As the 4th industrial revolution takes hold through widespread digitalization and technological advances, such as artificial intelligence and the internet of things (World Economic Forum, 2019), the human elements demonstrated and practiced by teachers will become increasingly recognized as an important teaching commodity.

Somewhat reflected in the literature was the need for the role of teachers and teaching to be viewed through a different lens (e.g., Donaldson, 2010; McLaughlin, 2018). From the perspectives of the principals, this viewpoint is underpinned by pedagogical considerations and acknowledged in three of the emergent themes. Interestingly, all but one of the principals highlighted the need for a more contemporary understanding, from graduate teachers and the general public alike, of what it means to be a teacher. While we have seen a shift from the notion of a teacher being a ‘sage on a stage’ to having a role more akin to a facilitator over recent decades (e.g., McLean & Attardi, 2018), consideration needs to be given to how we might conceive the role of future teachers. Perhaps, for example, more like a learning coach or curator of learning experiences, which would speak to the principals’ overwhelming sense of a more personalized approach to learning and teaching being required as part of next practice. In a similar vein to this reimagining of role was the sense from some of the principals that classrooms of the future will need to better mirror the reality of workplace practices, namely through an interdisciplinary approach. With the rise of STEM education globally (Bell, 2016), this call for interdisciplinarity is being increasingly reflected in education

policy and strategy (e.g., Education Council, 2015). Further thought is needed, however, in terms of how this approach is enacted successfully in classroom contexts. The third pedagogically-focused theme acknowledged that technologies will play an even more significant role in enhancing learning and teaching into the future. While we are existing in age with increasing numbers of digital natives, being a digital native is not going to be enough to ensure technology is applied meaningfully and in ways that benefit the learner (Passanisi & Peters, 2012). The principals recognized that future teachers are going to be required to think and act differently in their use of technology as an ‘enabling’ factor in their classrooms.

A more unique response emerging from the research regarding next practice was the notion that future teachers will need to be more mindful in the maintenance of their personal wellbeing. While only articulated by one of the participating principals, it was certainly a sentiment that echoed across the insights of all participants: increasing demands on classroom teachers directly leads to increasing levels of stress. Being well in all senses of the word is not only of benefit to teachers, but the school community at large. As identified through a recent review of literature by McCallum, Price, Graham and Morrison (2017), the wellbeing of teachers is of critical importance to all stakeholders if we are to assure quality educational outcomes into the future.

By garnering the perspectives of principals, a cohort who have significant and sustained educational experience, this study adds unique insights to understandings of what is needed to adequately and appropriately prepare graduates to engage with next practice. This work is important because it further documents and challenges our notions of what the role and practices of teacher into the future will entail. While this study adds weight to considerable literature identifying that well developed and honed interpersonal skills are the bedrock of nurturing learners and learning needs in the future classrooms, it does highlight some new ways of imagining what is required. The principals teased out the need to consider pedagogical practices and approaches differently, including reconceptualizing what it actually means to be a teacher in a future context and how to ensure personal wellbeing is at the centre of engaging with next practice in way that is sustainable.

Conclusions

In identifying the skills and attributes required in graduates to be prepared for next practice, as articulated by a narrow sample of Australian principals (experienced, older, male and metropolitan-based), a snapshot of what is required forms and the lack of action in the ITE space in moving pre-service teachers in this direction becomes more obvious. While researchers have conceptualized what might be needed to better prepare graduates for the realities of their future classrooms (e.g., Bahr & Mellor, 2016), further research along with program innovation is required to examine what is actually happening in ITE and explore what could be possible. In the Australian context, there is a significant amount and pace of change taking place in ITE driven by a national agenda for improved quality. It is important to note, however, that this change is not actually future-oriented in nature when considering the needs of teachers and their practice. Being able to assure ITE quality has become such a pressing issue that the goals connected with these large-scale changes are more short-term in nature and focused on the systemic level of ITE programming rather than examining the more fine-grained perspective of what is taking place within those programs (Yeigh and Lynch’s (2017) work is a notable exception). This study, along with the times that we currently find ourselves in globally, provides a metaphorical nudge to ITE providers and teacher educators to lift their heads, refocus their vision and reconceptualize what can be

done with the long game in mind for the benefit of future graduates, students and the education community at large.

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