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Supporting Primary and Secondary Teachers to Deliver Inclusive Education

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Abstract: With Australian disability discrimination legislation and educational policy promoting movement toward inclusive education, the building and supporting of inclusive education workforce capability is of paramount importance. This study investigated how principals in Australian primary and secondary educational settings support teachers to provide inclusive education and what these principals perceive to be barriers to supporting the education workforce to deliver inclusive education. The study used an online open- and closed-set survey. The findings demonstrated that principals in educational settings across the government, Catholic and independent sectors and across geographical regions offered largely similar professional learning opportunities to their staff, and expressed similar views about barriers and principals' roles in supporting their teachers to deliver inclusive education. Participants overwhelmingly reported that their role in building teacher capability was as instructional leaders and brokers of workforce professional learning. There was a strong indication by principals of the need for teachers' knowledge and skills to be developed and of the need for high quality, effective ongoing professional learning. Participants reported barriers to supporting teachers to deliver inclusive education, most commonly an insufficiency of time, finances, and access. Recommendations for better supporting teachers in primary and secondary settings to deliver inclusive education are made.

Introduction

Supporting teachers to deliver inclusive education is fundamental to maximising academic and social wellbeing outcomes for all children and young people (Mitchell, 2015, 2017). There is no overarching definition of inclusive education in the Australian context, but in recent years the concept of inclusive education has extended beyond the inclusion of children with disability to encompass meeting the diverse learning needs of all students (Anderson & Boyle, 2015). Australian classrooms have become increasingly diverse in recent years; not only do more students with disability attend mainstream schools, but many classes contain students from a range of ethnic, cultural and language backgrounds (Anderson & Boyle, 2019; Dally et al., 2019). In particular, the number of children with diagnosed autism spectrum disorder (ASD) has increased greatly in Australia in recent years, and these students' successful inclusion in regular schools requires teachers to have a good

understanding of the cognitive, social and behavioural characteristics associated with ASD and specialist training in supporting these students (Garrad et al., 2019). It is important that educators have the requisite knowledge, skills, attitudes, and self-efficacy to ensure genuinely effective inclusive education that meets the learning needs of all students, regardless of their abilities and backgrounds (Carter & Abawi, 2018; Dally et al., 2019). Given that graduates of preservice teacher education may not be fully equipped with these requisites (Dally et al., 2019; Sharma & Sokal, 2015), it is essential to ensure that teachers are adequately supported to develop their capability to deliver inclusive education. Such support must include ongoing professional learning with opportunities to enhance attitudes, knowledge, skills, and pedagogical practices (Loreman, 2014; Pearce et al., 2010). Additionally, at least three Australian Professional Standards for Teachers focus on inclusion:

Standard 1.5	Differentiate teaching to meet the specific learning needs of students across the full range of disabilities.
Standard 1.6	Demonstrate broad knowledge and understanding of legislative requirements and teaching strategies that support participation and learning of learners with disabilities.
Standard 4.1	Support student participation. (Australian Institute for Teaching and School Leadership, 2018)

The Role of Principals in Inclusive Education

Achieving inclusive education is complex and supporting an inclusive education workforce is multidimensional (Duncan et al., 2020). To ensure effective inclusive education, educational leaders require consciously targeted efforts, a strong belief in the value of inclusion, and an unyielding attitude of social justice (Carter & Abawi, 2018). School leadership, in terms of both strong administrative support for inclusion and of promotion of a climate and culture supportive of inclusion, is central to the achievement of effective inclusion (Loreman, 2014; Woodcock & Woolfson, 2019), and school principals have a significant role to play in fostering a culture of inclusion and promoting inclusive practices within schools (Ainscow & Sandill, 2010).

Generally, principals serve as leaders in providing students with disability opportunities to learn in inclusive education settings (Billingsley et al., 2018; Lyons, 2016). Australian researchers have emphasised the critical role of school leadership in ensuring that staff access appropriate training and resources in understanding legislative requirements and providing appropriate adjustments and supports to fully include students with disability (Dickson, 2014; Iacono et al., 2019). However, principals in many countries struggle to implement contemporary inclusive education (Jahnukainen, 2015). A small number of studies have reported that school principals in Australia emphasised the importance of teachers having the necessary skills and pedagogical practices for inclusion (Carter et al., 2014), and the necessity of professional development, training, and resources to adequately support inclusion (Duncan & Punch, 2021; Stokes et al., 2017; Wood et al., 2014). Furthermore, The Australian Education Regulation 2013 sets out the rights and responsibilities of organisations for them to receive Australian Government funding for school education (Australian Government, 2013). Related to this regulation and from 2018, all schools are required to report educational adjustments being provided to students with disability via the National Consistent Collection of Data (NCCD) and submitted to the Australian Government on an annual basis to receive student with disability funding loading (Australian Government, 2020). The NCCD has a cascade of principal responsibilities attached to it, not the least of which is ensuring the education workforce has the capability to implement educational

adjustments. However, there has been little research on how principals support teachers to deliver inclusive education or on principals' perceptions of the barriers to supporting inclusive education workforce capability.

Given the dearth of evidence that elucidates principals' perspectives on building a capable inclusive education workforce, the present study aimed to investigate how principals in Australian educational settings support teachers to deliver inclusive education. Specifically, the research questions were:

1. What types of inclusive education-related professional learning are principals in primary and secondary educational settings providing to their teachers, and are there differences in provision between educational settings?
2. What are principals' perceptions of barriers to supporting teachers to deliver inclusive education?
3. How do principals see their role in supporting teachers to deliver inclusive education?

Method

The study used an online survey to collect quantitative and qualitative data from principals in Australian education settings. Ethics approval was granted by (name of university withheld for the anonymous review process) Human Research Ethics Committee (H-2018-0070).

Procedure

Twenty Australian school principal federations, unions, and associations were invited via email to distribute an online survey to their members in principal positions. Seven agencies agreed to disseminate the survey, resulting in approximately 1,200 emailed invitations to Australian principals. The other 13 agencies either did not reply to multiple emails and phone calls or declined to assist with the survey distribution.

The survey was disseminated by the agencies using a link to SurveyMonkey. The participant information statement was the survey landing page, with informed consent on page two. Participants were assured of anonymity. The survey was open for four months.

Survey instrument

The researchers developed a 9-question survey incorporating closed- and open-set questions to gain both a broad and a deep understanding of the topic of investigation. The survey was kept relatively short to encourage maximum principal participation.

The survey first presented four demographic questions to identify the school setting, school sector, school geolocation, and principal's highest level of education. This was followed by three closed-set questions that were designed to answer the study's first research question about professional learning provided by the principals. Professional learning in education can take many different forms, including workshops, online courses or modules, coaching, and university courses (Billingsley et al., 2018; Shurr et al., 2014; Waitoller & Artiles, 2013), with modes of delivery varying from external experts providing advice or workshops to a more job-embedded model involving professional-learning communities and mentoring (Nishimura, 2014; Strieker et al., 2012). The items included in these questions

reflected this range, along with the large variety of inclusive-related topics for professional learning.

Each closed-set question asked participants to indicate the items that they had offered to their teachers in the previous 18 months. The first listed 13 types of professional learning; items included coaching, peer observation, and team teaching. The second question listed 26 professional learning topics, such as social/emotional disability, differentiated instruction strategies, and students from a minority culture. The third question listed five modes of professional learning, covering in-person or online learning of different durations.

To investigate research questions 2 and 3, the survey presented two open-set questions to which participants could respond at whatever length they chose. These asked participants to report their perceptions of 1) barriers to developing inclusive education workforce capability and 2) the role of the principal in developing inclusive education workforce capability.

Participants

The survey was completed by 113 principals, or 9.4 percent of potential respondents. As can be seen in Tables 1 and 2, most principals were working in a primary school (57.5%), within the government sector (69.9%), located in a major city (54.8%), and had achieved a Master of Education as their highest level of education (50.4%). Overall, the principals who responded were similar to the population of school principals in Australia, with a slight over-representation of principals from the Catholic sector and outer regional, remote and very remote geolocations (Australian Bureau of Statistics, 2017).

Level	n	% of sample	
Primary school	65	57.5	
Special school	26	23	
Secondary school	13	11.5	
Combined primary and secondary	9	7.9	
Sector	n	% of sample	% Australia*
Government sector	79	69.9	66
Catholic sector	28	24.7	20
Independent sector	6	5.3	15
Geolocation**	n	% of sample	% Australia ***
Major city	62	54.8	53
Outer regional area	29	25.6	16
Inner regional area	12	10.6	25
Remote area	9	7.9	3
Very remote area	1	.8	3

*Australian Bureau of Statistics (2017)
**Geolocations are based on the Accessibility/Remoteness Index of Australia (University of Adelaide, 2018).
*** % Australian schools by geolocation are based on Halsey (2017).

Table 1: Principals' Educational Setting (N = 113)

	n	%
Master of Education	57	50.4
Bachelor of Education	27	23.8
Graduate Diploma	11	9.7
Diploma	6	5.3
Double degree (e.g. Bachelor of Education plus)	5	4.4
Doctor of Philosophy or Doctor of Education	3	2.6
Other	4	3.5

Table2: Principals' Highest Level of Education (N = 113)

Data Analysis

Closed-set questions. The distribution of the responses to the set of three closed-set questions about professional learning types, topics, and delivery modes was tested against the normal distribution and the relevant descriptive statistic used to summarise them, depending on their level of skewness. These three closed-set questions formed the outcomes of interest.

Relationships between the three outcome questions and the four demographic questions were also tested using either an ANOVA or the Kruskal-Wallis (a non-parametric equivalent to the ANOVA), dependent on the level of skewness of the outcomes. Where significant relationships (differences among groups) were established, a post hoc test was used to establish where differences occurred among groups of the demographic variables using Tukey HSD (or its non-parametric equivalent, Steel-Dwass). Non-parametric comparisons for all data pairs were completed using the Steel-Dwass Method for questions 1-7.

Open-set questions. By the nature of the open-ended responses that participants were asked to provide, the data collected through the two open-set questions were qualitative. Principal responses ranged from only a few words up to 140 words. Coding reliability thematic analysis, a more positivist, partially qualitative approach than reflexive thematic analysis (Braun et al., 2019) was deemed the most appropriate analysis approach for this data. Using this approach, the first author analysed the data to identify codes and then themes within each of the two questions. NVivo 12 qualitative data analysis software (QRS International, Pty Ltd, 2018) was used to facilitate the analysis.

To establish a measure of inter-rater reliability, a University of Newcastle doctoral candidate with expertise in inclusive education was trained in open-text coding. This second coder coded a random sample of ten per cent of the data utilising a codebook developed by the first author. This resulted in a difference on the coding of two responses. The inter-rater reliability coder and the first author met to discuss the differences and the codebook was then modified. The first and second authors further reviewed the coding, resulting in eventual complete coding agreement between the three coders.

Results

Closed-set questions

There was a level of uniformity across the different types of educational settings, school sector, school location, and principal qualifications regarding the types of professional learning, the topics of professional learning, and modes of professional learning. As reported in Table 3, for one of these, a statistically significant relationship between the type of setting (primary school) and the professional learning topics offered was established. This indicated

that primary school principals provided a more extensive range of inclusive education topics than principals in any other educational setting (p-value 0.0014; alpha (p< .05).

As shown in Table 3, the participants reported that they had offered their staff all of the types of professional learning opportunities listed in the survey question. More than 65% of principals reported offering peer observation, conference attendance, full-day workshops, coaching and team teaching; university study was the least chosen item at 20%.

	n	%
Peer observation	76	67
Conference attendance	76	67
Coaching	75	66
Mentoring	72	64
Full day workshop	72	64
Team teaching	71	63
Evening/afternoon/twilight workshop	68	60
Targeted reading	67	59
Professional learning community participation	63	56
Action research	54	48
Access to content expert	38	34
Shadowing	24	21
University study	23	20
Total responses	707	

Table 3: Professional Learning Types Offered by Principals

Table 4 indicates the professional learning topics offered. The highest percentage was professional learning in autism spectrum disorder (88%), while social/emotional difficulties (79%), challenging behaviours (68%), and differentiated instruction strategies (67%) were each offered by the majority of principals. Professional learning in teaching students who identify as transgender or gay, lesbian or queer and students from a minority language or culture were the topics least offered.

	n	%
Autism spectrum disorder	99	88
Social/emotional disability	89	79
Differentiated instruction strategies	83	73
Challenging behaviours	77	68
Reading difficulties	75	67
Cognitive disability	71	63
Self-regulation difficulties	67	59
Sensory disability	66	58
Writing difficulties	59	52
Social difficulties	54	48
Numeracy difficulties	51	45
Language difficulties	46	41
Physical disabilities	45	40
Mental illness	43	38
State legislation	36	32

Inclusive education technology	29	26
Inclusive education team approach	29	26
Federal legislation	27	24
Augmentative or alternative communication	27	24
Chronic health condition(s)	26	23
Universal design for learning	24	21
Students from a minority culture	22	19
Inclusive education family collaboration	18	16
Students from a minority language	17	15
Students who identify as transgender	16	14
Students who identify as gay, lesbian or queer	12	11
Other	8	7
Total responses	1,216	

Table 4: Professional Learning Topics Offered by Principals

As Table 4 indicates, the delivery modes most commonly provided for professional learning events were in-person, while online learning was also offered by around 40% of principals.

	n	%
In-person learning up to 1 day	84	74
In-person learning up to 60 minutes	78	69
eLearning up to 60 minutes	49	43
In-person learning 2 days or more	45	40
eLearning more than 60 minutes	44	39
Other	3	3
Total responses	303	

Table 4: Professional Learning Modes Offered by Principals

Open-set question one

Two survey questions requested that participants provide an open-text response to describe their perspectives on supporting their workforce to deliver inclusive education. The first of these questions, “What are the barriers to building and supporting the education workforce to deliver inclusive education?”, resulted in 162 distinct coded responses. Data were coded into seven themes: time, financial, teacher knowledge and skills, access, teacher attitudes, systemic issues, and student diversity. Themes are presented in order of dominance.

Time. The most commonly mentioned barrier was time, cited in 35 responses. Many participants responded with simply the word “time”. Others who responded more fully indicated that demands were placed on the workforce without adequate time to fulfil all requirements; for example, “staff are willing to do work to build their capacity but with all other curriculum issues it’s time that is required and reflection”. Lack of time for professional learning, including the time to assemble as a professional learning community, was reported to be scarce; for example, one participant stated: “time to do the learning together to fully understand and integrate how inclusive education can work”. The need for time for follow-up discussion and planning was identified in several responses.

Financial. Thirty of the responses coded for this question indicated a belief that there was inadequate funding and access to financial resources to support teachers’ inclusion-

related essential professional learning. “There’s very little money for PD opportunities” was a typical response; the cost of releasing and replacing staff for professional learning was also cited. In addition, participants identified pressure of competing costs with other school-based needs as a barrier to building inclusive education skills.

Teacher knowledge and skills. Many principals perceived teachers’ foundation knowledge and skills (cited in 29 responses) to constitute a barrier to delivering inclusive education. Brief responses cited lack of knowledge, experience, expertise, understanding, and differentiation skills. Of the fuller responses, several suggested that novice teachers were ill-prepared for inclusive education given the complexity of modern classrooms; for example, “new staff with no knowledge or experience of Aboriginal culture, student learning needs, students with disabilities, differentiation of learning opportunities”. One participant identified an inability of some teachers to use effective time management strategies, stating “teachers often engage in reactive activities that consume a lot of time…Developing proactive strategies to deal with small issues so they don’t become big ones helps to focus on individualised, inclusive educational outcomes”.

Access. In 24 responses, principals indicated that difficulty accessing expertise and emerging evidence-based pedagogical practice was a barrier to supporting teachers to deliver inclusive education. “Accessing relevant and immediate resources” and “access to current information relating to the topic” are examples of these types of responses. Numerous responses cited difficulty accessing timely and quality professional learning. Principals reported a pervasive lack of access to disability-specific experts to support teachers. In addition, several responses specified that access to professional learning opportunities and expertise was particularly difficult in regional, rural, and remote areas; for example: “distance to travel to access quality learning” and “the availability of appropriate professional development – particularly in country areas”.

Teacher attitudes. Participants cited individual teacher characteristics as constituting a barrier in 23 responses. In particular, these principals perceived some teachers’ attitudes towards inclusive education as problematic. These responses included “attitudes/motivation of individual teachers,” “low expectations of students,” and “resistance to change in pedagogy”.

Systemic issues. Thirteen responses specifically mentioned systemic issues as barriers to supporting the education workforce in inclusion. Responses included “lack of systemic support,” “accountability pressures” and “the increasing demands of the DoE in relation to change and professional learning”. Some principals wrote of an inability to directly employ a highly-qualified workforce – in the words of one: “employing suitably trained and experienced staff”.

Student diversity. Finally for this question, eight responses referred to the extent of student diversity, with comments such as “diversity of student needs” and “the broad range of areas that we need to be inclusive” indicating these participants’ perceptions that the extent of student diversity in classrooms constituted a barrier to supporting teachers to deliver inclusive education.

Open-set question two

The second open-set question “What is the principals' role in building and supporting the education workforce to deliver inclusive education?” resulted in 215 distinct coded responses. Data were coded into seven themes: instructional leadership, managing professional learning, managing culture, strategy and policies, managing resources,

supporting staff, and networking and stakeholders. Again, themes are presented in order of dominance.

Instructional leadership. In 77 responses, principals indicated that a major part of their role in building teacher capacity to deliver inclusive education was as an instructional leader. This involved facilitating a school-wide approach that embraces diversity. Many responses mentioned mentoring, supporting and collaborating with teachers in curriculum and instruction modifications and in "how we can do things differently to support all students". Promoting a workforce learning focus and reflective practice was emphasised, along with supporting students with diverse needs through workforce knowledge and "keeping the importance of addressing the needs of all students at the forefront of teachers' planning".

Professional learning. The large number of responses (49) directly related to providing professional learning indicated that participants saw this as a major part of their role in supporting their workforce to deliver inclusive education. This included monitoring staff skills, identifying needs and ensuring access to appropriate just-in-time professional learning and school-wide professional learning. The principals emphasised that their role involved organising professional learning in consultation with the workforce, whether this be through access to direct support, coaching, or mentoring teachers. Several responses included mention of follow-up activities to professional learning opportunities; for example, "ensuring staff have access to adequate PD and time to reflect, adapt and accommodate".

Managing culture, strategy and policies. Participants reported that they were responsible for managing culture, strategy and policies related to building and supporting an inclusive education workforce, referring to this in 33 responses. Principals emphasised encouraging a culture of inclusion in their school and modelling inclusive attitudes and practices. Typical responses were "be a role model of inclusive practice and approaches" and "providing the vision for an inclusive community". Responses also indicated an emphasis on ensuring the alignment of culture, strategy, and policies, such as "ensure compliance with government policy," and a small number of responses referred to disability legislation, for example: "ensuring that national Disability Standards are being met".

Managing resources. Twenty-five participants referred to managing resources as part of their role in developing inclusive education workforce capability. Many of these responses reported the need for ensuring an adequate budget is in place for professional learning and other supports for inclusive education. Typical responses included: "finding financial and human resources to accommodate all student needs," "source funds and support", and "providing a Learning Specialist who is able to support staff, finding the budget to do this".

Supporting staff in inclusion. Supporting teachers in delivering inclusive education was cited in 20 responses. Some principals referred to staff wellbeing directly, while other responses indirectly indicated a concern for teacher wellbeing; for example, "finding the balance between supporting and upskilling staff without adding too much pressure". Encouraging support among teachers was mentioned in one response: "establish structures for staff to support each other to be inclusive".

Networking and stakeholders. Eleven responses indicated that principals' roles in supporting the delivery of inclusive education extended to the wider community. For example, one participant stated, "advocating for inclusive education amongst the parent and wider communities," while another wrote "networking with other site leaders and departmental consultants to ensure best practice is supported in our sites".

Discussion

The participants in this study, principals across a range of Australian educational settings, facilitated type, topic, and delivery mode of inclusive education workforce professional learning similarly. The only exception to this was that principals in primary school settings offered significantly more topics of professional learning than did their secondary school counterparts. Many disabilities and learning challenges are gradually diagnosed, insofar as an increasing number of children are identified as having learning difficulties and disabilities over time (Australian Bureau of Statistics, 2012). This has a flow-on effect to primary school principals who are then required to broker a broad range of professional learning topics for their workforce. The difference could also be related to the nature and structure of primary schools, insofar as one teacher is typically responsible for the near-complete learning needs of an individual student, whereas in secondary schools, multiple teachers are responsible for the learning needs of an individual student.

Regarding the range of professional learning topics, participants reported offering all 26 topics listed on the survey, some more commonly than others. The most commonly offered (by 86% of respondents) was the topic of ASD. This is consistent with reports in the literature of increased numbers of students with ASD in mainstream educational settings, and a strong need for teachers in those settings to have specialist training in order to fully include and support students on the autism spectrum (Garrad et al., 2019; Stokes et al., 2017).

The research literature strongly indicates that in-service professional learning in inclusion and differentiated instruction is most effective when it is sustained and collaborative, with follow-up involving coaching, mentoring, and collegial sharing of practice (Corkum et al., 2014; Nishimura, 2014; Sharp et al., 2020; Strieker at al., 2012). The current study's findings indicated that these practices are seen as important by principals. A large number of the responses to the two open-set questions included reference to reflection, follow-up activities, collaboration, mentoring, and coaching to support teachers' inclusive education capacity. In addition, the closed-set question about the types of professional learning offered indicated high percentages for such activities, including mentoring, peer observation, coaching, and team teaching.

In their responses to the question asking about barriers to supporting the workforce in delivering inclusive education, principals most commonly cited time, finances, teacher knowledge, and access to timely, high-quality professional learning. Lack of adequate time was reported at a system level (e.g., burdensome top-down requirements); school level (e.g., remote and regional locations creating the burden of travel time); and personal level (e.g., the difficulty for individual teachers to allocate time for professional learning and to engage in reflection and collaboration with school-based colleagues). In addition, lack of funding to support professional learning and individualised student learning was commonly reported as a barrier. Finance as a barrier was reported at a systems-level (e.g., cumbersome policies that allowed little flexibility in allocating additional resources to support inclusive education workforce capability), and school level (e.g., competing demand for the use of available finances). These findings reflect others in the literature that suggest financial costs to schools and individual teachers can inhibit the uptake of professional learning (Cameron et al., 2013).

A large number of participants identified teachers' inadequate knowledge and skills in inclusive teaching as a barrier. Principals suggested that the lack of workforce knowledge stemmed from teacher preparation programs not adequately preparing teachers for inclusive education settings, lack of system support in offering free-of-charge professional learning opportunities, and the unwillingness of some teachers to take responsibility for individual and personal professional learning. These findings reflect previous Australian studies suggesting that newly qualified teachers are inadequately prepared for inclusive education (Dally et al.,

2019; Sharma & Sokal, 2015) and in which principals identified a strong need for increased teacher knowledge and capability to facilitate inclusive education (Carter et al., 2014; Duncan & Punch, 2021; Stokes et al., 2017; Wood et al., 2014). The current study's findings reinforce previous research and further suggest the importance of ongoing and readily accessible professional learning for teachers, as well as the need for graduate teachers to be more fully prepared for inclusive teaching in their pre-service education.

Some of the principals in this study cited teacher motivation and attitudes as constituting a barrier. Teacher attitudes towards inclusion form an important component of achieving effective inclusive education, and engagement with appropriate professional learning can contribute to improved teacher attitudes (McFarlane & Woolfson, 2013; Sharp et al., 2020). In addition, teachers might be more motivated to engage in professional learning when it is based upon their self-determined needs and choices (Cameron et al., 2013). The type of close consultation between principals and teachers that was mentioned by some of the current study's participants is clearly important in achieving these outcomes.

Perhaps predictably, the study's participants felt that their major role in inclusive education workforce capability was to serve as an instructional leader. They referred to the mentoring of workforce regarding personalised curriculum and instruction, maintaining a workforce learning focus, and focusing on supporting diverse students via workforce knowledge. The extent to which principals can serve as instructional leaders is perhaps problematic, given the expansion of principals' roles in recent years and the amount of work required of them to balance competing student needs, workforce needs, school-level needs, and system-level needs (McGrath-Champ et al., 2019).

Another important role reported by these principals, and overlapping the notion of instructional leadership, was the brokering of workforce professional learning in inclusive education. This is consistent with literature reporting the importance of principals as facilitators of inclusive education through staff professional development (Carter et al., 2014; Dickson, 2014; Duncan & Punch, 2021; Iacono et al., 2019; Stokes et al., 2017). In the present research, principals documented the importance of negotiating the type, topic and mode of professional learning with individual teachers and balancing this with whole-school needs. However, the principals also described barriers to professional learning in terms of the difficulty in identifying evidence-based professional learning, access to specific experts required for identified workforce knowledge gaps, and the sometimes-impossible cost of professional learning. The complexity associated with brokering professional learning was intensified in remote school locations.

Recommendations

In response to study participants' perceptions as reported in the two open set questions, the following recommendations may enable more teachers in primary and secondary schools to deliver inclusive education.

Teacher preparation-level recommendations

- That teacher preparation programs increase the minimum course contact hours related to inclusive education;
- That teacher preparation programs include a practicum placement intended to assess novice teacher preparedness for delivering inclusive education;
- That teacher preparation programs include assessments directly related to delivering inclusive education.

System-level recommendations

- That systems allocate finances intended to allow adequate time for teacher professional learning, including participation in professional learning communities;
- That systems ensure policies are communicated to schools that are cohesive and reflect Australia's national commitment to inclusive education;
- That systems offer free-of-charge professional learning in a broad range of modes with a broad range of inclusive education related topics.

Principal-level recommendations

- That principals ensure a skills matrix is completed annually to match individual teacher skills and knowledge with the needs of individual learners;
- That principals assess just-in-time professional learning requirements with each teacher to ensure adequate support is available, if required;
- That principals set long-term professional learning goals with teachers as a collective to build inclusive education workforce capability.

Teacher-level recommendations

- That teachers self-monitor professional learning needs and disclose strengths and weaknesses to principals;
- That teachers attend free-of-charge professional learning where possible.

Limitations

The generalisation of the study's findings may be limited by the relatively small sample size. Although efforts were made to increase the survey distribution, some principal organisations invited to distribute the survey suggested that the population of principals serving in Australian education settings is over-researched, and many may be unwilling to participate. Additionally, some principals expressed reluctance to speak out in fear of system-level retribution.

The survey used in the study was relatively brief. A more extensive survey related to inclusive education workforce capability could improve the collective understanding of principals' perspectives regarding this topic. However, preliminary discussions with principals suggested that the survey ought to be short, with minimal identifiable demographic information and the questions broad in scope to encourage participation and protect identity. Specifically, demographic data indicating the principals' state jurisdictions was not collected to protect participant identity. This additional demographic data may assist in better understanding strengths and weaknesses of specific jurisdictions. Although the survey was not validated, it was based on relevant issues in the literature, and designed to capture the views of principals in the particular area of inclusive education workforce capability for this exploratory research.

Conclusion

The Australian Professional Standards for Teachers has an explicit focus on inclusion, highlighting its importance in pedagogical practice (Australian Institute for Teaching and School Leadership, 2019). Understanding principals' perspectives in inclusive education workforce capability is important because principals play a key role in ensuring the success of inclusive education (Billingsley et al., 2018; Carter et al., 2014; Carter & Abawi, 2018; Duncan & Punch, 2021; Lyons, 2016). This research aimed to understand better the perspectives and roles of principals regarding inclusive education workforce capability to meet individual student needs. Outcomes of this research may inform policymakers and

politicians. Additionally, outcomes identify further research required to better understand inclusive education workforce capability.

The research findings reported here indicated that principals embraced their role as instructional leaders and brokers of workforce professional learning. There was a strong perception by principals of the need for teachers' knowledge and skills to be developed and of the need for high quality, effective ongoing professional learning. However, the barriers they reported to achieving this, in particular the insufficiency of time, finances, and access, highlight the complex nature of supporting teachers to deliver inclusive education and indicate a clear need for these issues to be addressed. More research is required to better understand how principals support primary and secondary teachers to deliver inclusive education and fulfil their legislated and regulated obligations under the Australian Education Regulation 2013.

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Conflict of Interest

No author declares a conflict of interest.