

**Practical Pedagogy to Better Prepare Preservice Teachers for Inclusive Teaching:**

**Attitudes, Knowledge and Skills**

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## **Abstract**

Research about the preparation of preservice teachers for inclusive teaching has tended to use quantitative approaches, such as surveys, to investigate ways to better prepare preservice teachers. Further, studies to date have tended to examine the attitudes of preservice and experienced teachers. This paper presents the findings of interviews with 15 preservice, beginning and experienced teachers to ascertain their beliefs about enhancing preservice teachers' preparedness for their inclusive role. The findings expound on practical approaches in the areas of attitudes, knowledge and skills that may provide instructive information about designing initial teacher education courses for inclusive education.

## **Keywords**

Inclusive education, teacher education, preservice teachers, competencies, qualitative

## Introduction

Although the concept and practice of inclusive education continues to evolve, there are still many barriers to its successful implementation. The philosophy of inclusive education is rooted in social justice and is based on the view that all children (notably children with disability) have the right to take their place and be educated in regular classes (Ballard, 2012; Florian & Camedda, 2020; Loreman, Deppeler & Harvey, 2011; Naraian, 2017).

Common to many countries over the last few decades, Australia has moved towards a policy of including all students in regular classes (Armstrong, Armstrong, & Spandagou, 2011; Florian & Linklater, 2010; Forlin, 2010; Graham & Jahnukainen, 2011; Graham & Sweller, 2011; Hodkinson, 2009). Consequently, discourse has shifted away from justifying inclusive education to investigating its successful implementation (Loreman, 2007).

Australian and international research, conducted for at least the last 30 years, continues to show that preservice teachers and teachers have concerns and reservations about aspects of inclusive education (Desutter, 2015; Forlin & Chambers, 2011; Kurth & Foley, 2014; Parliament of NSW, 2010; Shaddock, Smyth King, & Giorcelli, 2007; Sharma & Sokal, 2015; Teacher Education Ministerial Advisory Group, 2014; Vinson, Johnston, & Esson, 2002). Some studies have found that teachers question the concept of inclusive education while others suggest that some teachers have a level of discomfort regarding disability (Sharma, Forlin, Loreman, & Earle, 2006).

Despite legislation (notably the *Disability Discrimination Act 1992* and *Disability Standards for Education 2005* in Australia) that supports inclusive education, increasing enrolments of students with disabilities in regular classes (Graham & Sweller, 2011) and a plethora of research undertaken about better preparing preservice teachers for inclusive teaching, teachers continue to report feeling ill-prepared and ill-equipped for their inclusive role (Chitiyo, Kumudzro, Hughes, & Ahmed, 2019; Cochran-Smith et al., 2016; Forlin &

Chambers, 2011; Forlin, Keen, & Barrett, 2008; Parliament of Australia, 2016; Shaddock et al., 2007; Sharma & Sockal, 2015). Ongoing studies and government reports across many nations suggest that initial teacher education is not adequately addressing the needs of preservice teachers for teaching in contemporary inclusive classes (Desutter, 2015; Forlin & Chambers, 2011; Hodkinson, 2009; Parliament of NSW, 2010; Pinter, Bloom, Charmion & Sastre, 2020; Shaddock et al., 2007; Teacher Education Ministerial Advisory Group, 2014). Many teachers report that they have insufficient knowledge and expertise to cater for classes of students with diverse learning needs (Chitiyo et al., 2019; Desutter, 2015; Forlin & Chambers, 2011; Kurth & Foley, 2014; Parliament of NSW, 2010; Sharma & Sokal, 2015). Findings also indicate that preservice teachers and teachers question their ability to cater for a diverse range of learners (Chitiyo et al., 2019; Forlin & Chambers, 2011; Forlin et al., 2008). This is despite that since 1994, preservice teachers in New South Wales (NSW), Australia have been required to undertake a mandatory one semester unit in what the Board of Studies Teaching and Educational Standards NSW (2014) referred to as a “special/inclusive education” unit during initial teacher education. The conflation of these two different educational philosophies, that is special and inclusive education, as if one approach, highlights a lack of clarity regarding the purpose of the mandatory unit.

Investigating teachers’ views about how to improve preservice teachers preparedness for inclusive education, specifically in the areas of attitudes, knowledge and skills, is likely to provide instructive information about designing courses (selecting content and designing learning experiences) to better prepare preservice teachers for the changing demands of teaching in contemporary schools (Desutter, 2015; Fuchs, Fahsl, & James, 2014; Hsien, 2007; Symeonidou, 2017).

In a review of educational outcomes for students with disability (Parliament of Australia, 2016), a major research-practice gap was identified in relation to improving

educational outcomes for students with disabilities. The authors recommended that initial teacher education providers ensure preservice teachers graduate with best-practice inclusive education skills.

Although ongoing research (e.g., Fuchs et al., 2014; Hodkinson, 2009; Hsien, Brown, & Bortoli, 2009; Lancaster & Bain, 2010; Loreman, Sharma, Forlin, & Earle, 2005; Pinter et al., 2020; Sharma & Sokal, 2015; Spandagou, Evans, & Little, 2008) has identified areas requiring attention during initial teacher preparation for inclusive teaching, it has not detailed learning experiences that lead to effective preparation of preservice teachers in the areas of attitudes, knowledge and skills. Further, studies to date have tended to examine the attitudes of preservice and experienced teachers, related to inclusive education rather than investigate how to shift attitudes (e.g., Ismailos, Gallagher, Bennett, & Li, 2019; Sharma & Sokal, 2015). Having positive attitudes about inclusive education is believed to play a crucial role in teachers' ability to successfully implement inclusive practices (Ismailos et al., 2019; Sharma et al., 2006; Sosu, Mtika, Colucci-Gray, 2010; Spandagou et al., 2008). This paper, however, proposes approaches that aim to shift attitudes, increase knowledge and augment the skills of preservice teachers in preparation for inclusive teaching.

There are historical parallels with how inclusive education has evolved in Western countries. For example, Hodkinson (2009) concluded that although there has been a dramatic increase in the enrolment numbers of students with disabilities in regular classes in England, the preparation of preservice teachers for inclusive education, has changed only marginally. The researcher implored the British government to ensure that initial teacher education provide preservice teachers with the necessary attitudes, knowledge and skills for catering to the broad range of learners who were previously excluded. In investigations about effectively preparing preservice teachers for inclusive education in the US, researchers identified program

shortcomings related to particular aspects, such as, opportunities to work with diverse learners, improving practice experience and coverage of skill development such as collaboration (Harvey, Yssel, Bauserman, & Merbler, 2010; Pinter et al., 2020). These findings are supported by the recommendations of the (Australian Government's) Teacher Education Ministerial Advisory Group (2014) that states that all teachers should have skills to work effectively with students with disabilities.

The majority of studies to date, however, offer scant practical suggestions as to how to change teacher attitudes, broaden knowledge and augment skills. This paper proposes approaches that raise preservice teachers' consciousness about exclusionary attitudes and practices. It proposes that preservice teachers who complete initial teacher education with a clear understanding of and commitment to inclusive education as well as attaining the relevant skills, are more likely to adopt inclusionary practices. This research aims to drill down by asking the question; how can educational learning experiences presented during initial teacher education be designed to effectively prepare preservice primary teachers for inclusive teaching in the areas of attitudes, knowledge and skills?

## **Materials and Methods**

Two approaches were used to capture qualitative data from preservice, beginning and experienced teachers to create a comprehensive picture of how to improve preparation of preservice teachers for inclusive teaching. The research presented here formed part of a larger study comprising quantitative and qualitative phases. A questionnaire was developed by the researcher to generate quantitative and open-ended qualitative data from preservice and experienced teachers about better preparing preservice teachers for inclusive teaching. The questionnaire was designed for both online and hard-copy presentation to optimise response rates in the different settings (Dillman, Smyth, & Christian, 2014). Preservice teachers' responded to the questionnaire before and after completing an on-campus mandatory

inclusive education unit (pre- and post-unit matched data; n=119) while experienced teachers responded only once (n=326). Responses to the open-ended questionnaire questions, in part, informed the development of the qualitative interview questions (see appendix). Face-to-face interviews with 15 participants yielded data that captured more refined, detailed and nuanced responses. These 15 teachers indicated on the survey that they were willing to be interviewed at a later date. Additionally, their responses to the open-ended questions on the survey indicated interest in and insight about inclusive education.

Interview and questionnaire open-ended responses were subjected to thematic analysis, however, additional procedures particular to each data set were also conducted. The findings from the interviews were the major focus while the questionnaire open-ended responses provided data that served to validate, corroborate, contradict or shed further light on the overall findings (Bryman, 2012; Hammersley, 2008). In particular, the open-ended responses provided data that was used to cross-check the validity of the interpretations of the interview findings (Bryman, 2012, Hammersley, 2008). Further, analysis of various data sets enabled the responses of different groups to be compared.

Ethics approval was granted by the university and education systems where this research was conducted. All participants were informed that participation in all aspects of the research was voluntary. Pseudonyms were used to conceal identities of participants. The study was conducted predominately in Department of Education public government primary schools across NSW, with a small representation from non-government schools. As such, it was important to design a questionnaire suitable for use in a variety of educational settings with a variety of participants.

In this study preservice teachers were postgraduate students enrolled in a Master of Teaching program in an initial primary teacher education course in a NSW university (as preparation to teach children aged approximately 5 to 12 years). As part of this degree

preservice teachers are required to undertake a mandatory one semester unit in inclusive education to prepare them to cater for the diversity of learners in contemporary classes. This unit is offered in the final semester of this degree. Although novices, preservice teachers were well placed to reflect on their overall course, including their practice experience in schools, to prepare them for inclusive education. Notably, preservice teachers' open-ended survey responses were mainly used to compare findings (Bryman, 2012).

The term experienced teacher refers to primary school personnel comprising executive staff, class teachers, school counsellors and support teachers.

The 15 teachers interviewed fell into the following subgroups:

- Beginning teachers who undertook the inclusive education unit, the previous year (n=5); all had been teaching for approximately three terms.
- Experienced teachers comprising
  - principals and class teachers (n=6); and
  - school counsellors and support teachers (e.g., itinerant support teachers, learning and support teachers) (n=4). In this study, school counsellors are qualified teachers with psychology registration; itinerant teachers have postgraduate qualifications in areas of expertise (e.g., hearing); learning and support teachers often have qualifications in inclusive or special education.

The interviews were semi-structured. In the main, the beginning teachers were teaching at schools located in socially disadvantaged areas. In an effort to secure a varied and representative cross-section, prior to contacting the teachers, consideration was given to the following factors gleaned from their questionnaire responses; their role (e.g., principal of primary school, itinerant support teacher – hearing), how conversant they were with the topic (e.g., thoughtful and unique responses and informative insights), representativeness of gender working in primary schools (females n = 9, male = 1), years of experience (very experienced

and less experienced teachers) and location of school. While most of the experienced teachers worked in western and south western Sydney, the researcher also secured interviews with some teachers who worked in different parts of NSW (e.g., mid-north coast and northern Sydney).

The interview questions were devised to generate responses that identified curriculum and pedagogy that effectively prepares preservice teachers for inclusive teaching during initial teacher education. More specifically, they were devised to elicit responses that investigated the areas of attitudes, knowledge and skills, and that arose from the open-ended responses in the questionnaire. Considerable attention was given to the development of the interview questions, as “structure facilitates reliability” which improves “comparative analysis” (Guest, MacQueen, & Namey, 2012, p. 88). With academic colleagues, the interview questions were revised, improved (e.g., broken into smaller questions, so that participants were able to more easily process and therefore answer the questions) and sequenced in a logical order. For example, the interviewer started by asking general questions about participants’ experiences of including students with disabilities, and gradually followed with more specific questions about the kinds of learning experiences, in the areas of differentiation and classroom management, that they believed would better prepare preservice teachers for inclusive teaching. The phrasing and structure of questions were developed to elicit responses enabling comparisons to be made between individuals and the three groups of teachers. Further, the questions were presented to the participants in a consistent way. That is, the same interviewer presented the questions in the same order; and interviews were conducted predominantly in school settings. Such considerations contribute to reliability and validity (Guest et al., 2012).

Semi-structured interviews ensured interaction between the researcher and participants was on a one-to-one basis. This allowed for clarification and elaboration on

points of interest and relevance. Bloomberg (2012) suggests that semi-structured interviews elicit “in-depth context rich personal accounts, perceptions and perspectives” (p. 252). In addition, face-to-face interviews “gives a voice” to those participants who may be influenced by outspoken or assertive individuals and reduces the possibility of the “me-too” that may occur when in focus groups (Guest et al., 2012).

Each interview took approximately 30 – 40 minutes. Techniques used by the researcher included approaches such as aiming for a balance between formality and informality and rephrasing a question to keep participants on track. Each interview was recorded using two iPhones (to safeguard against the possibility that one iPhone failed to record the interviews) and transferred to a laptop using iTunes. All interviews were transcribed by a professional transcription service (Transcriber Online) that specialises in academic, medical, legal and government transcription and captured nuanced information such as emphasised phrases or words, and hesitations.

All interviews were conducted at a time and place suitable and convenient for each teacher; mainly in school settings (e.g., end of school day, during release from teaching times). Conducting interviews in natural settings can facilitate the discovery of nuances in a culture (Bloomberg, 2012). Conducting the interviews with the five beginning teachers approximately 11 months after they graduated provided them with time to reflect on and recall details of their initial teacher education program in relation to their current teaching experiences.

Thematic analysis was conducted. The researcher reviewed the data, and identified patterns and general themes. Responses were accorded themes; statements that encapsulated various viewpoints were placed into tables under identified themes (Butler-Kisber, 2010) and according to their group (preservice teachers -pre-and post-unit questionnaire data or from beginning and experienced teachers). The researcher was the principal coder. An academic

colleague reviewed samples of coded text to determine whether the raw text and the code definitions were logical and intuitive. To ensure that the interview transcripts were coded consistently and with rigour, the researcher adopted approaches recommended by Guest et al. (2012). The researcher conducted initial coding on some of the data and revisited the codes after some time to allow for fresh perspectives and to mitigate effects of distortion that immersion in the data may cause (Guest et al., 2012). Additionally, the data collected from beginning teachers were coded by the author twice. As well, samples of data were checked and verified by another academic. The data fell mainly into the same themes indicating that the coding of the data was consistent and therefore presumed reliable. Identification of themes was an iterative process. Emerging themes and categories were modified based on subsequent analyses; with refinements made as each interview was coded.

As recommended by Guest et al. (2012) an audit trail, to create transparency, was undertaken showing the approaches used to theme and reduce the data, and to show the iterations of codes. Coding was done manually by the researcher resulting in greater familiarity with the data (Guest et al., 2012). The processes of winnowing and memoing were applied to the data (Creswell, 2014). Winnowing involved highlighting significant information on the transcripts. Recurring patterns, themes and threads were identified and thematic coding was developed and recorded on the data. Memoing involved writing notes and descriptors about certain occurrences or sentences that were of interest, and which captured new ideas, thoughts, and reflections. These processes assisted to identify commonalities, differences and relationships” (Guest et al., 2012, p. 53) and enabled the researcher to continue refining themes and categories, as well as eliminate descriptors that overlapped. Individual coding tables were created for each participant. Quotes were selected and placed onto these tables based on whether they exemplified and captured concepts or

provided insight. A coding development chart was created to record the process of refining, revising, adding, eliminating and collapsing of codes and categories that occurred.

As recommended by Saldaña (2013), a second cycle analysis was undertaken. The data were re-read, listened to on numerous occasions, re-examined and considered with a view to ensure that the data were coded accurately, and to identify latent as well as obvious themes (Saldaña, 2013). Quotes were rechecked to determine whether they exemplified and captured an intended concept or provided insight. Quotes were transferred to a template or code book and organised according to identified themes.

Methods adopted that enhanced reliability and contributed to accuracy and consistency of coding data included; re-reading each quote and reconsidering its placement within a theme, ensuring that the process of classification of quotes into themes was ongoing, and undertaking continual cross-checking of quotes during the writing phase to ensure the intended meaning was preserved. As analyses of subsequent transcriptions were completed, new iterations with finer-tuned themes were developed. Themes emanated from a combination of issues arising from the literature, and themes identified in the responses to the interview questions. Discussions with academic colleagues about the codes assisted to crystallise the themes (Guest et al., 2012). Codes were defined operationally in most instances.

## **Results**

The major themes identified related to:

- Teachers' **struggles** with inclusive education and preparedness;
- Fostering **positive attitudes** about inclusive education;
- **Knowledge** required to implement inclusive education;
- Developing inclusive **pedagogical skills**;
- **Learning experiences** to improve preparedness for inclusive teaching.

**Teachers' struggles.** A major theme to emerge from beginning and experienced teachers' interview data was the struggle beginning teachers have with inclusive teaching. Both groups discussed the challenges many teachers face catering for and managing a class with a diversity of learners. Their views were encapsulated by the comment "the fact that I wasn't prepared well enough".

Mel, a beginning class teacher, stated, "I fly by the seat of my pants... Inclusion: it plagues me, it haunts me", a sentiment that indicates her awareness of the importance of providing an inclusive environment while highlighting challenges she has with its implementation. Tara, another beginning teacher remarked, "I cannot allocate the time that they [her students] need to achieve their best and it's a crying shame because with twenty-two students..."

**Fostering positive attitudes.** Teachers felt that in order for preservice teachers to develop positive attitudes about inclusive teaching they should engage in learning experiences that lead to:

- acquiring positive attitudes towards students with disabilities; and
- developing a commitment to teaching the full range of students.

Some beginning teachers expressed concerns about ingrained negative views that some teachers hold about inclusive education and compared such attitudes to racism:

*You've got to convince others, that they [students with disabilities] have a right to be there, because I think some teachers out there don't think so, and so they're going to be telling those student teachers that these kids shouldn't even be here. (Debra, Beginning Teacher)*

Interestingly, some beginning teachers challenged the value of inclusive education by suggesting that some students should be educated in support classes (segregated settings).

Tara stated, 'I just believe that there's no placement ... and the amount of time I spend

behaviour-managing just takes away from classroom teaching'. An experienced teacher's remarks highlight challenges that some teachers have implementing inclusive education and reveal consequences of such challenges:

*Once you meet those kids in the context of a classroom where you've got 26 ...kids ... to ... get your head around, it's very difficult to then feel positive towards them.* (Linda, Assistant Principal)

These comments encapsulated some teachers' concerns about their capacity to implement inclusive education successfully. Such sentiments may be the consequence of feeling ill-prepared for their inclusive roles, or perhaps point to a need to consider how effectively current within-school structures support inclusive education.

Overall, teachers felt that interacting with people with disabilities would foster positive attitudes. Debra recommended that preservice teachers participate in community services (e.g., sports day for children with disabilities, guide groups) "before applying for teaching". She added, "the problem is a lot of people [preservice teachers] don't get exposed to anyone with any disability... and so they're scared of them". Sam, a beginning teacher, suggested that effective approaches to address "stereotypes" that preservice teachers may hold is to present preservice teachers with school-based case-studies, so that they learn practical strategies to cater for student needs. Similarly, Reem a learning support teacher suggested advancing preservice teachers understanding of how negative attitudes may impact a student's potential and future, by presenting real case-studies so that they are not "detached" from personal stories.

Numerous teachers recommended that preservice teachers engage in activities designed to heighten empathy. One school counsellor advised that learning experiences should be presented that required preservice teachers to "step back" from their own cultures and reflect on their practices and attitudes towards students. A number of teachers felt that

preservice teachers “need to see the students as people first and foremost” illustrating their awareness of the disabling practice of labelling and classifying students.

**Knowledge required to implement inclusive education.** Both groups felt that preservice teachers should attain knowledge about:

- legislation governing inclusive education and syllabus documents that inform inclusive education; and
- areas of disability that teachers identify as causing them challenges.

Teachers proposed numerous approaches to enhance preservice teachers’ knowledge of inclusive education. For example, a beginning teacher felt that she required information about strategies that “work for a child with autism” for instance. Mel, who works in a school of social disadvantage, discussed the high number of students with mild intellectual disabilities at her school. She added that some of the difficulties that students have with retention of learning is related to other impinging factors such as having parents who are illiterate in their first language, being refugees and having experienced trauma. She suggested that while at university she needed to learn skills for teaching students who have difficulty retaining information.

Beginning and experienced teachers stressed the need for preservice teachers to engage in learning that promotes knowledge about their legal obligations to cater for all students. Experienced teachers were concerned about their observation that some teachers regard teaching students with disabilities as “optional”. They emphasised that preservice teachers need to develop a clear understanding of the legal requirement to cater for the needs of all students in their class. Gemma, an itinerant support teacher – hearing, stated emphatically, “That’s part of their role [teachers] and that they’re expected to do that by law”.

*Experienced teachers* stressed that preservice teachers should have a thorough grounding in curriculum documents. Robyn, a principal, found it perplexing that beginning teachers are expected to know the curriculum, and implement the syllabus yet stated “some of them have never seen it”. Her comment raises concerns about how syllabus documents are “unpacked” in university settings and underscores the importance that academics have suitable background, knowledge and recent pedagogical experience to enable them to design learning experiences that adequately prepare preservice teachers for their role as inclusive contemporary teachers.

**Developing inclusive pedagogical skills.** Skill areas described by beginning and experienced teachers as requiring greater attention during initial teacher training fell into the following themes: managing inclusive classes; collaborating; differentiating instruction; and managing and using resources that would augment their readiness for inclusive teaching.

***Managing inclusive classes.*** The theme of classroom management emerged as a significant issue and was found to overlap with the theme of “struggle”. While beginning teachers tended to focus on managing the behaviour of individual students, experienced teachers described a more comprehensive approach to managing inclusive classes that included aspects such as student engagement and positive behavioural approaches. The findings suggest that preservice teachers require learning experiences that lead to:

- developing and consolidating fundamental classroom management approaches for effectively managing inclusive classes (e.g., managing group work); and
- acquiring approaches to manage challenging situations that occur in classrooms.

*Beginning teachers* indicated that preservice teachers require learning experiences that prepare them to manage and conduct authentic classroom scenarios. They emphasised that preservice teachers ought to engage in learning experiences that prepare them to respond appropriately to classroom circumstances involving students with challenging behaviours.

The overall message was that a “lot more needs to be done on classroom management” while at university.

Teachers expressed the view that preservice teachers require higher level behavioural strategies than those offered during initial teacher education. Numerous beginning teachers expressed concerns about their preparedness to manage a modern class and suggested that preservice teachers ought to be provided with a range of scenarios that show “not only positive ones [scenarios]” but rather show “that there can be bad times [in classrooms]”. Notably, beginning teachers referred to a non-conflict approach they had learnt about during their inclusive education unit and stressed how this approach was effective:

*The non-conflict approach and non-in-your-face approach, so that process of stepping away ... the steps to conflict resolution or anger management, so having the least intrusive down to the most intrusive. (Sam, Beginning Teacher)*

Beginning teachers described challenging classroom situations that in their view were related to students with difficult to manage behaviours. Tara recommended that the topics of autism spectrum disorder, attention deficit disorder and oppositional defiant disorder be prioritised during inclusive education units. She stated that these areas should be “top of the list because they are such difficult students to deal with”. Although these insights appear to focus on areas of disability they highlight the need to design learning experiences that provide preservice teachers with approaches to manage challenging situations.

***Developing collaborative skills.*** Teachers felt that preservice teachers required learning experiences that enhanced their ability to **collaborate** effectively in order to:

- augment their capability to collaborate effectively with a “broad range of people”; and
- raise their awareness of support staff and support structures that advance inclusive education.

Some beginning teachers reported feeling “unclear about how to work with teachers’ aides and support staff”. Mel recounted her sense of confusion about the roles of support staff (e.g., English as second language (ESL) teachers, teachers’ aides) *at* the beginning of the year:

*Oh my goodness here comes another teacher, what will I do with you?... as a beginning teacher ... ‘Hi I’m here for new arrivals’ and ... ‘I’m here for the refugees. but I don’t know who’s a refugee here...OK I’m here for the speech kids. Who are the speech kids? I don’t know. (Mel, Beginning Teacher)*

School counsellors and support teachers expressed concerns about beginning teachers’ lack of preparedness to collaborate effectively with stakeholders. Gemma, an itinerant teacher, asserted that initial teacher education does not prepare preservice teachers to collaborate effectively. She reflected on her experiences as a newly appointed teacher. “Collaboration is essential; I didn’t know what a teacher’s aide was [School Learning Support Officer]. I didn’t understand those roles so how was I supposed to work with those people in my first year?”

Robyn, a principal, flagged concerns about the trend for online university courses. In a context where online learning has become customary, it is important that collaborative exercises presented result in improved practice. As more courses move online, the challenge is to design collaborative exercises that translate to improved practice. A number of principals described collaborative processes that result in effective approaches that respond to diversity; these include setting goals and preparing learning plans collaboratively, developing awareness that parent involvement needs to occur early in the process, holding review meetings and implementing interventions. To exemplify the significance of effective partnerships two principals and class teachers recounted how their collaboration with itinerant support teachers (vision and hearing) had resulted in successful outcomes for

students. Teachers suggested inviting guest speakers, such as assistant principals and learning support teachers to explain how learning support teams operate and to highlight the importance of accessing support. The findings suggest that learning to collaborate is left to chance rather than taught in planned and structured ways.

*Acquiring differentiation skills.* Beginning and experienced teachers stressed the importance of preservice teachers acquiring **differentiation skills** during initial teacher education to enable them to cater for a diversity of learners. These were:

- differentiate instruction; and
- design lessons that cater for the diversity of learners;

Beginning and experienced teachers indicated that preservice teachers do not receive a strong grounding in how to differentiate instruction. Debra, a beginning teacher, conveyed a sceptical view by stating, “You [academics] talk a lot about it”, but asserted that preservice teachers are not shown *how* to differentiate. She posited that “the practical side of it is beyond them [beginning teachers] and ...they resort to worksheets”. Teachers felt that preservice teachers’ ability to differentiate instruction would be enhanced if they were provided with opportunities to observe skilled practitioners demonstrating “how to do it”.

Sam’s comments contrasted with the views of other beginning teachers. She stated, “I felt really confident to ... differentiate”. She remarked, “We talked about [during initial teacher education] not changing the whole lesson but just changing one aspect of it to include that child because otherwise they’re going to feel like they’re on the outer”. She discussed the use of “visuals” and “concrete material” for Maths lessons and indicated how such modifications “helps all the students within the classroom as well”. Notably, this notion of supporting the learning of all students was a common thread across all groups. *Principals and class teachers* regarded catering for all students, as an integral part of contemporary teaching and associated this with effective pedagogy:

*I've impressed upon young teachers that the things that are good for children who are included with disability are also good for the rest of the class. So that structured organised classroom which is good for a child [with autism], is also good for every other child in the classroom. (Leonie, Principal)*

Although not explicitly stated, the concept of *Universal Design for Learning* (UDL) – an educational framework to assist teachers to implement inclusionary practices – emerged as a significant theme. Teachers stressed that preservice teachers require opportunities to plan lessons that include all students. They felt that initial teacher education should raise preservice teachers' awareness “that they're going to teach people with a range of abilities in every class, for every year”. They also recommended that preservice teachers be provided with templates that require them to plan for the range of learners in their classes (see Figure 1). Experienced teachers recommended that preservice teachers be provided with opportunities to construct and deliver lessons so that they are “working on the same lesson” with different outcomes for “different children” and that it is not appropriate to “teach to the middle of the class”. Apart from ensuring that students who struggle do not “get left further and further and further behind because they can't do any of it”, Robyn, advised that teachers differentiate for their “own sanity”. Reem explained that,

*differentiation means making it different. Doing different things in your lessons so that you're not doing the same thing all the time. ...OK, having small group work is differentiation, doing a think-pair-share is differentiation, having them do a research task on the internet is differentiation. (Reem, Learning and Support Teacher)*

**Managing and using resources.** Acquiring these skills aligned closely with the ability to differentiate learning. The findings suggest that preservice teachers require opportunities to

- develop a level of proficiency with technology which teachers associated with social justice; and
- learn how to select, adapt and utilise resources to cater to a range of diverse learners.

There was a sense among the beginning teachers that their initial teacher education did not provide them with a strong foundation in selecting, accessing or utilising traditional or contemporary (e.g., e-learning) resources.

Experienced teachers advised that preservice teachers learn how to: use visual stimulus (e.g., visual timetables, visual aids); and use Social Stories. (A Social Story, devised by Carol Gray for students with autism spectrum disorder, is a written or visual story that shows students how to interact in social contexts.)

Principals explained how the use of visual timetables supports the whole class; they support the learning of all students, keep the “teacher on track” and provide routine which “definitely makes a huge difference for classroom management”. One principal explained how the use of Social Stories for a student who is behaving in inappropriate ways, may benefit “five other children in the class”. A view emerged that initial teacher education does not adequately prepare preservice teachers to use technology in contemporary inclusive settings. This was regarded as a social justice issue. A school counsellor for example, described how interactive whiteboards provide “kids with vision difficulties” immediate access to enlarged print.

**Learning experiences to improve preparedness for inclusive teaching.** Both groups felt that stronger connections should exist between

- universities and schools; and
- professional practice and university learning.

Sharing their shock of realising the importance of having acquired skills to cater for a diversity of learners led beginning teachers to offer suggestions about how to make

professional practice more relevant to their needs. They complained that their professional practice did not equip them for the challenges that they currently face in their endeavours to implement inclusive education. They recommended that learning at university should be integrated to a greater extent with school visits to enhance preservice teachers' preparedness to implement inclusive education. A number of beginning teachers recommended extending professional practice, because in their opinion it was "a bit on the light side". They asserted that more time in schools during their initial teacher education program would have been beneficial to their development as teachers.

Numerous beginning and experienced teachers suggested that preservice teachers would benefit from observing skilled role models implement inclusive practices. Stewart stated "it would be very helpful ... to observe a range of different classrooms where there was a range of [students with] different special needs" enabling preservice teachers to observe inclusion "working well". Sue suggested that preservice teachers should "observe professional skilled teachers operating" to allow them to see what "explicit teaching looks like". While Reem commented, "They [preservice teachers] need to be shown how to do it". Other factors were identified as impacting teacher preparedness and impinging on the implementation of inclusive education. Some proposed alternative approaches to preparing preservice teachers for inclusive teaching other than the one semester inclusive unit offered in some states of Australia, such as NSW. For instance, they recommended that inclusive education should be presented over two semesters; many felt that one semester was insufficient to cover the content. Tara, a beginning teacher stated that, "it's not, oh maybe you might come across someone that you need to include and differentiate for, it's definitely you will."

A number of *principals and class teachers* raised concerns about the relevant experience of academics who teach inclusive education at university. Linda, an assistant

principal, was critical of the mandatory inclusive unit that she undertook during her initial teacher education program because in her view it prepared teachers “for classrooms of ten [students], rather than the classroom of 30”. Linda explained, “it was all about tracking what every child, or what the children were doing in ten minute lots, and so it was impossible to do”. This is a concerning depiction and reveals that the learning that Linda undertook had a special education rather than an inclusive education focus.

Some beginning and experienced teachers expressed concerns about the selection process of candidates entering teaching degrees. In particular, they were concerned about the attitudes of some preservice and experienced teachers towards students with disabilities. Beth, a principal recommended more rigorous screening “for the appropriate people in front of these children [with disabilities]”; candidates who are “self-motivated and active learners”. She argued, “We should be like Finland – the best teachers – intellect ... and applied professional standards”.

## **Discussion**

This research identifies and describes an array of learning experiences likely to enhance preservice teacher’s preparedness for inclusive teaching in the areas of attitude, knowledge and skills. These cluster of practices extrapolated from analysing the data could inform and guide approaches for delivering content for preparing preservice teachers for inclusive teaching. These could be delivered online and as blended learning, as well as in traditional tutorial/lecture approaches. It is important that preservice teachers are presented with models of pedagogy that reinforce good practice during initial teacher education.

A recurring theme was the importance that beginning teachers placed on practical aspects of teaching, “the actual take-home, how do I manage it, how do I actually do it in the classroom?” Given evidence to suggest that teachers are increasingly experiencing difficulty managing behaviours of some students (Savolainen, Englebrecht, Nel, & Malinen, 2012;

Sharma & Sokal, 2015), it is important to increase efforts to bridge the gap between theory and practice during initial teacher education. In particular, by presenting learning experiences that equip preservice teachers with skills and approaches, as demanded by the evolving nature of schools.

Although the five *beginning teachers* described the influence of some aspects, particularly practical components, of the initial teacher education course completed the previous year, they expressed disappointment with their overall preparation. Other studies (e.g., Forlin & Chambers, 2011; Kurth & Foley, 2014; Parliament of NSW, 2010; Sharma & Sokal, 2015; Teacher Education Ministerial Advisory Group, 2014) have also found that teachers are critical of their initial teacher education for preparing them for contemporary inclusive teaching. It is important that teacher educators heed this message, examine the reasons for these findings and ensure they deliver high quality teacher education programs that equip preservice teachers for contemporary teaching (Sokal & Sharma, 2017).

The findings suggest that learning experiences designed to personalise the stories of individuals with disabilities are likely to have a positive impact on preservice teachers' attitudes about inclusive education. In addition, *beginning and experienced teachers* recommended that preservice teachers engage in learning experiences that raise their awareness of the disabling practice of defining students by a disability. Learning should include interviews and/or discussions with people with disabilities/ their carers' and teachers who are able to provide insight about how to successfully cater for a broad range of learners. Barriers to successful inclusive education should be highlighted.

During the interviews it became apparent that "words matter". Beginning and experienced teachers discussed the association between the language used by teachers in reference to students with disabilities and attitudes. Some expressed concerns about the undermining impact of what Foucault (1977) describes as a mode of discourse that reflects a

way of thinking (Fforde, Bamblett, Lovett, Gorringer, & Fogarty, 2013). Learning experiences should be designed to heighten preservice teachers' awareness of their own preconceptions. Opportunities should be created for preservice teachers to consider the negative impact of deficit discourse (a negative way of thinking about and discussing a group of people) which can impede the right of people with disabilities to acquire agency and independence. Additionally, preservice teachers require learning experiences that raise awareness of the impact of factors such as self-fulfilling prophecies, teacher expectations and labelling. Developing or sourcing multimedia material that presents the views of people with disabilities about the impact of language use and teacher attitudes is likely to have a powerful effect on preservice teachers. Creating and presenting video montages of media clips that juxtapose appropriate and inappropriate language usage when referring to people with disabilities would provide preservice teachers with insight about the impact and power of language and attitudes.

In addition, the findings suggest that attitudinal change towards inclusive education is likely to occur if preservice teachers engage in learning that requires them to consider the rationale and ethics underpinning disability legislation as well as understand the implications of legislation. Presenting and analysing case-studies that led to the enactment of disability legislation or resulted in litigation would be a way to ensure that preservice teachers gain a deeper understanding of the rationale underpinning disability legislation.

Issues emerged related to the rights of the child versus some teachers' views of what they consider their role entails. Given that legislation exists to support inclusive education, it is paramount that preservice teachers develop a firm understanding that a class teacher is responsible for the learning of all the students in their class. It is interesting to note that numerous teachers recommended that special placements be sought for some students. Importantly, this practice runs counter to inclusive education philosophy. Some teachers

expressed reservations about including all students in regular settings, highlighting an acceptance of the practice of ‘placing’ some students into segregated settings. The teachers may believe that support classes are preferable educational settings for some students. Alternatively, their views may stem from the challenges they experience when including students with higher support needs. Clearly, there is a need to provide beginning teachers with greater support to implement inclusive education as well as a requirement to scrutinise and revise school policies and systems. These findings are in line with those of Vandervieren & Struyf (2019) who concluded that teachers, especially beginning teachers, require support with implementing inclusive education.

Teachers provided insights about the culturally diverse nature of their schools and discussed how disability can produce different responses from individuals and from some demographic groups. Given Australia’s cultural diversity some teachers felt that preservice teachers should engage in learning experiences designed to develop cultural understanding in relation to disability. The findings underscore the need for a clear curriculum (Pinter et al., 2020) with connections between units such as inclusive education and diversity, and pedagogical units as well as practice experience. It seems there is a need for academics to work collaboratively in order to develop a shared vision of inclusive education rather than regarding the preparation of preservice teachers for inclusive education as the responsibility of a stand-alone unit or an individual academic.

Beginning and experienced teachers suggested that preservice teachers would benefit from learning about how specific areas of disability may impact some students’ learning. This finding dovetails with other studies (Chitiyo et al., 2019; McCrimmon, 2015) that indicate that teachers wanted knowledge about areas of disability to improve their practice. Although inclusive approaches should be considered universal, it seems that preservice teachers’ are more likely to adopt certain practices if they are aware of the implications of, for example,

profound pre-lingual deafness. Students with low vision are likely to benefit if preservice teachers understood that effective collaboration and planning is necessary to ensure that Braille or enlarged print resources are pre-ordered and available at the time of need. Notwithstanding this, the findings also highlight the importance of ensuring that preservice teachers are aware of the importance of focussing on students' needs rather than disability which may unwittingly lead to stereotyping. Presenting case-studies requiring preservice teachers to consider students' needs is likely to result in raising awareness about student educational requirements.

Presenting multimedia of classes of students with diverse needs that showcase a range of inclusive strategies would assist preservice teachers to identify and observe, and practise implementing effective inclusive strategies while on practice experience. Follow-up activities such as role playing various scenarios, participating in carefully considered empathy tasks (e.g., using Braille, experiencing inadequate access to suitable resources) and being shown how to scaffold learning experiences would mean that preservice teachers engage in practical and authentic learning experiences. These suggestions are supported by Pinter et als' (2020) meta-analysis highlighting the importance of ensuring that preservice teachers are shown effective evidence-based strategies for students with and without disabilities.

Presenting preservice teachers with an array of children's story books, both current and historical, about children with disabilities in schools, would enable them to identify inclusive and non-inclusive approaches and is likely to lead to a deeper understanding of disabling practices.

In order to monitor the progress of all students, teachers suggested that greater emphasis be devoted to examining syllabus and policy documents, and the learning continuum (key markers of achievement regarded as critical for success in literacy and numeracy through the years of schooling) during initial teacher training. Activities requiring

preservice teachers to unpack and dissect mandatory documents would augment familiarity with essential policies and syllabuses (e.g., using movie maker and blogs).

Preservice teachers require learning experiences that prepare them to manage a range of probable and challenging scenarios that occur in schools. Teachers indicated that some students who present with challenging behaviours affect the class dynamic, making it imperative that preservice teachers develop a level of proficiency to enable them to experience success with managing inclusive classes early in their careers. Teachers recommended learning experiences that are conducive to creating positive classroom climates to manage the behaviours of students. Presenting videos of scenarios that contrast effective with non-effective classroom approaches, such as techniques that de-escalate rather than escalate potential challenging circumstances, would shine a light on effective evidence-based approaches.

The findings demonstrate the importance of preservice teachers acquiring knowledge about various support roles and developing skills to work effectively with a range of people. These findings support the notion that the success of inclusive education is aligned with the ability to effectively collaborate with stakeholders (Forlin & Sin, 2017; Loreman, 2007; McKenzie, 2009; Siddik & Kawai, 2020). Group tasks that stipulate that preservice teachers practise collaborative skills, such as active listening and collaborative planning, would be an effective approach to ensure the topic of collaboration is planned and not left to chance. In addition, organising question and answer sessions with guest speakers to raise awareness about various support roles is likely to enhance preservice teachers' knowledge of various roles (e.g., learning support teachers).

Teachers reported that preservice teachers would benefit from engaging in learning experiences that require them to differentiate instruction and design lessons that are inclusive of all students (universal design for learning). Figure 1 shows a template to enable preservice

teachers and teachers to plan universal and inclusive lessons, thus ensuring that they consider, and practise planning for the needs of all their students.

**Figure 1.**

*Planning template for application of Universal Design for Learning (UDL) (TAUDL).*

<i>Curriculum Area:</i>		<i>Syllabus Document:</i>	
High Support Needs		Highly Independent Learners	
<b>Learning Continuum</b> 			
<b>UDL Elements</b> Varied pedagogy Differentiation Adjustments Accommodations	Support Needs	Universal: All Students	Extension
Engagement			
Representation (Enquiry)			
Expression (Action)			
Resources/materials:			

Given that beginning teachers are at the interface between traditional approaches and contemporary practices that incorporate Information and Communication Technologies, it is crucial that preservice teachers engage in learning experiences that prepare them to use technology competently to ensure provision of equity. Using approaches such as discovery learning, preservice teachers are likely to benefit from discovering (through searchers), reviewing and sharing technology that is inclusive. Notably, experienced teachers discussed inclusive education through the lens of contemporary practice rather than that of special education; most did not discuss using specialised resources. The key message was that inclusive teaching is synonymous with excellent pedagogy.

Teachers reflected on how to improve professional practice. Some felt that preservice

teachers would benefit from undertaking professional practice on special education classes. This, however, is likely to advance a segregated view of education. Regretfully, Vandervieren & Struyf (2019) describe a situation in which preservice teachers experience poor examples of inclusive education during professional experience. These conclusions highlight the need to ensure that preservice teachers are placed in exemplary inclusive professional experience settings.

It is important that preservice teachers are offered learning experiences that link course work with experience in inclusive settings with effective teachers (Sokal & Sharma, 2017). Adopting approaches such as linking assessment tasks to professional practice may lead to a deeper understanding of how to implement inclusive education. For example, conducting action research (Siddik & Kawai, 2020) to determine aspects of school environments and cultures that hinders or advances inclusive education.

**Limitations of the study.** The sample is small and is representative of beginning and experienced teachers who teach in NSW, Australia. NSW universities offer a stand-alone inclusive education unit while some states of Australia offer an infused approach to prepare preservice teachers for inclusive education. As such, contextual factors need to be considered (Symeonidou, 2017). Further, beginning teachers in this study graduated from one university and the inclusive unit was delivered on-campus.

**Further research.** In terms of future research, follow-up, in situ qualitative research with beginning teachers is recommended, to determine whether the approaches suggested in this research translate to classrooms. Given that the majority of research about preparing preservice teachers for inclusive teaching is quantitative, further qualitative research about preservice teachers' experience of their preparation, is likely to reveal nuanced information. Given the movement to online and blended learning, research should be conducted to

investigate and improve the effectiveness of preparing preservice teachers via these forms of delivery.

### **Conclusion**

Traditional approaches such as those that rely on attending lectures, whether online or in person, participating in teacher centred discussions, and having high expectations that all university students will complete their readings are not sufficient to effectively prepare preservice teachers for contemporary inclusive teaching. This paper offers some practical approaches for shifting attitudes, enhancing knowledge and augmenting skill development to improve the preparedness of preservice teachers for inclusive teaching. Sharing resources and increasing collaboration among academics is likely to reduce the onerous nature of acquiring and producing resources recommended in this paper.

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## Appendix: Qualitative Questions

1. Tell me about your experiences regarding inclusion of students with disabilities or additional needs.
2. May I ask you to think about what would have assisted you in your initial teacher training to prepare you for inclusive classes?
2. **(Alternative questions for experienced teachers)** May I ask you to suggest what would assist preservice teachers during teacher training for inclusive classes?
3. Attitudes of teachers towards students with a disability or an additional need is considered very important for effective inclusion to occur. Do you have any views or thoughts about how to develop positive attitudes towards individuals with disabilities in preservice teachers?
4. What prior knowledge do you think preservice teachers should have about inclusion of students with disabilities before commencing work as a teacher?
5. Based on your experiences tell me about what you think preservice teachers need with regard to classroom management and students with additional needs.
6. What kinds of experiences/knowledge do preservice teachers require to prepare them for:
  - Differentiation
  - Classroom management
  - Collaboration (support staff, teachers' assistants or aides or school learning support officer, parents and others)
  - Resources
7. Overall, what skills do you think preservice teachers should engage in during their teacher training to equip them for inclusive classes?
8. Have you had effective professional learning either at university or during your teaching career regarding inclusion of students with disabilities or additional needs; how was it beneficial?