

# Do Secondary Pre-Service Teachers Have What it Takes to Educate Learners With Special Educational Needs?

Petrea Redmond, School of Teacher Education and Early Childhood,  
University of Southern Queensland, Australia,  
[redmond@usq.edu.au](mailto:redmond@usq.edu.au)

Jennifer Lock,  
Werklund School of Education, University of Calgary, Canada  
[jvlock@ucalgary.ca](mailto:jvlock@ucalgary.ca)

**Abstract:** This case study shares secondary pre-service teachers' concerns about teaching students with special educational needs within mainstream classrooms. Many pre-service teachers are fearful that they do not have what it takes to provide the best learning and teaching experiences for students with special educational needs. In this study, an online community comprised of pre-service teachers, practicing teachers, and teacher educators explored contemporary teaching and learning practices for students who have special educational needs. An analysis of the online posts exposed that the pre-service teachers: 1) had limited realization of the diversity of learners in secondary classrooms; 2) demonstrated a positive attitude towards inclusivity; 3) used literature to support claims; 4) presented an appreciation of learning with and from each other within an online community; and 5) made explicit references to their personal learning during their participation in the online community. This paper identifies four implications for teacher educators.

## Introduction

Learners with special educational needs require refined quality teaching and learning experiences. Students with special educational needs may have a broad range of needs and might include students who are hearing impaired, have a diagnosis of a learning difficulty, or have a short-term medical problem (e.g., a broken arm). Rosenberg, Westling, and McLeskey (2011) suggested that instructional methods should be more "precise, intense, structured, and systemically [delivered] than most general education methods" (p. 5). Students with special education needs have a diverse range of barriers which impact their learning. Both novice and experienced teachers are highly concerned about providing students with special educational needs with the best learning opportunities in a regular classroom (Jobling & Moni, 2004; Savolainen, Engelbrecht, Nel, & Malinen, 2012).

Pearce and Forlin (2005) recommended that classroom teachers collaborate with others and create teams of people to help respond to the learning needs of the students. Within the context of Queensland, Australia, sources of support for a teacher can come from more experienced colleagues (both general educators and special educators) as well as school administration; professional development workshops and resources; advisory visiting teachers; guidance officers; teacher aides; psychologists; occupational therapists; and speech and language therapists. This collaboration is reflective of a collective responsibility in providing the necessary conditions and supports to assist students with special educational needs in learning.

The context for students with special educational needs has gone from not participating at school, to enrolment within a special school with separate educational programs, to enrolment in mainstream schools. Today, a range of contexts exist dependant on the severity of the educational need. Students may still be in a special school, or special education classes in a mainstream school, or be involved in general classes or a mixture (Rosenberg et al., 2011). In this paper, special education needs are in the context of secondary students who are integrated within regular classrooms rather than in a separate special school. The context may include partial or full integration in the general classroom, with or without a range of supports (e.g., teacher aide in room with student).

This paper describes a case study of an online community that provided secondary pre-service teachers (PSTs) with the opportunity to discuss inclusive classrooms and the integration of students with special education needs into mainstream classrooms with experienced special needs educators, who acted as experts. A single case research design was used to examine archived online discussions that occurred in a secondary education course. Using a constant comparative analysis, five themes and four implications were identified with regard to inclusion and inclusive practice that reflect where PSTs are in their understanding of inclusion and what teacher education programs need to do to prepare PSTs for diverse learning needs in today's classrooms.

In 2012, Savolainen et al.'s study explored attitudes and self-efficacy in implementing inclusive practices of PSTs and the results of their research indicated that "there is much to be done in teacher education to introduce principles and practical implementation strategies of inclusive education for future teachers" (p. 65). They also suggested that PSTs require "concrete tools to meet diverse needs in their classrooms" (p. 65). As such, teacher education programs need to design effective and appropriate learning opportunities that will develop PSTs' knowledge and skills to support the learning needs of all students.

## **Context and Research Design**

With the increasing expectation of inclusivity in secondary classrooms, PSTs have expressed anxiety about their ability to effectively plan for and teach students with special educational needs. This case study maps the knowledge and concerns of PSTs regarding inclusivity education. The participants included PSTs who were enrolled in a secondary curriculum and pedagogy course that introduced them to the concept of an inclusive classroom. The PSTs were either in their first semester of a graduate-entry program or their second year of a four-year undergraduate program in a regional university in Australia. The other group of participants were in-service teachers from Australia and Canada who acted as experts and joined the PSTs to share their knowledge, experiences, and resources, and to answer questions raised by the PSTs in online discussion forums. In total, there were 50 participants. The research question investigated PSTs' perceptions of teaching students with special educational needs.

The case study, exploratory in nature, was conducted under the naturalistic paradigm (Lincoln & Guba, 1985; Stake, 1995) using the real world as the research setting, without any control or manipulation. After the results of the course were released, a research assistant de-identified all online discussion posts. Content analysis of the expert and PST posts was undertaken using the constant comparative approach (Wellington, 2000) to develop patterns and common themes.

## **Discussion of the Findings**

When exploring how the PSTs interacted the following five common themes were identified: 1) limited realization of diversity of learners in secondary classrooms; 2) positive attitudes towards inclusivity; 3) use of literature to support claims; 4) learning with and from each other; and 5) personal learnings including metacognition. Each theme is discussed in relation to the data and current literature in the following sections.

### **Limited realization of diversity of learners in secondary classrooms**

Through their experience in the program, PSTs came to accept that supporting students with special educational needs is part of the expectations of teachers in contemporary classrooms, irrespective of sector, discipline specialization, or year level. PST-F admitted that "*[c]lass room inclusion didn't cross my mind at all when I began my journey as a pre-service teacher, however the last 6 weeks has shown that it can be quite a daunting important task to include students.*" This comment was supported by PST-G who revealed that *[d]uring the course of the Prac, I have needed to revise my understanding of 'Special Needs'.*"

Such responses align with the study by Jobling and Moni (2004) who found that PSTs "expected that students with special needs would be catered for in a special needs unit and that classroom teachers would pass all responsibility for educating these students to Special Needs teachers" (p. 9) and that "regular secondary teachers were not required to

teach ‘children’ with special needs” (p. 13). Dieker (2013) maintained that in an inclusive classroom “[t]eachers teach differently because they understand the individualistic nature of learners and accept responsibility for teaching each and every student” (p. v) and it seems that the PSTs experiences in this activity opened their eyes to the reality of teaching in current secondary classrooms.

### **Positive attitudes towards inclusivity**

Although the PSTs had an immature view of their role in teaching students with diverse needs, they did have positive attitudes towards inclusion and students with special educational needs. As evidenced by PST-H, “[h]aving disabled children in school now is a wonderful thing. It enriches the lives of all children and PST-G commented that “[e]very child deserves an education that suits them.” PST-J stated that “I too have an underlying passion that all kids have the potential to learn, and it is my job to create that learning space for them. If your passion is evident—you will be one of those teachers that the kids are drawn to.”

These attitudes were in contrast to Dieker’s (2013) statement, which indicated that “while inclusion is increasingly embraced in schools, districts and communities, many people are still sceptical about this delivery serviced model” (p. 3). PST-L shared that the “*uniqueness of students’ needs certainly makes education challenging, but I also see it as interesting.*” This aligns with Hill and Brown (2013) who acknowledged that teaching is not just about content knowledge and pedagogical knowledge. “[T]eachers have to manage complicated and demanding situations, [and] deal with the personal, emotional and social pressures of students in order to facilitate learning” (p. 870). For some teachers, promoting an inclusive classroom may require a change in attitude and their teaching and learning methods. This can be “time consuming, as well as professionally and personally challenging” (Foreman, 2008, p. 392).

The results of this case study align with those of Savolainen, et al. (2012) who found that “the overall sentiments towards disabilities were positive ... teachers had many concerns about the consequences of including children with disabilities in their classrooms” (p. 51). Foreman (2008) reaffirmed that “effective inclusion of all students requires a positive attitude toward diversity and inclusion” (p. 391).

### **Use of literature to support claims**

When analysing the data, it was clear that the PSTs could integrate into the online discussions their knowledge and experiences from general life experiences and previous courses. They often included in their responses connections to such theorists and educationalists as Noddings, Vygotsky, Sternberg, and Piaget. A recent study by Naranjo, Frizelle, and Duesbery (2016) signposted that teachers gained more effective learning outcomes when implementing research-based practices they have identified through the literature.

The PSTs also regularly included direct quotes or connected their thoughts to information from relevant literature that was not part of the course content. From review of the data, PSTs were largely engaging in discussion with a novice-like, yet informed voice. The following posts provide such examples: “*I came across a great publication on inclusion on the OFSTED site named ...*”; and “*It is fairly evident that inclusion is a difficult task and it is made harder by the fact that many educators feel like they are ‘dumped’ with the policy of inclusion without support of the policy makers (Pearpoint and Forrest).*”

### **Learning with and from each other**

All participants (instructor, online experts, and PSTs) learned with and from one another in the online environment. In online discussions the teaching role is largely taken on by the instructor, but all participants can demonstrate a teaching presence (Garrison, Anderson, & Archer, 2000). It was particularly visible in the monitoring and facilitation of the online discussion posts where participants identified areas of agreement/disagreement, sought to reach common understandings, and encouraged, acknowledged, and reinforced the contributions of others. For example, PST-H reinforced his/her peer’s comment by responding, “[y]our apprehension about the time restrictions should be a point of concern for all pre-service teachers. However, that’s something that is going to come down to trial and error.”

Pre-service teachers often devalue the opportunity to learn from their peers and give more credence to participation by the instructor or experts. This was not the case in this activity. PSTs acknowledged and encouraged the sharing of

resources, programs, websites, texts, literature, strategies, and stories from their peers. PST-I's quote below exemplifies the types of responses participants made in support of one another:

*... you mentioned that all kids are different and all of us have different learning preferences, you just have to have faith in your ability to impart the knowledge, you will engage the majority. What you can do for the ones that are struggling or who are at the other end of the scale is make sure other people know about them too. I feel like I have come back to the power of communication again - make sure these kids ... have access to things that can support them.*

PST-H encouraged others to “develop your own personal philosophy of inclusive education so that it works for you” and PST-J pointed out that “[o]ver time and with experience, you'll see that you can meet their needs and you will determine who needs your time first and more frequently. Once you get to know your students, together you'll figure this out.” This shared support and encouragement by PSTs to develop their capacity is reflective of how they have engaged as an online community of learners.

### **Personal learnings including metacognition**

Akyol and Garrison (2011) investigated metacognition in online discussions and found that it could be in the form of monitoring one's own learning and in the form of regulating the learning of others. When present, metacognition makes visible the high order thinking of the participant. Garrison (2003) reflected that the “dimensions of high-order learning emerge from the concepts of reflective inquiry, self-direction and metacognition” (p. 1).

This online activity facilitated PSTs' ability to make their metacognition visible as evident by the following quotes. PST-F exposed that “I am having trouble with the concept of inclusion.” Further, PST-A revealed, “[Y]ou have sparked a thought process that I had been struggling to find. In reflecting on the Sloan quote, I feel that ... .”

Henri (1992) categorised metacognitive statements as those “related to general knowledge and skills and showing awareness, self-control and self-regulation of learning” (p. 125), including appraisal of one's knowledge and skills. PST-J confessed, “[A]t this stage I feel very underprepared for normal classroom duties. ... I feel underprepared because of the range of needs and abilities which already naturally exist in any classroom.” Whereas, PST-T admitted, “I'm starting to realize that inclusion doesn't just mean plonking a special needs student down in a class and expecting the teacher to conjure up something. The whole teaching process should be changing.”

Many of the PSTs identified they were fearful of their lack of knowledge and pedagogical strategies to support inclusive teaching. The following quote by PST-L captured this fear.

*...in acknowledging that all of the above are concerns to me, the one single major fear for me personally is preparedness. Do I have the skill and knowledge base to individualise the learning and assessment strategies? Am I prepared for any possible societal pressures such as expectations of parents? Am I prepared to handle mainstream students possibly feeling hard done by with the time allocation to the special needs student, or the issues of adjusted assessments and the possible cry of 'fowl' by mainstream students on differing expectations?*

As the activity evolved over the six weeks through the various activities, PSTs also spoke of their increased knowledge and understandings in the area of inclusivity. PST-X remarked, “I have been coming to understand the importance of providing a wide range of resources and activities to cater for diverse students and I think providing that in itself goes a long way to engage students.” PST-Y remarked that “I found the concept of working to the margins the most thought provoking.” While PST-C confessed, “I think it might be quite daunting to experience inclusive teaching to start with.”

Through their online contributions, the PSTs acknowledged that experience and time would contribute to their ongoing development and confidence as inclusive educators. They were optimistic that in the future they would be inclusive educators. PST-J commented:

*I really do think, openmindedness, a willingness to try different things, a willingness to embrace all students as individuals and to do your best to include all by thinking creatively might be the best strategies that a pre-service teacher can take to the classroom.*

PST-K noted that observing and testing new ideas on their professional experience placement (practicum) was a natural progression of their learning. “*I’m really looking forward to starting PRAC and testing what I’ve learnt so far this semester.*” PST-N argued, “*I would hope I have the verbal ability, in the setting of a classroom, to make clear that equitable education is not about being equal. It is absolutely clear that students are individuals and have different needs.*” Both examples reflect that PSTs were developing greater confidence and understanding with regard to special education needs and inclusivity and that they would be able to act on this in their school placements.

PST-P provided an example of a PST regulating the learning of others while monitoring one’s own learning (Akyol & Garrison, 2011) in the statement, “*[y]ou seem to be struggling with your personal position in relation to these pedagogies. I thought I knew where I sat, and ultimately I still believe in all students having the ability to learn irrespective of their background/social/emotional/physical conditions but I too am having to re-think some aspects of my position on inclusion.*” Through the online experiences of interacting, questioning and sharing, PSTs were confronting and re-negotiating what they believe in terms of special education and inclusivity. Further, they were able to identify their transformed feelings, thoughts and understandings of the inclusive classroom. PST-W also confessed, “*[c]an I say that I have had a 180 turn around ... now I better understand the flexibility in assessment, the issue of inclusion becomes much lighter.*” PST-H admitted the following:

*My perspective has changed since the start of the project. I was quite against inclusive education before but I can now see it has many benefits and it can be done. As a pre-service teacher I still have my concerns regarding how I will cope with special needs students .... My approach to teaching is now more open-minded and I am looking forward to the challenge!*

## **Implications**

There are four implications for teacher education programs that resulted from the case study’s innovative use of online discussions to explore PSTs concerns and their response to inclusive education. Firstly, the activity of creating an online community of PSTs, practicing teachers, and teacher educators provided multiple perspectives and increased awareness. The experts, stimulated discussion and identified misconceptions, and assisted PSTs to synthesise current inclusive practices. As a result, the PSTs had an increased realisation that inclusive teaching is for everyone, and that it does not come without challenges. This aligns with Rademacher et al.’s (1998) expectation that there are few teachers who “are unaware of the challenge they face in creating [a] positive learning community that meet[s] the academic and social needs” (p. 154) of all students in an inclusive classroom. Pre-service teachers valued both the novice and expert participation in the online discussions as they used their advice to build new knowledge beyond their personal experiences.

Secondly, the pre- PSTs’ experiences resulted in positive attitudes towards inclusivity. It is important for them to have exposure to the concepts of inclusivity “since knowledge and experience of disability and inclusion have been shown to affect attitude toward inclusion” (Foreman, 2008, p. 392). The design and facilitation of online community provided a safe and trusting space for PSTs to question and explore their ideas without being judged. There was no expectation that they had the right answer. Rather, it was about helping them in their journey to develop a deeper understanding of the concepts and what this means for their future teaching practices.

Thirdly, PSTs developed enhanced knowledge and skills for inclusion even though the experts only contributed to the online discussions for two weeks. Within this short period of time, PSTs had limited exposure to specific strategies. They acknowledged that they had to pursue ongoing development of knowledge to assist them in creating their own inclusive practices. This aligned with the findings of Rademacher et al. (1998) who stated that “[s]tudent teachers also gained an understanding that they were not adequately prepared to meet the anticipated challenges” (p. 161). As such, it reinforced the importance of lifelong, professional learning for teachers.

Finally, the design of the online community within the case study facilitated PSTs' higher order thinking and metacognitive skills. Pre-service teachers felt safe to acknowledge not only their weaknesses, but also their ongoing personal learnings. The case study, PSTs were able to apply their knowledge, make informed judgements, and consider what had changed in terms of their dispositions toward inclusive education and practice.

## Conclusion

There is currently limited research in the area of inclusion in mainstream secondary classrooms. Pre-service teachers, including secondary PSTs, struggle to conceive of multiple approaches available to teach all students effectively and to confidently and competently take up the diverse methods. This case study of an online community highlighted some of the learning that occurred when PSTs engaged in thoughtful discussions with peers, in-service teacher experts, and teacher educators with regard to issues and concerns related to addressing the special educational needs of students in secondary classrooms. The innovative use of an online community provided a learning space where PSTs could question and challenge assumptions, as well as learn with and from each other. Through such practice, they were beginning to develop a sense of collective responsibility for educating students with special needs in secondary settings. From this online experience, these PSTs are better positioned to identify next steps in their professional learning with regard to inclusion and inclusive practice.

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