

“SINKING OR SWIMMING?” SECONDARY SCHOOL TEACHER TO TEACHER EDUCATOR – REFLECTIVE PRACTICE AND PRE-SERVICE TEACHER PREPARATION IN WORKING WITH LEARNER DIVERSITY

Kathy Gibbs
Griffith University, Australia

ABSTRACT

This reflective narrative is divided into three sections. The first section explores one Australian secondary school teacher's experience of working in a mainstream school classroom prior to her recent transition to teacher education at an Australian metropolitan university. The second section focuses on what the literature has to say about teacher education courses preparing pre-service teachers to work in diverse classrooms. Finally, the review concludes with a merging of the two sections as part of a service model of delivery based on the author's experiences in both settings (secondary and tertiary) that aims to better prepare pre-service teachers for working in diverse Australian mainstream classrooms. The author hopes that through a process of self-reflection on her own actions and overcoming challenges she can better prepare new graduate teachers and provoke conversation among teachers and teacher educators to facilitate best practices that better prepare future educators to work in diverse classrooms.

Keywords: Differentiated instruction, Diverse classrooms, Initial teacher education, Mainstream classrooms, Pedagogy, Pre-service teachers, Reflective practice, Special needs education, Teacher educators

INTRODUCTION

This is an initial paper which serves as a preface to a small differentiated instruction (DI) co-researching project between a teacher educator at a major university and an inclusion coach at a state school in Brisbane, Australia. The project's title: *How is DI enacted in the regular classroom to respond to diversity?* aims to explore how DI is implemented in Queensland schools since the release of Education Queensland's *Whole school approach to differentiated teaching and learning* (Department of Education [DET], 2019) and *Every School Succeeding: State Schools Strategy 2019-2023* (DET, 2019).

Initially, the author came to write this qualitative reflective narrative looking through the lens of her own use of DI as a mainstream secondary school teacher and then from the perspective of how to better prepare pre-service teachers work in diverse classrooms. The author came to write this paper as an experienced secondary school teacher and more recently as an early career teacher educator, and as such, strongly reflects her own point of view. Through self-reflection and thinking as a means of promoting professional growth, she hopes to convey that while teaching in diverse classrooms is challenging, with the appropriate tools, along with a strong philosophical support for DI that includes flexibility, drive and enthusiasm, all students will benefit from the teaching and learning process (Scanlon & Baker, 2012). Over the past three decades there has been too many times that the author has questioned her own

teaching practice and her capacity to enhance the educational experience of students with and without additional needs.

The first section highlights a period of time in her teaching career where she explores her pedagogy as a secondary school mathematics teacher at a large, mainstream, independent boys' school in Brisbane, Australia. Her role at the school also included heading up the Learning Support department across both the Primary and Secondary sectors of the school.

THE SECONDARY TEACHER

The first section of this review is one of personal exploration based on the author's own personal experience. Reflecting on her teacher journey as a mainstream classroom practitioner, learning support head teacher and previously as a senior manager, she was not aware of the tenets of considering the individual needs of all students in her classroom assuming students were homogenous learners. DI was unfamiliar to her. It is not the intention of this reflective narrative to argue for or against DI but to acknowledge that graduate teachers must be equipped with the necessary skills and knowledge to teach in diverse classrooms (Winter, 2006).

The author admits that in her first twenty years as a mainstream teacher, she perceived that she did not purposefully plan for, or actively implement, effective teaching and learning strategies to ensure her students were engaged or to assist them to achieve the expected learning outcomes. This was not intentional but because she assumed that all learners were able to meet the needs of the curriculum through quality teaching practice only. Foreman and Arthur Kelly (2014), state that valuing diversity, matching pedagogy with individual needs, making classroom adjustments and adjusting/modifying the curriculum for students is fundamental practice for teachers but this was not considered part of the author's teaching pedagogy. There was limited teacher reflection by the author about alternative teaching approaches for those students not progressing at the level of their same-age peers. She assumed that an excellent teacher knew the content, knew it well and that was enough to ensure the learning capacity of all students.

She had no idea about DI even though she had heard the term used by some of her colleagues at conferences and network meetings. The schools in which she was employed did not, to her knowledge, offer mentoring or professional development opportunities on pedagogical practice to support diverse learners. She was not cognisant of the policies or practices related to diversity and inclusion as a multifaceted concept (Sharp, Jarvis, & McMillan, 2018) or framing differentiated practices through a learner-centred teaching approach to consider student differences. No consideration was given during the planning phase of the learning process for students' needs and she only catered for those students with an identified learning difficulty when required to do so (Jarvis, Pill, & Noble, 2017).

Over the last ten years as a mainstream classroom teacher, the authors teaching classroom-level strategies and pedagogy transitioned to a teaching approach which focused on preventing learning failure and a way to carry this out. Albeit this occurred by accident, after volunteering to teach middle school mathematics. Secondary mathematics classes are streamed from Year 9 according to academic capability at the conclusion of Year 8. The author volunteered to take the weaker Year 9 mathematics class, that is, the class in which all students had not achieved at a pass level the year before. Each student sat below a combined score of 50 marks across four testing periods in Year 8.

To see her new class on day one of the new school year trudge into the classroom with their shoulders slumped forward and feet dragging on the linoleum floor, knowing they had to endure another twelve months of perceived mathematics failure, was demoralising for them and the author to see. According to the Australian Curriculum and Reporting Authority

(ACARA), the class epitomised a typical group of students, “with multiple, diverse and changing needs, shaped by individual learning histories and abilities as well as personal, cultural and language backgrounds and socio-economic factors” (ACARA, 2018, p. 3). Students with specific educational needs were members of the class group, including students with Autism, Attention Deficit/Hyperactivity Disorder (AD/HD), a student with an undiagnosed hearing impairment, students with specific learning difficulties, disengaged learners and several students with a poor behaviour record.

It was apparent that more than quality teaching on the author’s part would be required to support this heterogenous group of students who had one area of learning in common – poor mathematics results. On day one, the students attempted to push their way to the back of the room on entry and begrudgingly moved to the front tables only when the author informed the class to fill the front of the room first. Desks were traditionally aligned in single rows, there were no visual prompts, anchor charts or posters evident on the walls to provide visual aids and the only noise to be heard in the room was the occasional sigh by a disengaged student besides the vertical blinds flapping against the windows. As this was not the author’s regular teaching room, she was reluctant to change the classroom environment.

Self-efficacy was low, enthusiasm was non-existent, and disengagement was high. This required a paradigm shift and quickly. The author will not waste time in delving into how she changed the classroom climate to one where each student strived for academic excellence except to say that this took time, patience and considered conversations with all class members. She needed to get to know each student and for them to know her, and that her goal for each class member was to develop a “like” of mathematics and pass the course at the end of the year. The author had two particular teacher qualities she would draw from – (1) she knew the content and new it well and (2) she was a firm but fair teacher with well-developed classroom management skills.

Informed by student performance data from the previous year and through the completion of a numerical operations quiz in the first week of Term One, she made changes to her classroom practice through blending her existing practices to design and implement instruction to meet the specific needs of the students (Vaughn & Parsons, 2013). Her initial goal was to change students perceived negative attitude towards mathematics to an attitude where learning had a positive impact on self-efficacy and learning outcomes. For each class member to succeed in his or her own learning would be professionally and personally challenging but highly rewarding. She was up for the challenge. The author did not seek collaborative assistance about best practice pedagogy from teaching colleagues as she had done so in the past, and little assistance was offered. She did not attend professional development sessions about DI as she was unaware if courses were available and this topic was not common teacher talk in the staffroom. In short, she established a set of realistic goals with each class member that would see their negative attitude towards mathematics change over the course of the year and academic results improve slowly but steadily.

Fundamentally, a differentiated approach to classroom learning was adopted through the creation of an open, inspiring and collaborative learning environment where all the learners could achieve at their own pace (Bentley-Williams & Morgan, 2012). Each students’ individual needs were met through regular education provision through DI (Foreman & Arthur-Kelly, 2014). Adjustments were made to content, the teaching process, and assessment, and the environment were ongoing and flexible. The author used a combination of direct instruction (whole class teaching techniques) and explicit teaching (I do, we do, you do) depending on the learning goal for each lesson. She did not progress to a new topic until all students had grasped the current content taught.

She used humour during teacher instruction to help students re-engage in the learning process (Gibbs, 2017) and teaching strategies to improve mathematics literacy such as think

alouds and visual imagery (Gersten et al., 2009). Above all, the author repeated, repeated and repeated the teaching and learning process until all students knew and understood the content. She set realistic goals for them to achieve. Finally, the author improved student self-worth and self-esteem through encouragement, praise and a reward system. By the end of Term One, she had students lined up at the classroom door before class to ensure they were able to secure a seat in the front row. There was no punitive punishment for silly behaviour or for not completing homework. Student examination results saw 11 out of 24 students achieve over 70% at the end of Term One to 18 out of 24 students achieving over 70% by the end of Term Two. Results saw some students move into the class above at the beginning of Term Three.

The narrative above provides an entry point into current literature that examines pre-service teacher preparation for teaching in diverse classrooms. Recently, the author stepped away from mainstream secondary teaching and school management to convening, preparing and teaching secondary learning support courses at a large metropolitan university in Brisbane, Australia.

PRE-SERVICE TEACHER PREPARATION TO TEACH DIVERSE LEARNERS

While the preferred context of this section is to provide an overview of what the literature has to say about pre-service teacher preparation about teaching in diverse classrooms, the author's data search revealed limited literature about student diversity and pre-service preparation but burgeoning research in regard to pre-service teacher attitudes and beliefs about inclusion. This section will begin with an account of current policy and legislation pertaining to student diversity and then focus on a literature review about pre-service teachers' attitudes and concerns about inclusion and inclusive education (IE).

Student diversity is evident through the Australian Curriculum (AC) (ACARA (2016), which highlights the importance of a high-quality curriculum for all Australian students. While the AC (ACARA, 2016) does not provide a definition of student diversity, it categorises student diversity into three broad areas, namely: students with a disability, gifted and talented, and students for whom English is an additional language or dialect (EAL/D). According to Akshir Ab Kadir (2016), student diversity goes well beyond the parameters of disability, giftedness and EAL/D and should also account for the diversity in learner epistemology. What is also not evident in the AC is how the needs of diverse students are catered for.

The *Melbourne Declaration on Educational Goals for Young Australians* (Ministerial Council on Education, Employment, Training and Youth Affairs [MCEEYTA], 2008) provides the policy framework for the AC in terms of learner diversity through two important goals. They are: "(1) Australian schooling promoting equity and excellence, and (2) that all young Australians become successful learners, confident and creative individuals and active and informed citizens" (MCEEYTA, 2008). Achieving these goals is not only a responsibility for governments but schools and their stakeholders/community members as well.

The Queensland Curriculum & Assessment Authority (QCAA) supports the AC's approach to teaching to student diversity through its commitment to supporting equity of access to for all learners (2017). Further evidence of recognition of student diversity is represented in the Australian Professional Standards for Teachers (Australian Institute for Teaching and School Leadership [AITSL], 2013), in particular, Standard 1: Know your students and how they learn; Standard 3: Plan for and implement effective teaching and learning and, in Standard 4: Create and maintain supportive and safe learning. The standards aim to improve teacher quality and student attainment and require universities ensure that pre-service teachers are cognisant of relevant documentation for support the engagement and learning of all Australian students.

Teacher educators tasked with preparing pre-service teachers to be able to adequately work in diverse classrooms has received considered attention in recent years (Peebles & Mendaglio, 2014). Teacher education courses appear to have addressed the need for general education training to include the philosophy and pedagogy inclusive practices, with tertiary institutions offering at least one compulsory or elective course in inclusive education (Sharma, Forlin, Loreman, & Earle, 2006). However, it has been noted that such courses are too theoretically based and offer little practically (Carroll, Forlin, & Jobling, 2003; Lancaster & Bain, 2010) or that the courses do not adequately prepare undergraduates to teach diverse learners (Forlin & Chambers, 2011). Carroll, Forlin, and Jobling (2003) also concur that within teacher education courses there is little alignment between general and special education courses, with little or no opportunity for integration between the two. With that lies the problem that teacher education programs do not align with traditional school models of pedagogy (Carrington & Sagers, 2008). As well, attitudes and perceived efficacy for teaching in diverse classrooms is often shaped during the pre-service years (Sharma, Forlin, & Loreman, 2008) so it is important that teacher education programs are seen as critical components in the preparation of graduates to work in diverse classrooms (Sharma & Sokal, 2015; Winter, 2006).

While pre-service teachers are philosophically supportive of IE, many feel ill-equipped with the practical skills required to teach children with a disability (Hoskin, Boyle, & Anderson, 2015). This is due in part to pre-service teachers' limited exposure to students with disabilities (Avramidis & Norwich, 2002; Lancaster & Bain, 2010). Therefore, further professional experience with high needs students could better prepare and provide a more positive and practical experience for pre-service teachers (Hoskin et al., 2015). In addition, it is important that new graduates adopt a positive attitude from the beginning of their career, with regard to teaching students with additional needs, and be able to truly welcome all students into their classrooms (Winter, 2006).

It is important that all Australian new graduate teachers focus on the academic, social and emotional needs of all students in their classrooms (MCEETYA, 2008). Pre-service teachers clearly learn from emulating expert teaching practice, and through the development of their own teacher identity, formed from their own classroom experiences as students themselves, observations during practicum, and personal professional practice (Walton & Rusznyak, 2016). An effective pre-service model of teacher education results in more positive attitudes towards inclusion and generates greater confidence in teaching students with additional needs (Winter, 2006). It would appear that while there has been progress toward better preparation for pre-service teachers in this regard, there is still some way to go in terms of ensuring effective practical experience (Hoskin et al, 2015).

There is a considerable body of research that has been given to teacher attitudes towards inclusion, but little has been identified about best practices for preparation of inclusive educators (Sharma & Sokal, 2015). With this in mind, the final section of this paper focuses on a philosophy of teaching drawn from the author's self-reflection and the teaching practices she used with her Year 9 Mathematics class as discussed previously. Understanding learner diversity in mainstream classrooms is a difficult process (Dixon, Yssel, McConnell, & Hardin, 2014), and the author hopes to provide examples of teaching that demonstrates an approach that is student-focused and could help other teacher educators to better prepare pre-service teachers for their work in diverse classrooms.

THE TEACHER EDUCATOR

In this final section, the author looks through the lens of her secondary mixed-ability mathematics classroom and uses this self-reflective experience as a means to better prepare pre-

service teachers to face the challenge of meeting a wide range of student needs as new graduate teachers.

Pre-service teachers learn from emulating the most effective teaching practices of professionals in the field and while the author does not see herself as an expert teacher educator, she aims to develop pre-service teacher confidence through shared practical knowledge and through demonstration of that aim to prompt their own personal theories about teaching (Walton & Rusznyak, 2016). Teacher educators, “directly influence the quality of (student) teachers and therefore, though more indirectly, the learning results of young children and teenagers” (Ping, Schellings, & Beijaard, 2018). The author sees her need to be knowledgeable about content areas, specifically about diverse learners. of high importance.

Thus, for the author to better prepare future teachers one way is to draw on her extensive experience in the field, having taught in mainstream secondary classrooms for over three decades, and use it as a foundation for teacher education programs. As a learning support teacher, secondary school teacher and with post graduate qualifications in psychology, she sees her teacher education role as providing teaching/learning processes that fully support pre-service teachers to become teachers equipped for today’s multi-ability classrooms. Another way this teacher educator can better prepare pre-service teachers is to better appreciate that diversity transcends into her own teacher educator classrooms, since pre-service teacher cohorts include those with mixed-ability, ethnicity and sexuality (Fry, Ketteridge, & Marshall, 2008).

This author sees herself as a role model, as modelling can be a powerful instrument owing to the impact it can have on the actual learning process of pre-service teachers (Lunenberg, Korthagen, & Swennen, 2007). Forms of modelling used by this teacher educator include: (1) direct and explicit teaching through a flipped classroom, (2) flexible and contextualised expertise, and (3) a focus on presenting problems with different solutions with diverse learner situations in teaching contexts at the forefront of the teaching process. Thus, the author presents an undergraduate foundation course, designed for special needs educators, to provide two examples (flipped classroom and practical based workshop activities) of how practice is used to better prepare pre-service teachers to work with diverse student groups.

In a traditional instructional model, teacher educators use direct instruction to present information. This is usually achieved through the teacher educator being at the front of the room with students ‘spoon-fed’ information rather than them having the opportunity to discover, make meaning and construct knowledge for themselves (Killen, 2016). This is typically followed by students spending time outside the lecture applying the content taught. In a flipped classroom, the content material is presented in advance of the tutorial, and students review the material independently (Shi, Rana, & Burgin, 2018). The author releases the online lecture material one week prior to the lectures so learners can learn the material at their own pace in a self-directed manner. Lectures are in the form of ‘lecture bites’, several small 10-12-minute lectures with accompanying summary activities to reinforce the learning process, besides serving as a summary of the lecture material. Lecture bites contain PowerPoints which include embedded short videos with questions to complete, ideas to ponder, quizzes, podcasts, journal article readings with questions to answer, and content material.

Time in tutorials is usually spent reviewing the summary activities and journal article reading, and activities to engage the pre-service teachers in applying the skills they have learned in a participatory way, with the author as facilitator. Activities include collaborative problem-solving exercises and class discussions with an emphasis on active student engagement. For example, one of the online lectures in the foundation course focused on Education Queensland’s *Whole school approach to differentiated teaching and learning* (DET, 2019). This policy document highlights the need for teachers to use a whole school approach to identify “the diverse learning needs of a school community, cohorts, classes, groups and individuals”, which should be “ identified through the school data profile and assessment and

reporting data” (DET, 2019). During the tutorial, time is allocated to address the importance of collecting student data and tracking student progress through data collection. The disadvantage for pre-service teachers is that while at university, limited opportunity arises to apply practice to content material, and as stated prior, courses are too theoretically based and offer little practically (Carroll, Forlin, & Jobling, 2003; Lancaster & Bain, 2010). This problem is addressed by the author conducting a simple quiz with the students (a math quiz followed by a spelling quiz) to demonstrate a technique to collect formative assessment. Not only does this exercise show students that collecting data need not be an onerous task for teachers, but it also serves to identified learner diversity among tutorial group members, with the exercise proving challenging for some.

Further to this is the need for “effective pedagogical practices that respond to the specific learning needs of groups and individual students” (DET, 2019). Teachers have traditionally worked alone in their classrooms but more recently, owing to being involved in an interdependent and specialised world, no one person has the knowledge to handle every circumstance (Dettmer, Knackendoffel, & Thurston, 2013). Twenty-first century teachers must be connectors of learning within the classroom and beyond and to do this, teachers must know how to consult and work with others. Teachers are under pressure to deepen their content knowledge and be seen as experts in their field. Often, they lack the knowledge and skills to deliver instruction effectively to a group of diverse learners and often they lack the skills to collaborate with peers (Shamberger, 2010). Students’ interests and ways of learning directly affect how they process information; thus, educators need to consider different teaching approaches based on their communication and learning needs.

An example of how teachers can develop collaborative skills is the development and implementation of a co-teaching partnership. This forms an important part of the content material taught in the Foundation Course as mentioned before. Co-teaching applies when a general education teacher and special education or specialist teacher work together in the generalist/mainstream classroom. It is now one of the widely used approaches to teaching multi-ability classes in mainstream schools (Strieker, Gillis, & Zong, 2013). The two educators share responsibility for planning, delivering and evaluating instruction for students with and without a learning difference/ difficulty/disability (Kloo & Zigmond, 2008). However, in a teacher education course, it is difficult for pre-service teachers to see co-teaching in action.

For co-teaching to work effectively, there needs to be a model of respect, trust and ownerships between both teachers and time dedicated to co-plan together. There also needs to be a shared philosophy of teaching instruction, similar behaviour management skills (Strogilos, Tragoulia, & Kaila, 2015), and collaboration and negotiation skills (Friend, Cook, Hurley-Chamberlain, & Shamberger 2010). To provide an example of how the author brings contextualised example to the tutorial, students are required to participate in a co-teaching pre-planning scenario where one pre-service teacher takes on the role of general education teacher and the other the learning enhancement teacher. Prior to the tutorial, students view the online lecture which includes a pre-recorded guest lecturer (Deputy Principal – Inclusive Education) who speaks about her school’s trial and implementation of the co-teaching model.

The activity in the tutorial initially requires the students to discuss their emerging teacher identity and complete a co-teaching checklist to determine their philosophical suitability to co-teach together. Following this, they view a short film and pre-plan one lesson from a list of scenarios aimed at Year 7 English, Science or Physical Education. Their lesson must include a formative or summative piece of assessment as evidence of collecting student data for tracking student performance, and a general strategy used in the lesson to assist students with additional needs. As they have wide practicality, general strategies are beneficial in most classes and can be viewed as “(a) organisational strategies (e.g., task analysis, cue cards, graphic organisers), (b) emphasis strategies (e.g., colour coding and big ideas), and (c) general

study skills (e.g., mnemonics, study skills, and think-alouds)” (Conderman & Hedin, 2013, p.158). Once the pre-planning phase is completed, students present their session to the cohort as a 5-minute power point presentation.

This final section provided some ideas to reduce the gaps that might still exist in pre-service teacher programs. The ideas presented are not a cause for optimism regarding the preparedness of pre-service teachers for the necessary skills, knowledge and understandings required to meet a wide range of student needs. Rather, they provide key opportunities to scaffold their teacher education experience as they build their own teacher confidence and competence.

CONCLUSION

The role of teacher educators is to train the next generation of teachers, however, Loughran (2014) identifies that most teacher educators are responsible for their own learning unlike teachers who rely on education authorities to set a learning agenda. This reflective article is based on my own teacher and teacher educator learning. The paper begins with a context narrative by the author to identify her pedagogical approach to teaching a mixed ability class. The following section provides a short literature review of how pre-service teachers see their preparedness by teacher education courses to navigate the teaching world as it is today. Finally, through reflection of her classroom experience and building from this foundation to her current role as a teacher educator, the author provides connections to pedagogical concepts to how ‘next-generation’ teachers understand what teaching practice might look like in today’s diverse classrooms.

The author has no specific evidence of how her teacher education practices can better prepare pre-service teachers to work in diverse classrooms at this time but her support for her practice is evident through strong evaluation data collected on conclusion of courses she convenes and teaches. Using survey instruments to gather data is one way to collect feedback on courses and teaching from students. Overall, student satisfaction with key elements of the courses taught, indicate very high satisfaction rates in teaching and course design.

The aim of this paper was to tell her story, that is, share her vulnerability and honesty about her teaching journey that has seen her transition from teacher to teacher educator, who catered for diverse students in an inclusive way and now shares that experience with the next generation of preservice teachers. Her goal is to provide ways for preservice teachers to better navigate their transition from university to classroom, to become confident about what they will be able to contribute, and how they will gain satisfaction in their job and aspire to make a difference to diverse students in mainstream classrooms. She has no desire for preservice teachers to merely copy her in any way, and she does not see herself as an expert in the field but as a teacher foremost, who, through her own years of experience, hopes to build their capacity to cater for the diversity in their future classrooms. To do this, the author will continue to improve students' experience of studying at university through the ongoing development and improvement of her approach to learning and teaching, and through a research trajectory to better understand how DI practice can be advanced in Australian schools.

Address for correspondence: Dr. Kathy Gibbs, School of Education and Professional Studies, Griffith University, Australia.

Email: <k.gibbs@griffith.edu.au>

REFERENCES

- Akshir Ab Kadir, M. (2016). Critical thinking and learner diversity in the Australian Curriculum: Implications and epistemological tensions. *International Journal of Pedagogies and Learning*, 11(3), 225-237.
- Australian Curriculum, Assessment and Reporting Authority (ACARA). (2016). *Student diversity*. Melbourne, Australia: ACARA. Retrieved from <http://www.acara.edu.au/curriculum/student-diversity>
- Australian Institute for Teaching and school Leadership (AITSL). (2013). *Australian Professional Standards for Teachers*. Melbourne, Australia. Retrieved from <https://www.aitsl.edu.au/>
- Avramidis, E., & Norwich, B. (2002). Teacher's attitudes towards integration/inclusion: A review of literature. *European Journal of Special Needs Education*, 17, 129 – 147.
- Bentley-Williams, R., & Morgan, J. (2012). Dilemmas in inclusive education: What does it mean to be an inclusive educator? *Special Education Perspectives*, 21, 17-22.
- Carrington, S., & Saggars, B. (2008). Service-learning informing the development of an inclusive ethical framework for beginning teachers. *Teaching and Teacher Education*, 24, 795-806.
- Conderman, G., & Hedin, L. R. (2013). Co-teaching with strategy instruction. *Intervention in School and Clinic*, 49, 156–163.
- Carroll, A., Forlin, C., & Jobling, A. (2003). The impact of teacher training in special education on the attitudes of Australian preservice general educators towards people with disabilities. *Teacher Education Quarterly*, 30, 65-79.
- Department of Education and Training Education. (2019). *Every school succeeding: State schools strategy 2019-2023*. Brisbane: Author. Retrieved from <https://education.qld.gov.au/curriculums/Documents/state-schools-strategy.PDF>
- Department of Education and Training Education. (2019). *Whole school approach to differentiated teaching and learning*. Retrieved from <https://education.qld.gov.au/curriculums/Documents/school-approach-to-differentiated-teach-and-learn.pdf>
- Dettmer, P., Knackendoffel, A., & Thurston, L. P. (2013). *Collaboration, consultation, and teamwork for students with special needs*. (7th ed.). Boston, NY: Pearson.
- Dixon, F. A., Yssel, N., McConnell, J. M., & Hardin, T. (2014). Differentiated instruction, professional development, and teacher efficacy. *Journal for the Education of the Gifted*, 37, 111-127.
- Forlin, C., & Chambers, D. (2011). Teacher preparation for inclusive education: Increasing knowledge but raising concerns. *Asia Pacific Journal of Teacher education*, 39, 17-32.
- Foreman, P., & Arthur-Kelly, M. (2014). *Inclusion in action* (4th. ed.). South Melbourne, Vic.: Cengage Learning.
- Friend, M., Cook, L., Hurley-Chamberlain, D., & Shamberger, C. (2010). Co-Teaching: An illustration of the complexity of collaboration in special education. *Journal of Educational and Psychological Consultation*, 20, 9-27.
- Fry, H., Ketteridge, S., & Marshall, S. (2008). In H. Fry, S. Ketteridge, & S. Marshall (Eds.). *A handbook for teaching and learning in higher education: Enhancing academic practice* (3rd. ed.). New York and London: Routledge.

- Gersten, R., Chard, D. J., Jayanthi, M., Baker, S. K., Morphy, P., & Flojo, J. (2009). Mathematics instruction for students with learning disabilities: A meta-analysis of instructional components. *Review of Educational Research, 79*, 1202-1242.
- Gibbs, K. (2017). Australian adolescent boys with attention deficit/hyperactivity disorder (AD/HD): teacher and teaching factors that assess the efficacy of reducing unwanted behaviours within the classroom environment. *Australian Journal of Learning Difficulties, 23*, 53-65.
- Hoskin, J., Boyle, C., & Anderson, J. (2015). Inclusive education in pre-schools: predictors of pre-service teacher attitudes in Australia, *Teachers and Teaching, 21*, 974-989.
- Jarvis, J. M., Pill, S. A., & Noble, A. G. (2017). Differentiated pedagogy to address learner diversity in secondary physical education. *Journal of Physical Education, Recreation & Dance, 88*, 46-54.
- Killen, R. (2016). *Effective teaching strategies: Lessons from research and practice*. (7th. ed.). Melbourne, Vic.: Cengage Learning.
- Kloo, A., & Zigmond, N. (2008). Co-teaching revisited: Redrawing the blueprint. *Preventing School Failure, 52*, 12-20.
- Lancaster, J., & Bain, A. (2010). The design of inclusive education courses and their effects on self-efficacy: A comparative study. *Asia Pacific Journal of Teacher Education 38*, 117-128.
- Loughran, J. (2014). Professionally developing as a teacher educator. *Journal of Teacher Education, 65*, 271-284.
- Lunenberg, M., Korthagen, F., & Swennen, A. (2007). The teacher educator as a role model. *Teacher and Teacher Education, 23*, 586-601.
- Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA). (2008). *Melbourne declaration on educational goals for young Australians*. Melbourne, Australia: Author. Retrieved from http://www.curriculum.edu.au/verve/_resources/National_Declaration_on_the_Educational_Goals_for_Young_Australians.pdf
- Peebles, J. L., & Mendaglio, S. (2014). The impact of direct experience on preservice teachers' self-efficacy for teaching in inclusive classrooms. *International Journal of Inclusive Education, 18*, 1321-1336.
- Ping, C., Schellings, D., & Beijaard, G. (2018). Teacher educators' professional learning: A literature review. *Teaching and Teacher Education, 75*, 93-104.
- Queensland Curriculum & Assessment Authority. (QCAA). (2017). *Catering for diversity*. Brisbane: Author. Retrieved from <https://www.qcaa.qld.edu.au/p-10/catering-diversity>
- Scanlon, D., & Baker, D. (2012). An accommodations model for the secondary inclusive classroom. *Learning Disability Quarterly, 35*, 212-224.
- Shamberger, C. (2010). Early career teachers' perceptions of their preparation for an initial experience in co-taught classrooms. (Unpublished Dissertation). University of North Carolina.
- Sharma, U., & Sokal, L. (2013). The impact of a teacher education course on pre-service teachers' beliefs about inclusion: an international comparison. *Journal of Research in Special Education Needs, 15*, 276-284.
- Sharma, U., Forlin, C., Loreman, T., & Earle, C. (2006). Pre-service teachers' attitudes, concerns and sentiments about inclusive education: an international comparison of the novice pre-service teachers. *International Journal of Special Education, 21*, 80 - 93,
- Sharma, U., Forlin, C., Loreman, T. (2008). Impact of training on pre-service about inclusive education teachers' attitudes and concerns and sentiments about persons with disabilities. *Disabilities and Society, 23*, 773-785.

- Sharp, K., Jarvis, J. M., & McMillan, J. M. (2018, early online). Leadership for differentiated instruction: teachers' engagement with on-site professional learning at an Australian secondary school. *International Journal of Inclusive Education*, 1-20.
- Shi, C., Rana, L., & Burgin, S. (2018). Teaching and learning tips 6: The flipped classroom. *International Journal of Dermatology*, 57, 463-466.
- Strieker, T., Gillis, B., & Zong, G. (2013). Improving pre-service middle school teachers' confidence, competence, and commitment. *Teacher Education Quarterly*, 40, 159-180.
- Strogilos, V, Tragoulia, E., & Kaila, M. (2015). Curriculum issues and benefits in supportive co-taught classes for students with intellectual disabilities. *International Journal of Developmental Disabilities*, 61, 32-40.
- Vaughn, M., & Parsons, S. A. (2013). Adaptive teachers as innovators: Instructional adaptations opening spaces for enhanced literacy learning. *Language Arts*, 91, 81-93.
- Walton, E., & Rusznyak, L. (2016). Approaches to assessing pre-service teachers' learning in authentic and rigorous ways: The case of an inclusive education model. *Perspectives in Education*, 34, 84-101.
- Winter, E. E. (2006). Preparing new teachers for inclusive schools and classrooms. *International Teacher Education*, 21, 85-91.