Adaptability: An important capacity to cultivate among pre-service teachers in teacher education programmes

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Teaching is characterised by constant change and occurs in a dynamic and unpredictable environment. Being able to adapt to meet the novel and changing situations that occur in these everchanging environments is an important capacity for thriving and effective teachers. This is known as adaptability, or the capacity of individuals to adjust their thoughts, feelings, and behaviours in response to new, changing, or uncertain situations (Martin et al., 2012). Although a growing body of research has demonstrated the benefits of adaptability for teachers and students (e.g. Collie & Martin, 2017; Parsons & Vaughn, 2016), limited work has considered the role of adaptability among beginning teachers, and how this capacity can be fostered in pre-service education courses. The present article thus examines the nature of adaptability and proposes a range of strategies that can be employed to foster this capacity in the context of pre-service educational psychology courses.

Keywords: adaptability; pre-service teachers; transition to teaching; educational psychology.

EACHING is characterised by constant change, and occurs in a dynamic and unpredictable environment. Teachers are regularly required to modify lessons, restructure learning environments, and adjust content to meet the diverse needs of students. Being able to adapt to manage the novel and changing situations that occur in these everchanging environments is an important capacity for thriving and effective teachers. This is known as adaptability, or the capacity of individuals to adjust their thoughts, feelings, and behaviours in response to new, changing, or uncertain situations (Martin et al., 2012). A growing body of research is demonstrating the benefits of adaptability for teachers and students (e.g. Collie & Martin, 2017; Parsons & Vaughn, 2016); however, limited work has considered the role of adaptability among beginning teachers, and how this capacity can be cultivated in pre-service education courses to better equip them to navigate the inevitable change and uncertainty that characterises teaching. We suggest that the need for adaptability is amplified for new teachers as they make the transition from pre-service

to in-service teaching and encounter many instances of novelty, change and uncertainty. Accordingly, the first aim of this article is to discuss adaptability and its role for beginning teachers as they make the transition into the profession. The second aim is to present practical strategies for cultivating adaptability in pre-service teacher educational psychology courses. We propose that pre-service educational psychology courses are optimal settings through which prospective teachers can learn about adaptability and begin to develop it in their emerging skill set. Indeed, developing adaptability during pre-service teacher education programmes is particularly important, as it may be a way to prepare future educators for the regularly changing demands of the classroom – which are often cited as key reasons early career teachers leave the profession (e.g. AITSL, 2016; House of Commons, 2018).

Adaptability – What is it and why does it matter?

In their 2012 tripartite model, Martin and colleagues (2012) establish that adaptability comprises three dimensions: a cognitive,

a behavioural, and an emotional dimension. When faced with a challenging, novel, or uncertain situation, cognitive adaptability involves thinking about the situation in different ways or changing one's thoughts about the situation or circumstance. Behavioural adaptability involves adjusting one's actions in order to manage the change in situation or circumstance. Emotional adaptability involves adjusting one's emotions to reduce less helpful emotions (e.g. anxiety) or increase positive emotions (e.g. hope) in the face of novelty, change, or uncertainty.

For newly qualified teachers entering their own classroom, cognitive adaptability may involve shifting their perceptions of self and identity from that of a pre-service teacher to that of qualified practitioner. Behavioural adaptability may involve seeking out new resources when presented with a situation that was not experienced in practicum. Emotional adaptability may involve regulating anxiety in the face of the new expectations and procedures that are likely in a new school.

Adaptability among practising teachers has been linked with a range of positive teacher and student outcomes. For example, in a study of Australian secondary teachers, Collie and Martin (2017) showed that when teachers were more adaptable, they also tended to report greater wellbeing and organisational commitment. In addition, teacher adaptability was linked with students' numeracy achievement via the boost it provided to teachers' wellbeing. More recently, Collie et al. (2018) demonstrated that more adaptable teachers tended to be less disengaged at work. Loughland and Alonzo (2019) found that more adaptable teachers tend to use teaching practices in the classroom that adjust to the needs of the students. Most recently, Martin et al. (2019) found that adaptability among teacher assistants working with students with disabilities was associated with greater workplace motivation and occupational self-concept. Taken together, there is clear evidence of the importance of adaptability for thriving and effective teachers (and teacher assistants). Yet non-cognitive skills are rarely a focus in pre-service education courses. We suggest there is clear impetus to develop this capacity in pre-service teachers through educational psychology courses.

Developing adaptability in educational psychology courses

Teacher education programmes are designed to imbue future educators with the knowledge and skills to prepare them to work in schools; however, there can at times be some disparity between the educational theories learnt and their actual application (Vanderlinde & van Braak, 2010). Accordingly, many pre-service teachers feel ill-prepared for the realities of the classroom (Darling-Hammond, 2006). Integrating targeted and specific strategies to promote adaptability, and a range of practical activities, may therefore be effective ways for pre-service teachers to connect the theory of educational psychology to actual practice. Moreover, such strategies may not only be useful for preparing teachers to adapt to novel situations in their classrooms, but also to prepare them for the uncertainty that can arise when faced with situations not covered by university courses. Although no prior research appears to have examined strategies to promote adaptability in teacher education courses, we draw on a range of evidencebased strategies that may foster this capability.

The strategies put forth in the present discussion are aligned with the processes described in Clarke and Hollingsworth's (2002) framework for teachers' professional growth. This framework provides a model through which teacher professional development can be understood, and provides directions for designing effective professional development programmes. According to the model, professional development is a reflective and enactive process, in which teachers learn about a new skill, idea or activity, apply this new skill, draw new conclusions, and therefore further understand and continue to apply this strategy. As per Collie and Martin (2016), we propose that this

is a valuable framework for promoting the development of adaptability. The strategies detailed below provide specific examples.

Scenario-based learning

Scenario-based learning may be a useful tool for introducing pre-service teachers to the realities of teaching (Sorin, 2015) and to develop their ability to consider a variety of responses to novel or uncertain situations. In scenario-based learning, pre-service teachers are presented with a hypothetical situation drawn from actual practice. The teacher educator then facilitates critical discussion regarding the scenario, and scaffolds pre-service teachers towards developing a feasible solution. A major benefit of this approach is that pre-service teachers are able to explore such scenarios safely, without the immediate pressure of students in front of them (Errington, 2010). Moreover, scenariobased approaches foster deeper learning and link theory with actual practice (Akins & Crichton, 2003).

Given the emphasis on reflection extolled in the Clarke and Hollingsworth (2002) model, the effectiveness of scenario-based learning when teaching adaptability may be enhanced with the integration of scaffolded reflection. We therefore suggest the following steps to enhance adaptability through scenario-based learning:

- i. The teacher educator presents pre-service teachers with a classroom scenario, in which teachers experience some form of novelty, change, or uncertainty – e.g. 'A new student joins the class midyear. How do you respond to this situation on his/her first day?'
- ii. Pre-service teachers are then encouraged to document the thoughts, feelings, and behaviours they would likely experience in this situation – and what ones might need adjusting to best manage this new situation.
- iii. Following this reflection, the teacher educator and the class discuss possible ways of managing this novelty/change.
- iv. After this discussion, the teacher educator asks pre-service teachers to reflect on

their initial responses, and write what and how they would have to adapt to effectively navigate this new situation.

Such approaches encourage critical reflection and promote self-awareness, which are important components of professional development (Clarke & Hollingsworth, 2002). Integrating such approaches into educational psychology courses thus further strengthens the relationship between theory and practice for pre-service teachers.

Role plays

Closely related to scenario-based learning, role playing involves enacting scenarios which are likely to occur when teaching (Crow & Nelson, 2015). Promising research suggests that academic role-playing can be empowering for pre-service teachers, as they facilitate the development of an authentic understanding of new or changing situations, and enable them to consider the strategies, skills, and attitudes that can be used to respond to them (Crow & Nelson, 2015; Kilgour et al., 2015). Such techniques may therefore be useful for cultivating adaptability in preservice teachers, by requiring them to simulate teaching situations and display adaptive practices that could be used to successfully navigate novel or changing events.

We draw on the work of Shaftel and Shaftel (1967) to propose a step-by-step model for using role plays: (1) select participants; (2) present the scenario; (3) assign roles; (4) provide observers with criteria for observation; (5) enact; (6) discuss and evaluate; (7) re-enact; and (8) discuss, evaluate, and generalise. This model is particularly useful as it allows participants to change their emotional, behavioural and cognitive responses (core elements of adaptability) when re-enacting the scenario. Moreover, as observers provide critical feedback, the pre-service teacher is able to consider others' perspectives and expand his/her repertoire of strategies to respond to novel, changing, and uncertain teaching situations. We provide an example of this below:

- 1. Divide pre-service teachers into groups large enough so that there are adequate participants and observers.
- 2. Present the scenario: e.g. 'You begin teaching a mathematics concept to a Year 6 class. After the first five minutes, you realise that the students already understand this concept and require further extension. Yet, you had planned the whole lesson around developing understanding of this concept. How would you respond?'
- 3. Select one pre-service teacher to be the teacher and assign roles to the other preservice teachers.
- 4. Ask observers to evaluate the emotional response, behaviours, strategies and language displayed by the participant acting as the teacher.
- 5. Act out the scenario.
- 6. Discuss the contents of the scenario. The pre-service teacher should begin the discussion by reflecting on their behaviours, thoughts and feelings. Each group member should then provide feedback on how the pre-service teacher managed the situation, and how they could adapt their behaviour to navigate similar situations.
- 7. Re-enact the scene. Encourage the preservice teacher to use the feedback provided by the group to change their response to this situation.
- 8. Repeat step five. Encourage critical reflection on the adaptive practices used by the pre-service teacher. Further encourage group members to discuss how they might be able to generalise these adaptive practices to use in similar such situations that reflect some level of novelty, change, variability, or uncertainty.

Notably, the process of critical reflection that occurs in steps six and eight is an important component of facilitating changes in teachers' attitudes and promoting professional growth (Clarke & Hollingsworth, 2002). Based on the needs of the pre-service teachers, teacher educators may choose to

scaffold or model this reflection to ensure participants gain the most from the experience. Other scenarios that educational psychology instructors may choose to simulate include:

- Adapting teaching when new technology is introduced to the school/class.
- Adapting teaching and course content in response to different students' learning needs.
- Adapting teaching and course content when students' abilities have been over/ underestimated.
- Adapting the lesson after a major class disruption.
- Adapting teaching when necessary resources are unavailable.

Microteaching sessions

Microteaching sessions immerse pre-service teachers in actual teaching situations, in order to develop skills and deeper knowledge required to teach effectively (Remesh, 2013). Unlike a full teaching lesson, microteaching focuses on teaching one component of a larger lesson, a single concept, or a smaller group of students. Pre-service teachers receive feedback from peers, which promotes critical reflection. Where possible, having reflected on feedback, pre-service teachers repeat the lesson and evaluate their experiences. Mergler and Tangen (2010) found support for the use of microteaching in educational psychology courses, reporting that pre-service teachers experienced a greater understanding of course content, and greater self-efficacy in teaching. This finding also provides support for the use of microteaching sessions to foster adaptability. Educational psychology instructors may establish partnerships with local schools, in which pre-service teachers partner with in-service teachers to teach a small group of students. An example of how such sessions could be integrated to promote adaptability is as follows:

1. As part of the educational psychology unit, pre-service teachers would plan a short lesson, identify possible unplanned

- situations or circumstances they may face, and list ways they could adapt to address these.
- 2. Pre-service teachers would then deliver the lesson, and rotate so that all their peers are able to teach and can provide feedback.
- 3. Following the lessons, pre-service teachers provide feedback to one another and discuss how they could have changed the lesson, or adapted their thoughts and feelings to improve the lesson.
- 4. Pre-service teachers compose a written response in which they explicitly differentiate between the behavioural, emotional, and cognitive adaptations made in their microteaching sessions. They then make suggestions as to further adaptations or changes that could be made to improve their practice.

Importantly, the process of microteaching described above involves all of the processes outlined in Clarke and Hollingsworth's (2002) model for professional development. Pre-service teachers are able to draw on knowledge attained from educational psychology courses, apply this knowledge, reflect on its application, and therefore form new understandings, which further strengthens their perception of how adaptability concepts can be actualised in practice.

Engagement with practising teachers

Another means by which educational psychology courses can attempt to connect theory to practice in terms of adaptability is through engagement with current practitioners. Mentorships with in-service teachers have been linked with a range of positive outcomes for pre-service teachers, including greater self-efficacy for teaching, improved content knowledge, and a greater adaptation of instructional strategies (Allen et al., 2003). There are a number of ways preservice teachers could work with in-service teachers to promote adaptability, such as:

 Pre-service teachers could observe in-service teachers' lessons, note the

- adaptations the teacher makes during a lesson, and reflect on the impact of these adaptations on the class environments.
- In-service teachers could provide guest lectures in which they share their experiences of adapting in a classroom, and discuss strategies they use to respond to novel and changing situations.
- In-service teachers could work with educational psychology instructors to develop scenarios and role plays, and could participate in these activities with pre-service teachers.

Given the importance of reflection outlined in the Clarke and Hollingsworth (2002) model, partnerships between current practitioners, educational psychology instructors, and pre-service teachers should emphasise the process of pre-service teachers actively experimenting and critically reflecting on their experiences.

Conclusion

Given the dynamic nature of teaching and schooling contexts, it is important to equip pre-service teachers with the skills and knowledge required to successfully navigate the novelty, change, and uncertainty they will undoubtedly face when entering the profession. Adaptability may therefore be a useful capacity for both pre-service and in-service teachers to possess. In light of the growing body of evidence that has demonstrated the importance of this capacity for in-service teachers, we recommend that adaptability as a concept and as a practice be promoted through educational psychology units in teacher education courses. On a broader level, given the generally dynamic and constantly changing contexts in which education occurs, we suggest that this capacity is important for educators across all sectors, including early childhood, primary, secondary and university and higher education teachers. Promoting adaptability through university courses may strengthen educators' understandings of the

links between theory and practice, and may help them to navigate the inevitable novelty, change and uncertainty that characterise contemporary teaching.

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