Improving the teaching of the arts: Pre-service teacher self-efficacy towards arts education

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Abstract: Arts education is an essential component of a comprehensive education, requiring highly skilled teachers to achieve quality arts integration (Andrews, 2004). It equips students with skills necessary for the 21st century workforce, allowing nations to develop the human resources necessary to tap their cultural capital (UNESCO, 2006). A world trend however suggests that arts teaching by pre-service teachers is subject to lack of confidence, motivation and knowledge (Henessy, Rolfe & Chedoy, 2001; Russell-Bowie, 2004). Greater recognition of confirming and disconfirming experiences that shape pre-service teachers' self-efficacy beliefs for arts education is necessary. This paper provides insights into a research project that attempts to contribute towards filling this void in order to improve teacher effectiveness in the arts domain. After the first semester of teacher training, pre-service teachers completed a questionnaire based on their personal teaching beliefs for instructional design, student engagement and classroom management in arts education. Findings provide a greater understanding of how pre-service teachers regulate their own behaviour for teaching the arts, acting as validation beliefs of capabilities.

Key words: teacher self-efficacy; pre-service teachers; motivation

1. Introduction

Many beginning generalist teachers are responsible for the delivery of integrated arts education as part of their curriculum for students aged 10-15 years. This responsibility is dependent on their own beliefs about their competence, school context, pressures of the curriculum and benefits of the arts for students. Within Australia, arts education is considered as a key learning area endorsed by the *Hobart Declaration* (MCEETYA, 1988) and more recently in the *National Education and the Arts Statement* (MCEETYA, 2005). It is comprised of music, drama, dance, visual arts and media. Research in Australia (Russell-Bowie, 1993; 2004) and around the world (Henessy, Rolfe & Chedzoy, 2001; Oreck, 2001, 2004; Smithrim & Upitis, 2001; Upitis, Smithrim & Soren, 1999), however, highlight problems of lack of confidence, motivation and knowledge faced by generalist teachers in delivering arts education. Subsequently, these problems lead to avoidance behaviour, and result in limited teaching and learning of arts education within the classroom for students. One of these problems is also found in science teaching by generalist teachers who exhibit low self-efficacy (Plourde, 2002; Tosun, 2000).

It is accepted that confidence, motivation and self-knowledge inform a teacher's self-efficacy beliefs system. These beliefs operate as a key factor in a generative system of human competence (Bandura, 1997), leading to the assumption that they are powerful influences on the overall teachers' effectiveness with students. The higher the

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sense of self-efficacy, the greater the perseverance and the higher the chance that the pursued activity will be performed successfully. Moreover, teachers' beliefs in their efficacy "affect their general orientation toward the educational process as well as their specific instructional activities" (Bandura, 1997, p. 241). Teachers who do not expect to be successful with certain students are less likely to put forth effort into planning and teaching, even if they know of strategies that could help students.

Teacher self-efficacy is still forming within the beginning years of teaching and once developed according to theory, is resistant to change (Bandura, 1997). During this beginning phase, teachers create their own self-knowledge through their efficacy beliefs as they reflect on teaching arts. Subsequently, efficacy beliefs determine how environmental opportunities and impediments are perceived (Bandura, 2006a). Teachers therefore set goals, anticipate outcomes and monitor their actions as they reflect on their personal efficacy when teaching the arts. From this assumption, the developmental self-efficacy beliefs of beginning teachers are important for investigation for recognition of confirming and disconfirming experiences that shape this motivational construct.

Few studies in Australia however have investigated the impact of teacher self-efficacy on the overall effectiveness of the teacher with students, especially within individual subject areas. An understanding of teacher self-efficacy in different subject matters is increasingly important during the middle grades, and as academic content grows, it becomes more complex (Woolfolk Hoy & Davis, 2006). Research suggests that in science teacher efficacy, beginning teachers who felt lacking in content knowledge tended to avoid teaching topics they did not know well for the fear that they would be asked questions by their students they could not answer (Rice & Roychoudhury, 2003; Tosun, 2000). Furthermore, pre-service teachers lacking in confidence for teaching science deemphasized or avoided teaching science, or taught using transmissive as opposed to inquiry methods (Plourde, 2002). These findings highlight the low level of pedagogical variety used by the teachers if low self-efficacy for that teaching area exists.

2. Arts education in Australia

The expectation of arts education was made in public by the Australian Ministerial Council on Education Employment, Training and Youth Affair (MCEETYA) releasing a statement entitled the *National Education and the Arts Statement* (2005). The statement was designed to foster a culture of creativity and innovation in Australian schools. It acknowledged that an education rich in the creative arts maximises opportunities for learners to engage with innovative thinkers and learners. Three key principles underpinned the statement to drive change by laying a foundation for stronger co-ordination between educational institutions and also to guide arts and education leaders to ensure that the Australian education system helps children and young people to achieve. These were (MCEETYA, 2005, p. 5): (1) All children and young people should have a high quality arts education in every phase of learning; (2) Creating partnerships strengthens community identity and local cultures; and (3) Connecting schools with the arts and cultural sector enriches learning outcomes.

In particular, it acknowledged that arts experiences enhanced all phases of schooling. All students, irrespective of their location, socio-economic status or ability should have equal opportunities to participate in arts-rich schooling systems (MCEETYA, 2005). School-based arts experiences should be diverse, based on models of effective practice, and embedded from the early years through to graduation in order to unlock the creative potential of young people (MCEETYA, 2005). In order to foster this crucial change in arts education, the statement acknowledges the necessity to foster the skills and knowledge of teachers through pre-service training and professional development.

3. Beginning teachers' self-efficacy

As yet, limited research has explored the development of teacher self-efficacy that is formed during the beginning phase of teaching, created from the four sources of efficacy. Of importance however, is the theoretical assumption that once these beliefs are formed during this beginning phase, they are resistant to change (Bandura, 1997). Research suggests that personal teaching efficacy tends to increase during teacher education and student training (Hoy & Woolfolk, 1990; Wenner, 2001), but decrease during the end of teacher training to the end of the first year of teaching (Woolfolk & Hoy, 2000). This may be caused by the removal of support given to teachers to develop efficacy during the beginning phase of teaching (Tschannen-Moran & Woolfolk Hoy, 2007). Subsequently, while beginning teachers often enter the profession with high hopes about the kind of teachers they would like to be for students, they often encounter a "reality shock", when they realise their hopes may be harder to achieve then anticipated (Weinstein, 1988). Alternatively, beginning teachers exposed to doubts may be more motivated for continued growth and learning to maintain the belief of future success (Wheatley, 2002).

A theoretical understanding of the development of beginning teacher self-efficacy within different contexts is necessary to provide a better understanding of the suitable sources of efficacy necessary to sustain and develop self-efficacy and negate the effect of negative contributors. While research had provided segregated views of beginning teacher self-efficacy by exploring the impact of different sources, a holistic view that encompasses the development of efficacy through all sources is needed. A holistic view of development allows the identification of key stages that impact upon a beginning teacher's effectiveness with students.

4. Hypothesis

The purpose of this study was to investigate perceived levels of pre-service teachers' self-efficacy for arts education. It is hypothesised that pre-service teachers generally exhibit high self-efficacy for arts education (context specificness) during their pre-service teacher training, consistent with personal teaching efficacy research (Tschannen-Moran & Woolfolk Hoy, 2007).

5. Method

15 pre-service teachers completed an adapted version of the "teachers' sense of efficacy scale" (Tschannen-Moran & Woolfolk Hoy, 2001) after their first semester in teacher training. 10 participants were female and 5 male. All were enrolled in the graduate diploma teacher education programme for middle years school teaching (able to teach year 4-10 in Queensland schools). These participants were between 20 and 45 years. The questionnaire was adapted to the context of arts education within the Queensland curriculum. It consisted of the three 4-item sub-scales for efficacy for student engagement, efficacy for instructional strategies and efficacy for classroom management. Sample items include the following:

When teaching arts education to students aged 10-15 years;

(1) Efficacy for instructional strategies: How well can you implement alternative arts strategies in your classroom?

(2) Efficacy for classroom management: How much can you do to manage disruptive behaviour in the classroom?

(3) Efficacy for student engagement: How much can you do to motivate students who show low interest in

the arts?

The full scale has been reported with reliabilities of 0.92 to 0.95 and 0.86 to 0.90 for each of the sub-scales (Woolfolk Hoy, Hoy & Kurz, 2008).

6. Results

The demographic profiles of the pre-service teachers compared to the Australian population of teachers are presented in Table 1. Major difference was the mean age of the beginning teachers compared to the average age of 43 years for teachers in Australia.

Table 1   Comparison of sample pre-service teachers to Australian teachers

Teacher characteristic	Sample	Teachers in Australia (ABS, 2003; 2007)
Male/female ratio	33%/66%	31.3%/68.7%
Mean age (years)	25-29	43
Teaching experience	1yr	n/a

Since the "teachers' sense of efficacy scale" was adapted to the context of the arts within Queensland (Australia), reliability was tested. Alpha reliabilities in this study were 0.89 for the full scale. Reliabilities for the subscales for classroom management, instructional strategies and student engagement were 0.82, 0.86, and 0.80 respectively.

Means and standard deviations for the full scale and subscales are presented in Table 2. Pre-service teachers generally rated their overall teacher self-efficacy as 6.31 out of a 9 point scale, with a standard deviation of 1.36 when they commenced the start of their teacher education.

Table 2   Means and standard deviations of efficacy and support variables for pre-service teachers

Variables	Mean at beginning of teacher education	SD
Teacher sense of efficacy for arts education	6.31	1.36
Instructional strategies	6.56	1.45
Classroom management	6.49	1.61
Student engagement	6.42	1.55

Note: Scores range from 1 to 9, the higher the score, the greater sense of efficacy or perceived support.

Pre-service teachers concluded:

> I feel confident to teach any subject area, given the opportunity to research the content of the field and plan the lessons according to the curriculum. (Pre-service teacher 7)
> If I put the effort into learning how to teach it, I will be able to gain the confidence for it. (Pre-service teacher 9)

This suggests that the pre-service teachers exhibited high self-efficacy during teacher education towards arts education. Results are discussed below.

7. Discussion

In examining the self-efficacy beliefs for arts education of pre-service teachers, a somewhat high mean for overall self-efficacy beliefs was found. This higher assessment is quite surprising, considering all of the pre-service teachers were not trained in arts education during their teacher training. These pre-service teachers

realize however that they are expected to engage in arts education (as a key learning area) in their classrooms.

It is possible that these pre-service teachers may have overstated their teacher self-efficacy for arts education as they were yet to begin teaching within the schooling context. This may impact on cognitive processing of teacher self-efficacy beliefs for the arts. This is consistent with the model of teacher self-efficacy proposed by Tschannen-Moran, Woolfolk Hoy and Hoy (1998), where cognitive processing determines how the sources of information will be weighed and how they will influence the analysis of the teaching task and the assessment of personal teaching competence.

It is interesting to note that in numerous inquiries into arts education in Australia (National Senate Inquiry in Arts Education, 1995; National Review of Music Education in Australia, 2005), generalist teacher confidence for teaching arts education is low, with teachers often marginalizing the arts in their teaching. If this is true and future research confirms that pre-service teacher self-efficacy for arts education is high, it may suggest that teacher self-efficacy for the arts starts high, but decreases as teachers begin teaching and continue teaching. Similar findings in the United States of teacher self-efficacy suggest personal teaching efficacy tends to increase during teacher education and student training (Hoy & Woolfolk, 1990; Wenner, 2001), but decrease during the end of teacher training to the end of the first year of teaching (Woolfolk Hoy, 2000). It is suggested that this may be caused by the removal of support given to teachers to develop efficacy during the beginning phase of teaching (Tschannen-Moran & Woolfolk Hoy, 2007). While beginning teachers may enter the profession with high hopes about the kind of teacher they would like to be for students, a "reality shock" sets in when they realise their hopes may be harder to achieve then anticipated (Weinstein, 1988). Beginning teachers may simply "recalibrate" the meaning of quality teaching, lowering their standards in an attempt to avoid self-assessment of failure (Tschannen-Moran & Woolfolk Hoy, 2007). Previous research has further suggested that teachers who leave the profession have significantly lower self-efficacy beliefs than teachers who remain in teaching (Glickman & Tamashiro, 1982).

Of interest was the closeness of results in the individual sub-scales for "instructional strategies, classroom management and student engagement". All areas were self-reported as high for perceived capabilities surrounding the teaching of the arts. No sub-scale appeared more important than the other in regard to perceived teaching capabilities. Common wisdom would suggest that instructional strategies may have appeared low given the pre-service teachers had not been taught arts education strategies in their teacher training. This was not the case. Again, this may be reflected by the fact that the pre-service teachers had not undergone practical experience in the classroom where current teacher self-efficacy beliefs for the arts may be reassessed. It could also be suggested that pre-service teachers may be drawing on teacher self-efficacy from similar subject domains with similar sub-skills. The findings from this study begin to lend some evidence to the predictions that teacher self-efficacy for arts education is initially high during teacher training. The question remains however, if teacher self-efficacy for the arts does decline after this time period, greater support structures are necessary to sustain teacher self-efficacy.

8. Conclusion

The results in this small study invite further exploration into the antecedents of confirmatory and disconfirming beliefs of teachers' self-efficacy. More research into pre-service teacher self-efficacy in different contexts and subject domains would be of great value as we learn how to better train and facilitate teachers for their complex teaching tasks. For example, improving the effectiveness of generalist teachers with arts education. This study provides some insights into filling the void.

Greater longitudinal designs are necessary that allow researchers to observe periods of stability and flux of pre-service and beginning teachers' self-efficacy beliefs during teacher training and the beginning phase of teaching. Some of these studies are starting to appear (Woolfolk Hoy & Burke-Spero, 2005; Tschannen-Moran & Woolfolk Hoy, 2007), but from a more generalised perspective of the teaching context. Greater research is also needed into self-efficacy beliefs at different career stages (including mid and experienced stages within teaching). Through such research, it is hoped the quality of arts teaching can improve.

Reference:

Andrews, B. W. (2004). Curriculum renewel through policy development in arts education. *Research Studies in Music Education, 23,* 76-93.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: W.H. Freeman.

Bandura, A. (2006a). Adolescent development from an agentic perspective. In: F. Pajares & T. Urdan. (Eds.). *Self-efficacy beliefs of adolescents.* Connecticut: Information Age Publishing, 1-44.

Hennessy, S., Rolfe, L. & Chedzoy, S. (2001). The factors which influence student teachers' confidence to teach the arts in the primary classroom. *Research in Dance Education, 2*(1), 53-71.

Hoy, W. K. & Woolfolk, A. E. (1990). Socialization of student teachers. *American Educational Research Journal, 93,* 279-300.

MCEETYA. (1988). *Hobart declaration on schooling.* Retrieved October 3, 2007, from http://www.mceetya.edu.au/hobdec.htm.

MCEETYA. (2005). *National education and the arts statement.* Retrieved January 27, 2007, from http://www.curriculum.edu.au/ mceetya/national_education_and_the_arts_statement,20981.html.

Oreck, B. (2001). *The arts in teaching: An investigation of factors influencing teachers' use of the arts in the classroom.* (Doctoral dissertation, University of Connecticut)

Oreck, B. (2004). The artistic and professional development of teachers: A study of teachers' attitudes toward and use of the arts in teaching. *Journal of Teacher Education, 55*(1), 55-69.

Plourde, L. A. (2002). The influence of student teaching on preservice elementary teachers' science self-efficacy and outcome expectancy beliefs. *Journal of Instructional Psychology, 29,* 245-253.

Rice, D. C. & Roychoudhury, A. (2003). Preparing more confident preservice elementary science teachers: One elementary science methods teacher's self-study. *Journal of Science Teacher Education, 14*(2), 97-126.

Riggs, I. & Enochs, L. (1990). Toward the development of an elementary teacher's science teaching efficacy belief instrument. *Science Education, 74,* 625-638.

Russell-Bowie, D. (1993). *Policy and practice in music education in NSW State primary schools.* (Unpublished Doctoral dissertation, University of Wollongong)

Russell-Bowie, D. (2004). Arts education: Are the problems the same across five countries? Paper presented at *the Australian Association for Research in Education,* Melbourne.

Smithrim, K. & Upitis, R. (2001). Strong poets: Teacher education and the arts. *Journal of Professional Studies, 9*(1), 19-29.

Tosun, T. (2000). The beliefs of pre-service elementary teachers toward science and science teaching. *School Science and Mathematics, 100,* 374-379.

Tschannen-Moran, M. & Woolfolk Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783-805.

Tschannen-Moran, M. & Woolfolk Hoy, A. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education, 23,* 944-956.

UNESCO. (2006, March 6-9). *Road map for arts education world conference on arts education: Building creative capacities for the 21st century.* Lisbon, Portugal. Retrieved November 2, 2007, from http://portal.unesco.org/culture/es/ev.php-URL_ID=30335 _DO-DO_TOPIC&URL_SECTION=2a.html.

Upitis, R., Smithrim, K. & Soren, B. (1999). When teachers become musicians and artists: Teacher transformation and professional development. *Music Education Research, 1*(1), 23-25.

Weinstein, C. S. (1988). Preservice teachers' expectations about the first year of teaching. *Teaching and Teacher Education, 18,* 5-22.

Wenner, G. (2001). Science and mathematics efficacy beliefs held by practicing and prospective teachers: A five-year perspective. *Journal of Science Education and Technology, 10,* 181-187.

Wheatley, K. F. (2002). The potential benefits of teacher efficacy doubts for educational reform. *Teaching and Teacher Education, 18,* 5-22.

Woolfolk Hoy, A. E. & Davis, H. A. (2006). Teacher self-efficacy and its influence on the achievement of adolescents. In: F. Pajares & T. Urdan. (Eds.). *Self-efficacy beliefs of adolescents.* Connecticut: Information Age Publishing, 117-138.

Woolfolk Hoy, A. E., Hoy, W. K. & Kurz, N. M. (2008). Teacher's academic optimism: The development and test of a new construct. *Teaching and Teacher Education, 24*(4), 821-835.

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