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THE IMPORTANCE OF POSITIVE ARTS EXPERIENCES AND SELF-EFFICACY IN PRE-SERVICE PRIMARY TEACHER EDUCATION

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Abstract

With the impending introduction of the Australian Curriculum in the arts, there is cause to reflect on primary pre-service teacher education courses, and how effectively they prepare graduates to facilitate the curriculum. Reflecting on pre-service teachers' experiences in the arts, at both entry and graduation of their degree, may afford insight into improving arts instruction in Bachelor of Education. A two-year mixed methods study (2013-2014) was conducted with first and fourth-year Bachelor of Education primary students at a Western Australian university, to determine baseline data on students' arts experiences and their self-efficacy to teach the arts at graduation. This paper reports specifically on the first-year data collected, and suggests that pre-service teachers have limited experiences in the arts prior to completing the core units in their degree. Data were analysed using descriptive statistics, and some interview observations are presented to contextualise these findings. The research emphasised the role of self-efficacy in sustaining students' personal and professional engagement with the arts.

Introduction

The arts develop strong sensory, perceptual and cognitive processes, accommodating the transmission of cultural understandings (Arnheim, 1969; Efland, 2002, 2004; Eisner, 2002; Gardner, 1999; Habermas, 1999) vital to the Australian Curriculum (ACARA, 2014). The Australian Curriculum is a catalyst to reflect on the state of pre-service teacher education in the arts. In Western Australia (WA), a group of tertiary arts educators teaching in the Bachelor of Education (B.Ed) primary course formed an Arts teaching research group (ATRG) to investigate pre-service teachers' experience and self-efficacy in the arts. Investigating pre-service primary teachers afforded the opportunity to gauge the experiences of teachers entering and leaving the B.Ed primary course, to determine baseline data that will influence how tertiary arts education can best meet the needs of future primary teachers.

The investigation has been ongoing for two years (2013 and 2014) and has explored pre-service teachers' personal and professional interactions within the five arts subjects: dance, drama, media arts, music and visual arts (ACARA, 2014). The research findings link to self-efficacy and motivation theories (Bandura, 2012; Bandura & Locke, 2003; Ryan & Deci, 2000), suggesting pre-service teachers require positive experiences, and mastery of arts skills and knowledge, in order to build self-efficacy and provide meaningful arts experiences for primary children.

Background

Declining arts instruction time within the B.Ed primary course at the university motivated the ARTG investigation, with arts instruction being minimised over the past 30 years, from two core arts units (four hours per week) to five-week on campus rotations for the arts subjects (Lummis, Morris, & Paolino, 2014). The decline of the arts in the B.Ed primary course mirrored Commonwealth tertiary educational reforms that impacted on teacher education courses.

The Dawkins Report (1988) introduced fees for Australian higher education and lowered government funding; reflecting the competitiveness of tertiary education due to globalisation (Bessant, 2002; Marginson, 2004; Pick, 2006). With students' ability to move overseas for higher education, universities had to ensure they had a competitive edge to gain (and keep) students, in addition to

preparing them for success in a global market (Marginson, 2004; Pick, 2006). The issues outlined in the Dawkins Report were also reflected in the Nelson Report (2003), which emphasised the privatisation of universities in providing market-driven education (Pick, 2006), and more recently (May 2014), the Abbott Government's intention to deregulate the sector (Australian Government, 2014; Marginson, 2014).

The aforementioned reforms had an impact on teacher education courses, which have been supported by changes in the curriculum. In WA, the Curriculum Framework (Curriculum Council, 1998) implementation shifted arts instruction from the specialist to the generalist teacher (Dinham, 2007). In addition to the loss of many primary specialist arts teachers, the Curriculum Framework divided the arts into five subject areas (mirroring the Australian Curriculum) and required generalist teachers to accommodate the different arts subjects into instruction time (Dinham, 2007). During the Rudd/Gillard Labor Governments, this pressure was compounded by a numeracy and literacy focus, as reflected by national and international standardised testing (Berlach & McNaught, 2007; Dawkins, 2008; Down, 2006). The 1998 Curriculum Framework is still currently taught in WA, prior to the commencement of the Australian Curriculum. However, while generalists with limited arts training are expected to accommodate the five arts subjects, they often enter and leave university with minimalist arts experiences (Alter, Hayes, & O'Hara, 2009a, 2009b; Dinham, 2007). Furthermore, the pressures of standardised testing in primary schools, and market-driven education across all sectors, provides teacher education courses little incentive to increase arts instruction (Garvis, 2008). If pre-service teacher education courses do not adequately support generalist teachers in developing their arts experiences, the primary arts may be further marginalised (Dinham, 2007; Lemon & Garvis, 2013; Lummis et al., 2014).

The ATRG's investigation began in 2013 as a mixed-methods study of pre-service teachers' arts experiences as they enter (first-year) and graduate (fourth-year) their primary teacher education course. The first and fourth-year students were invited to participate in a questionnaire, and could volunteer for a follow-up interview. The success of the 2013 study led to a 2014 follow-up investigation, which was expanded to include feedback from the third-year students who are currently completing the arts core units for the B.Ed primary course. In addition, the 2014 instruments were modified based on the 2013 data; for example, the inclusion of qualitative short written responses in the questionnaire to complement the interview responses. This change was driven by limited interview volunteers in the 2013 fourth-year sample, which is likely due to the proximity of graduation and perceived independence from the university.

Significant Literature

Learning through the arts

The arts assist students' cognitive and social development, exploring creativity in addition to transmitting deeply held cultural values and traditions (Arnheim, 1969; Efland, 2002, 2004; Eisner, 2002; Gardner, 1999; Habermas, 1999). Participation in the arts is linked to brain novelty, as neural pathways are expanded based on interaction with unfamiliar or evolving arts experiences (Seeley, 2006; Slotnick, Thompson, & Kosslyn, 2012; Willis, 2008). Actively reflecting on arts experiences encourages assimilation of new and existing knowledge, ensuring the brain strengthens connections between assimilated knowledge (neural plasticity) (Piaget, 1950; Seeley, 2006; Slotnick et al., 2012; Willis, 2008). As arts experiences include both making and responding to the arts, students learn to resolve concepts in visual/musical/kinaesthetic forms additionally to linguistic methods, which enhances their communication skills through process driven learning (Gardner, 1999, 2006; Webster & Wolfe, 2013). Subsequently, students learn to create and be proactive agents in society, with the ability to manipulate and negotiate the world around them (Bandura, 2001).

In addition to the cognitive benefits of arts learning, students develop socially through the arts. Participation in the arts can be linked to subjective responses within an individual's life-world (Habermas, 1999), and in this way, can be seen as an expression of self, place and community

(Anderson, 2003). Through making and responding to the arts students develop intrapersonal and interpersonal intelligences, as they create art from self-reflection, and respond through collaboration and shared understandings with others (Deasy, Catterall, Hetland, & Winner, 2002; Gardner, 1999, 2006). In collaborative work, students link sensory perception to collective social understandings about culture and place (Arnheim, 1969; Eisner, 2002; Seeley, 2006; Slotnick, 2012); for example, developing understandings of power, representation, ideology and intertextuality (Duncum, 2010). Cultural understandings are important because of increased access to art through multimodal media (Duncum, 2010; Fadel, 2008; Virilio, 2010). These benefits of learning through the arts can be applied to both pre-service teachers entering the B.Ed primary course, and by extension, any future primary school children they will teach after graduation.

Self-efficacy and motivation theories

An individual's motivation to partake in an arts activity is linked to their previous life-world experiences; if individuals have positive experiences they are likely to be motivated to engage in arts activities, similarly negative experiences may have consequences for future arts participation (Bandura & Locke, 2003; Ryan & Deci, 2000). Pre-service teachers' self-efficacy is key to their engagement of the arts, and their ability to motivate primary-aged children is linked to the positive arts experiences they create (Garvis & Pendergast, 2010; Oreck, 2004). Motivation can be intrinsic or extrinsic; however, if individuals are to engage in long-term arts practice they require intrinsic motivation as opposed to external reward (Ryan & Deci, 2000). To build intrinsic motivation individuals require high self-efficacy, or a belief they are good at arts, to sustain interest in the arts even when tasks are challenging (Bandura & Locke, 2003).

Building arts self-efficacy is a cyclical process that requires the study of skills and knowledge, as these concepts link to arts mastery. The mastery a person feels in completing arts activities increases their self-efficacy, and subsequently builds their intrinsic motivation to encourage future engagement in arts experiences (Bandura, 2001; Bandura & Locke, 2003; Ryan & Deci, 2000). As the process is cyclical, negative experiences in which individuals do not feel mastery can be detrimental to self-efficacy and motivation, while positive feedback linked to novel engagement can enhance self-efficacy. Therefore, past experiences are important in gauging the causes for an individual's current level of self-efficacy in the arts. It is important to ensure individuals feel success, safety and mastery, as this will increase their likelihood of seeking out new arts experiences. Additionally, as self-efficacy is dynamic, positive experiences can reverse low self-efficacy caused by earlier negative experiences (Bandura, 2001; Bandura & Locke, 2003; Ryan & Deci, 2000).

Self-efficacy links to teachers' arts engagement

The links between mastery, motivation and self-efficacy are significant because research has shown that teachers who have low self-efficacy in their arts skills and knowledge limit arts instruction in their classrooms (Garvis, 2008; Garvis & Pendergast, 2010; McKean, 2001). Furthermore, pre-service teachers seem to have limited arts experiences beyond tertiary study; which compounds lowered self-efficacy and intrinsic motivation (Lemon & Garvis, 2013; Lummis et al., 2014). Universities can begin to build self-efficacy by providing opportunities for pre-service teachers to safely to engage mastery in the arts. Mastery is achieved by providing basic subject content, and pedagogical knowledge required to participate and teach the arts to primary children (Dinham, 2007; Garvis, 2008; Oreck, 2004). It is essential for universities to change the cycle so that the next generation of pre-service teachers have positive arts experiences and build self-efficacy from a young age, otherwise limited arts experiences will perpetually lower mastery and self-efficacy among young Australians, due to a lack of access to the arts, as well as less than optimum arts instruction (Dinham, 2007).

Method

The ATRG used a constructivist theoretical framework, through which the researchers constructed knowledge of students' arts experiences and self-efficacy based dynamic social interactions using

mixed methodologies (Cohen, Manion & Morrison, 2011; Creswell & Plano Clark, 2011; Guba & Lincoln, 2000; Punch, 2009; Sandelowski, Voils, Leeman & Crandell, 2012). The researchers posed two main questions for investigation to gather baseline data on students entering and graduating from the B.Ed primary course:

1. What arts experiences have first and fourth-year B.Ed primary students participated in, within the following contexts:
 - a. Childhood home,
 - b. Compulsory education (primary and secondary),
 - c. Post-compulsory education (tertiary), and
 - d. Current personal recreation.
2. How prepared are fourth-year B.Ed primary students to teach the arts as a result of their teacher education course?

In both 2013 and 2014, the ATRG administered an online questionnaire (Qualtrics) to the first and fourth-year B.Ed primary students. The questionnaire was administered after ethics approval had been obtained from the University's Human Ethics Research Committee, and the pilot test returned a Cronbach's Alpha Coefficient of 0.80 for all sections, indicating the internal reliability of the instrument (Cohen, Manion, & Morrison, 2011). The questionnaire comprised five sections, one for each arts subject (dance, drama, media arts, music and visual arts). The questions in each section related to the contexts specified in the first research question, as these contexts are linked to environmental factors impacting self-efficacy development (Bandura, 2012). At the conclusion of the questionnaire students were invited to volunteer for a follow-up interview. The semi-structured interviews were conducted face-to-face at the university and included students' describing their personal experiences in the arts and their preferences for learning within the arts. The process was repeated over two years so that the ATRG could begin to gather longitudinal baseline data from the students.

Feedback from the 2013 interviews and questionnaire findings allowed the researchers to improve the 2014 instrument; for example, the instrument offered more short answer questions for the description of arts experiences. The new short answer text box commentary option in the questionnaire provided a more accurate qualitative insight into student experiences prior to their B.Ed primary course engagement. Additionally, the instrument provided greater clarity associated with definitions; for example, the definition of media arts was much more distinctive based on the description of media arts in the Australian Curriculum.

This paper specifically focuses on the first-year students' responses to the first research question, relating to experiences in the arts prior to commencing the B.Ed primary course. In both 2013 and 2014, data were collected from the first-year students in Semester One, prior to the students completing any arts education units for their B.Ed primary course. In 2013, a total of 108 first-year students (18%) completed the questionnaire, and seven students participated in the interview (five females and two males). In 2014, 107 first-year students (19%) completed the questionnaire, with the interviews currently being conducted at time of writing.

Demographics were recorded from the questionnaire in both 2013 and 2014. In the 2013 first-year sample: 93% were female; 72% were between 17 and 25 years of age; and 2% were of Aboriginal or Torres Strait Islander descent. Furthermore, 65% of the 2013 sample attended government primary schools; 51% attended government secondary schools; and 74% of respondents had not completed any tertiary education prior to commencing the B.Ed primary course.

In the 2014 sample, 89% of students were female; 80% were between 17-25 years of age; and 3% identified as Aboriginal or Torres Strait Islander. Similar to the previous sample, 67% of the 2014 students attended government primary schools; 46% attended government secondary schools (with Catholic and Independent schools each attended by approximately 20% of students); and 52% of respondents did not complete tertiary education prior to commencing their education degree.

This paper reports on the baseline findings for the first-year students from both 2013 and 2014. Both data sets, as non-parametric data, cannot draw causality between items (Cohen, Manion & Morrison, 2011; Creswell & Plano Clark, 2011). However, significant correlation between items was found, which gives some insight into the importance of positive arts experiences on longitudinal engagement of the arts, in addition to the risks of negative experiences (Bandura, 2003; Dinham, 2007).

Findings

The findings from the first-year 2013 and 2014 data are presented for the first research question, *“What arts experiences have first and fourth-year B.Ed primary students participated in?”* The findings are discussed according to the contexts defined in the original research question, with the exception of *post-compulsory education (tertiary)* as only two students completed any post-compulsory education in arts related fields.

Childhood home

The childhood home was the first context investigated, as it is the likely source of students' first interactions with the arts. The following vignettes underscore an insight that emphasised lessons outside of school or media experiences that were integrated across the arts; for example, one student reflecting upon her dance experiences said: *“I grew up in the country where most children participated in dance classes on a Friday night with a performance at the end of the year. Not too many boys participated other than acrobatics”*. Another student described integration with media technology noting: *“My family would always film me as a child growing up, like they were documenting me. Same for my dancing, they will film it”*.

Table 1 shows the first-year students in both 2013 and 2014 had limited engagement with the arts within the home, with the exception of music. Compared to 2013, childhood engagement with drama, media arts and music had decreased (according to mean values). Dance and visual arts had slightly increased. The difference of scores in media arts is particularly interesting, as both samples were predominantly 17-25 years of age, and as such, had grown up within a digital technological society.

Table 1

Mean Response To: When I Was A Child I Had Lots Of Arts Experiences At Home

	2013	2014
Dance	2.74 (Disagree)	2.76 (Disagree)
Drama	2.75 (Disagree)	2.68 (Disagree)
Media Arts	2.80 (Disagree)	2.44 (Disagree)
Music	3.26 (Agree)	3.04 (Agree)
Visual Arts	2.73 (Disagree)	2.76 (Disagree)

In addition to being asked about their childhood arts experiences, students were asked to rate the influence of these experiences on their value of the arts. These ratings were used to find the correlation between the quantities of arts experiences in the childhood home, and the value of the arts based on these experiences. Across both 2013 and 2014, the correlations were statistically significant, as determined by a Spearman's rank correlation coefficient. The results of these correlations are found in Table 2.

Table 2

Spearman's Rho Values For Correlation Between Quantity Of Childhood Arts Experiences At Home And Value Of Arts Disciplines

	2013		2014	
	Correlation (<i>r</i>)	Significance (<i>p</i>)	Correlation (<i>r</i>)	Significance (<i>p</i>)
Dance	0.84	0.00	0.77	0.00
Drama	0.70	0.00	0.75	0.00
Media Arts	0.60	0.00	0.63	0.00
Music	0.67	0.00	0.77	0.00
Visual Arts	0.68	0.00	0.59	0.00

Table 2 shows that dance had the strongest correlation between quantity of experiences and students' value of dance, evidenced by a correlation coefficient much higher than 0.66 (Creswell, 2005). In fact, only two arts disciplines, media arts and visual arts, had correlation coefficients weaker than 0.66. This suggests that the quantity of childhood arts experiences in these disciplines had only a moderate relationship with students' value of each discipline. For the other arts subjects of dance, drama and music, high quantities of experiences appears to support high value for these disciplines, just as limited experiences would support lower valuations; however, other external factors (beyond family) may also be significant in determining the cause of students' arts values.

Interviewed students also discussed the relationship between exposure to the arts and personal value of the arts; one student noted: *"Dad was musical. [My] dance background gave me confidence to express myself ... acting, role-play and I did play the piano ... [I] can still read music"*. Another student explained his home arts influences:

Music was very important in our family. My sister played piano and ... sang ... Her children play instruments. My grandmother was a church organist and pianist. My grandfather was where I got the cornet ... a bit of a legacy there ... [I am] probably more ... the music side. My wife is also an artist.

Compulsory education (primary and secondary)

Compulsory education was investigated because positive experiences across 12 years of schooling would have long-term impacts on students' self-efficacy and arts engagement (Bandura & Locke, 2003); for example, one student explained how primary school drama experiences were framed: *"We did plays - but we never got to choose the play, the teacher did, and she always made us repeat it over and over again"*. Another student reflected upon her secondary school drama classes saying: *"I enjoyed drama so much. It was my best class - because it was different to my other classes, like maths and science."*

Table 3 shows the mean responses to students' enjoyment of the arts subjects in primary school. Due to the high percentage of 17-25 year old students, the samples would likely have been educated under the current WA Curriculum Framework (1998). In 2014, students reported a higher enjoyment of dance compared to the 2013 sample. The other subject areas experienced a decline in enjoyment, with media arts and music experiencing the greatest drop since 2013. Visual arts decreased by 0.13 by 2014; however, it was still the most enjoyed subject across the arts.

Table 3

Mean Responses To The Statement: I Always Enjoyed Arts Disciplines In Primary School

	2013	2014
Dance	2.80 (Disagree)	2.88 (Disagree)
Drama	2.80 (Disagree)	2.74 (Disagree)
Media Arts	2.83 (Disagree)	2.54 (Disagree)
Music	3.26 (Agree)	2.96 (Disagree-Agree)
Visual Arts	3.16 (Agree)	3.03 (Agree)

As positive self-efficacy leads to sustained engagement (Bandura, 2001; Bandura & Locke, 2003; Ryan & Deci, 2000), positive primary school experiences were likely to motivate students to participate in secondary school arts subjects. Similar to the 2014 decline in primary school arts enjoyment (with the exception of dance), the level of achievement in secondary school arts also significantly decreased. Table 4 shows the highest year level achieved across the 2013 and 2014 samples. In 2013, first-year students were generally participating in the arts until at least year 10. However, in 2014, the subjects fell to participation in year 8 only; with the exception of visual arts, which was completed in year 9 by 23% of the first-year students.

Table 4

Mode Values Of Highest Year Level Achieved In Secondary School Arts Disciplines

	2013	2014
Dance	Year 12 (10%)	Year 8 (24%)
Drama	Year 10 (18%)	Year 8 (27%)
Media Arts	Year 10 (23%)	Year 8 (26%)
Music	Year 10 (14%)	Year 8 (34%)
Visual Arts	Year 10 (28%)	Year 9 (23%)

In the 2014 sample, the decline in primary school enjoyment of the arts mirrored the decline in secondary arts participation. These results had declined from the 2013 sample, where despite (generally) lower enjoyment in primary school, students had participated in the arts until their senior schooling (years 11 and 12). Again, causality could not be determined between primary and secondary school arts based on these samples. However, primary school arts enjoyment did appear to be correlated to students' intention to choose arts electives during their B.Ed primary (Table 5).

Table 5

Spearman's Rho Values For Correlation Between Primary School Arts Enjoyment And Intention To Study An Arts Elective In The B.Ed Primary Course

	2013		2014	
	Correlation (<i>r</i>)	Significance (<i>p</i>)	Correlation (<i>r</i>)	Significance (<i>p</i>)
Dance	0.67	0.00	0.41	0.00
Drama	0.56	0.00	0.51	0.00
Media Arts	0.22	0.35	0.14	0.24
Music	0.63	0.00	0.51	0.00
Visual Arts	0.36	0.00	0.54	0.00

For all arts disciplines, except media arts, there was a significant relationship between primary school experiences and B.Ed primary arts elective selection. It is possible that the minimal media arts experiences of these samples affected the correlation. The remaining disciplines showed moderate to strong correlations (Creswell, 2005) between primary school and the intent to study arts electives, although these relationships require further investigation. These correlations appear to indicate that positive primary arts experiences may influence the choice to study arts electives in pre-service teacher education.

Current personal recreation

Based on first-year students' prior experiences of the arts and their relationship to B.Ed primary study, the researchers were interested students' current arts participation beyond the university context. Current recreational experiences could indicate students' willingness to engage the arts professionally; for example, one student reflected on her life-world where she would, "*play music with friends, teach my son some basics as he is learning and playing the drums and has formed a primary school band*". Another student reported: "*listening to [her] radio ...*". With respect to the visual arts a student explained: "*[I've done] a wide range of art. I have done photography, and drawing things on the computer, which I hated, but have done it ... I have a range [diversity of skills] – doing everything gives me the most knowledge*".

Table 6 shows the percentage of first-year students who participate in the arts. Media arts and visual arts were the only two subject areas to experience an increase in engagement. Visual arts had ranked higher across the childhood home and compulsory school contexts, and therefore, an increase in current participation was anticipated. However, media arts results had generally declined, and an increase in students' participation with media arts was unexpected. The current percentage of students participating in dance significantly decreased between 2013 and 2014 (by approximately 50%), despite past experiences.

Table 6

Percentage Of Students Who Currently Participate In Recreational Arts Experiences

	2013	2014
Dance	32.40	16.30
Drama	24.10	22.20
Media Arts	61.10	84.30
Music	41.70	39.20
Visual Arts	27.80	34.20

The students who indicated their current participation in arts activities were additionally asked to rank the amount of time (per week) they spend using the arts. In 2013, the amount of time was not specified; however in 2014, the rank was described as: *low (less than 1 hour)*, *moderate (more than 1 hour)*, *high (more than 3 hours)* or *very high (5 or more hours)*. Generally, the amount of time was similar across both years for dance, drama and visual arts. The time spent engaging media arts had significantly increased, while the time attributed to music had decreased. However, due to the increased specificity of time descriptions in the 2014 questionnaire, comparison of the 2013 and 2014 data are limited.

Table 7

Mean Quantity Of Current Recreational Arts Time

	2013	2014
Dance	2.67 (Moderate)	2.59 (Moderate)
Drama	1.69 (Low)	1.86 (Low)
Media Arts	2.42 (Moderate)	2.94 (Mod-High)
Music	2.96 (Mod-High)	2.44 (Moderate)
Visual Arts	2.00 (Moderate)	2.07 (Moderate)

Overall, the current engagement of the arts by first-year students is relatively low, and this may have implications for their professional engagement with the arts during their B.Ed primary course. Subsequently, a Spearman's rank correlation coefficient was conducted to determine if there was any relationship between the amount of time students spent engaging in the arts recreationally, and their intention to study arts electives in the B.Ed primary course. The analysis provided inconclusive

results, with dance showing some correlation ($r = 0.61$, $N = 16$, $p = 0.01$), although this was linked to a small number of students. Overall, the correlations were not statistically significant, and therefore, more research needs to be conducted to explore possible relationships between recreational and university-based arts experiences.

Discussion

The interview data showed some students' low self-efficacy influenced their lack of current arts participation. One student, reflecting upon her visual expression said: *"I'm not good at it, which means I just don't enjoy anything to do with it!"* Similarly, the questionnaire secured data that underscored, across both years (2013 and 2014), low arts engagement. If experiences are closely tied to self-efficacy, as suggested by the literature (Bandura, 2001, 2012; Bandura & Locke, 2003; Lemon & Garvis, 2013; Virilio, 2010), this disclosure has important implications for education students' self-efficacy across the five arts, both in the B.Ed primary course and future primary school contexts.

The data offered insights into trends across all arts subjects. Dance increased in the childhood home and slightly increased with primary school enjoyment; however, significantly decreased in secondary and current participation. In 2013, students who participated in dance had a high engagement across all contexts, and had long-term engagement from early childhood. These data support ongoing experience and mastery as supporting self-efficacy.

In 2014, drama decreased slightly in the home, although experiences' influence on the value of drama slightly increased. The enjoyment in primary school and participation in secondary school decreased, as did the current recreational commitment. Importantly, those B.Ed primary pre-service teachers who do currently participate in drama spent more recreational time in 2014 compared to 2013.

Media arts participation data indicated a drop for the 2014 sample in: childhood exposure, the enjoyment of media arts in primary school, and the completion of media studies in secondary school. In 2013, when asked which arts disciplines they preferred, students stated dance, drama, music and visual arts. Only one student considered media to be an arts discipline:

Media ... fairly interested in media in our family, particularly audio, but also the visual stuff ... my son's an audio tech and I was an audio tech ... fairly seriously involved in audio ... [and] film to some extent ... we like watching the movies and critiquing them.

In contrast to this trend, in 2014 the percentage of student using media in their recreational life-world increased significantly, as did the amount of time spent using media arts overall. A student discussing the role of media arts said: *"It's a good skill to have - our society is moving towards a more technological society"*.

Music participation and perceived value declined in the home, as did the enjoyment level in primary school context and secondary school achievement. The percentage of students who currently participate in music also decreased, and those students who did participate spent less time than the 2013 sample. The data underscored that multimodal digital technologies (often viewed as media) were becoming integrated across the students' life-world. Music as entertainment appeared more integrated; for example, iTunes, YouTube, GarageBand applications, as well as live multi-arts experiences with high visual content. One student explained the entertainment and social value: *"[I] play music with friends, teach my son some basics as he is learning and playing the drums and has formed a primary school band"*. Another student said that for her music was: *"listening to the radio and my iPhone and singing"*.

Visual arts participation in the 2014 sample showed a slight increase in both quantity and its influence on the perceived value of the visual arts at home. The enjoyment experienced at primary school decreased slightly, as did the secondary level of study. One student declared: *"I really don't like*

anything to do with art. I don't enjoy drawing or painting ...". The low enjoyment seemed to stem from a current lack of participation. The data indicated that the study of visual arts in secondary school did not experience as large a decrease as the other four arts areas. In addition, current participation increased moderately, whilst the amount of time relative to 2013 remained fairly consistent.

The longitudinal data showed insights into student expectations for their arts education in the B.Ed primary course; for example, "[I want to learn] how to teach art to primary students. Practical skills and activities." In addition, concerns about fear of performing in front of their peers surfaced: "[I expect drama] to be fun and not confrontational, and not expected to feel uncomfortable by having to perform in front of others". Students indicated desire for tertiary study to provide basic skills and knowledge linked to mastery. Additionally, the data confirmed students' low self-efficacy evidenced through disclosures of fear.

Conclusion

The research findings show students enter the B.Ed primary course with diverse arts experiences across the home, compulsory schooling and recreational contexts. These experiences also influence students' arts decision-making and requirements during their pre-service arts education units. The University often assumes that students come with extended experiences in both arts and digital preparation; however, the research findings to date question both the quality and distinctiveness of such assumptions. The findings suggest pre-service teachers need opportunities to develop skills and knowledge through the explicit teaching of arts content integrated with pedagogy. However, despite these initial findings, the variations between the two sample groups (2013 and 2014) emphasise the need for an ongoing longitudinal study to determine baseline data on pre-service teachers' arts experiences, which would illuminate the next phase of supporting pre-service teachers through arts-based interventions.

Another emerging realisation is that innovation in digital technologies is a major influence driving change across the arts. The ever-inclusion of digital technologies in daily life appears to be blurring the distinctiveness of once unique arts conventions; for example, tablet technologies can accommodate both music platforms and visual representations at a rate that once would not have been possible. Tablets also offer the video recording of dance and drama as part of an instant reflective process. Multimodality digital tools have an emphasised role in both representing and recreating an individual's life-world. As one student explained, the media arts should be fundamental to teaching in a digitally dependent global society, yet this subject does not have a module in the B.Ed primary course.

Importantly, the data suggested correlation between positive primary school arts experiences and the direction of arts elective choices made by B.Ed primary students, underscoring that they may engage in university arts from their memories of primary school arts enjoyment. Subsequently, the influence of early-middle childhood arts experiences on pre-service teacher education should be recognised and further investigated.

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