

EXPLORING FIRST-YEAR PRE-SERVICE TEACHERS' EXPERIENCES AND EXPECTATIONS OF MEDIA ARTS

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Abstract

Media arts develop students' digital literacies so they can critically engage in the media-rich Australian lifeworld. However, pre-service teacher education courses often marginalise The Arts subjects, including media arts. In 2014, a pilot study was undertaken to determine first-year Bachelor of Education (Primary) pre-service teachers' experiences with media arts at a Western Australian university. In addition, the pre-service teachers indicated the types of media art learning experiences they expected from their teacher education course, as they were yet to participate in any media arts learning at the university. The pilot data demonstrated that the first-year pre-service teachers were high consumers of media technologies; however, were limited producers of media texts. Furthermore, media arts were more often used for recreational purposes, with very low levels of media arts being used within educational institutions. This research emphasised the need for specific media arts content and pedagogy within teacher education courses, to ensure that future generations of primary school students receive the necessary instruction in media arts education to become critical and creative thinkers.

Introduction

The prevalence of media in contemporary Australian society has an effect on the way individuals conduct their professional and personal lives, and also influences education as students need the skills to understand information presented through a range of digital communications technologies (Hepp, Hjarvard, & Lundby, 2015; Kereluik, Mishra, Fahnoe, & Terry, 2013). ACARA (2014) defines media arts products as *media artworks*, through which students learn to negotiate the media rich lifeworld. As a result of media technologies students must learn critical digital literacy, defined by Pangrazio (2014) as both *critical analytic literacy*, skills to understand ideology and representation in digital media artworks; and *technical literacy*, skills to create and manipulate digital media. Without an understanding of both cultural ideologies and technical skills, individuals cannot meaningfully participate in making digital artworks (Bequette & Brennan, 2008; Pangrazio, 2014).

Making and responding, or critically analysing, media artworks is at the core of the *Australian Curriculum: Media Arts* (ACARA, 2014). Through making and responding, students interact with a number of communications technologies, including "television, film, video, newspapers, radio, video games, the internet and mobile media ... exploring concepts and viewpoints through creative use of materials" (ACARA, 2014, p. 64). It is important for primary teachers to have experience across this range of communications technologies and to have a capacity to critically engage with media artworks, in order to facilitate primary students' development of critical digital literacy (McArdle & Prowse, 2010).

This paper reports on research conducted with a cohort of Bachelor of Education Primary (B.Ed Primary) pre-service teachers' experiences with media arts in 2014. The pre-service teachers had not completed any learning in The Arts when the research was undertaken, and as such, the findings represent a baseline from which teacher education in media arts can be shaped. It is important to reflect on primary teacher education to ensure that graduate teachers have the self-efficacy and competency to successfully facilitate meaningful media arts learning experiences.

Critical digital literacy and the Australian Curriculum

Defining critical digital literacy, and media arts itself, is the subject of an ongoing debate in the literature. Pangrazio (2014) states that many definitions of digital literacy emphasise either the technical skills required or the analytical component of critical digital literacy, as opposed to integrating both aspects. The definition of media arts is also contentious, with some advocating media arts “not as content, but rather as a tool” (McGuire, 2012, p. 120), while others argue that media artworks are important in their own right as they “support students becoming critical and analytical media users and creative media producers” (Burton, 2014, p. 48).

The *Australian Curriculum: Media Arts* focuses on both the consumption and production of media artworks (ACARA, 2014). Deconstructing media artworks gives students the opportunity to reflect on cultural representations and the construction of social values in their lifeworld (Connell, 2009; Habermas, 1988). The lifeworld is an intersubjective place that is constructed from a range of social interactions that are experienced by each individual (Habermas, 1988). As such, the way in which media is presented to the public affects the lifeworld and the shared understandings of individuals within the lifeworld (Habermas, 1988). If students have an understanding of the technical skills used to produce media artworks and the semiotic knowledge to decode meaning from media artworks (Campbell & Parr, 2013; Dezuanni, 2015; Francini, 2010), they can become “critically aware of ways that the media are culturally used and negotiated” (ACARA, 2014, p. 64). Furthermore, interacting with media artworks unlocks new understandings of literacy, as students no longer operate with written text alone, but explore multimodal literacies in two, three and/or four dimensions (Carrington & Marsh, 2005; Walker, 2006).

Critical digital literacy gives students agency to operate in contemporary society, as they develop knowledge of society's systems and power, and also how to negotiate the complexity of these systems to best meet their needs (Foucault, 1982; Luke, 2000; Pangrazio, 2014). These systems immerse students into competing subjective narratives published by individuals across the globe (Connell, 2009). This kind of literacy elevates media consumption and production beyond that of personal use to an understanding of the individual as part of a broader society (Burton, 2014; Pangrazio, 2014). However, the second component of critical digital literacy, technical literacy, is crucial to developing

broader cultural understandings (ACARA, 2014; Freire & McCarthy, 2014). Just as visual artists explore the nature of materials when creating visual artworks, students can gain a deeper understanding of media artworks through exploring communications technologies on a technical level (Freire & McCarthy, 2014):

... it is important that when exploring digital or other new media tools, students understand that the tool they use only allow limited options for manipulation, and selective formats for presentation of the media. Even the most basic understanding of what underlies these tools – the code – can elucidate on the wider creative potential of digital media. (p. 30)

If students cannot develop the technical skills to produce media artworks, they may be disadvantaged in contemporary society where these skills are a key component of daily social interactions (Bawden, 2008; Dagiene, 2013; Dezuanni & Levido, 2011).

Media arts in teacher education courses

Media arts, as a subject in the Arts curriculum, has been integrated in Western Australian schools since 1998 (Curriculum Council, 1998). In most Australian States media activities and courses have been integrated for even longer (Dezuanni & Levido, 2011). With the release of the *Australian Curriculum: Media Arts*, many educators are publishing ideas to integrate communications technology into their teaching and learning (see Burton, 2014; Dezuanni & Levido, 2011; Freire & McCarthy, 2014; Johnston, Underwood, & Curtin, 2007; Levido, 2010; McArdle & Prowse, 2010). With the inclusion of media arts in the recent Australian Curriculum, it is important to reflect on media arts in primary teacher education courses.

There is a history of funding cuts and limited instruction time in general for The Arts subjects, including media arts (Barton, Baguley, & MacDonald, 2013; Ewing, 2010; Lummis, Morris, & Paolino, 2014). Teacher education often follows the priorities dictated by education reforms, such as an increase in accountability for numeracy and literacy from the introduction of the *National Assessment Program: Literacy and Numeracy* (NAPLAN) in schools (Barton et al., 2013). This trend was what motivated the Arts Teaching and Research Group at our university to explore the experiences of pre-service teachers in the B.Ed Primary in The Arts learning area. Our Teaching and Research Group was driven by diminishing arts instruction time within our B.Ed Primary course, and the expanding body of research on low teacher self-efficacy in the arts (Alter, Hayes, & O'Hara, 2009; Garvis, 2008; Lemon & Garvis, 2013; D. Russell-Bowie, 2012; D. E. Russell-Bowie, 2013). Within our University's B.Ed Primary course, media arts is currently taught alongside music in a *music media* five-week rotation, as part of a multi-arts unit (Edith Cowan University, 2013). The integration of media arts within The Arts B.Ed Primary core unit does not recognise media arts as an independent subject. This organisation of media arts may perpetuate the view of media arts as a tool, as opposed to a creative discipline in its own right; and as such, limit primary teachers' competence and willingness

to deliver media arts as a subject within The Arts curriculum.

Methods

The Arts Teaching and Research Group explored pre-service primary teachers' experiences in The Arts subjects across a range of contexts: family-based, compulsory school-based, and current recreational contexts. Two cohorts participated in the research, first-year pre-service teachers who were in their first semester of the B.Ed Primary course and fourth-year pre-service teachers who were about to graduate, having completed their final teaching practicum. This paper reports on the findings from the first-year respondents only, as these data could be used to explore the changes required for pre-service teacher education in media arts.

The research was conducted within a constructivist theoretical framework, which is premised on the collective construction of new knowledge based on cultural understandings and past experiences (Creswell, 2014; Schwandt, 2000). Within this framework, the Arts Teaching and Research Group sought to gain an understanding of pre-service primary teachers' lived experiences in the arts and construct knowledge from these findings that could then be used to enhance their media arts education at the University.

The research used a mixed methods approach, in which semi-structured interviews were conducted after an online questionnaire. Short text responses were also incorporated in the questionnaire to gain detailed descriptions of pre-service primary teachers' arts experiences. For the first-year cohort, the following research questions applied:

1. What prior educational and personal experiences do first-year B.Ed Primary pre-service teachers have when entering their course?
2. What skills do first-year B.Ed Primary pre-service teachers feel they need to develop during their course?
3. Will first-year B.Ed Primary pre-service teachers choose to study *The Arts in Education* electives, if given the choice, during their course?

The online questionnaire, administered via Qualtrics, was divided into five sections as per The Arts subjects in the Australian Curriculum: dance, drama, media arts, music and visual arts (ACARA, 2014). For each section, respondents were given a definition of The Arts subject from the curriculum; for example, media arts was defined as:

... creating representations of the world and telling stories through communications technologies such as television, film, video, newspapers, radio, video games, the internet and mobile media. Media Arts connects audiences, purposes and ideas exploring concepts and viewpoints. (ACARA, 2014, p. 64)

This definition was used as it positioned the pre-service primary teachers' reflections on their

experiences within the rationale for media arts in the Australian Curriculum, and subsequently would link to the curriculum expectations they will confront as graduate teachers.

The questions asked were similar across both the online questionnaire and semi-structured interviews. As the purpose of the research was to determine what experiences the pre-service primary teachers had prior to university, the questions centred on students' childhood experiences of media arts, primary and secondary school media arts, and their current personal recreational engagement in any media arts-based activities. Where they felt they had engaged with media arts, the pre-service primary teachers explained their experiences and the impact these experiences had on their ongoing practice or interest in media arts. A total of 25 questions related to media arts were asked in the online questionnaire, although some of these questions were only displayed depending the student's answers for previous questions. The media arts section of the questionnaire ended with three questions about the students' expectations for media arts units within their teacher education course:

1. During my university course I need to develop the following skills/knowledge related to media arts ... (this question offered a number of responses linked to the Australian Curriculum, and students were directed to select all that apply).
2. If given the opportunity I would like to select media arts electives at university.
 - a. Why would you choose *not* to select media arts electives?
 - b. Why would you like to do media arts elective units?
3. What would you expect from media arts units if they were offered in the B.Ed Primary course?

The semi-structured interviews were based on similar questions about childhood, school and current experiences of The Arts; however, only the questionnaire findings are reported within this paper.

Findings

The first-year pre-service primary teachers had not encountered any arts units within the B.Ed Primary course when they participated in the questionnaire. These findings show respondents' experiences prior to any university-level arts instruction, with only two respondents stating they had undertaken university studies before enrolling in the B.Ed Primary course. A total of 107 first-year pre-service teachers completed the questionnaire, representing 18.6% of the first-year B.Ed Primary cohort.

The sample was mostly female (88.8%) and between 17 and 25 years of age (79.4%). The majority of the respondents were Australian citizens (94.4%); only three participants identified as Aboriginal or Torres Strait Islander. A significant proportion of the sample attended government sector primary

schools (67.5%). They had varied secondary school contexts, with 47.0% attending government sector schools, 24.3% attending Catholic schools and an equal 24.3% attending independent sector schools. Five respondents (4.3%) attended other types of secondary schools, including Steiner and home schooling. The majority of pre-service primary teachers had co-educational experiences, with only 14.0% of the sample attending single gender secondary schools.

Throughout the findings, scores between one (1) and four (4) correspond to a four-point Likert type scale, in which 1 = strongly disagree or low, 2 = disagree or moderate, 3 = agree or high, and 4 = strongly agree or very high; dependent on the context of the question.

Media arts in the family context

Initially, pre-service primary teachers indicated which groups or people influenced their values and attitudes towards media. Of the first-year respondents, most felt that their personal preference influenced their value of media more than an external group ($M = 3.31$, $SD = 0.59$). Besides personal inclination, respondents felt influenced by the general media ($M = 2.88$, $SD = 0.71$) and friends ($M = 2.81$, $SD = 0.67$), and least influenced by their family ($M = 2.76$, $SD = 0.70$) and their teachers ($M = 2.71$, $SD = 0.70$).

Pre-service primary teachers subsequently responded to more specific questions about their family engagement of media arts. Firstly, they were asked whether they used a lot of media in their family home, which received a neutral response ($M = 2.44$, $SD = 0.78$), indicating the respondents had varied quantities of media experience in their childhood. They also responded that these family media experiences had a moderate impact on their value of media arts ($M = 2.01$, $SD = 0.89$). These findings were unanticipated, as the majority of the pre-service primary teachers were between the age of 17 and 25, and would have grown up during the emergence of the digital age and recent prevalence of mobile media. When asked to list the types of activities they did experience at home, most respondents stated watching television and movies for recreation. However, qualitative text responses from the sample included comments such as, “not a lot”, when asked to “describe your family experiences with media arts”. In limited cases, some pre-service teachers (aged between 17 and 35 years old) had virtually no access to media at home, “no technology [was] used in most environments I lived [in]. Media was forbidden” or “I didn’t own a computer until I was 18”.

In addition to their family exposure, pre-service primary teachers indicated they had little exposure to media arts lessons outside of school time (8.1%). Those who indicated that they had participated in lessons were also asked to write about what they had experienced. When analysing these data, the researchers found that the pre-service primary teachers’ definition of media arts lessons included craft lessons and other visual arts experiences. Subsequently, it is unknown how many respondents actually engaged with media communications technology in formal lessons outside of school.

Compulsory schooling and media arts use

The variance of media arts experiences was also evident in compulsory schooling. Pre-service primary teachers had polarised responses to the item: I always enjoyed using media arts throughout my primary school years. As shown in Figure 1 below, 47.0% of the sample responded in the negative to the item (combined strongly disagree and disagree categories) and 52.9% responded in the positive to the item (combined agree and strongly agree categories).

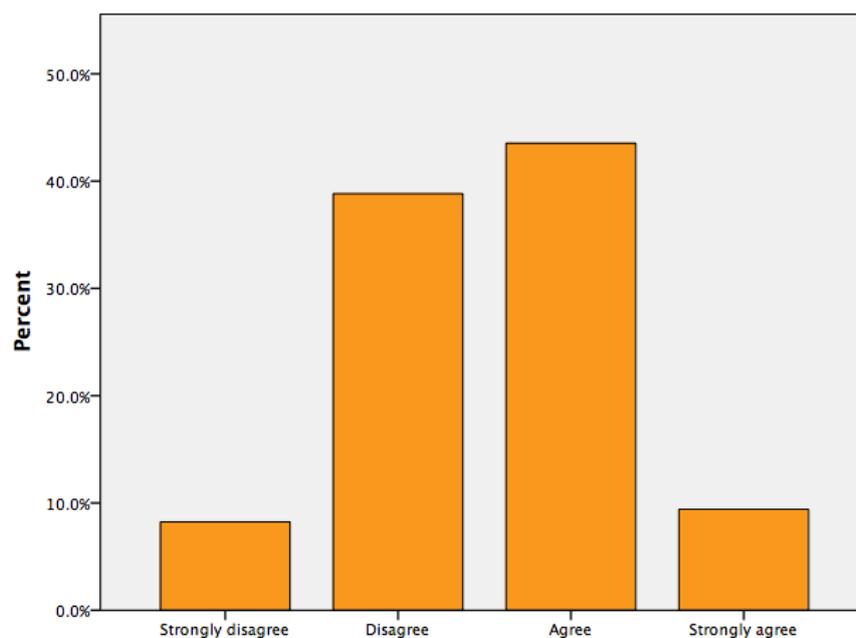


Figure 1. Frequency of first-year pre-service primary teachers' response to the item: I always enjoyed using media arts throughout my primary school years

The polarised response to primary school enjoyment of media arts could be linked to teachers' encouragement to use media arts. These findings indicate that only 36.5% of primary school teachers encouraged the use of media arts, while 63.5% of teachers did not. Due to the mean age of the first-year respondents (17-25 years), the researchers anticipate these findings may reflect teachers' personal beliefs and training regarding media arts technologies as opposed to their inability to access communications technologies in the classroom. One pre-service primary teacher reflected on her primary school media experience was "... limited. My primary school was more of a *sit, listen, read and then write* ... Not much time was spent on the computers or doing media arts".

Secondary school engagement of media arts was also explored. Pre-service primary teachers were asked to indicate the highest year level in which they studied media arts. While 30.5% did not study media arts at school, over half (55.4%) of the respondents started studying media arts in year eight.

While this percentage declined over the course of secondary schooling, 28.0% of the first-year respondents completed year 11 media arts, and 23.2% completed year 12 media arts courses. One pre-service primary teacher stated that she was “not introduced to media arts until high school”. For many of the respondents, different media-based subjects elicited different reactions: for example, responses to the question “please describe your high school media arts experiences” ranged from “We had a mandatory computer class in year eight. It was really boring and focused almost entirely on creating letterheads” compared to, “Photography was a fun subject. We got to manipulate photographs using [Adobe] Photoshop!”

Despite the high level of media arts study at secondary school, very few pre-service primary teachers completed post-compulsory education in media arts (3.5%). Those who did undertake further study had complete Certificate level qualifications in photography or filming and editing.

Pre-service primary teachers' current recreational engagement in media arts

The respondents' current engagement with media artworks was determined through their selection of media from a pre-determined list, including an ‘other’ option where they could write alternative communications technology that they engaged with. *Video-television/films/media installations* was the most selected category (94.0%), closely followed by *Images/photographs* (92.8%) and *Internet sources* (88.0%). Written media, *Text-papers/magazines/journals/books* was the next most frequently selected (78.3%), showing that the first-year pre-service primary teachers were engaging with visual-based media more than traditional print based media. Interestingly, audio-based media (radio/music) was less popular, with only 77.1% of responding that they used these types of media. *Video games/apps* were the least selected category (69.9%).

Pre-service primary teachers mostly used these media communications technology when at home (95.2%) or on mobile devices (91.6%). Engaging with media while at a learning institution (school, university, TAFE) was the least selected option (72.3%), which reinforces their low use of media arts as part of their education.

The specific recreational activities undertaken by first-year respondents were also identified (Figure 2, below). They more frequently consumed media as opposed to producing media artworks, with *watching television and films* being the most frequently selected option (88.9%), closely followed by *listening to music* (87.7%) and *using the Internet or mobile media* (84.0%). *Creating visual arts, films or music* was the least selected option (33.3%). These findings show that the first-year pre-service primary teachers are high consumers of media in their current recreational activities; however, do not frequently use media-based tools to produce media artworks.

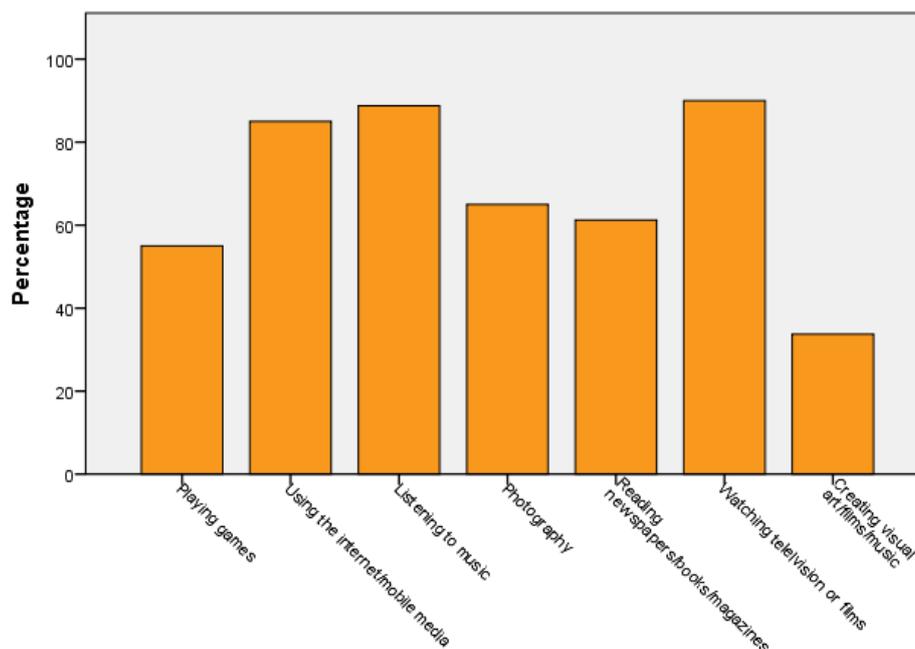


Figure 2. Percentage of first-year pre-service teachers' participating in recreational media arts-based activities

In addition to recreational activities, pre-service primary teachers were asked to rate the amount of time they spent (per week) using media arts. Of the 84.3% of first-year sample who stated they did use media arts during their recreation, 2.9% used media arts for less than one hour per week, 30.9% used media arts for more than one hour per week, 35.3% used media arts for more than three hours per week, and 30.9% of first-year respondents used media arts for five or more hours per week.

Pre-service primary teachers' beliefs about arts within the B.Ed Primary course

As the respondents completed the questionnaire prior to participating in any B.Ed Primary Arts education, they were asked about their expectations of media arts' inclusion within the course. Taken from the Australian Curriculum's rationale for media arts (ACARA, 2014), the first-year respondents indicated which skills they felt they needed to develop during the B.Ed Primary course (Figure 3, below).

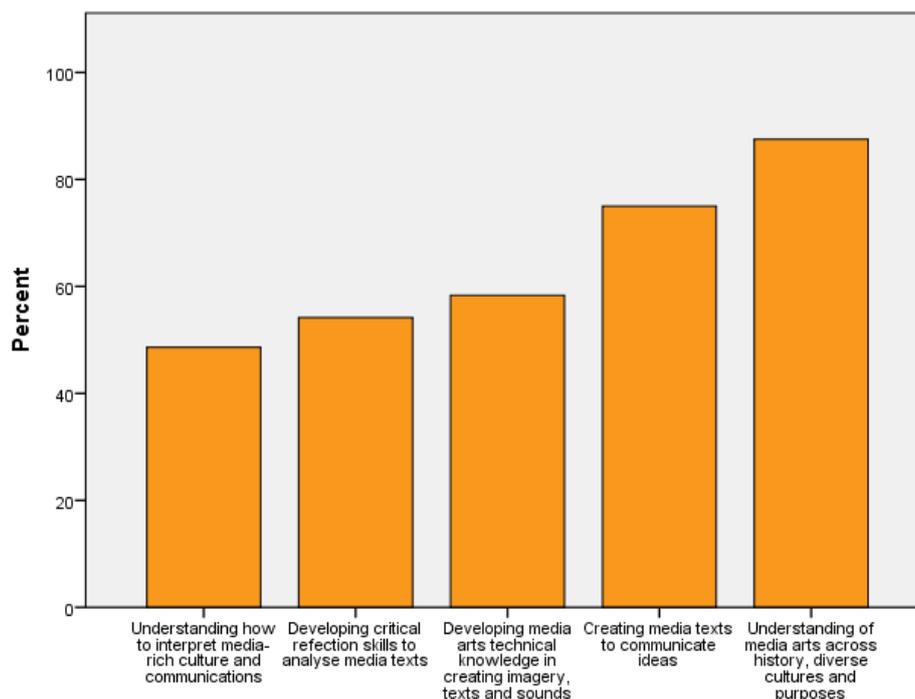


Figure 3. Frequency of first-year pre-service primary teachers' response to the item: During my university course I need to develop the following skills/knowledge related to media arts

Interestingly, understanding media arts across history, diverse cultures and purposes was considered most important to learn during the course. This suggests pre-service primary teachers wish to learn about the theory behind media arts and how this changes across different contexts. However, options related to interpreting media was least selected in this questionnaire item. This could be problematic, given that critically analysing media arts texts is an important component of the media arts curriculum. As the findings suggested pre-service primary teachers consume media more than they produce it, the researchers anticipated *creating media texts to communicate ideas* would be a frequently selected option, and this was confirmed by 75% of the first-year respondents.

Although not included on the graph at Figure 3, only 5.5% of first-year respondents indicated they needed to develop *pedagogical (how to teach) skills in creating media experiences for students*. This response may be suggestive of the media-rich contemporary culture where children often interact with digital technologies before they begin schooling (Buckingham & Martinez-Rodriguez, 2013; Hepp et al., 2015; Kereluik et al., 2013). Alternatively, the low response to the pedagogy item may suggest that knowledge of how to explicitly teach media skills is not considered important by the respondents. Considering the high percentage of first-year respondents who indicated they needed to develop media arts skills during the B.Ed. primary course, only 60.0% of the sample would choose to participate in media arts electives if offered during the course (39.0% agree and 19.5% strongly agree). Overall, 41.6% of first-years would not elect to study media arts (37.7% disagree and 3.9%

strongly disagree), which would limit these pre-service primary teachers' ability to develop the necessary skills to teach media arts to primary students.

Discussion

The variance found in pre-service teachers' experiences in media arts is likely to produce different levels of *process literacy*, or the ability to produce media texts (Pangrazio, 2014). While the sample for this research was quite small (approximately 20% of the population), the findings are consistent with literature that states many students do not creatively or critically engage in producing media artworks (Buckingham & Martinez-Rodriguez, 2013) and that often students passively engage with digital technologies (McLean, 2013). Even recent research suggests that some primary school teachers are reluctant to incorporate digital technologies into teaching and learning due to increased preparation or their own digital self-efficacy (Delacruz & An, 2014; McLean, 2013).

Based on the demographic information recorded, the majority of pre-service teachers participating in this study would have completed their compulsory schooling during the mid-late 2000s; therefore, they would have experienced the rapid increase of communications technology and mobile media during the early 21st century that has changed students' literacy needs and creative communication (Campbell & Parr, 2013; Dezuanni, 2015; Saltz, 2013). They would also have experienced the way in which digital technologies have shaped socio-cultural understandings, and mediated interactions between industry and individuals in a globalised society (Hepp et al., 2015). It is likely that the pre-service teachers' experiences with digital technologies have shaped their perceptions of the skills they require to teach media arts to primary school students. While the pre-service teachers had diverse experiences of media arts during their own schooling, their personal use of digital technologies was consistently high. Therefore, it is unsurprising that almost half of the sample felt they did not need to take extra elective media arts education units during their teacher education degree. However, three quarters of the sample did want to learn how to create media artworks during their core Arts units at university. This response represents the need for teacher education courses to provide technical skills related to digital technologies, not just as a classroom tool but also as a creative platform (Buckingham & Martinez-Rodriguez, 2013).

In order to prepare teachers for delivering media arts in primary school, it is important that teacher education courses explicitly teach concepts linked to media arts making and responding. While it appears that pre-service teachers already use a lot of media technologies, using digital media does not ensure a deep understanding of the ethical and pedagogical issues linked to media artworks consumption and production. Teacher education needs to offer opportunities to develop making skills across a wide range of media devices and programs, to ensure that teachers can integrate diverse and creative technologies in the classroom (McGuire, 2012). Pre-service teachers need time to gain

proficiency in using a range of technical skills, as teacher self-efficacy is a common reason for teachers' minimising arts instruction in compulsory schooling (Garvis, 2008; Garvis & Pendergast, 2010; Morris & Lummis, 2014). In addition, teachers need to be aware of the ethical issues of teaching and producing media, including copyright laws, representation and bias in media-based artworks (Connell, 2009; Shenfield, 2015; Windschuttle, 1988). These critical analytical and ethical ideas affect both the construction and appropriate use of media artworks. An understanding of these issues, and pedagogical knowledge about how they can integrate these topics into students' media experience, will improve their capacity to facilitate critical digital literacy in students as outlined in the Australian Curriculum (Buckingham & Martinez-Rodriguez, 2013; Burton, 2014).

Conclusion

Media arts and digital technologies are a part of everyday life in contemporary society. This 2014 pilot study investigated pre-service primary teachers' experiences of media arts on entry into the B.Ed Primary, as understanding pre-service teachers' skills and knowledge may assist teacher educators to best prepare them to deliver the Australian Curriculum. The findings of this study demonstrated that the first-year pre-service teachers were high consumers of media technologies in their current recreation; however, were limited producers of media artworks. They also had very diverse childhood and educational experiences with media arts. Subsequently, it cannot be assumed that pre-service teachers have high digital literacy, and particularly, critical digital literacy. Therefore, teacher education needs to provide adequate time and resources to integrate media arts making and responding opportunities into B.Ed primary courses. The need for adequate media arts education was strongly indicated by the participants in this research study, who felt they needed to develop a range of media arts skills and knowledge during their teacher education course. Teacher education must reshape its arts instruction if it is to ensure that future teachers are equipped and confident to deliver critical and creative thinkers in the technological world.

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