# **Equipping future arts educators for primary schools of the 21st century: an Australian point of view**

Nita Temmerman

#### Abstract

This article discusses two interrelated themes. First, that arts education plays a valuable role in developing the skills required by successful individuals of an increasingly sophisticated knowledge economy; and second, that arts education programmes in initial primary teacher education courses should be linked to, and compatible with, the needs of future schools. If young people are successfully to develop skills, knowledge and understandings that prepare them as productive citizens of the creative economy, then those enabling that development should understand and in turn be able to demonstrate and foster these capacities.

### Key words

Australian education, music, primary school teachers

# Author accepted version of

Temmerman, Nita (2006) Equipping future arts educators for primary schools of the 21st century: an Australian point of view. International Journal of Music Education, 24 (3). pp. 271-282. ISSN 1744-795X

### Introduction

It was the Dutch humanist Erasmus (1466–1536) who said: 'The best hope of a nation lies in the proper education of its youth'. Today's demanding workplace and knowledge-based and ideas-focused economy expects young people not only to have certain scholastic abilities, but increasingly to demonstrate capacity in creative thinking, problem solving, flexibility and effective communication. The conventional hierarchical organizational structures of old are increasingly being replaced with flattened arrangements, which demand decision-making and problem-solving competence from everyone, not just a few (Psilos, 2002, p. 1). Businesses are progressively requiring well-rounded, original thinkers and adaptable, confident and self-motivated knowledge workers to give their business the edge in today's competitive market. As stated by Venturelli (2001, pp. 19–21), the fundamental literacy skills and 'imitative learning' that were sufficient for following directions 'on the assembly line, the workshop, or desktop terminal' are plainly insufficient in meeting the demands of a creative and innovative society. What is now required are 'advanced intellectual and creative skills that emphasize interdisciplinary and independent thinking' and which 'extend from preschool to graduate school' and beyond.

Critical to that future economic (as well as social) change and prosperity is education that develops the whole person and has, as part of its goal, ways of knowing that feature creativity and critical thinking. Venturelli (2001) concludes:

as nations begin to grasp the critical importance of educational quality to an economy based on creative capital, there will be an international race to fortify the substance of knowledge that is taught and to reincorporate the linkages between the arts, humanities and the sciences. (p. 21)

A 'proper' education for young people in the 21st century in which ideas, not physical capital, are imperative would, it is to be assumed, therefore embrace the development of creative thought and action and the promotion of life-long and life-wide learning in a diversity of contexts of which schools represent just one.

# Arts education and life-long, life-wide learning and the development of creative potential

The arts sector in Australia has vigorously argued that arts education is fundamental to the nation's future; according to the comprehensive survey conducted by Saatchi & Saatchi Australia for the Australia Council (2000, p. 22), 85 percent of Australians concur that the arts should be a central component of the education of every Australian child. In the Australia Council's National Education and the Arts Strategy (2004), a vision for education is proposed in which 'the arts are an integral part of the lifelong learning of every Australian'. It claims that when education is linked 'with the arts you not only improve the quality of learning, but the quality of life itself in its many variations - from the personal, to the family, community, to regional life, and to the life of the nation' (p. 2). The arts are described as being 'essential to developing an engaged and active citizenry for a progressive and successful Australia' and instrumental to the development of the 'kind of skills and capacities needed to build a viable and environmentally responsible economy and society for Australia in the 21st century' (p. 6). For example, the Australian Democrats in their Cultural Plan for Australia (2004, p. 1) articulated that the 'creation and transmission of information, intellectual property and cultural products will be the cornerstones of economic development in the 21st century'. The claim is made that Australia needs to invest more 'seriously' in cultural development and at the very least match budgetary expenditure in arts education with that provided to literacy and numeracy education. They see the arts as 'central to the development of the kind of creative, responsive, collaborative employee that business values' (p. 4), and call for moving the arts 'from the periphery to the centre of public policy, in recognition that diversity, creativity and innovation are critical to our nation's future' (p. 1). They link the notion of developing Australia as a 'clever country' to offering arts education opportunities to all young people, so they can contribute to creative skills for the workplace and advance the development of a creative economy.

Philosophers such as Langer (*Philosophy in a New Key* (1942)) and Goodman (*Languages of Art* (1968) and *Reconceptions in Philosophy and Other Arts and Sciences*, with Catherine Elgin (1988))

led the way in positioning the arts as important ways of recognizing and constructing knowledge. They viewed the arts as conveying knowledge in ways unique to them as subject areas – as representing knowledge founded in human imagination and ways of thinking and feeling. More recently the work of Gardner (*Frames of Mind: The Theory of Multiple Intelligences* (1983)), and the Project Zero educational research group at Harvard University have shown how the arts draw on a multiplicity of intelligences and learning methods and naturally develop creative abilities.

Arts educators have long recognized the distinctive contribution that the arts make to the general education of learners (refer, for example, to Burton, Horowitz, & Abeles, 2000; Deasey, 2002; Eisner, 1998; Fiske, 2000; Gardner, 1973; Greene, 1995). The arts are a natural part of a young person's life and are connected to it through home, school and community-based experiences and activities (Heath, 2001; Lamont, Hargreaves, Marshall, & Tarrant, 2003). Participation in arts-based (school and/or community) programmes has proven to be educationally and developmentally rich (Psilos, 2002, p. 2). Arts educational experiences are often organized around problems, issues or themes derived from varied real-life situations, in which priority is given to active (rather than passive) learning and meaning-making that is transferable and connected to authentic everyday life circumstances. The focus is not on finding the one 'right' answer, but rather on discovering various means to solve a single problem and taking and managing 'risks' along the way.

Learning in and through the arts can, therefore, present varied and complex means for the acquisition of relevant, broadly based life skills such as creative thinking, communication, time management, decision making, goal setting, personal planning, critical thinking, cultural awareness, self-directed learning, interpersonal skills and self-confidence. Although the arts do not hold exclusive rights over the domain of creative endeavour, they do provide a very extensive basis for creative opportunities. The arts involve students in making, expressing, experiencing and/or interpreting something, by themselves and often with others.

A report of evaluations of four (two music and two drama) Australian school-based arts education programmes found evidence that participation in these programmes had a positive impact on a number of fronts. The latter included improving young people's ability to plan and set goals, increasing students' overall engagement with learning, enhancing self-confidence and enhancing ability to work cooperatively with others. (Department of Education, Science and Training, 2004). These studies make a strong argument for the significance of student participation in arts learning, the positive relationship between learning in the arts and improved student achievement in other learning domains. They furthermore highlight that the arts are fundamental to the development of essential skills required by citizens of the creative, knowledge economy.

# The quality of what goes on in schools is dependent on the quality of its teachers

The arts as potential agents of improvement and change is a concept that has not been well recognized to date in most Australian primary schools. A lack of resources for the arts, along with a lack of status of the arts vis-à-vis other subject areas at the school level, has contributed to a less than ideal provision of arts education. Perhaps the major contributor above all else has been the (lack of) preparedness of teachers to teach the discrete art forms (music, visual arts, drama, dance, media) and/or incorporate creative processes and arts activities in other subject areas. The esteemed Australian educator Malcolm Skilbeck wrote, 'important as it is to have a well-structured and resourced curriculum and a well-designed and equipped school, if we lack highly educated and competent teachers, we have nothing' (Skilbeck, 1995). Australia produces quality teachers who are highly sought after by both national and international employing agencies. What is evidenced, however, in research investigating how well prepared early career teachers feel to teach school classroom arts programmes, is their lack of essential knowledge and skills (refer, for example, to Australian-based studies by Gifford, 1993; Hartwig, 2004; Jeanneret, 1994; Russell-Bowie, 1993; Temmerman, 1997). A perpetuating cycle of deficiency is created that sees student teachers who have themselves been denied satisfactory primary school arts learning experiences, because of their teachers' lack of confidence, knowledge, understanding and skills, in turn lacking the confidence,

knowledge, understanding and skills to be able to break the cycle and provide effective classroom arts experiences to a new generation of learners. In relation to the art form music, for example, those responsible for teaching music in very many primary schools in Australia are generalist classroom teachers who, when asked to comment on why music education at the primary level is in such an

unsatisfactory state or is not taught at all, claim their own lack of confidence and competence to teach music as the major determinant. The latter they attribute principally to the type and amount of music education received at university as part of their undergraduate training.

It is a fact that in Australia, at the primary school level, the arts disciplines are taught by generalist teachers, and that where specialist teachers are available, in most cases they spend on average only 30 or so minutes a week with each class. Further, the arts are usually interpreted as music or visual arts or drama, or a combination of two of these with dance featuring to a much lesser degree. By way of example, in 2003 a project was commissioned by the Music Council of Australia (MCA) to provide information about, and determine trends in, the provision of school music education in Australia. Although available data proved to be either incomplete or ambiguous for a number of key questions posed, it nevertheless provided a broad-brush picture of trends. The following summarizes some of the project's key findings as they relate to the primary school sector.

While some very good examples of music practice exist in primary schools in Australia, at this point in time, only one state – New South Wales (out of six states and two territories) – has mandated compulsory music education at the primary school level. There is an assumption that students in the other five states and two territories are recipients of music instruction of some type, whether it be classroom, co-curricular in the form of instrumental lessons, or extra-curricular such as choir, band or school concert practice. The same variability of offering extends to the actual hours of instruction recommended, which ranges from 30 minutes to 1.5 hours per week and is (it would appear) determined to some degree by the availability of staff to teach music, meaning consistency and frequency of delivery can in some cases be erratic. Most states, however, do not provide prescribed time requirements.

Extra-curricular music activities vary so widely that no discernible patterns emerge in terms of what is offered, by whom and how much. In relation to who teaches music at the primary level, again the situation is very diverse from state to state and even within a state, especially between metropolitan and rural, wealthy and less wealthy, government and nongovernment schools. In some schools, music specialists with formal qualifications in music and music education are employed. In others, the responsibility rests with the generalist classroom teacher, or with teachers who self-identify an interest in music, and show a willingness or ability to teach it. The arrangements for music activities beyond the classroom include paid tutors teaching small groups or providing individual instrument tuition. In some situations, there is heavy reliance on parents and community volunteers to assist in managing extra-curricular activities such as choir, bands and ensembles.

The trend toward integrated arts rather than music-specific syllabi has also translated, in some schools, to a combined arts education curriculum approach and examples of practice where music is not (one of the arts 'chosen' to be) studied. All of this is to say that there is real room for improvement in the provision of music education at the primary school level in Australia.

To continue with the music example, music is a highly complex activity requiring a variety of skills and an in-depth knowledge of subject matter and pedagogy (Jeanneret, 1994; Leong, 1996). It is expected that teacher education graduates have mastered this knowledge sufficiently well to be able to use it to guide classroom practice. The key question is whether this can be achieved with the resources available and in the minimal contact hours provided in most Australian initial teacher education courses. Music education in undergraduate primary teacher education courses has experienced significantly reduced face-to-face contact time over the past 10 or so years. This has seen 4-year degrees replace 110-120 total contact hours of music-specific education with a single arts education (not music specific) subject totalling just 6-12 hours of contact time. It is obvious that 6 to 12 hours of music education cannot adequately equip teachers for the required task. For secondary trained teachers the issue is more one of relevance, as demonstrated in a recent study undertaken in the Australian state of Queensland with early career secondary music teachers, who rated the relevance of their undergraduate programme relative to their teaching needs as quite low in a whole range of teaching as well as discipline-specific areas (Ballantyne & Packer, 2004). This is not to say that relevance in terms of lack of correlation between what was covered in teacher education arts programmes and what teachers found to be most useful and worthwhile in their teaching was not an issue for primary teachers. A survey conducted by the author with a cohort of 12 graduate teachers in New South Wales in 2001, who were either in their first or second year of general primary classroom teaching, revealed unanimity in their views about the above. They all claimed that university arts education programmes that had as their focus learning to play the guitar or recorder, learning to read

music notation, and lectures on art theory and history were useless. They maintained that learning how to connect the art forms and how to link the arts with other subjects across the curriculum would have been more constructive. These comments appear to be supported by findings in other locales, as comprehensively described by Morin (2004).

## Reconceptualizing arts education in initial primary teacher education courses

Integral to the development of competent and confident individuals with the knowledge, skills and understanding demanded by the creative economy is the educator. Regardless of the indomitable influence of the family and various community groups, young people still spend a considerable amount of their time at school under the effect of teachers. As suggested by the Australian Council of Deans of Education (ACDE)<sup>1</sup> in their vision for Australian education entitled New Teaching, New Learning (Australian Council of Deans of Education, 2004, pp. 40-43), what is required is a new 'breed of educators' who are 'proactive towards change and well connected to the broader community'. These educators need to become familiar with the 'new basics' of education, which consists of a more general and comprehensive education around technology, including maths, science and the applied sciences; commerce with its focus on how to work together; and culture including cultural understandings and capacity for intercultural interaction. The new basics demand 'broad knowledgeability' and interdisciplinary learning that crosses discipline boundaries and acknowledges different learning styles, as opposed to (fixed) expertise and competence residing in defined and separate subjects that measure a narrow set of performances. It relies on educators who have 'technical' (discipline and pedagogy) expertise, but who are also aware of and able to support different learning styles; who acknowledge and encourage sound interpersonal relationships amongst young people as well as colleagues, parents and the broader community; who are flexible and responsive to purposive change; and who are reflective and critical thinkers.

The content of teacher education programmes needs to be linked to and compatible with the needs of future schools and the development of life-long learners for the creative economy. The latter relies on encouraging and developing creativity skills in young people as a life-long aim. If young people are to successfully develop skills, knowledge and understandings that prepare them as productive citizens of the creative economy, then those enabling that development should understand and be confident in encouraging these capacities. Therein lies a real challenge for initial primary teacher education in Australia, namely, ensuring that courses adequately prepare future educators able to promote the creative, life-long and life-wide learning capacities of every young person.

Recently, Eisner (2004) described how the arts and the 'forms of thinking the arts evoke' (p. 8) could be used to 'reframe our conception of what education might try to accomplish', and accordingly formulate alternative teaching—learning practices to the present ones, which noticeably concentrate on outcome measurement. The forms of thinking identified by Eisner as 'artistically rooted qualitative forms of intelligence' (p. 9) include making judgements in the absence of rule, coping with uncertainty and ambiguity and constructing imaginative responses to problems. These are, states Eisner, forms of thinking:

far more appropriate for the real world. The promotion of such thinking requires not only a shift in perspective regarding our educational aims, it represents a shift in the kind of tasks we invite students to undertake, the kind of thinking we ask them to do, and the kind of criteria we apply to appraise both their work and ours. (pp. 8–9)

Similarly Davis (2005), in *Framing Education as Art*, argues how the arts effectively model methods of engaging students in complex problem solving, and proposes that they could serve as a template for all of education.

The ability to achieve such aims is reliant on teachers having the knowledge, understanding, skills and resultant confidence to develop and implement programmes that will engage young people in experiences that foster such aims. As stated by Darling-Hammond (2000):

Teaching for problem solving, invention, and application of knowledge requires teachers with deep and flexible knowledge of subject matter who understand how to represent ideas in powerful ways, can organize productive learning process for students who start with different levels and kinds of prior knowledge, assess how and what students are learning and adapt instruction to different learning approaches.

An important contribution to the development of such effective teachers is the initial teacher education programme. Teacher education programmes by their very nature have embedded within them broad-based skills, such as effective oral and written communication, critical thinking and sound interpersonal skills, that sit comfortably alongside professional discipline-specific knowledge, values and understandings, such as knowledge of pedagogical practices, understanding of subject content and behaviour management. Such skills are aligned to national standards and guidelines for initial teacher education in Australia and state-based teacher registration requirements. For example, in the state of Victoria, the teacher registration authority - the Victorian Institute of Teaching - in its (draft) Standards of Professional Practice for Graduating Teachers (2005), provides eight standards that all university teacher education courses in Victoria must demonstrate graduates of their courses have met. They include three categories of expectation, namely: professional knowledge, which includes teachers knowing their students and how they learn and the content they teach; professional practice, which includes teachers being able to plan and assess for effective learning, create safe and challenging learning environments and use a diversity of teaching practices and resources; and professional engagement, which includes teachers reflecting, evaluating and improving their knowledge and being active members of their profession. Within the standards, specific mention is made of teachers knowing how to integrate learning effectively across the curriculum and the ability to create opportunities for students to explore ideas and foster cooperative learning.

In the case of primary arts education in Australia, given the paucity of arts knowledge, understandings and skills many student teachers bring to the profession and the curriculum structure of (some) teacher education courses, which continues to treat each art form as a discrete subject with accompanying disconnected assessments, the challenge is heightened. The notion, for example, that 6 or 12 hours of tuition in basic music skills is going to successfully break the existing 'cycle of deficiency' described earlier is nonsensical. It will in all likelihood further diminish a graduate teacher's inclination to teach music at all. In order to be able to implement real and positive change at the school education level, it is imperative that teacher education courses implement innovative programmes that produce graduates who have developed a broad discipline and pedagogical knowledge of arts education. Of course, in an ideal world, each school district in Australia would also have access to teachers sufficiently expert in school dance, drama, media, music and visual arts education to support classroom teachers in the provision of quality arts education. Unfortunately, the latter does not appear imminent.

There are emerging in Australia an increasing number of examples of transformative teacher education programmes in which the traditional divisions between subjects have been removed and instead student teachers, classroom teachers, teacher educators and community experts learn and teach together as well as share and critique their 'teaching practice'. They include programmes that feature collaborative partnerships between schools as well as other learning sites in an attempt to strengthen the link for student teachers between abstract pedagogical theory and the practical context. Some programmes even place the arts at the centre of learning and encourage student teachers to integrate the arts across the curriculum, to experiment, be innovative and take risks. The aim in these programmes is to provide student teachers with valuable, relevant, real contexts for teaching arts education, which in many cases would otherwise not be available.

### An example of a transformative initial primary teacher education programme

One such (transformative programme) example is the Bachelor of Teaching, a 2-year graduate entry programme offered by the Faculty of Education at Melbourne's Deakin University. The current programme, offered for the first time in 2004, equips graduates to teach 5- to 18-year-olds and features three learning opportunities for student teachers to engage in activities that connect the arts, including music, dance, drama and visual arts, with language and literacy and studies of society and the environment (SOSE). There are no separate classes for the content knowledge areas of Language, SOSE or the arts disciplines. Instead, every attempt is made within the context of maintaining the integrity of all disciplines, to model different approaches for the application of connections across the learning areas, which are, in turn, put into practice by the student teachers in the school-based component of the subject.

The degree programme has as its vision the 'educating of teachers to make a difference in 21st century schools and communities'. It aims, *inter alia*, at graduate teachers who are skilled in facilitating learning; have a holistic view of learning; and recognize the importance of and build

cooperative relationships with students, parents, school authorities and community groups. The content, teaching/learning activities and assessment items all aim to ensure that this vision and these characteristics have optimum opportunity for development.

The three Arts/Language/SOSE subjects have assumed a collaborative, inquiry-based learning approach and have adopted innovative pedagogical strategies, including the provision of opportunities for student teachers to engage critically with multiple sites of learning. The latter include the Melbourne museum, the Immigration museum, an environmental park, the Melbourne Zoo and a week long Festival especially for children held annually in the seaside town of Warrnambool, located on the south coast of Victoria. The inaugural group of student teachers graduated from the programme at the end of 2005. The real test, of course (which in reality cannot be determined for some years), will be whether this approach will transform the teaching practice of these graduates and result in them, as teachers, providing their students with opportunities to learn in and through the arts.

There is still more that can be done to improve the structure, content and presentation of the course. This includes ensuring that the course incorporates skills that are transferable and applicable in a broad array of contexts; builds on learners' prior understanding and knowledge base; and provides student teachers with more authentic learning environments. It is also worth mentioning that not all teacher educators within the course unanimously embrace the approach or are involved with the same level of enthusiasm. For some it has required a considerable shift in their own beliefs about what constitutes learning. The latter along with building the multi-integrated curriculum model further and extending potential learning partnerships not only with the teacher educators, student teachers and school-based personnel, but also with community groups, within timetabling and resource constraints represent real ongoing challenges. For example, prior to implementation of any learning experiences, many meetings took place that involved teacher educators, classroom teachers and community personnel from the aforementioned sites. Logistically demanding but not insurmountable was ensuring up to seven university staff were timetabled at the same time and in physical spaces that could accommodate flexible learning experiences that involved movement and used an array of musical and other resources, as opposed to 'talk and chalk' lectures being presented by individual teacher educators in lecture halls and tutorial rooms with fixed seating.

Perhaps what is still to be explored is how to foster explicit links between the learning opportunities outlined above and the other subjects within the 2-year teacher education programme. Initial discussions have identified two potential ways to achieve this; first, the identification of focus questions; second, related assessment tasks across the curriculum to do with, for example, creating effective learning environments and developing quality professional relationships. An ongoing issue for some of the participants within these discussions continues to be overcoming their apprehension about 'genuine' music, drama, social or language education learning occurring through the connected curriculum approach. Pleasingly, however, there are several staff who have worked together as a teaching team since 2004, and advocate strongly the interdisciplinary approach, not least due to positive feedback from student teachers about the integrated subjects. The latter has included comments about how the cooperatively planned approach and organization of the curriculum around real-life problems, ideas, concepts and/or issues of significance are not only seen to be very relevant and have actual application to young people's lives and the knowledge, skills and understandings they require in the 'real world', but also how making connections across the curriculum is perceived to involve interesting, engaging and 'rich' teaching-learning experiences. It is intended that more comprehensive data will be collected about student teachers' perceptions, not only about the course content and delivery, but also, most importantly, about their experiences in applying what they have learnt in primary classrooms.

### Some concluding comments

Young people are living in a socially, culturally and economically complex and fast-changing society. The world of work they will enter demands more than ever that they demonstrate facility with creative thought and action. The attributes of innovative thinking and interpretation, problem solving, cooperative decision making and effective communication, so crucial to being a successful citizen in the new economy, are central to arts education. While the latter should be fostered in all areas of education, it is arts education that provides real opportunity for young people to comprehensively develop these skills, and it is arts activities that can provide exemplars for innovative teaching and

learning more generally across the curriculum.

This article has asserted that the quality of what goes on in the name of arts education in Australian schools is inescapably connected to the education of teachers accountable for teaching arts education. Enduring transformation in the quality of arts education practice, therefore, is dependent on changes also being made to initial teacher preparation programmes. In many respects, arts education at the university level encounters the same pressures of time constraints, lack of resources and lack of status as at the school level.

In light of the current unsatisfactory state of arts education, especially at the primary school level in Australia, which has been the focus of this paper, it seems reasonable to question the adequacy of most current initial teacher education courses, their curriculum content and delivery methods and the necessity to identify that which is deemed to be both essential and achievable given resource constraints. In Australia and elsewhere, exemplars of transformative initial teacher education arts programmes are emerging that are preparing primary teachers to both develop innovative, relevant, connected curricula that position the arts at the centre of learning, and nurture a new generation of teachers' capacity to enhance young people's arts-specific as well as more broadly based, highly valued thinking, personal and interpersonal skills.

The challenge is to explore how within university timetabling, staffing and other resource constraints such exemplars can be mainstreamed. The lack of connection between initial teacher preparation and the school realities facing new (and experienced) teachers has been the subject of a number of studies worldwide. A frequently recurring theme within the research is the need to prepare graduates who not only have pedagogical as well as professional knowledge and skills, but also an understanding of the ways in which music is made and used in postmodern cultural and social life. As part of the 'new basics' of music education, through purposeful design, courses need to feature collaborative partnerships between schools and other learning sites as well as new technologies such as CD, DVD, mobile phone and the Internet. The aim must be to provide teachers with valuable, relevant and real contexts for teaching music education, which will ultimately facilitate young people's engagement with, and understanding of, music, and, in turn, ensure the longer-term well-being and sustainability of music experience in the broader community.

#### Notes

1. The Australian Council of Deans of Education (ACDE) is the peak organization representing the deans of faculties of education in Australian universities and other higher education institutions. It represents those responsible for undergraduate and post-graduate teacher education as well as education research in Australia.

### References

Australia Council. (2000). *Australians and the arts*. A report by Saatchi & Saatchi Australia. Sydney: Australia Council.

Australia Council. (2004). National education and the arts strategy. Sydney: Australia Council.

Australian Council of Deans of Education. (2004). *New teaching, new learning: A vision for Australian education*. Canberra: Australia Council of Deans of Education.

Australian Democrats. (2004). *Cultural plan for Australia*. Retrieved 27 July 2005 from www.democrats.org.au

Ballantyne, J., & Packer, J. (2004). Effectiveness of preservice music teacher education programs: Perceptions of early-career music teachers. *Music Education Research*, *6*(3), 299–312.

Burton, J., Horowitz, R., & Abeles, H. (2000). Learning in and through the arts: The question of transfer. *Studies in Art Education*, *41*(3), 228–257.

Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, *51*, 166–173.

Davis, J. H. (2005). Framing education as art: The octopus has a good day. New York: Teachers

College Press.

Deasey, R. (2002). *Critical links: Learning in the arts and student academic and social development.* Washington, DC: Arts Education Partnership.

Department of Education, Science and Training. (2004). *Evaluation of school-based arts education programs in Australian schools*. Retrieved 22 July 2005 from <a href="https://www.dest.gov.au.schools/publications/2004">www.dest.gov.au.schools/publications/2004</a>

Eisner, E. (1998). Does experience in the arts boost academic achievement? *Art Education*, *51*(1), 7–15.

Eisner, E. (2004). What can education learn from the arts about the practice of education? *International Journal of Education and the Arts*, *5*(4). Retrieved 22 July 2005 from ijea.asu.edu/v5n4/

Fiske, E. (2000). (Ed.) *Champions of change: The impact of the arts on learning.* Washington DC: Arts Education Partnership.

Gardner, H. (1973). The arts and human development: A psychological study of the artistic process. New York: Wiley.

Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York: Basic Books.

Gifford, E. (1993). The musical training of primary teachers: Old problems, new insights and possible solutions. *British Journal of Music Education*, *10*, 33–46.

Goodman, N. (1968). *Languages of art.* Indianapolis, IN: Bobbs-Merrill. Goodman, N., & Elgin, C. (1988). *Reconceptions in philosophy and other arts and sciences.* Indianapolis,IN: Routledge.

Greene, M. (1995). *Releasing the imagination: Essays on education, art and social change.* San Francisco, CA: Jossey-Bass.

Hartwig, K. (2004). Ways of knowing: An investigation into how preservice teachers learn music. In M. Chaseling (Ed.), *Proceedings of the 26th Australian Association of Research in Music Education (AARME) Conference* (pp. 207–213). Lismore: AARME.

Heath, S. (2001). Three's not a crowd: Plans, roles and focus in the arts. *Educational Researcher*, 30(7), 10–17.

Jeanneret, N. (1994). Teaching music K-6: Confidence and the pre-service primary teacher. In J. E. Southcott (Ed.), *Proceedings of the 16th Australian Association of Research in Music Education (AARME) Conference* (pp. 78–91). Melbourne: AARME.

Lamont, A., Hargreaves, D., Marshall, N., & Tarrant, M. (2003). Young people's music in and out of school. *British Journal of Music Education*, 20(3), 229–241.

Langer, S. (1942). Philosophy in a new key. Cambridge, MA: Harvard University Press.

Leong, S. (1996). The relationship between music competencies perceived as important for novice teachers and the professional expectations of high school music teachers in Australia. Unpublished doctoral dissertation, University of Western Australia.

Morin, F. (2004). K-4 pre-service classroom teachers' beliefs about useful skills, understandings, and future practice in music. *International Journal of Education and the Arts*, 2(1). Retrieved 22 July 2005 from <a href="https://www.ijea.asu.edu">www.ijea.asu.edu</a>

Music Council of Australia. (2003). *National report of trends in school music education provision in Australia*. Sydney: MCA.

Psilos, P. (2002). The impact of arts education on workforce preparation. Issue Brief, NGA Centre for

Best Practices, USA.

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

Skilbeck, M. (1995). For what kind of world? Keynote address, Australian College of Education National Conference, Adelaide.

Temmerman, N. (1997). An investigation of undergraduate music education curriculum content in primary teacher education programs in Australia. *International Journal of Music Education*, *30*, 26–34.

Venturelli, S. (2001). From the information economy to the creative economy: Moving culture to the centre of international public policy. Washington, DC: Centre for Arts and Culture. Retrieved 22 July 2005 from www.culturalpolicy.org

Victorian Institute of Teaching. (2005). *Standards of professional practice for graduating teachers*. Melbourne: Victorian Institute of Teaching.

Nita Temmerman has held senior managerial roles in the university sector for the past 9 years in two Australian universities. Her professional interests are in creative and performing arts education and her research/scholarship is exemplified by 14 sole-authored music education books; over 40 publications in refereed international and national journals; numerous citations; invited keynote presentations for teachers and educators in Japan, Malaysia, Singapore, the UK and the USA; editorial board membership of international and national education journals; regular conference presentations and media commentary. Of recent significance was Nita's role as the Australian Council for Deans of Education representative on the Australian Department of Education Science and Training National Review of Music Education Steering Committee (2005).

Address: [Until 31 Dec 2006] Deakin University, 221 Burwood Highway, Burwood, Victoria 3125, Australia. [From January 2007] Faculty of Education, University of Southern Queensland, West Street, Toowoomba Q4350, Australia. [email: <a href="mailto:nita@deakin.edu.au">nita@deakin.edu.au</a>]