

Using video to cross the boundary between Arts education and online learning in a pre-service teacher education degree: Student perspectives

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Abstract

In a higher education landscape in which many universities are exploring the online delivery of units and courses, the challenges of designing online experiences that enable students to learn in a genuinely active and participatory manner should be a matter of priority. Yet in the area of Arts education, an intrinsically constructivist domain, there has been little research about ways in which to achieve this and therefore the boundary between online pedagogy and Arts education is only just being explored. Part of an ongoing three year research project into a fully online pre-service teacher music education unit in one university, this paper presents the results of an analysis of survey data collected from students who completed the 2010 iteration of the unit. Current literature in the area of e-learning in tertiary education is presented along with a summary of survey data from student participants, and selected data in relation to the use of video in the unit are analysed and discussed in depth. This project uses multiple methods of data collection (survey and semi-structured interviews) and data have been analysed through the use of inductive category construction (Hatch, 2002; Miles & Huberman, 1984; Sarantakos, 2005). In this paper data from two survey items are presented and analysed in depth: student use of lecturer demonstration videos and of videos of past students completing tasks. Data in relation to lecturer demonstration videos have revealed complex relationships between the use of videos in an active and participatory way, the construction of deep understandings of core concepts and also in the support of a diversity of learning styles in particular those who regard themselves as 'visual' learners. Data regarding the use of videos of past students completing tasks revealed similar relationships however connections between these and the professional context were also evident. Further investigation of the design of participatory learning opportunities in online delivery shall flow from this research.

Introduction

In 2009 the Faculty of Education in which I work made a decision to offer all education degrees and all units in these degrees in a fully online environment from the commencement of the 2010 academic year. This decision occurred simultaneously with very significant changes to degree and unit structures, including an overall reduction in the number of degrees and units being offered and an alignment of all education degrees and units with the graduate attributes of our state teacher registration authority. The resulting structures enabled students to complete the coursework components of any degree fully online without any on-campus attendance requirements. The professional experience component of the degree that takes place in schools would be managed regardless of study mode according to the geographical location of the student. Face to face teaching of the degrees would continue for on campus students; however, the option of online completion would become standard from 2010, effectively creating two student cohorts distinguished by their mode of study. From the 2010 iteration of my unit in music education it was possible that enrolled students could be located anywhere in the world. The resulting re-designed unit therefore faced enormous challenges not least of which was the maintenance of an approach to learning and teaching that privileged active and participatory learning.

This paper, resulting from data collected within an approved, ongoing three year research project into one fully online pre-service teacher music education unit, presents the results of an initial analysis of survey data collected from students who completed the 2010 iteration of the unit. The research question underpinning the project asks “What is necessary to enable effective and efficient learning in music education for pre-service primary generalist teachers in a fully online environment?”. Effective learning in this project refers to that which encourages “deep” learning as defined by Biggs (2003), and efficient learning refers to that which enables students to engage meaningfully with key concepts and processes of the unit regardless of their mode of study. Two layers of data will be presented: the quantitative responses to all survey questions, and a detailed presentation and analysis of both the quantitative and qualitative data from two survey questions to do with the use of online video resources by students. Literature presented traverses current uses of e-learning in higher education in various locations including Australia, the language of e-learning and the definitions of distance learning and e-learning.

The data analysed in relation to student use of two types of video, lecturer demonstration videos and videos of past students completing tasks, have revealed the following significant themes: the use of videos in an ‘active’ and ‘participatory’ way by some respondents in order to enrich their learning; the use of videos to assist in the construction of understanding about key concepts and skills in the unit; the use of videos to support a diversity of learning styles in particular those who regard themselves as ‘visual’ learners; the use of videos to support completion of assessment tasks; and, the application of learning from videos to a professional context.

Literature

The adoption of e-learning in higher education institutions across the world has grown rapidly in recent years and continues to expand (Boettcher and Conrad, 2010; Cleveland-Innes and Garrison, 2010; Commonwealth of Australia, 2002; Drummond, 2008; Epstein, 2006; Guri-Rosenblit, 2005; Herbert, 2007; Jones and O’Shea, 2004; Kerr, Rynearson and Kerr, 2006; Nagel & Kotze, 2010; Paechter and Maier, 2010; Riddiford, 2009; Rovai, 2004; Sherbon & Kish, 2005; Song, Singleton, Hill & Koh, 2004; Young and Norgard, 2006). According to the Organisation for Economic Co-operation and Development (OECD) “It has been estimated that there will be between 30 and 80 million online students in the world by 2025” (in Commonwealth of Australia, 2002, p. 3). Digolo, Andang'o and Katuli (2011) maintain that “online education is rapidly increasing. In 2006, the number of students in the United States alone...was estimated at over 3.5 million... It is fast becoming a universal educational trend that must be adopted by all institutions of higher learning” (p. 138). In Australia Riddiford (2009) reports that the “analyst IBIS World expects online education to be the fastest growing industry in Australia this financial year. Revenues have increased from \$827 million in 2004 to more than \$2.7 billion this year. This represents a

compound annual growth rate of more than 27 per cent, more than seven times the 3.5 per cent growth rate in the education sector as a whole” (p. 7). According to Nagel & Kotze (2010) “there is a boom in online courses worldwide” (p. 45).

There are some complexities with the domain specific terminology and definitions in respect of online learning with authors referring to it in different ways, including distance learning, e-learning, distributed learning, internet-based learning, blended learning and online learning to name some. Twigg (2001, p. 4) highlights a confusion of terminology stating that “the terms ‘distance learning’, ‘distance education’, ‘distributed learning’ and ‘online learning’ are used more or less interchangeably” (in Guri-Rosenblit, 2005, p. 468), see also Moore, Dickson-Deane, and Galyen (2010). In a distance learning approach, from which online learning has evolved, the central determinant is access to higher education regardless of geographical location. In this model the learner learns asynchronously, is self managed and motivated, communicates principally with the tutor, and does not necessarily communicate with other students.

Guri-Rosenblit (2005) highlights the scope of ‘e-learning’ stating that it “is a relatively new phenomenon and relates to the use of electronic media for a variety of learning purposes that range from add-on functions in conventional classrooms to full substitution for the face-to-face meetings by online encounters” (p. 469). This definition, focusing on the use of technology is similar to that of Liaw, Huang, and Chen (2007) who refer to e-learning as “the application of digital media for teaching and learning” (in Paechter and Maier, 2010, p. 292). Moore, Dickson-Deane, and Galyen (2010) refer to the approach as one of “online” learning, stating that “online learning is described by most authors as access to learning experiences via the use of some technology” (p. 4). Rovai (2004) refers to e-learning as “a combination of content and instructional methods delivered via a computer and designed to build knowledge and skills” (p. 82). The Commonwealth of Australia (2002) states that “‘fully online’ refers to a unit in which ‘all interactions with staff and students, education content, learning activities, assessment and support services are integrated and delivered on line’” (p. 14). This definition is the one that most closely aligns with the approach analysed in this study.

The Unit

The unit entitled ‘Arts Education: Music and Visual Arts’ is a core unit of a Bachelor of Education degree offered in the second semester of first year. In 2010 this unit was offered face to face on two campuses in addition to being offered in a fully online mode. Six hundred and forty students were enrolled in the unit at census date with 271 (42%) of these enrolled as fully online students. The unit, taught over a thirteen week period, allocates time equally to music education and visual arts on a weekly basis; however, the three assessment items for the unit - a paragraph answer

theoretical quiz, a reflection on an Arts teaching moment, and an integrated lesson plan - require students to draw upon their learning in both domains. There were ten teaching staff in the unit, two of whom were profile staff and eight of whom were teachers working in schools who were employed by the Faculty on sessional contracts. This paper relates to the online mode of the music education component of the unit.

A commonly reported characteristic of students completing core units in music as part of education degrees is an anxiety often attributed to previous experiences in working with the Arts (Abril, 2007; Baker, 2007a, 2007b; Commonwealth of Australia, 1995, 2005; Gifford, 1993; Green, 1995; Hanley, 1993; Hennessey, 2000; Jeanneret, 2006; Russell-Bowie, 2002; Temmerman, 1991). These studies acknowledge the problematic effect of a lack of confidence amongst generalist primary pre-service teachers upon their levels of engagement in units such as this one. The unit is therefore designed to enable students to overcome some of these initial anxieties whilst learning domain skills and pedagogical understandings. It is designed to enable pre-service teachers to plan and implement music and visual art learning experiences; but, this is not possible without domain knowledge, skills and understandings. The domain content in this unit is therefore contextualised by its pedagogical application. If they are to engage, students must know this and must see this paradigm enacted in each online activity. The unit presents students with opportunities to explore the “dimensions” of music (Wiggins, 2009), framed by a philosophy of music education as “praxis” (Elliott, 1995). Such an orientation includes active engagement with soundscapes, instrumental and vocal creation and re-creation, and critical listening in both face to face and fully online modes of learning.

The role of the learner in the unit is underpinned by a constructivist orientation. Learner agency and an active learner are therefore central tenets of this approach. This orientation had informed the design of the unit in face to face iterations for many years and was seen as the most critical feature to maintain in the online context. The result of this thinking was to foreground the development of digital resources, including instructor videos demonstrating activities and former students undertaking activities, and to explicitly relate these resources to the weekly activities being completed by students. Discussion board forums were used to enable students to share their experiences in undertaking the tasks.

Procedure

Data presented in this paper are drawn from the first of three annual surveys to be conducted over the length of the project, with each survey followed by semi-structured interviews with both academic colleagues and students. Hatch (2002) writes that ‘deciding exactly who the participants

will be is determined in part by the context and unit of analysis selected for the study' (p. 50). In this respect the perspectives of both students and academics were deemed to best inform the research question. At each stage of the project all students will be invited to participate in the survey and all colleagues and students will be invited to participate in semi-structured interviews. The participants, in this sense, self-select for participation - a process that is in line with the idea of "purposeful" sampling (Patton, 1990; Hatch, 2002) - as they have decided to participate in and hence contribute to the research.

This research project is grounded in the constructivist ontology as described by Blaikie (1993, p. 203), who maintains that unlike the realist view of the world the constructivist ontology asserts that in any situation there are "multiple realities" that are produced by the social actors in those realities (see also Burns, 1997, pp. 11-12; Sarantakos, 2005, p. 37). This research project uses a multi method approach within a constructivist ontology (Blaikie, 1993; Burns, 1997; Denzin and Lincoln, 1994; Patton, 1990; Sarantakos, 2005). The use of more than one method of data collection is referred to as a multiple method approach. Denzin and Lincoln (1994) refer to qualitative research as being inherently "multimethod" in focus (p. 2) and for Patton (1990) the use of multiple methods of data collection is to be regarded as a source of methodological strength within the qualitative paradigm. Patton (1990) encourages the multiple method approach, stating that it can contribute to the process of data validation:

One important way to strengthen a study design is through triangulation, or the combination of methodologies in the study of the same phenomena or programs. This can mean using several kinds of methods or data, including both quantitative and qualitative approaches (p. 187).

The use of different methods of data collection from different sources can result in research that is characterised by the structural strength resulting from these multiple methods. Denzin and Lincoln (1994) acknowledge the strength of multiple methods of data collection when stating the "use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question" (p. 2). These multiple methods of data collection from the participant groups provide significant methodological strength to the research design and contribute to data validity.

In December 2010, following the release of grades, fully online students (n=271) were invited to complete an online survey regarding their experiences of online learning. Seventy one respondents (26%) completed the survey in its entirety; however the number of respondents varied slightly

between questions with one respondent answering only one question, and another answering only four questions.

Data analysis and discussion

Survey data collected from the participant groups have been analysed through an approach that uses “inductive category construction” (Hatch, 2002; Miles & Huberman, 1984; Sarantakos, 2005, p. 306). The inductive process involves identifying and coding domains of data and searches for themes across domains. According to Hatch (2002) the inductive approach “proceeds from the specific to the general. Understandings are generated by starting with specific elements and finding connections among them” (p. 161). Hatch (2002) states that “inductive data analysis is a search for patterns of meaning in data so that general statements about phenomena under investigation can be made” (p. 161). Data were entered into extensive data maps and charts, or “matrices” (Miles & Huberman, 1984) that provided the framework for analysing themes and the relationships between them.

Table 1 presents the raw data from survey respondents. Following a brief discussion of quantitative survey data, the themes that emerged from written responses to questions four and five, relating to the use of video by students, shall be presented and discussed in more detail.

Table 1: Quantitative survey data by question

		Percent	Number of Responses	Mean	Standard deviation
1	I did not have access to musical instruments	20.8%	15		
2	Not useful	5.6%	4		
3	Somewhat useful	25.0%	18		
4	Useful	22.2%	16		
5	Very useful	12.5%	9		
6	Extremely useful	12.5%	9		
Total		99%		3.5	1.7

		Percent	Number of Responses	Mean	Standard deviation
1	I did not use this text	8.2%	6		
2	Not useful at all	5.5%	4		
3	Somewhat useful	21.9%	16		
4	Useful	23.3%	17		
5	Very useful	26.0%	19		
6	Extremely useful	15.1%	11		

Total		100%		2.0	1.4
Question 3. Select ONE response that best describes the usefulness of the narrated PowerPoints in completing the unit (n=72).					
1	Not useful	1.4%	1		
2	Somewhat useful	8.3%	6		
3	Useful	9.7%	7		
4	Very useful	26.4%	19		
5	Extremely useful	54.2%	39		
Total		100%		4.2	1.0

Question 4. Select ONE response that best describes the usefulness of the instructor videos in completing the unit (n=72).

1	I did not use the instructor videos	2.8%	2		
2	Not useful	1.4%	1		
3	Somewhat useful	19.4%	14		
4	Useful	11.1%	8		
5	Very useful	22.2%	16		
6	Extremely useful	43.1%	31		
Total		100%		4.8	1.4

Question 5. Select ONE response that best describes the usefulness of the videos showing past students in completing the unit (n=72).

1	I did not use the videos of past students	2.8%	2		
2	Not useful	5.6%	4		
3	Somewhat useful	15.3%	11		
4	Useful	12.5%	9		
5	Very useful	25.0%	18		
6	Extremely useful	38.9%	28		
Total		100%		4.7	1.4

Question 6. How useful were the weekly learning plans and the other word based resources, Such as readings and handouts that were available in MyLO [the University Learning Management System (LMS)] to you in completing this unit? (n=71).

1	I didn't use these	0.0%	0		
2	Not useful	1.4%	1		
3	Somewhat useful	16.9%	12		
4	Useful	11.3%	8		
5	Very useful	29.6%	21		
6	Extremely useful	40.8%	29		
Total		100%		4.9	1.1

Question 7. How effective were the three assessment tasks - quiz, reflective analysis and lesson plan - in assessing your learning in this unit (n=71).

1	Not effective	5.6%	4		
2	Somewhat effective	12.7%	9		

3	Effective	32.4%	23		
4	Very effective	31.0%	22		
5	Extremely effective	18.3%	13		
Total		100%		3.4	1.1

Question 8. How often did you use of the Discussion Boards in this unit? (n=71).					
1	Never	0.0%	0		
2	Once or twice during the unit	9.9%	7		
3	Three to six times during the unit	19.7%	14		
4	An average of around once per week	43.7%	31		
5	An average of more than once per week	26.8%	19		
Total		100%	71	3.9	0.9

The mean of means for questions 1 to 8 was 3.5. With a response rate of 26%, and with the different response options provided between individual questions, it is difficult to generalise from these data. As may be seen in Table 1 questions four, five and six elicited the highest mean scores being 4.8, 4.7 and 4.9 respectively, suggesting that students most valued the videos and resources provided in the LMS. Question six, the highest mean score, related to the usefulness of other materials such as a weekly learning plan. These plans were developed to provide students with a weekly structure for their learning. Questions four and five are the focus of this paper.

Two types of videos were used in the unit and were linked to the first and second assessment tasks, these were videos of academic staff working with key skills and concepts (referred to in the survey as instructor videos), and videos of former students demonstrating how to complete different Arts activities. An example of the instructor videos is a demonstration (direct to camera by an academic) of how to create an ostinato (a repeated musical accompaniment pattern) to accompany a name-game rhyme that could be used in any classroom entitled 'My name's...'. An example of the past student videos is a group of students filmed at a summer school learning the rhythm of a poem entitled "Potions in the Pot" through various movement-based activities such as clapping, walking and rhythmically chanting.

Question four relates to the usefulness of the instructor videos. As can be seen in Table 1, 65.3% or 47 out of the 72 respondents agreed that the instructor videos were either very useful or extremely useful. Two respondents or 2.8% did not use the videos and one respondent or 1.4% did not find them useful. The mean response for this question was 4.8 being at the top end of the 'useful' range and 95.8% or 69 out of 72 respondents indicated that these learning resources were "useful" to differing degrees. Fifty four respondents also chose to make written comments. The analysis of these written responses to question four about the usefulness of the instructor videos has revealed four themes: those who only viewed the videos and took notes (a passive approach

in terms of participatory Arts learning); those who used the videos actively by working along to them in some way (an active form of participatory Arts learning); those who valued the videos as a means to increase their depth of understanding; and, those who appreciated the visual that is inherent in videos, sometimes referring to themselves as “visual learners”. Each of these themes and the relationships between them shall be explored now.

Fifteen references were made to viewing videos and taking notes from them, including one respondent who wrote that “I thought these were fantastic, I took lots of notes off [sic.] these, and watched them a number of times too”. Ten respondents simply referred to watching and taking notes. Others referred to the usefulness of videos as a visual learning tool, with one stating that “Monkey see, monkey do worked well for me”. One respondent wrote about their “note taking often of what was said as much as what was visually apparent”. This leads into more interesting data that made reference explicitly to the value of visual learning in the videos. Three respondents refer explicitly to themselves as “visual learners”, with one writing “I am a visual learner and these videos made it much easier for me to understand the process. It would be very difficult to do this unit without visual learning aids”. This comment is reflected in the response of another participant who stated that “the videos were crucial for myself [sic.] to learn about these techniques. I have no music experience what so ever [sic.], so having [the tutor] step by step the activity and demonstrate was fantastic...I wouldn't have been as engaged or even understood the tasks if I was to read instructions and try and [sic.] complete it”. This is an interesting comment as the respondent has linked the videos to their level of both engagement and understanding. Student understanding was referred to variously in these data, with eight positive and one negative response being evident: “BORING!!!!!! When I couldn't sleep at night I put these on so that it bored me to sleep”. For another respondent though, the videos were linked to their future practice, being referred to as useful to “model teaching practices and show me the way that the activities can be used in a classroom situation”.

The most numerous written responses to question four were those that referred to the ways in which students used the videos in an active way, in a way that was other than just note taking, seventeen such responses were received. These mostly refer to working, singing or playing “along with” the videos. However what is most significant about these data is that many respondents also refer to how this participation helped them in other ways, such as to review key concepts or skills, or to check their own understanding about a key concept or skill. One respondent referred to their use of the videos as a preparation for teaching a concept in their classroom stating that they “attempted to use some of the activities within the classroom”, and another that they then “also taught others some of the music techniques”. Another respondent also applied their learning from

the videos stating that “without these videos some of the concepts would have been close to impossible to understand ...I played that video over and over and practised with it, then had a go with my children and music”.

Question five relates to the usefulness of videos of past students completing tasks. With question four and question five both being concerned with the usefulness of videos, question 5 data revealed similar themes to those of question four, with two exceptions: these types of videos seem to have been applied more extensively to classroom contexts by students, and respondents repeatedly referred to the “re-watching” of these videos. Also the comments regarding active use of these videos were more detailed and included comments about clarifying assessments. Question five also revealed more complex connections between themes, and there were more comments regarding lack of usefulness, which is consistent with quantitative data for this question. A strong thematic connection between the active use of videos and the increased understanding of key concepts and skills was evident in responses to this question. As can be seen in Table 1, 63.9% or 46 out of 72 respondents agreed that the videos of past students were very useful or extremely useful. Two respondents or 2.8% did not use the videos and four respondents or 5.6% did not find them useful. The mean response for this question was 4.7 being at the top end of “useful” range and 91.6% or 66 out of 72 respondents indicated that these videos were “useful” to differing degrees.

One response highlights many of the major themes in the use of videos by students, stating:

“I consider myself to be a very visual learner and being able to ‘see’ activities in action helped me make sense of their purpose and structure. First, I would watch and take notes and then if applicable I would watch again and join in. Some of the activities I tried in small group settings, for example the soundscape activities. These videos were also extremely helpful for completing weekly activities and assignments”.

This comprehensive response makes clear the connectedness of the data in this part of this research, highlighting that students use of videos was often more complex than merely assisting with one area of learning such as their understanding of concepts and skills. Another very comprehensive response indicated one student’s very sophisticated use of the videos to locate their learning within their broader learning in the degree, stating that

“I both watched and took notes, then compared them with how I was taught and how I was currently performing the activities myself. I learned many new tips - particularly in the musical experimentation and delivery - this has helped to inform my own teaching methodology, and having a concrete example in front of me showed how the lesson should look, which in turn gave me confidence to expand it”.

Eight references about using the videos to apply learning in a professional context were revealed in

these data. These ranged from I “used some of the activities” to more explicit responses such as “I practiced each lesson and challenged my Year 8’s to try their hand at a soundscape. Each video is so valuable in developing our own personal techniques within the Arts”. Ten responses highlighted the usefulness of these videos in clarifying the requirements of or assisting with assessment tasks. These responses were generally not very detailed, and included responses such as “I took notes from videos as well as re-watching during assignment time”. This last response highlights a theme that was unique to this question, that of students replaying or re-watching videos. This highlights an advantage for online learners where they could continually review videos to clarify concepts or skills in relation to their learning or as this respondent makes clear to complete assignments. This use of videos in this way also connects with the theme of clarifying assessment items.

Conclusion

The significance of this paper lies in data from this initial exploration of the boundary between online learning and Arts education in a tertiary context, with the Arts being an area that is presently under-represented in studies of the use of online learning in higher education. These data have indicated that further crossing of this boundary in both research and practice has much to contribute to understanding the synergies that are possible in this area. These data indicate that students in this online context regarded the materials devised to facilitate their active engagement in musical learning not only as “useful” to varying degrees, but reported quite high levels of “usefulness” across data. This suggests that further investigation of this “usefulness” and particularly the ways in which students use videos in their learning has the scope to inform the scholarship of online teaching significantly. The main theme from these data suggests that some students used videos in a very “active” way and that they regarded this is important in the learning. Further research in this area could explore these active approaches, and suggest ways in which the future use of videos may be framed in order to maximise student learning.

Qualitative data analysed in this paper confirm the high levels of “usefulness” in respect of student use of videos, and highlight that students use of videos was often more complex than assisting with isolated aspects of learning, often being used in interrelated and sophisticated ways that contributed to their metacognition. One aspect of this complexity was the “re-watching” of videos by some students and the application of videos by others to the professional context. Like the notion of “active” learning, and indeed related to it, the further investigation of the re-watching of videos by students could suggest ways in which the future use of videos may be framed in order to maximise student learning. Further research in these areas is ongoing and will continue to inform some of the themes over time; however, this paper has certainly highlighted the ways in which students have used online support measures such as videos to support their learning.

References

- Abril, C. R. (2007). I have a voice but I just can't sing: A narrative investigation of singing and social anxiety. *Music Education Research*, 9(1), 1-15.
- Baker, W. J. (2007a). The use of journaling in the development of student engagement and confidence with the teaching of music in an Australian early childhood and primary teacher education degree: A new perspective of an old problem. *Australian Journal of Music Education*, 1, 40-49.
- Baker, W. J. (2007b). The use of journaling in the development of student engagement and confidence with the teaching of music in an Australian early childhood and primary teacher education degree, *Education in the Pacific*, 4-7 December 2007, Christchurch New Zealand.
- Biggs, J. (2003). *Teaching for quality learning at university*. Great Britain: The Society for Research into Higher Education & Open University Press.
- Blaikie, N. (1993). *Approaches to social enquiry*. Cambridge, England: Polity Press.
- Boettcher, J. V. & Conrad, R. (2010). *The online teaching survival guide: Simple and practical pedagogy*. Hoboken: Jossey-Bass.
- Burns, R. (1997). *Introduction to research methods*. (3rd Ed.). South Melbourne, VIC: Addison Wesley Longman.
- Commonwealth of Australia. (1995). *Arts education*. Report by the Senate Environment, Communications and Arts References Committee. Canberra, ACT: Senate Environment, Recreation, Communications and the Arts Reference Committee.
- Commonwealth of Australia. (2002). *Universities online: A survey of online education and services in Australia*. Canberra, ACT: Department of Education, Science and Technology.
- Commonwealth of Australia. (2005). *The National review of school music education: Augmenting the diminished*. Canberra, ACT: Australian Government.
- Cleveland-Innes, M., & Garrison, D. R. (Eds.). 2010. *An introduction to distance education: Understanding teaching and learning in a new era*. New York: Routledge.
- Denzin, N., & Lincoln, Y. (Eds.). (1994). *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications.
- Digolo, B. E., Andang'o, E. A., & Katuli, J. (2011). E- Learning as a Strategy for Enhancing Access to Music Education. *International Journal of Business and Social Science* 2(11), 135-139.
- Drummond, G. (2008). Success in online education: Creating a roadmap for student success. *Distance Learning* 5(4), 43-48.
- Elliott, D. J. (1995). *Music matters: A new philosophy of music education*, New York: Oxford University Press.
- Epstein, Paul. (2006). Online, campus or blended learning: What do consumers prefer and why? *Distance Learning*, 3(3), 35-37.
- Gifford, E. (1993). The musical training of primary teachers: Old problems, new insights and possible solutions. *British Journal of Music Education*, 10, 33-46.
- Green, R. (1995). Primary school music curriculum – one solution. *British Journal of Music Education*, 12, 113-125.
- Guri-Rosenblit, S. (2005). 'Distance education' and 'E-learning': Not the same thing. *Higher Education* 49(4), 467-493.
- Hanley, B. (1993). Music teacher education: new directions. *British Journal of Music Education*, 10, 9-21.
- Hatch, J. (2002). *Doing qualitative research in education settings*. Albany, NY: State University of New York Press.
- Hennessy, S. (2000). Overcoming the red-feeling: the development of confidence to teach music in primary school amongst student teachers, *British Journal of Music Education*, 17 (2), 183-196.

- Hebert, D. G. (2007). Five Challenges and Solutions in Online Music Teacher Education. *Research and Issues in Music Teacher Education*, 5.
<http://www.stthomas.edu/rimeonline/vol5/hebert.htm>. Accessed 2 June 2011.
- Jeanneret, N. (2006). The National Review of Music in Schools and the endless debate about music in primary schools. *Australian Journal of Music Education*, (1), 93-97.
- Jones, Norah., & O'Shea, John. (2004). Challenging hierarchies: The impact of E-learning. *Higher Education*, 48(3), 379-395.
- Kerr, M. S., Rynearson, K. & Kerr, M. C. (2006). Student characteristics for online learning success. *Internet and Higher Education*, 9, 91-105.
- Miles, Matthew. B., & Huberman, Michael. A. (1984). *Qualitative data analysis: A sourcebook of new methods*. Newbury Park, London: Sage.
- Moore, J. L., Dickson-Deane, C. & Galyen, K. E. (2010). Learning, online learning, and distance learning environments: Are they the same? *The Internet and Higher Education* (accepted manuscript).
- Nagel, L & Kotze, T. G. (2010). Supersizing e-learning: What a CoI survey reveals about teaching presence in a large online class. *Internet and Higher Education*, 13, 45-51.
- Paechter, Manuela., & Maier, Brigitte. (2010). Online or face-to-face? Students' experiences and preferences in e-learning. *Internet and Higher Education* 13, 292–297.
- Patton, M. (1990). *Qualitative evaluation and research methods*. (2nd ed.). Newbury Park, CA: Sage Publications.
- Riddiford (2009) Online learning a \$2.7bn industry *The Australian* 05.09.2009, p. 7-7, 1.
<http://web.ebscohost.com/ehost/detail?sid=fecb6470-3dab-4312-9030-d3b0381e0d4a%40sessionmgr13&vid=1&hid=25&bdata=JnNpdGU9ZWWhvc3QtbGl2ZQ%3d%3d#db=anh&AN=200909051P07373330>. Accessed 30 May, 2011.
- Rovai, A. P. (2004). A constructivist approach to online college learning. *Internet and Higher Education* 7, 79-93.
- Russell-Bowie, D. (2002). Where in the world are we: How the perceptions of Australian primary teacher education students differ from those from four other countries in relation to their background and confidence in music education. *Australian Journal of Music Education*, 1, 33-44.
- Sarantakos, S. (2005). *Social research*. (3rd Ed.). Houndmills, Hampshire: Palgrave MacMillan.
- Sherbon, J. W. And King, J. L. (2005). Distance learning and the music teacher. *Music Educators Journal* 92 (2), 36-41
- Song, L., Singleton, E. S., Hill, J. R & Koh, M. H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *Internet and Higher Education*, 7, 59-70.
- Temmerman, N. (1991). The philosophical foundations of education: The case of primary music education in Australia. *British Journal of Music Education*, 8, 125-138.
- Wiggins, J. (2009). *Teaching for musical understanding*. (2ndEd.). Rochester, Michigan: Centre for Applied Research in Musical Understanding (CARMU).
- Young, A. & Norgard, C. (2006). Assessing the quality of online courses from students' perspective. *Internet and Higher Education*, 9, 107-115.