

# PRE-SERVICE STUDENTS' PERCEPTIONS AND EXPERIENCES OF DIGITAL STORYTELLING IN DIVERSE CLASSROOMS

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#### ABSTRACT

The purpose of this paper is to analyse an innovative teaching and learning practice in which pre-service student teachers at the CPUT used digital stories to reflect on their experiences of diversity in their classroom. Managing diverse classrooms is one of the main challenges for all teachers. Digital storytelling can help manage such classrooms. It facilitates the convergence of four student-centered learning strategies: student engagement, reflection for deep learning, project-based learning, and the effective integration of technology into teaching. A qualitative research approach was employed whereby twenty-nine written stories and a recording of a focus-group interview with purposively selected participants from the group was the data collection technique. The results indicate that the digital storytelling approach exposed the students to new media literacies which prepared them for the rich and diverse contexts which they will encounter in their teaching.

#### INTRODUCTION

Storytelling has been used throughout history for teaching and learning. Stories help to make meaning out of a particular practice. In our lives today, with the technological communication explosion and globalisation, we have experienced a shift in our traditional understandings of 'literacies' to exploring diverse modes of meaning-making. Currently children in schools encounter and interact with new digital literacies including blogs, wikis, social network sites, digital texts and digital storytelling. Given storytelling's essential role in learning, meaning-making and knowledge development, it is not unexpected to find digital storytelling being part of an undergraduate curriculum.

At the end of 2010, the final-year pre-service Intermediate and Senior Phase (ISP) students at Cape Peninsula University of Technology (CPUT) were introduced to digital storytelling. As the curriculum presentation was fairly flexible the students were given the option of either completing a digital story or a paper-based portfolio. For those students who chose the digital storytelling process, they had to master the academic content which was to reflect on the seven roles of a teacher (Government Gazette No20844) during their past four years of preparation to be a teacher, and to acquire the necessary reading, writing and digital literacy competences. This was accomplished through situated practice in a computer laboratory on the campus, overt instruction by three educational technology experts from the institution including their regular lecturer and underpinning the whole process was critical framing amongst the students and the academic support team.

Of a class of fifty-nine students, twenty-nine chose to do the digital storytelling. These students came from a diverse cultural, linguistic and class background. 79.31% of the students were aged between 20 and 25 years old, 13.79% were between 30 and 35 years old and 6.89% were older than 36 years. 72.4% of the class was female and 27.6% were male. 79.3% of the class was English first-language speakers while 20.7% was isXhosa first-language speakers.

The paper aims at analysing final year teacher education students' perceptions and experiences of digital storytelling in a multicultural classroom. The following questions gave focus and drive to the paper:-

- i. What were the pre-service teachers' perceptions and experience of digital storytelling in their classroom within a teacher education programme?
- ii. How do the student teachers perceive the integration of digital storytelling approach into their teaching?

To answer these questions, we used qualitative data collected through focus group interviews with ten preservice students and their reflections on their choice of teaching as a career presented as digital stories. We adopted an interpretive qualitative research approach to gather and analyse the focus group interviews as well as the reflections. We used an Interpretative Phenomenological Analysis (IPA) approach to gain insights to the way students perceive and experienced digital storytelling in multicultural classrooms. Analysis of the findings of the study shows that as a teaching approach, digital storytelling helped the pre-service teachers develop personally and professionally. The teachers perceived the approach as a valuable technique for challenging issues of diversity in their classrooms. Since most of the classrooms in the urban areas of South Africa are very diverse, teachers in those classrooms need to be equipped with the technique which will aid them challenge the ills of



diversity. The findings of this study therefore could be helpful to instructors in teacher education who are keen to develop and equip diverse classroom teachers to handle their multicultural learners sensitively. The terms "diverse", "multicultural" and "teacher education students" and pre-service teachers are used interchangeably in this paper.

#### LITERATURE REVIEW

Since this research project was investigating students' perceptions and experiences of digital storytelling in a multicultural classroom within a teacher education programme, the literature review therefore, discusses the concepts of digital storytelling, diversity and issues of student reflections within the programme.

## Digital storytelling in a teacher education programme

Anstey and Bull (2006:1) state that:

the world is changing in technological, social and economic ways and as a result of this the genres of texts we use change, the way we use literacy will change as purposes and contexts change, and literacy knowledge, skills and processes change. Today the literate person needs to unite and reunite existing and new literacy knowledge, skills and purposes for new purposes and new contexts using new technologies. Therefore the way we teach and learn literacy will need to change. Students not only need a broader knowledge base about texts and literacy, they also need the resources, attitudes and strategies to adjust to and develop responsive and appropriate literate practices. As a result of this we decided to introduce our students to digital storytelling within their existing flexible curriculum.

Developing digital stories encourages students to engage in both old and new literacies and through the process of creating a movie they construct, examine, and manifest other literacies (Sylvester & Greenidge, 2010:287). Hull and Nelson (in Warschauer, 2009:124) further suggest that combining images and texts transcends rather than combines what is possible in each particular mode. Warschauer (2009:125) affirmed that digital story tellers find a deeper meaning of what they want to say through the process of combining modes.

A digital story is a multimedia text incorporating still images complemented by a narrated soundtrack to tell a story or present a documentary. Using this multimedia approach in a classroom encourages students to engage with each other. Anstey and Bull (2006:14) state that today students have to engage in a range of social and literate behaviours in order to use the information. And in so doing it influences students and shape their voice, personal identity and agency.

As stated by Sylvester and Greenidge (2010:287), Joe Lambert and Dana Atchey combined their backgrounds in theatre, video production and interests in cultural democracy and community arts to develop a business enterprise using digital storytelling. In 1994, they established the Centre for Digital Storytelling at the University of California at Berkeley as a community art centre for new media based on the premise that everyone has a story to tell. The model constructed by Lambert (2002) for creating effective digital stories is based on a combination of the following seven elements:

- 1. Point of view digital storytelling allows the storyteller to come close to his audience by expressing personal experiences through first-person point of view;
- 2. Dramatic question a plot is developed in a digital story thereby distinguishing it from showing wedding pictures with music and flashy pictures;
- 3. Emotional content effective digital storytelling evokes an emotion from the audience. In our research project, the students shared their philanthropic motives for becoming teachers and how they had developed over the four years;
- 4. Economy digital storytelling is using approximately 300 500 words in a story so one has to be very economical in what you chose to say and how you say it;
- 5. Pacing determining the rhythm of a story to sustain an audiences interest;
- 6. The gift of voice the pitch, inflections and tenderness of ones own voice is one of the most essential elements that contribute to the effectiveness of digital storytelling; and
- 7. Soundtrack using music to enhance the story and create an emotional response.

Sylvester and Greenidge (2010) suggest that when developing digital stories in a university classroom setting, students go through the process of writing a story by traditional methods: using pencil and paper or the word-processing functions of a computer. This becomes the digitized voice-over narration. The story is recorded and preferably as a performance, allowing the audience to hear the personal emotion inflected in the voice. Once the story has been written and read, personal photographs, pictures, scenes or image frames that complement the



narration are included. Music or sound effects are added to enhance the narration. Finally a title frame is included as well as rolling credits to cite sources, and add acknowledgements. If students used media from the internet to enhance their stories, we insisted they acknowledge cited the files and any other copyright information.

Once the movies have been created, showing them to the class, parents, family members, friends and lecturers is the publishing phase. This stage should not be missed as students generally enjoy showing their movies. What viewers see and understand from this publishing phase may influence the way they view their day-to-day social, cultural or ethnic groups differently and may change their behaviour (Anstey & Bull, 2006:9).

#### Diversity in a teacher education programme

James (2001:1) in the *Manifesto on Values, Education and Democracy Manual for the South African Department of Education*, states that the Constitution commits us to the establishment of a society based on "democratic values, social justice and fundamental human rights". Democracy is at the heart a society's means to engage critically with itself. But critical engagement is not an automatic consequence of democratic institutions. Education is the key because it empowers us to exercise our democratic rights, and shape our destiny, by giving us the tools to participate in public life, to think critically, and to act responsibly.

Today, South Africa is a nation built from the richness of many cultures, languages, traditions and beliefs. Au (2004:393) believes there is a trend towards greater diversity in the student population and teacher educators have an essential role in preparing teachers to teach in multicultural classrooms. However, Smolen, Colville-Hall, Liang and Mac Donald (2006:47), highlight the futility of preparing teachers for diversity if the teacher educators themselves lack multicultural competences. They believe that in America 40% of the school population was racially and culturally diverse and was projected to become more diverse. Many of the white middle-class teachers have a monoculture perspective and they view culturally diverse students as less capable of achieving academically. Valentin (2006:198) states that all students should have the knowledge and skills that will enable them to succeed in both academic and real-life situations and to be skillful as well as professionally equipped to address the learning needs of all students. If such changes are happening in the economical, social and technological worlds then a global consciousness needs to be evident and embraced as the philosophy of an academic environment.

Au (2004:409) concurs saying that teacher educators should teach in a culturally responsive and sensitive manner and make sure that students of diverse backgrounds have the opportunity to participate in instruction that involves them in motivating meaningful learning experiences.

Au (2007:7) proffers two explanations for the gap that educators can work on to improve when dealing with diversity. Firstly, students of diverse backgrounds tend to receive a great deal of instruction emphasizing lower level skills as opposed to higher level thinking. She believes that with the era of globalization, educators must give all students, and especially students of diverse background access to instruction focused on higher level thinking with texts. Secondly, Au believes that schooling fails to connect with the literacy learning needs and interests of students of diverse backgrounds. Typical schooling is centered on content orientated to mainstream students and their perspectives. She concludes by suggesting that the successful use of culturally responsive instruction requires some depth of understanding of both the concepts of culture and instruction.

#### Reflection in a teacher education programme

Hatton and Smith (1995:4) state that 'reflection' and 'critical reflection' are ubiquitous terms used in the descriptions of approaches to teacher education. They believe many of these terms are loosely defined and embrace a wide range of concepts and strategies. However, Schon (in Hatton and Smith) has narrowed his definition and he discusses the terms 'reflection-on-action' and 'reflection-in-action'. The latter implies that the professional has reached a stage of competence where they are capable of thinking consciously and being able to modify their actions almost immediately. Hatton and Smith restate his idea by saying that knowledge is 'derived from the construction and reconstruction of professional experiences'.

## Framework: Interpretative Phenomenological Analysis

This study employs an Interpretative Phenomenological Analysis (IPA) as a framework to understand the CPUT final-year pre-service teachers' perceptions and experiences of digital storytelling in multicultural classrooms. As a qualitative research approach, IPA has its theoretical origins in phenomenology and hermeneutics. The framework was designed by Smith, Jarman and Osborn (1999). A researcher can deploy IPA if the aim of the study is to explore individuals' perceptions as well as understand how they (individuals) make sense of their experiences. IPA aids in the interpretation of perceptions, experiences, events and actions held for individuals in



a study (Chapman & Smith, 2002). The framework helps in explanations that give insights to understand human experience better (Fade, 2004:647).

IPA is both phenomenological and interpretative. It is phenomenological because it "seeks an insider perspective on the lived experiences of individuals," and is also interpretive because it "acknowledges the researcher's personal beliefs and standpoint and embraces the view that understanding requires interpretation" (Fade, 2004:648). That is, while IPA aims at gaining the participants' perspective of the phenomena being studied, the researcher is recognised to be the primary analytical instrument in the process. Through a process of interpretative activity, the researcher's conceptualizations of the phenomena are valued for making sense of the perceptions and experiences of the study subjects (Fade, 2004; Chapman and Smith, 2002).

Purposive sampling is normally used to identify participants for a phenomenological study. Only individuals that can offer meaningful perceptions and experiences on the phenomena under scrutiny are asked to participate. IPA employs qualitative data collection techniques such as focus group interviews, diaries, one-on-one interviews etc that aid in understanding the meanings of the phenomena, the changing behaviours, and conflicts which may not be accessible in quantitative approaches.

#### RESEARCH METHOD

This interpretive study has used IPA as a framework to conduct and analyse data from focus group interviews and digital stories by final-year pre-service teachers from CPUT. As is dictated by IPA the focus group interview participants were purposively sampled to participate in the conversations. Ten students from different races who participated in the digital storytelling programme were sampled. We wanted different races so we could understand how different people perceive and experience digital storytelling in multicultural classrooms.

In this study as already indicated above, we wished to analyse in detail the perceptions and experiences of the final year teacher education students regarding digital storytelling in diverse classrooms. Focus group interviews were used to engage in a flexible dialogue with the student teachers in the study. Interviews were audio-recorded with the consent from the participants; the interviews were then transcribed verbatim. To establish trustworthiness of the findings, the interviews were conducted by two different researchers. Again, the interview data was triangulated by the participants' digital stories about their choice for teaching career and how they perceive themselves prepared to fulfill the seven roles of a teacher when they go teaching in the following year.

In the process of analysis, we did a detailed systematic qualitative analysis, case by case. We read and examined the transcripts over and over, with each time annotating the text with initial comments. Then we extracted and listed the themes. The themes were then clustered in a meaningful way by looking for connections between them to develop super ordinate themes.

As researchers in a Higher Education Institution we obtained permission from the institution and the students before the study commenced. Permission to use the students written reflections and to interview them was obtained orally and in written form at the beginning of the project. We also obtained consent to record the conversations from the students who participated in the focus group interviews. Privacy and confidentiality were adhered to throughout the research process.

#### FINDINGS AND DISCUSSION

Using IPA to analyse qualitative data collected through: (i) focus group interviews with ten students purposively selected from the fourth years who participated in the digital storytelling course; and (ii) the students' digital stories, the following super ordinate themes became evident:

- Personal and professional development
- Challenging diversity issues
- Approach created a strong class bond

# Personal and professional development

Participants are of the opinion that using digital storytelling in a diverse classroom could help teachers gain insights about issues of diversity from the learners' stories, hence, enhancing the teacher's role of a lifelong learner. In addition, the teacher could be in a better position to know more about their learners. Consequently, the teacher would handle the individual learners accordingly. A student in the focus group interviews narrated that:

we are just learning from every child that you get in your classroom, you are going to learn so much and I think being a lifelong learner, like I just want to find out everything about – about them and their



culture. Like that would be so interesting. And it's not that you want to take them in a classroom and like teach them oh this is Indian culture and this is that. It's just that you've got, you've got the children there and you've got real people and their own actual history and context to learn from and use.

Because they (the participating students) perceive the approach to be good and helpful they wish they were exposed to digital storytelling when they were beginning their training programme. One of the participants said:

it would be nice to have Digital Stories in the first year, when you come here. So that by the time we get to the end of 4<sup>th</sup> year you have such a great respect for the people that you're with, because I now sit here knowing Zantu's story and Charnelle's story and Warren's story, which I haven't known before. ...I know why they're here, what has driven them. Maybe this should be done at the beginning of your tertiary studies and at the end

Some practitioners are of the opinion that the approach is really useful in teacher education classrooms. Robin and Pierson (n.d) after using the approach in their teacher programme, concluded that "digital storytelling ... proven to be the solution to our search for a rich technology-integrated teaching and learning model for our undergraduate teacher education students. A key goal of our teacher education program is that our graduates be able to meaningfully use technology to support their curriculum beyond basic productivity tasks; thus, we encourage our students to think beyond the technology tools themselves to educationally-sound uses of those tools".

Analysis of the students' digital stories and the focus group interviews in this study shows that the approach could be good for teacher education students as they could have a chance of reflecting on their choice of career. Through the approach the students had a chance of reflecting on their training as teachers. For instance one student in her digital story said:

Over these [past] four years I have learned to be sensitive to the diverse needs of my learners, construct appropriate learning environments, demonstrate sound knowledge of my learning area and more importantly be an inspiration to my learners

Similarly, another student in the focus group interviews said:

I think Digital Stories gave us the opportunity to reflect on the four years that we've been here and why we've chosen Teaching.

From the reflection the students create the impression that they are going into teaching because they feel it is their calling.

#### **Challenging diversity issues**

Analysis of the data shows that the students perceive digital storytelling as a beneficial teaching tool in multicultural classrooms because it encourages the understanding of the differences existing among learners in a classroom. Given resources at the schools they will be teaching, they were enthusiastic to use the teaching approach. Regarding the theme, this is what some of the participants had to say:

I think you could also have a story where you have different races and different religions together in one story. Maybe start off with their separate entities where they come from their backgrounds, but end off in way where you have a whole group of learners that are completely different from one another ending off in a way that they combine together and you can send a message across about multiculturalism in that way, where everybody actually comes together and they don't see it as a problem.

If your children could do a thing on their family tree for Geography, instead of making a poster, then they must make a Digital Story. And they will learn about each other, and their lives and their problems and their backgrounds. You would get such a healthy respect and it's actually really beautiful and inspiring, to see other people's lives and where they come from.

Parents of many South African learners do not know much about multiculturalism. Most of them have not yet changed the apartheid mentality where the classrooms were normally monocultural. The students think that by doing the digital storytelling with the learners, lessons about multicultural classrooms could extend to parents. One student in the interviews narrated that:



It spreads further than just the learners. Because if you do it in the school like if you take this idea [digital storytelling] into a school and you make the learner – say in Grade 7 and they do a project like this and you expand it and you call their parents in, like we called our parents in to come and watch our stories. ...through teaching their kids multiculturalism, you're also teaching their parents because their parents then also get to see their children's perspective of it and they can actually learn from their children.

In line with the idea of creating learning environments as narrated by the respondent above, one student in her digital story wrote:

I do believe learners need to be provided with a supportive and empowering environment. This is also key in the role as a teacher to develop supportive relationships with parents and other key people and organisations in the community.

The use of technology to bring multicultural awareness to people is also pointed out by Sleeter and Tettegan (2002:1) who show that "previous studies have proved that technology can provide meaningful ways for educators and students to process information and collaborate in order to promote critical thinking and social justice through multicultural education". Similarly, Donaldson and Carter (2000) and Selwyn (2000) noted that some teacher training curricula are now integrating technology-supported courses to connect communities and teach multicultural, social justice, and cross cultural education.

### Approach created a strong class bond

From the students' own experience with the digital storytelling approach, they reported to have understood their classmates better through the stories. This knowledge helped them to respect each other as the stories helped to deal with some prejudices and stereotypes they held against one another. Some of the participants narrated that:

everybody has their own story to tell. So Digital Story allows you to tell your specific story and share it amongst everybody in your classroom. So yes, if you get exposed to another person's culture, surely you will respect that culture eventually and you will learn about that person and you see that person with more respect and in a better light.

And we've experienced that in our class where you've learnt so much about people. Things that you didn't know and now suddenly you understand them better and you might not even relate but you've already seen it from their point of view. So it's quite a nice tool

And you respect each other's reasons for teaching.

Analysis shows that the students came to realize that minorities in classrooms may fail to actively participate due to the literacy practices and interaction of their culture being different from those in the classroom. The class-teacher and other students may interpret that those from the minorities are incapable or not cooperative. However, using digital story telling provided a platform to the minorities to make their voices heard and let others know that they are not linguistically poor students. This type of situation is echoed by Anstey and Bull (2006). In addition, Sylvester and Greenidge (2010) agree that "using this multimedia approach in the classroom helps students discover voices, confidence and structure in their writing".

Hammer and Kellner (2000) encouraged the use of interactive multimedia for curriculum delivery to bring individuals to real life; students encounter the "Other" as real individuals in audio artifact, video. They further argued that "these images can personalize individuals; they make it possible to experience the views, practices, and culture of groups outside one's life. In particular, multimedia can dramatize oppression, making intolerance and bigotry vivid, showing the evil effects of racism and prejudice".

# CONCLUSIONS AND RECOMMENDATIONS

Given the challenges faced by multicultural classrooms in teacher education in our country, it is surprising that greater attention has not been paid to promoting integration and use of multimedia approach in the classrooms' in particular in the teacher education program. Digital storytelling as a teaching and learning approach has proven to aid creation and build communities, provide platforms for communication and reflecting on one's past.

It is interesting to note that the students who participated in the digital storytelling approach came away with a deeper understanding of one another's ethnic, racial and socio-economic backgrounds. The knowledge about other students enhanced the understanding and respect for one another in the class. The situation gave a practical example of what and how they would handle diverse classrooms when they begin their teaching career next year. Vaughan (2005: 30) also states that pre-service education programmes should recognize that multicultural



teaching is a valuable concept that will help future teachers to function more effectively in the classroom. Teaching students from culturally diverse backgrounds is going to be the norm for teachers in this century so we must prepare teachers to meet these challenges if they are going to be successful. Since it was noted that some students struggled producing their digital stories due to language as they were expected to complete their work in English, we therefore, suggest that culturally responsive instruction is proposed as a possible solution to the diversity issue. We need to be sensitive to the English second-language students and offer the students the opportunity to speak in their digital stories in their mother-tongue while displaying English subtitles.

Digital storytelling and meaning-making both inside and outside the classroom have earned their place by being the forefront of research at our university. While the teacher education students in the study perceived the approach as a technique which was useful in challenging ill issues of diverse classrooms, and therefore, recommended that the digital storytelling be introduced to student teachers right from the beginning of the teacher training programme, it appears that many lecturers are not ready to integrate the innovation in their curriculum delivery. Many have not yet adopted and made use of this new media in their teaching despite the access they have to the new technologies at the institution. Nevertheless, Elliott (2010) argued that "communication technologies have enabled higher education providers including education programmes to expand and enrich teaching and learning opportunities and pedagogies". Recent research in South Africa shows that "though, in most cases today, many lecturers would be familiar with technology in general, many are still not in a position to make informed judgments on the technologies to support their pedagogical goals" (Chigona & Dagada, 2011 citing Mishra & Koehler, 2006).

It is therefore recommended that teacher education programme instructors be equipped with technological pedagogical skills which will enable them to competently integrate the new technologies in their teaching and learning. There is also need for the institutions also to encourage the instructors to adopt the new technologies for teaching. The rationale here is that, since teachers teach the way they were taught (Britzman, 1991), the preservice teachers would be able to integrate new technologies in their pedagogy if their teacher education lecturers used the technologies in their teaching.

#### REFERENCES

- Anstey, M. & Bull, G. (2006). *Teaching and learning multiliteracies: Changing times, changing literacies*. Delaware: International Reading Association.
- Au, K. (2004). Multicultural factors and the effective instruction of students of diverse backgrounds. In *What research has to say about reading instruction*. 3<sup>rd</sup> ed. Edited by A.E. Farstrup & S.J Samuels. USA: The International Reading Association. 392 413.
- Au, K. (2007). Culturally responsive instruction: Application to multiethnic classrooms. *The International Journal of Pedagogies*, 2 (1):1-18.
- Britzman, D. (1991). *Practice makes practice: A critical study of learning to teach*. Albany, NY: State University of New York Press.
- Chapman, E. & Smith, J.A. (2002) Interpretative phenomenological analysis and the new genetics. *Journal of Health Psychology*, 7 (2):125-130.
- Chigona, A. & Dagada, R. (2011). Adoption of eLearning platforms at tertiary level in South Africa: Qualitative analysis. *Proceedings of the Global Conference on Learning and Technology*, Melbourne. 28 March 1 April 2011. 93-101.
- Donaldson, K & Carter, L (2000). Voices of varied racial ethnicities enrolled in multicultural/antiracist education computer telecommunication courses: Protocols for multicultural technology education reform. *International Journal of Educational Reform*, 9 (2):234-248.
- Elliott, A. (2010). Equity, pedagogy and inclusion. Harnessing digital technologies to support students from low socio-economic backgrounds in higher education *The Journal of Community Informatics*. Available at: www.ci-journal.net/index.php/ciej/article/view/751/643 Accessed 15 March 2011.
- Fade, S. (2004). Using interpretative phenomenological analysis for public health nutrition and dietetic research: a practical guide *Proceedings of the Nutrition Society*. 63:647–653.
- Hammer, R. & Kellner, D. (2000). Multimedia pedagogy and multicultural education for the new millennium. *Religious Education*. 95 (4):
  - http://gseis.ucla.edu/faculty/kellner/essaysmulimediapedagogymulticulturaleducation. Accessed 27 February 2011.
- Hatton, N. & Smith, D. (1995). Reflection in teacher education: towards definition and implementation. *Teaching & Teacher Education*, 11 (1): 33-49.
- James W 2001. (ed). Manifesto on values, education and democracy. National Department of Education: Government Printers.
- Lambert, J. (2002). Digital storytelling: Capturing lives, creating community. Berkeley, CA: Digital Diner.



- National Department of Education, Pretoria RSA. (2000). *National Education Policy Act, 1996: Norms and Standards for Educator*. Gazette No.: 20844, Vol. 415 February.
- Robin, B. & Pierson, M. (n.d.) A multilevel approach to using digital storytelling in the classroom. University of Houston. http://retapedia.pbworks.com/f/Using+Digital+Storytelling+in+the+Classroom.pdf Accessed 30 March 2011.
- Selwyn, N. (2000). Creating a connected community? Teachers' use of an electronic discussion group. *Teachers College Record*, 102 (4):750-778.
- Sleeter, C. & Tettegan, S. (2002). Technology as a tool in multicultural teaching. *Multicultural Education*. Winter 2002.
- Smith J.A., Jarman, M. & Osborn, M. (1999). Doing interpretative phenomenological analysis. In Qualitative Health Psychology: Theories and Methods, pp. 218–240 [M Murray and K Chamberlain, editors]. London: Sage Publications.
- Sylvester, R. & Greenidge, W. (2010). Digital storytelling: Extending the potential for struggling writers. *The Reading Teacher Journal*, 63 (4): 284-295.
- Valentin, S. (2006). Addressing diversity in teacher education programmes. *Education* 127 (2):196 202.
- Warschauer, M. (2009). Digital literacy studies: Progress and prospects. In *The future of literacy studies*. Edited by M. Baynham and M. Prinsloo. New York, Palgrave Macmillan. 123-140.