Students learning across differences in a multi-disciplinary virtual learning community

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Abstract  
Despite desegregation, and educational policies calling for increased inclusivity in higher education, students in South Africa generally continue to have homogenous social and learning experiences. This article reports on a collaborative student learning community across three disciplines at two universities. The e-learning project aimed to provide students an opportunity for collaborative learning across differences. Feedback and comments from the students revealed that students had the opportunity to learn about socio-economic difference in South
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African communities, but that there was some avoidance in engaging with issues of race and apartheid. What students most benefited from was learning about the different disciplines.

INTRODUCTION

The ongoing informal segregation that prevails in society is reflected in divisions of race and class in higher education institutions. Recent research conducted by social psychologists in South Africa, has shown that despite desegregation in post-apartheid South Africa, there continues to exist an informal socio-spatial segregation between racial groups (Dixon and Durrheim 2003; Durrheim 2005; Durrheim and Dixon 2005). In the context of inequality, learning in contexts of homogeneity is problematic as students do not have the opportunity to engage with a plurality of perspectives about issues. They would not be able to benefit from what Boler and Zembylas (2003) term ‘difference as creativity’. Furthermore, the historical and continuing divisions between higher education institutions, accompanied by differences in levels of resources, entrenches inequality in the distribution of educational advantage.

Authors in other countries that are faced with similar challenges, for example Northern Ireland (Nelson, Dickson and Hargie 2003) and Israel/Palestine (Hansen 2006; Halabi 2004), where divisions exists in the form of religion, demonstrate how merely providing opportunities for students to learn in the same institution, does not imply that meaningful engagement across difference will occur.

TEACHING AND LEARNING ACROSS DIFFERENCE

Crossing boundaries, such as discipline, race, language and class, offers an opportunity for learning in that it exposes participants to alternative ways of thinking (Wenger 2000). Participation in a ‘community of practice’ or a learning community, involves collaboration among community members, facilitating reflexivity and a critical investment in a learning process (McConnell 2006; Wenger 1998 and 2000). Nancy Fraser’s (1997 and 2000) bivalent view of social justice is a useful framework for assessing the extent to which difference is accommodated and recognised in higher education. She proposes that both redistribution of resources and recognition or valuing a person’s distinctive attributes that are ascribed to them are important in assessing participatory parity or the ability to interact as peers on an equal footing with others in social life. In working towards participatory parity (Fraser 1997 and 2000) in a classroom, students have to respect and have confidence in their own abilities as learners and co-creators of knowledge (Bozalek 2004).

Davidson (2004) refers to the importance of educational initiatives that encourage interdependence across disciplines in higher education, in order to cultivate emerging professionals that are critical and capable of challenging hegemonic discourses in higher education. He makes reference to a useful notion of the decentring of the academic self, by which he means an academic who interrogates and critiques the as-
sumptions of his or her own discipline through engagement with the assumptions and perspectives of other disciplines (Davidson 2004). It was these ideas which provided the impetus for the design and implementation of the interdisciplinary module which is described below.

THE COMMUNITY, SELF AND IDENTITY PROJECT

This article reports on a collaborative inter-institutional, multi-disciplinary teaching and research project conducted by the University of the Western Cape (UWC) and Stellenbosch University (SUN). In an effort to address some aspects of the continuing gap between education policy and lived practice, the Centre for Teaching and Learning and the Psychology Department at SUN, and the Social Work Department and Occupational Therapy Department at UWC, have engaged in curriculum renewal. It was hoped that through the use of a blended approach of collaborative e-learning and face-to-face communication and dialogue on community, self and identity, students could be equipped to work more inclusively.

The two universities differ in terms of levels of resourcing, ethnicity and class. Today, UWC remains a comparatively under-resourced institution serving mainly African and coloured students, mostly from working class and middle class backgrounds, speaking mainly Afrikaans, English and IsiXhosa. English is the language of instruction at UWC, which for the majority of students at UWC is not their home language. Stellenbosch University (SUN) has historically been a well-resourced, Afrikaans, white university, with a more conservative, and at times a distinctly right-wing political ideology. Today, SUN remains a predominantly white university, with students who are typically from middle class and upper class backgrounds. The language of instruction at SUN mainly is Afrikaans, the home language of a majority of students.

During the pilot project, fourth year Social Work from UWC and Psychology students from SUN were involved. Students took part in a collaborative module as part of their respective course curricula. Feedback from participating students in the pilot project was positive, with the majority of students recommending that the course be repeated (Rohleder, Swartz, Bozalek, Carolissen and Leibowitz, in press).

The project was expanded in the second year to include the Occupational Therapy Department at UWC. Using the feedback received from the pilot project, changes were made to the structure of the module, to include more face-to-face contact, fewer assessment tasks, and attention was given to making computer laboratories at UWC more accessible to the UWC students. This article reports on the students’ experience of this course, and some of the differences between the implementation in the second year and the pilot project.
METHOD

Research approach

The research process for the CSI project, is informed by a participatory action research approach. According to Kemmis and McTaggart (2005), such an approach emphasises research as a social process as practical, collaborative, and reflexive, aiming to transform both theory and practice. Participatory action research combines research goals with action goals (Healy 2000). Using such an approach gives us as researchers and designers of the module the opportunity to interrogate our own roles as educators and researchers, to investigate the learning context, and to provide solutions to problems encountered. In our project, the participants (students) did not control the research process or the design of the project tasks. However, a high degree of participation and shaping of material was required on their part. The advantages of web-based technology in qualitative research has been recognised by Turney and Pocknee (2005), as it allows for an accurate recording of written data, and provides a safe and secure environment for research participants.

The project and participants

The project began with an initial face-to-face workshop held at the start of the first semester at UWC. A total of 105 students were assigned to seventeen groups of six or seven members. Each group was divided to include students from each discipline and university. Students were randomly selected to these groups, and they remained in these workgroups for the duration of the module. Each workgroup was assigned a facilitator that would be available online. There was a significant difference in the structure of the student workgroups in the second year of the project, as compared to the pilot project. In the second year there were fewer SUN students enrolled in the course and many more UWC students (due to the inclusion of occupational therapy). The social and educational differences between SUN and UWC students were less stark than was the case in the pilot project, when there were approximately equal number of students from the two institutions.

At the initial workshop, students were given input on participatory action learning techniques, and an opportunity to experience using these techniques. The students each made drawings of their own community (a map depicting their immediate neighbourhood) and a drawing of their ‘river of life’ (a picture portrayal of their life trajectory). Students shared and spoke about their drawings within their groups, exploring their own constructions of community and identity. Students were thus given the opportunity to interrogate their own ideas about ‘community’ and those of students who may be perceived as different from them in terms of their class, gender and racial identities, as well as their university and professional disciplines.

The initial contact at the first workshop was followed by the following teaching and learning events and tasks:
• Two more workshops, one at the middle of the module and one at the end.
• Ongoing student interaction in their workgroups using an e-learning system created by one of the universities. Each workgroup had their own forum containing a space where their drawings were uploaded, and the interactive spaces of a chat room and a discussion forum, accessible to all members of the workgroup.
• Two small assignments encouraging students to explore what they had learnt about community, self and identity in South Africa, with reference to critical literature provided to them.
• Collaboration on a group project, where students had to put together a powerpoint presentation on what they had learnt. These group projects were then presented at the final workshop held at the end of the module.
• A short individual essay, in which each student reflected on the process of learning and working collaboratively on this module.
• Students were asked to complete a course evaluation form.

All the students’ assignments on the CSI module were marked by the various facilitators for assessment purposes. The module and marks formed part of students’ broader course curricula at the respective universities.

In addition to the data generated by the students during the course, the online facilitators themselves were also interviewed after the completion of the module, by an independent interviewer. Facilitators were interviewed individually and in a focus group. The interviewer then compiled a report giving feedback on what emerged from these interviews.

Method of analysis

All the students’ drawings as well as their e-learning interactions and assessment tasks are being used as data for ongoing analysis, using content analysis as well as discourse analysis. For the purposes of this article, the individual essays and feedback from the evaluation forms from the second year of the project were used, which provided overall impressions of the CSI module and what students report having learnt. A thematic content analysis of the data was conducted, following the guidelines of Krippendorf (2004). According to Krippendorf there are a number of steps required in a thematic content analysis. Firstly the text is read and reread and general themes are identified. Data is then coded as they relate to themes. The text is then analysed, identifying quotes specific to the codes, and further codes are developed as themes emerge.

Some of the quotes used in this article have been minimally corrected for grammar and spelling for ease of reading. Following each quote, a descriptor of the participant is given in brackets, showing: the number allocated to each student when analysing the data; which university they are from; which discipline; their gender; age; home language; and race. These descriptors are only used when quotes are taken from the essays, as reponses to the evaluation forms were anonymous.
Ethical issues

At the start of the module, all students were informed that as well as being a teaching module, the CSI project was a research project for the developers of the module. They were told that written consent would be asked of them at the end of the course, once they had generated their drawings and written work. The participating students were also alerted to the fact that their written works, which were often of a personal nature, would be in the public domain as they were generated on the e-learning program. Students were informed of the research team’s intention to publish data generated from the project, and that any of the students’ written works used for research and publication would be treated anonymously. Written, signed consent was given by all except seven students. The works of these seven students were therefore not included in any analysis.

RESULTS

Overall impressions of the project

The majority of students were positive about the CSI module, and said they would recommend repeating the module. In the evaluation form, students responded to three key aspects of the course. Of those that responded:

• 93 per cent (81 out of 87 respondents) suggested repeating the use of collaboration with students from another university.
• 94 per cent (80 out of 85 respondents) suggested repeating the use of students from different disciplines.
• 75 per cent (61 out of 81 respondents) suggested repeating the use of a mixture of face-to-face workshops and e-learning.

As with the students of the previous year, a number of students were frustrated with the e-learning component of the CSI module, finding it difficult to communicate and collaborate on-line as a group. This was compounded by the fact that the different disciplines had different lecture and practical work schedules, so it became a challenge for groups to find a time to ‘meet’ online. For this reason the chat room of the various workgroups was under-utilized. As one student wrote in her essay:

The tool that I found less than useful was the chat room. The reason for this was the fact that all the group members had to be online at the same time for it to be effective. This proved to be very difficult, because many of the students in my group were working during the day due to their different professions. This form of communication was not useful, as the message would only be read long after it was sent, and then by the time they replied it would be too late. (F6-SUN-Psy-F-21-Eng-W).

Compounding this was the fact of unequal access to computers. As we learnt from the pilot project (Rohleder, Bozalek, Carolissen, et al., in press), it was generally the case that students at UWC had no access to computers and the internet at home, whereas a
majority of the Stellenbosch students did. Both universities have computer labs, but because of the greater reliance on computers at UWC, these labs were often very full, and we learnt of students having to wait in long queues to use computers. As we were aware of this from the pilot project, we made an effort to block-book computer lab times at UWC. However, most labs were not open after hours, presenting problems for those students who could not access computers during the normal day. For example a UWC student wrote: ‘The lack of access in computers and limitage; it was a huge problem for me because in many times I had to stop while I’m not done with my work’ (P2-UWC-SW-F-25-Xhosa-A).

This was also reflected in the user statistics generated by the e-learning programme, which recorded the number of times that users logged into the system and the CSI site. These statistics were downloaded from the e-learning program some weeks after the end of the module, and provided a record of the number of log-ins up to that time. These statistics are summarized in Table 1.

Table 1: E-learning User Statistics

<table>
<thead>
<tr>
<th>Number of Log-ins</th>
<th>SUN Students (N = 17)</th>
<th>UWC Students (N = 88)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>33 to 109</td>
<td>8 to 104</td>
</tr>
<tr>
<td>Mean</td>
<td>58</td>
<td>39</td>
</tr>
<tr>
<td>Median</td>
<td>50</td>
<td>36</td>
</tr>
</tbody>
</table>

As can be seen from Table 1, UWC students had fewer average log-ins to the e-learning site compared to the Stellenbosch students. Although this is not a measure of computer and internet access, rather only a measure of the amount of times a user has logged in, it does illustrate the difference in frequency of getting online to communicate. This is significant in terms of participatory parity; Fraser’s (1997) bivalent view of social justice suggests that students need material resources in relation to social justice, not just recognition.

Students also felt that the use of e-learning had some positive results for them. They commented on the easy availability of information, in the form of the prescribed readings that were uploaded on the site, as well as being able to access group members’ work and facilitators’ comments. For example, one student wrote:

the fact that we could at any time view fellow group members’ work illustrated how, for example, they had sometimes totally divergent, obviously course-specific (and of course personal) views to my own, sometimes about the same readings. Furthermore, the fact that all the readings were readily accessible online eliminated the need to tediously search for the prescribed or appropriate readings. (J1-UWC-SW-M-26-Eng-C).
This sort of experience was important for developing collaborative learning, where students from different life experiences and three different professions could learn from one another by sharing knowledge and generating new knowledge, thus engaging in a social learning system. From students’ comments in their essays, it seems that they learnt a lot from this interaction, about communities and social issues in South Africa, as well as the professional roles and work of the three disciplines. These results are discussed below.

The majority of students found working in groups a positive experience from which they learnt how to learn about difference and learn to work as a team. For example, one student wrote:

> Working in groups really helps to expand your thoughts and views of life beyond your own ideas. It is almost like removing your “blinders”. My group was particularly great because, not only did we have 6 students that were all enthusiastic and reliable, but we also had a lot of diversity in our group – with relation to age, race, culture, language, places of origin and religion. This brought a lot of colour to our discussions with varying perspectives and opinions. (Q5-UWC-OT-F-26-Eng-W).

The experience for other students presented some challenges, as they reflected on their own identity in the group and relative positions of power within the group. One student from UWC wrote:

> Working together as team was also positive and not positive because there are some group members that were feeling superior among others and some of the other people’s views were seen as inferior not consider(ed) as important views. So it was difficult sometimes to voice your opinions because of fear that may your point is not relevant enough. (P2-UWC-SW-F-25-Xhosa-A).

This could be seen as an instance of misrecognition (Fraser 1997 and 2000; Fraser and Honneth 2003). This evidence of misrecognition has shown that students have in some instances internalised denigrating constructions of themselves. Furthermore, this student’s account illustrates the way in which being denied respect through cultural racism prevents her from being able to participate fully and equally in social interaction in the classroom situation, which is what Fraser (1997 and 2000) refers to as participatory parity. Although we tried to provide conditions where students’ voices were heard, respected and valued, the power dynamics between them and the way they were positioned in relation to their perceived attributes, led to feelings such as those expressed in the above quote. A student from the same group, but from a different social and disciplinary background, wrote:

> I found the process of working together in a group both enjoyable and challenging. I was conscious both of my age (I am much older than other group members) and my race (white). Both my age and race potentially gives me power in the context of an unequal
society. I did not want to dominate the group or use that power in an unconstructive manner and tried to be conscious of process and creating space for all of us to participate. However, there was a point in preparing for the group presentation where we had limited time and seemed stuck and I made a conscious decision to facilitate the process. I felt very conflicted afterwards, wondering if I had been undemocratic to assume that role without asking others if I could do that. (P6-SUN-Psy-F-40-Eng-W).

This group clearly experienced some conflict and challenges, which they had to negotiate. From the above students’ writings it can be seen that it was a learning experience for them as they reflected on their own identity and positioning in the group. The student from Stellenbosch above is aware of the dynamics of power within the group in relation to her age and race. This indicates the sorts of differences that the groups needed to work with. However, the students’ engagement with difference during the course tended to be limited to certain areas, as will be discussed below.

Learning about South African communities

The initial participatory action learning exercises seem to have been a powerful experience for the students as they shared personal struggles and aspects of their lives with one another. This allowed them to empathise with shared experience. For example, one student wrote:

Through rivers of lives the student had learn(t) that every person had gone through difficulties in life, because I always tell myself may(be) I am the only one who had some difficulties in life but through river of lives that we discuss in our group I learnt that I am not alone. (L1-UWC-SW-F-32-Zulu-A).

The river of life was not always an easy task. Students had to represent their journey through life, indicating influential events that shaped them as individuals and their choice of study. This had the potential to raise some uncomfortable and unresolved feelings in students as they reflected back on past, perhaps traumatic, experience.

The community drawing exercise which was also shared amongst group members initiated discussions about communities in South Africa on the e-learning discussion forums, aided by the use of prescribed readings. In sharing with each other, students had the opportunity to ‘visit’ communities which they might not otherwise have been exposed to. As one student wrote in her final essay:

These two activities I found were greatly beneficial to making us aware of the realities of different communities in South Africa and the difficulties people are experiencing. Sometimes living in our sheltered environment allows us to not have to face these factors, this made me learn a lot about myself and the fact that I as a health worker should be aware of what is happening in our communities. (C5-UWC-OT-F-21-Eng-C).
This also allowed students to reflect on their own community experience and find solace
in the similarity to others’ experiences. For example, another student wrote:

All along I thought it is only my community which (does) not have enough resources
or have it but people do not use properly, but in this course I found out that our com-

munity are similar in many things and different here and there. (K2-UWC-SW-F-30-

Xhosa-A).

Most students spoke about difference in communities in relation to socio-economic
status, referring to privileged and under-privileged communities. Fewer students dis-
cussed this disparity amongst communities in their group in relation to the history of
apartheid and unequal socio-economic development along racial lines. For example,
one student wrote:

It also brought me to the conclusion that colonialism and apartheid's legacy still runs
deep in our collective consciousness and we will not so easily, as we all would have
wished, shake the shackles of apartheid because its part of the way we think about
things, do things and perceive life in this country. (E4-UWC-OT-F-31-Eng-C).

As facilitators and designers of the CSI module, we were left feeling that discussions
around the legacy of apartheid and racial oppression were not discussed enough, despite
inclusion of prescribed readings related to this (for example, Thornton and Ramphele
1988). This was commented on by a student, in relation to what he perceived to be the
aims of the CSI module:

throughout the module group members averted all issues pertaining to race or perceived
racial superiority. This, I felt was evident in both the Black and Coloured students pro-
ceeding throughout the workshops with much reticence, rather opting to reserve their
input or opinions [. . .] The student believes that our not acknowledging that race was a
significant limiting factor in terms of group dynamics and group cohesion, contributed
to members not looking to challenge or explore the impact of race on our interaction in
our group. I believe that this was one of the aims of the joint interdisciplinary module,
that is, in addition to learning more about students from other institutions and disciplines,
we’d also learn more about how race, culture, and gender inadvertently influenced our
perceptions as prospective professionals. (J1-UWC-SW-M-26-Eng-C).

Other students also commented on this silence, recognising the difficulty in talking
about issues of race and the history of apartheid:

I think the fact that I realized most throughout this course was just how afraid or avoid-
ant we all are to talk about the past and how it affects us today. We somehow did not
want to see how our history has affected us. (C5-UWC-OT-F-21-Eng-C).
The reluctance to talk about the apartheid past among students has been observed by other authors, for example McKinney (2004 and 2007). During the pilot project, students also tended to talk about issues of race and the history of apartheid at a surface level. However, as researchers and facilitators of the course we felt that these issues remained more silent during the second year of the project. This was also commented on by those online facilitators that were involved with the module in both years. The sense was that students could talk about difference in terms of socio-economic disparity, but in only a few cases went further to engage with the legacy of apartheid in relation to South African communities. All the facilitators who were interviewed after the course commented on it, feeling that students tended to avoid dialogue around racial differences in particular. A number of reasons for this can be hypothesized. One possible explanation is the decrease in the number of white students, which would have left the appearance of the groups as less polarised. The obvious difference among students became the three different professions, rather than socio-economic or racial differences. It may have been easier therefore to avoid dialogue around racial difference. However, Nelson, Dickson and Hargie (2003) confirm that students prefer to gloss over difference (in their case, religious differences in Northern Ireland).

From the facilitator interviews there emerged a tension among facilitators and between facilitators on whether differences, particularly racial differences, should be actively addressed or not. There was a difference of opinion as to whether facilitators should introduce these differences into the workgroups’ conversation, or whether they should be allowed to develop naturally. Some felt that because racial difference was included in the course learning material (through prescribed readings and in the panel discussion during the second workshop), facilitators needed to actively encourage discussion around this. Others felt that if facilitators ‘inserted’ such discussion, it will lead to an artificial and perhaps didactic rather than a democratic engagement with racial differences.

**Learning about other professions**

The majority of students wrote about the benefits for them of working collaboratively with students from different professions. Some students commented on how seldom students have the opportunity to engage with students from other disciplines and learn about the work that they do. For example, one student wrote:

Something else which I have learnt more about during this course, are the roles of the psychologist, occupational therapist and social worker within a community. During the workshops at UWC, it was especially interesting to talk to the occupational therapy- and social work students, about what their courses entail. All of it was very new to me. (O6-SUN-Psy-F-23-Afr-W).

This allowed students to clear up some of the myths and stereotypes about various professions that tend to exist among health care professionals (Barnes, Carpenter and
Dickinson 2000; Mandy, Milton and Mandy 2004). This was noted by a number of students, one of whom wrote:

> It was wonderful to work with other future professionals as it has helped get rid of the stereotypical attitude that I had to other profession. Now I will say that I accept the diversity of health related courses as I now understand that each person comes with something from which I can benefit. I am overjoyed with this because I was always asking myself about the duty of this other health professionals but now I understand what it is that they are doing. (J4-UWC-OT-M-24-Tswana-A).

The students further found this multi-disciplinary interaction beneficial in terms of preparing them for future work in their professions. One student wrote:

> Also it made me have that little bit of understanding about other professions, because sometimes you have a client that you don’t even know how to solve their problem, but if you understand the roles played other professions, you can always refer your client to appropriate professionals. (F3-UWC-OT-F-24-Setswana-A).

Another student wrote about the learning experience as preparing her for future work in multi-disciplinary health care teams:

> The third activity that I found useful was the space in which we were able to as professionals discuss the tensions we experienced in working on Assignment 3. As I found this vital in having to one day work with different people from different professions and this may be an introduction in (when) we deal and interact with colleagues when we are in practice. (D1-UWC-SW-F-21-Eng-C).

The benefits of working together across the three disciplines were reported on by students from all three disciplines. In this sense their discussions about their future professional work and current studies, provided a multi-disciplinary ‘community of practice’ where participants could learn from each other and gain experience of working together as a team.

**CONCLUSION**

The CSI project provided students with a valuable method of collaborative learning, where students could learn about disparity in communities, and some of the social issues facing post-apartheid South Africa. More significant for students was the experience of learning and working together across disciplines. It provided students with the opportunity to learn about their own and others’ professional identity and roles, and to share knowledge, and thus to learn in a new and refreshing way. The use of e-learning, despite its challenges, provides a useful way to connect the students across time and space for engagement in an ongoing learning community.

An issue of concern is the level of silence that exists in talking about race and the history of apartheid, a silence noted by McKinney (2004 and 2007) in her work with
South African students. For the facilitators this was a disappointment that these topics remained silenced. In a sense it created a community of practice in that what was mostly learnt and engaged with was professional identity, rather than personal, historically raced and classed identities.

The benefits of working and learning in a multi-disciplinary learning community, however, was more marked in the second year of the project. Learning to work across professional boundaries is essential for emerging health care professionals, as they prepare to work in multi-disciplinary health care teams. However, as they are to be working in under-resourced settings and in contexts of social inequality, students also need to learn to work with issues of difference. Engaging with racial difference, and attempting to promote participatory parity and social justice in the university context with the legacy of apartheid remains a challenge for educators, and investigating the contexts of learning offered by projects such as the CSI project, offers educators an opportunity to learn about ways of doing this.

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