

Group work as ‘terrains of learning’ for students in South African higher education

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A common global perception of group work in the higher education context is that it has the potential to act as a platform which can enable student learning by means of interactions, shared diverse experiences, deep engagement with subject concepts and the achievement of tasks collaboratively. Indeed, in different socio-economic, historical and institutional contexts, group work activities have become levers by which deeper learning could be achieved. Drawing on perceptions and experiences of group work among environmental science students at a South African university, we investigate the ways in which group work could be more expansively viewed as ‘terrains of learning’ for students. The results in general indicate that students have positive perceptions and experiences of group work, though problematic elements are evident. This particular case study points to the attention that should be paid to understanding issues of background, ethnicity and various student personalities which could hinder or enable the desired student learning. Such an understanding could contribute to debates regarding the achievement of higher quality learning, given issues of diversity and transformation in the South African higher education context.

Key words: Group work, higher education, diversity, learning

Introduction and background to the problem

In recent years, growing research on higher education teaching and student engagement has drawn together insights about those activities that tend to generate high quality or deeper student learning (Rhem, 1995; Biggs, 1999; Mann, 2001; Coates, 2005; Haggis, 2006). According to Rhem (1995), a deeper approach to learning

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(learning for understanding) is an integrative process in which students synthesise and connect subject material to existing knowledge. Whether one's conception of quality learning relates to the approaches to learning (Marton & Säljö, 1984; Biggs, 1999) or student engagement (Mann, 2001; Coates, 2005), the active involvement and interactions of students is seen as that which better promotes quality learning. The adherence to such principles could be fostered partially by means of group-based activities. Levin (2005) contends that group work provides an educational learning opportunity for students as they are involved in the assessment and processing of alien values and ideas and react to unfamiliar 'knowledge' territories. Group work is also said to promote team work, creativity, cooperative working methods, understanding one another, opportunities to learn from others' experiences and perhaps new ways of doing things, ways of dealing with conflicts and disagreements, and preparedness for working in culturally diverse work environments (Brownlie, 2001; Oakley, Felder, Brent & Eljaj, 2004; Levin, 2005). However, group work is not without its challenges, and conflicts at the heart of group work are common (e.g. Oakley et al., 2004; Knight, 2007).

The growing preference for this type of peer engagement might be influenced by the dominance of discourses from socio-cultural theories of learning in 'Western' education. Social learning theories not only provide conceptual lenses for understanding how people learn in social contexts by learning from one another, but also shed light on how those who teach can construct active learning communities. Collaborative work in which students work jointly on the same problem is linked with ideas such as situated cognition and scaffolding (Edwards, 2009). The notion is that social interactions which are developed in this kind of enquiry arouse group members to think collectively. From Vygotsky's (1978) psychological point of view, this approach drives students to push beyond their individual level of thinking or zone of proximal development and then scaffolds their cognitive processes. While many such psychological theorists might hold that learning is an individual-based process and failure to learn is attributed to individual characteristics, socio-cultural theories of learning have shifted our understanding to one that recognises that learning processes occur within specific contexts that have social and cultural dimensions – a clear departure from the single rationality and a narrow progressive path of learning. With regard to group learning, this allows for a wider and more nuanced focus on social relations and their effect on individual learning within a group.

The possibilities of group work become even more relevant given the argument that knowledge is not just an atomistic and fixed deliverable for individual possession, but is socially constructed and contestable, and that the essence of human knowledge is that it is shared. According to Edwards (2009: 59), in the group work method, 'learners work towards a joint understanding through argument as an active process, rather than a mere pooling of information'. In other words, group work recognises the fact that people construct knowledge together. This implies that instructional strategies which promote student learning through collaborative ways ought to be

encouraged because such arrangements can allow students to engage in higher-order thinking tasks such as analysis, synthesis and evaluation of research results. So, while students might not necessarily work in groups daily, opportunities should be created within the curriculum for them to meet because of the potential imbedded in their interactions – where sharing of information, insights and advices, exploring ideas and solving of problems are typically a collective process.

Researchers (e.g. Levin, 2005; Woods, Barker & Hibbins, 2011) have argued that the values and benefits of group work as a teaching and learning strategy might endure well beyond the teaching class. Indeed, most of these group work benefits highlighted above are highly sought after by employers in the working world, especially considering an increasingly globalising world and, as such, this pedagogical method is attractive for those concerned with curriculum responsiveness. There is need for responsible graduates who are global citizens – those who have acquired the knowledge, skills, attitudes and values required for working in a global village (Brownlie, 2001) and in a super complex world (Barnett, 2004; 2006).

However, despite the many seemingly desirable possibilities of the group work method, the various experiences of group work, especially given an increasingly diverse student population nationally, remain underexplored. Within the context of South African higher education, the increasingly changing cultural landscape of student populations from previous homogeneity to heterogeneity calls for a re-examination of the different ways in which learning is approached by education practitioners (Woods *et al.*, 2011) and experienced by students (Mann, 2001). Thus, while general studies have been conducted on students' experiences of group work (e.g. Burdett, 2003; Hassanien, 2006), our concern is with their perceptions and experiences of the diversity of that group and the impact this has on their experiences. Such concerns about the changing composition of students in our national context have resonances with those on our continent, as well as with countries such as Canada, Australia, USA and UK, with the introduction of massification. The main question that we seek to explore in this paper is whether group work offers 'terrains of learning' by facilitating processes of quality learning, using a case study of environmental science students at a South African university. Such an understanding could provide ideas for facilitators to be more cognisant of challenges to student learning that could emerge from group work. Our representation of this analysis is structured as follows: in the next section, we outline our methodological approach, followed by a presentation and discussion of the implications of the findings, ending with our conclusions and recommendations for future research.

Our methodological approach

The study was conducted with the participation of second- and third-year students in the Department of Environmental Science (DES) at a South African higher education institution. Second- and third-year students undertake group-based fieldwork

projects and a year-long group work research project respectively, so as to echo professional practice where research is most often conducted in teams. Group work has been part of DES curriculum since 2000 when the department was established. Up to six students are placed into groups balanced for diversity in terms of socio-cultural backgrounds, gender and their choices of major subject. A move towards diversified groups was a conscious choice of the curriculum developers in DES (e.g., see Kelly, 2009). Over the course of a year, group members work together on a variety of tasks, such as preparing for verbal presentations and preliminary reports, prior to undertaking an individually written examination. Critical cross-field outcomes for this group work include the ability to work in a team, identify and solve problems, collect qualitative and quantitative data and use the data effectively, plan and manage a programme of work, and communicate effectively (SAQA, 2000: 18). At both second- and third-year levels, group work research projects contribute a substantial 32% of the final mark. A peer review system is used to determine an aspect of this grade in an attempt to ensure that group members who are perceived by their fellow group members to have contributed the most earn the highest marks. DES's espoused theory is built on an assumption that group work enriches students' learning experiences, which motivated this study's exploration of whether students, indeed, perceived and experienced this to be so.

This study sought to elicit responses from these students regarding some important factors that affect the effectiveness of group work, using a hard-copy questionnaire as the data collection method. It is important to note that one of the authors taught the surveyed students; thus, asking students to state who did what in their respective groups could have created a 'name, shame and blame' culture which, in turn, could have had a negative impact on group dynamics. Therefore, our questionnaire solicited self-reflection of individuals' positioning in group work rather than the blaming of other group members. Using ranked statements, radio boxes and open-ended questions, we designed the questionnaire to capture information on students' general perceptions of the impact of group work on their learning; their views on and experiences of group work in DES particularly; and what they think would work best for them with regard to their learning experiences and perspectives. While it might be a concern in other contexts (Andersson, Kagwesage & Rusanganwa, 2013), multilingualism has not been noted as of concern within this department. Students themselves did not explicitly identify language as a major criterion but, in this paper, we make inferences from implicit indications in their open-ended responses of the interplay between culture and language in group work. We also asked questions to obtain students' views on working in culturally diverse groups, with respect to what they learned about other students' cultures and what they felt was the most important attitudes for effective group work. A series of Likert-type and Likert-scale questions (with responses ranging from 1 = strongly disagree to 5 = strongly agree or highest = 1 to lowest = 7) were asked to create a measurement of attitudes towards group work. Likert-scale data were analysed based on the composite mean scores from the different series of questions that represented the attitudinal scale, using

Excel. With Likert-type items, multiple questions are asked but there is no attempt to combine the responses from the questions into one composite scale (Clason & Domordy, 1994). Categorical analysis was applied to identify and code topics and formulate different themes, the interpretation of which we present in this paper.

We collected data after informing students about the intention and purposes of the study. We also highlighted that, while students' participation was completely voluntary and would not influence their semester grades, their honest responses would be of great value to our understanding of group dynamics and for the improvement of group work exercises in future offerings of courses in DES. Assurances of participant anonymity and confidentiality were made.

In total, the sample consisted of 75 out of a combined total of 106 second- and third-year students. Second-year students completed their questionnaire in class during the first 15 minutes of the lecture period. Out of 68 students, 52 completed the questionnaires because some students were absent and others chose not to participate. Third-year students were given the opportunity to complete the questionnaire outside of class and 23 out of 38 students responded. Out of all the participating students (n=75), the majority (56%) were white, 32% were black and 12% did not indicate their ethnicity. Note that, while we are aware of the problematics of such distinctions, the structural definition we are using for these racial characteristics are to indicate white as of European ancestry and a broad understanding of black as of African descent, including Indian and coloured, 'mixed race' individuals. This definition remains the predominant separation used within equity discourse nationally. Fifty-six percent of the sample students were women, 37% men and 7% chose not to specify.

Findings and discussions

Given the diverse backgrounds of the participants, we decided to explore how group work dynamics and effectiveness would be directly or indirectly affected by ethnic background and other individual behaviours and intergroup relations. In this section, we discuss the findings around the key themes that emerged from the study, namely group work and student interactions; group work and student learning experiences; and then, having re-considered those larger contexts, group work dynamics in the face of ethnicity.

Group work and students' interactions

Group work is believed to promote active interactions and negotiations among students given that students have to exchange information and ideas (Mann, 2001; Knight, 2007). Often in group work, students encounter divergent viewpoints which promote exposure to new perspectives and understanding of topics or concepts. However, there are two pedagogical approaches to group work: students can reach final group-based decisions either through consensus or other means. With regard

to decision making in group work activities, 40% of the students said that decisions were reached by discussion and consensus, while 27% reported that they arrived at the final decision by voting. The remaining set of the students said one person usually made the decision and others agreed to it. Comparison by level of study showed both second- (67%) and third-year (65%) students made decisions by voting and consensus. The results in general suggest that the majority of decision making occurred in a seemingly interactive and democratic way.

Knight (2007) argues that the use of groups can provide a change to the regular classroom routine, but the results are rarely all positive. A common assumption is that, invariably, one or two students in each group might be unwilling to share their insights because they are shy, lack self-confidence or prefer not to perform publically. In this study, most students (61%) reported that, when it came to the verbal presentation of the group work results, they were not at all comfortable. The issue of verbal presentations also came out quite strongly when students evaluated the teaching of a second-year environmental science course that one of the authors teaches. Because of these different personalities, the person who becomes the group leader by default or proclamation is often not sensitive to engage the quieter students in conversations (Knight, 2007). Currie (2007) claims that students who find it difficult to make their voice heard could feel socially isolated which, most likely, promotes alienation rather than active engagement. Mann (2001) adds that the issue of voice in higher education should be promoted if students are to engage deeply with certain subject concepts. This is an important proposition in the context of South African higher education which has a history of discrimination against black students. Asked about the most important behaviours that influence a group's ability to be productive, 51%, 40%, 32% and 27% of the students respectively reported the following: *group members that express their ideas clearly and listen well*; *group members that get along very well*; *groups that are good at brain storming*; and *members that do what they are told to do*.

We explored the attitudes of students towards collaborative activities. The means for each subscale (on the five-point Likert scale, except for preference variable) are indicated in table 1. The statistical data for the different aspects/variables show mixed indications. Most of the attitudinal variables that reflect ability to work in group work, participation and cooperation in group work and preference for diverse group composition were positive as shown by higher means of more than 3.5.

<i>Aspect</i>	<i>Mean</i>
Attitudes	
In group discussions, I always try to participate (5 indicates high level of willingness to participate)	4.3
I feel that I am able to work well in any group (5 indicates high level ability to work in groups)	3.7
Cooperation among all group members is necessary for us to accomplish our objectives (5 indicates the majority of respondents believe cooperation is important in group work)	4.5
In our group, my contributions are taken seriously	4
I am expected to make an equal effort towards our group project as all other group members (5 indicates high level of agreement)	4.6
I take on the role of facilitator to move ideas forward or to relieve frustrations (5 indicates high ability to facilitate group work)	3.4
At times, I purposefully do not participate in group discussions (5 indicates high tendency to expend less individual effort when working in a group)	2.1
Perceptions	
Perceptions of academic impact of group work (5 indicates high value of group work from an academic statement)	3.5
Satisfaction from group work (5 indicates high level of satisfaction)	3.2
I have skills and experience that make me good at work (5 indicates the majority of students have group work experience)	2.4
Group composition (5 indicates high preference for group diversity)	3.6
University classes require group projects worth more than 25% of final grade (5 indicates the majority of students support this idea)	2.8
Preference (3 indicates high preference to work in groups)	1.3

Table 1: Means of students' attitudes and perceptions about working in groups

Surveys also show that some students felt that their contributions were not taken seriously; hence, they did not actively participate in group work. Other students felt that cooperation was not entirely necessary to complete given tasks. With regard to the latter, the findings suggest that groups could be marred by 'social loafing'

and that, as individuals feel anonymous within large groups, this could further reduce their sense of personal obligation and consequences, what Furnham (1997) terms 'deindividualisation'. However, of specific concern in this paper is how such deindividualisation is problematised in heterogeneous rather than in homogenous groups which might not offer the cover of such individual anonymity. These central concerns are discussed in detail in the next section. In general, the findings show that most students had positive attitudes towards group work, but perceived that group work had not achieved its potential, in part due to the constraints explained below.

Group work and student learning experience

For group work to achieve the desired goal of quality learning, there is need for exchange of information and understanding, which involve the construction of knowledge in which all students contribute and gain new or enriched perspectives (Holmes, 2004; Knight, 2007). However, group work can be highly frustrating if it is not well planned. Several constraints that made group work activities undesirable among students were identified. Time management and non-participation of other group members were highlighted as the two main constraints, mentioned by 55% and 39% of the students respectively. Free riding by group members in collaborative activities is well documented in the literature (e.g. Oakley et al., 2004; Levin, 2005; Knight, 2007). Other constraints mentioned were the dominance of individual group members, personality clashes, coordination issues, intra-group conflicts and different targets or approaches to learning with respect to the final grade.

This latter constraint bears further discussion. Different academic goals relate to how some might be content with a minimum score to secure a pass, while others might want to achieve higher grades in this particular subject. In this way, we could identify heterogeneous approaches to learning. Related to this, less than half of the students (49%) reported that they tried to understand deeply the central concepts of environmental science courses and how these might be applied in practice (deep approach to learning). A further 32% of students said they try to figure out what is required to pass and aim to achieve that, which indicates a strategic approach to learning, while 11% did just enough to pass, and the rest reported a combination of deep and strategic learning depending on factors such as time availability and the weight of the task in relation to the overall grade. Those students who were aiming for higher grades claimed that they felt they had ended up taking responsibility and doing most of the group tasks, despite agreements to share the workload equally. The following comment by one participant illustrates this feeling:

I dislike that I always have to work harder in group work when other members do not pull their weight.

In this regard, in their responses, some of the students stated that they felt as though they were often expected to do more than their group colleagues, while others pointed out that most group tasks or objectives could still be completed with only a few people doing the work. This sense of the group dynamic versus

individual member performance is revealed in the discrepancy between the higher marks scored by groups as entities (e.g. 75%), compared with when group members were ranked individually by means of peer reviews, where they scored substantially lower marks. As noted in table 1, a substantial proportion of students did not believe university classes should have significant group projects worth more than 25% of their final grade, as was apparent in one student's remarks:

I believe occasional group work can be advantageous but when it becomes relied on too much (such as in the department of Environmental Science) it is not effective at all. In groups you are only as strong as your weakest member and relying on other people often brings down my marks.

This discontent is supported by the fact that most students (68%) said that, given an option, they would work independently. These findings are consistent with findings elsewhere. For example, Byrnes and Byrnes (2007) argue that most students say they hate groups because the least of the students will drag down the best. Referring to these motivated and annoyed students who adopt a deep approach to learning as 'lone wolves', Byrnes and Byrnes (2007) suggest that it might be useful to form a group of such individuals. Students reported that they would like group work more if all the group members worked equally hard and had the same vision and desire to excel.

Group work dynamics and ethnicity

With respect to group composition, students had mixed opinions about the effectiveness of composing groups in the manner chosen by DES curriculum designers, namely balanced across ethnic backgrounds. More than half (59%) of the students perceived that such balanced groups are likely to achieve the best learning experience for them, arguing that a range of people will in general produce a diverse set of ideas which will be invaluable for the project. One student remarked:

With different backgrounds, different and well-rounded perspectives are incorporated into the project.

Apart from academic benefits, some students also reported that group work offered them an opportunity to learn how to deal with different personalities, which is critical in most organisations, as illustrated in the following statement by a student:

My group was not very cohesive but gave me insights on how to deal with problematic personalities in the future. Group dynamics are essential and inevitable in life. |

However, a sizeable proportion of the students (41%) felt that diversity was not that important, because group work effectiveness depended on willingness and the proactive nature of those individual members who wanted to work hard and achieve good grades. Comparisons of satisfaction measures by preferred learning approach ($p = 0.75$), gender ($p = 0.19$) and ethnicity ($p = 0.49$) yielded statistically insignificant results. Perhaps this could be attributed to missing values in an already small data set. Hence, some of the results should not be overgeneralised.

Qualitative responses by the different ethnic groups showed that the majority of students (94%) across the racial and ethnic divide felt, encouragingly, that they could learn from different ethnic backgrounds and experiences. Only a smaller proportion (12%) of black students perceived that their views were not considered seriously in group work, as demonstrated in the following statement:

Sometimes you do learn from people who are different from you in terms of ethnic background but some people do not even consider your opinions because they generalise you to your background. My friends and I have experienced this.

This indicates that some black students perceived that ethnicity usually determined whose views in collaborative projects carried more weight, bringing to light the impossibilities of deindividualised anonymity within a culture where individuals still feel constructed as distinct or 'other' with regard to their race, culture, gender, language, class, etc. Such perceptions are illustrated by remarks from a black student:

I think being from different ethnic backgrounds played a huge role as one was judged even before they could present their ideas to the group.

The feeling among these students that their ideas were not valued might be a product of history. Usher, Brynat and Johnson (1998) suggest that students' experience of alienation in higher education context is a function of the socio-historical process. People are positioned differently depending on the discursive practices of socially and historically significant features such as gender, race, class, ethnicity and other marks of difference (Usher et al., 1998: 20). In South Africa, black communities were discriminated against under apartheid rule and many people still carry these scars and inferiority complexes. In fact, the Department of Education (2008, cited in Thomas 2011: 68) argues that, "in spite of the official dissolution of apartheid in 1994, strained intergroup relations or the perceptions thereof persist in contemporary South Africa". In addition, some cultures are stereotypically viewed as passive, while others are perceived as participative (Holmes, 2004; Nguyen, Terlouw & Pilot, 2008). Members of social groups that are being discriminated against in general carry the stereotypes associated with their groups into other situations (Crocker, 1999). This was apparent in this study: the majority of students who indicated that they were not comfortable with verbal presentation but preferred the traditional teacher-student lecture were black. This is perhaps attributable to issues regarding language constraints and confidence in exposure, aspects that point to cultural features. Such different learning preferences, attitudes and perceptions of others' learning attitudes from cultural and educational experiences have been found to be problematic in group work (Nguyen et al., 2008). Ethnicity issues, whether real or perceived, need to be well understood because they might have implications for students' active participation in group work. The extent to which one can become alienated or engaged in group-based activities has important implications for the effectiveness with which one can perform academic tasks or achieve academically (Chemers, Hu & Garcia, 2001).

While most students agreed in principle that a mixture of cultures and ethnicity can improve their learning experience, they also highlighted that, while desirable, group work does not always lead to substantive interaction between students or to better academic results. In this study, students from all ethnic groups felt that mixed groups were not always effective because they created challenges with communication. The following statement is testimony to the mixed outcomes of diversity in group work:

Diversity lends new perspectives but also new problems. If one works with someone who is of similar ethnic group or anything sometimes it helps because you are able to communicate and interact more strongly than someone who is different from you.

While the above statement reflects an individual experience, a critical reading might be that communicating across a diversity of viewpoints might force students to make their assumptions explicit, rather than presumed, as might be the case between two individuals from similar backgrounds. While students might prefer what is easiest for them, diversity could offer more learning benefits because the challenges it poses force students to learn about different ways of doing and communicating.

Nonetheless, it is important to note that all groups (including a culturally homogenous one) mentioned that some of their members did not 'pull their weight'. According to our interpretation of the analysis, the responses point to some critical aspects. First, gender was a part of our initial concern, because studies have indicated different learning experiences of female and male students (Harrop, Tattersal & Goody, 2007; Grebennikov & Skaines, 2009) and the course is situated within a national higher education system that has been found to be lacking in pedagogies of sexuality (Bennett & Reddy, 2009). Yet, we found that, with regard to the way in which students conceptualise their peers, gender was not a significant factor in their conscious thinking about group work dynamics, nor with regard to analysing the data according to that filter. Secondly, the complexities associated with group work management such as non-participation of group members also seem to transcend the issue of race and hinge more on individual approaches to learning. The diversity of students' opinions regarding group work within and across different ethnic groups which are discussed in this study support this fact. This has led us to question our own assumptions that race and gender would be issues of considerable concern to the students and the group dynamic. Such assumptions might be a matter of transference from the educators' generation and, thus, while it should continue to be something we are cognisant of, it should not be assumed to be a fixed experience or problem. Thirdly, higher education contexts need to go beyond the mere provision of group work skills to previously disadvantaged students or even affective support for them to thrive in 'alien' territories. These contexts should endeavour to make such spaces more hospitable and inclusive learning environments (Mann, 2001); thus, altering them at a systemic and cultural rather than an agential level.

Given the rapidly transforming student composition in higher education institutions globally and considering the educational benefits of diversity, it is highly likely that student composition will become even more heterogeneous in the future in South African higher education institutions. This implies a compelling need to provide enabling conditions for students to be at the productive wave-length of working in groups. Without such attempts, group work goals of enabling high quality learning might be more difficult to achieve in culturally and ethnically diverse environments, which will add weight to real or perceived prejudice that students might already possess.

Conclusions and recommendations

It has long been recognised that the benefits of group work are not automatic, and that being in an ineffective or dysfunctional team might be inferior to independent study in promoting learning (Oakley et al., 2004) and lead to extreme frustration and resentment. It is, therefore, unsurprising that, given the group work constraints discussed, many students reported they would prefer working independently. Based on the study, our strong conviction is that these findings are not indicative of the unwillingness of students to engage in group work. Instead, the findings perhaps point to the problematic preconditions under which groups are formed and group work is practiced. The seemingly dysfunctional group work might not be due to individuals in the group but instead, as this study suggests, the legacy of assumptions and projections of differences associated with structures such as race. Other studies have shown that group work requires group members to have certain attitudes such as respecting other people's cultures; personality traits such as practice and openness; skills such as building teamwork; integration and knowledge relating to understanding the culture of others (e.g. Levin, 2005, Woods et al., 2011), which themselves suggest constructions of tolerance and social etiquette which could be culturally based.

Contemporary discourses construct group work as a good teaching method which provides productive terrains of learning for students in higher education. The assumption is that group work is a neutral method of engaging students and, as such, group work proponents seldom highlight cultural considerations. While group work might be desirable and yield high quality learning, practice on the ground in this case showed mixed conclusions, suggesting a mismatch between the intentions of the curriculum designers and the experience of participants in this context. According to Woods *et al.* (2011: 60), 'students from diverse backgrounds can have different learning styles and preferences hence it is critical that learning and teaching practices are tailored to meet these diverse needs'. However, we found that it is equally important to understand the factors, including those relating to students' internal motivation, that make them prefer certain learning styles to others. If group work is to be effective and enjoyable for students, certain steps should be taken to help students become aware that such group work might aid them in skills such as those

to do with communication, and to equip students to deal effectively with problems that often arise in collaborative learning activities. If the teacher explicitly explains the validity of diversified group work and the worth of the challenges the students might face when problem solving by collaborating, this could lead to more students' 'buying in', increasing the chances of their more willing engagement with the process of group work.

Our main argument is not that group work is neither desirable nor ineffective, but rather there are exogenous factors that should be explored to gain insight into the attitudes and perceptions of students towards group work. Based on the findings, we argue, as have others (e.g. Mann, 2001; Badat, 2007) that, despite explicit strategies such as group work aimed at developing critical beings for personal engagement in study subjects, inclusion and lifelong learning, the issues and complexities of diversity ought to be paid attention to by facilitators if they are to be harnessed for educational worth.

Though researchers have argued that the pledge for transformation in South Africa higher education has largely missed its target (Badat, 2007; Hall, 2008; Scott, 2009), positive progress has been made. To turn the transformation mandate to full throttle, group work dynamics need to be well understood by means of empirical research, particularly within our national context. In keeping with socio-cultural theories of learning, we believe that the socio-economic and the cultural context of students' lives and of the institutions where they learn need to be explored further. This is because students might live in different socio-economic landscapes where gender, race, class and other factors, which have an impact on the heterogeneity of the group, might interact significantly in ways that could influence their attitudes to learning in groups. This is fundamental because it has been proven, at least empirically, that it is not the student who matters, but the processes and value systems that shape and direct learning (Haggis, 2006; Scott, 2009). Such an understanding will help to reconfigure how we think about the ability of group work to achieve the goal of high quality learning. To us, this understanding is critical, because it challenges educators to reflect on their teaching strategies and the assumptions that underpin them.

On the micro level, in the context of this case study, the nuanced understanding that this research has allowed is being used to not only constructively (re)align (see Biggs, 1999) curriculum design regarding group work activities, but also give more consideration of concepts such as voice and the mutual construction of knowledge which have been found helpful for multicultural group work (Orr & Hulse-Killacky, 2006) – with the intention of coming closer to achieving high quality learning. It has also pointed to a need for more reflexivity with regard to the diversity of the educators themselves (Simpson, Causey & Williams, 2007; Emirbayer & Desmond, 2012).

Within the context of higher education, we hope this research has resonances for a wider audience and that it would encourage more research on problematising

teaching methods in the face of socio-cultural challenges. While the diversity of students in South Africa poses the challenge of dealing with the 'underpreparedness of some students from previously disadvantaged backgrounds' (Boughey, 2004), we maintain that group work could generate high quality learning if properly conceptualised, designed and implemented. As noted earlier, we think these results do not necessarily indicate that collaborative learning strategies do not facilitate learning, rather they point to the need to rethink the factors that could improve the effectiveness of group work. As Mann (2001: 8) suggests, 'critical work must be done to examine the conditions which might promote alienation within higher education contexts' and the ways in which we can provide hospitality for difference. Without this, students could become increasingly alienated from activities which they should be involved in to facilitate their learning. Consequently, group work might become 'platforms of failure' rather than 'terrains of learning'.

The limitations of our research could be that we drew somewhat tentative inferences regarding diversity and group work. However, we hope our study marks the beginning of and contributes to growing areas of research on the nuances of diversity in group work. If issues of diversity and learning are to be tackled head on and insights into complexities researched, specific details are needed. Thus, we hope to contribute to future studies in South African higher education by closely and openly exploring the complex interplays of language, race and class in group work to provide conclusive recommendations

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