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Childhood education student teachers responses to a simulation game on food security

Abstract

This paper provides an account of student teachers' responses to a simulation game about food scarcity and how the game served as a conversation starter regarding the influence of food scarcity on educational provisioning. The simulation game was utilised as part of a suite of activities during an educational excursion for first years in primary school teacher education. In this investigation data were generated via video recordings of the simulation game itself, summary notes of the key points of the discussion session during the game, and students' learning portfolios. Analysis of the various data sets indicate that student teachers' engaged with the game both viscerally and cerebrally, with the game providing a powerful concrete introduction to the issues of food scarcity and unequal distribution of resources. Most student teachers were able to relate the lessons learned from the game to the classroom and educational situation. In addition, I found that the simulation game as method can assist students in their activity of learning to look at education as an equity and justice issue.

Keywords: Simulation game, pre-service teacher education, food scarcity, childhood education, educational excursion

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Introduction

This paper reports on the use of simulation game as method, utilising the topic of food security, with student teachers in childhood education. The game to which I refer forms part of a set of activities during a three day educational excursion.[1] The student retreat is part of a compulsory first year course in which students and a few lecturers work intensively together in a context outside of the formal university environment. My aim with linking the simulation game to an issue such as food scarcity is twofold. It is firstly to start conversations with student teachers about the influence of food scarcity on the learning of young children. It also serves as a means of prompting reflections and discussions about the influence of wider social and economic factors on educational provision. As a teacher educator I have a particular interest in emphasising principles of equity and justice in education. These principles are aligned with combating forms of oppression of individuals as members of various groups, whether they be ethnic, racial, linguistic, socially stratified by class, or as other groups that are rooted in particular institutional and societal structures (McDonald & Zeichner 2009).

Engaging student teachers in childhood education with the issue of food scarcity

Food is a basic need for each individual's everyday survival (Dubois 2006). For young children in primary school, getting access to enough food is critical as this stage is the second most rapid and intensive period of growth and development after *in vitro* nutrition (Dubois 2006:1504). According to Maxwell and Smith (1992:8) the concept of "enough food" is captured in different ways in the literature and refers to a "minimal level of food consumption" required for basic survival (Reutlinger & Knapp 1980). During primary school, rapid changes in children's caloric and nutrient needs must be fulfilled in accordance with the different intensive developmental phases (such as physical growth, brain wiring, organ development) that characterise childhood (Dubois, Farmer, Girard & Porcherie 2006). Researchers in this area have found that poor childhood nutrition can alter children's physical and cognitive development and even mild malnutrition can have lifelong effects. For children, being hungry increases hyperactivity, school absenteeism and tardiness, and decreases psychological functioning. Additionally, the impact of poor food security has long lasting effects such as anaemia, which in turn leads to other problems such as altered growth and delayed puberty (Lozoff, Jimenez & Smith 2006) and slower development in the areas of "language learning and motor skills" (Fleisch 2009:35). Factors such as these affect young children's physical and cognitive development and school achievement (Sarlio-Lähteenkorva & Lahelma 2001).

One of the biggest problems in the world today is that food access is not equal for everybody (Reutlinger & Knapp 1980; Dubois et al, 2006) with more and more people not being able to purchase the food they need. Additionally, more people are becoming increasingly anxious about these issues. This is what is known in the literature as "food insecurity" or "food poverty" (Dubois et al 2006:1504), with the

main factor for food insecurity being identified as poverty. In South Africa, Fleisch (2009:32) notes that "more than 60% of children live in poverty and that this affects nutrition, creating problems such as stunting, micronutrient deficiencies and short-term hunger". Research has also shown that food insecurity is transmitted from one generation to the next. Food scarcity (and poverty) is thus a clear issue of inequity and injustice (Sarlio-Lähteenkorva & Lahelma 2001).

A great number of teacher education programmes are concerned with how students can be made aware of issues associated with injustice (Darling-Hammond, French & Garcia-Lopez 2002) and teaching for equity. Many students will have come to the study of teacher education without clearly understanding their role in confronting and addressing injustice on educational provision and student learning. Food scarcity is one such issue in childhood education. In a mixed group of student teachers there will generally be some who acutely understand such an issue from their own life experiences, and there will be others who will find it hard, as they may have been beneficiaries of a system which produced much of the injustice (Darling-Hammond 2006). When student teachers have not had much personal experience with food scarcity it can be difficult for them to understand its impact on school children's lives and learning. As Kumashiro (2000:4) argues, students come to school with "partial knowledges", in which they may not know much about marginalised groups in society, also referred to as knowledge of *the other*, or have what he calls "mis-knowledge, a knowledge of stereotypes and myths learned from the media, families, peer groups, and so forth". Although Kumashiro was referring to school children, I would argue this is equally applicable to first year student teachers learning how to be teachers for young children.

Equally, I am motivated by Guyton's view (2000:11) that there remains "a great need for focused attention on what can contribute to social justice (in) teacher education". Thus, in line with the varied means that are used to integrate ideas and principles of justice and equity into programmes in the teacher education literature (Zeichner 2009), such as reading, writing, and discussing autobiographies and literature (Abbate-Vaughn 2008:41), and through action research (McIntyre 2003) this simulation is my attempt to sensitise first year student teachers to a particular orientation of justice at the beginning of their education. I deliberately use the simulation game as an experiential learning strategy which places student teachers in the shoes of *the other* and allow them to be on the receiving end of marginalisation and discrimination though a beginning understanding of food scarcity.

I also wanted to find a way of inserting the language and discourse of food scarcity (and in a broader sense of social injustice) into a course that serves as student teachers' introduction to the teaching profession, so that it would frame ensuing work in their programme. As Zeichner and Teitelbaum (1982:98) argue, both the moral and technical aspects of teaching need to be emphasised at the very beginning of new teachers' education to prevent such issues from becoming marginalised later in their programmes. In South Africa, where the quality of childhood education is increasingly being viewed as vital for the education system as a whole, addressing awareness of an

important issue such as an influence of food scarcity on educational provisioning with student teachers for this phase of education cannot be ignored.

The simulation game provided a vivid, authentic experience by which beginner student teachers could begin to converse about and reflect on the effect of food scarcity on childhood education. I also wanted to foreground a vital issue (such as food scarcity in childhood education) at the point at which students first began thinking about what their roles as future teachers would entail, which is a central focus of the education excursion curriculum. In my view, the educational excursion provides the optimal time to start discussions with students about the "complex moral and ethical issues associated with their work" (Zeichner 2009:55). Thus, although I acknowledge that the process of understanding and change in ways of thinking about the world is a protracted one, and not likely to be achieved through one exercise, I believe that an early awareness of the influence of food scarcity on childhood education is paramount for teachers of young children so that early conversations about teaching for equity in education can begin and can filter student teachers consciousness and developing philosophies and pedagogies. This, I would argue is vital: That I, as a teacher educator, am to help make student teachers aware of how an issue such as food scarcity in the wider social and economic context links with education and their future roles as teachers. I am also fulfilling my brief as teacher educator. A simulation game about food scarcity gives the students an opportunity to recreate dramatically what they will realistically encounter in many of the classrooms. Some children will be hungry and suffer neglect and bias. Of the different types of play and drama available in the educational arena, simulation and role play are seen as powerful tools (Henning 1981).

A description of the simulation game on food scarcity

The simulation game[2] structure and characterisation requires a venue with a display table that can be viewed by all students, and smaller work areas for group discussions. Students, on entry to the venue, randomly receive a *passport* which categorises them as citizens of one of three groups of countries. The first very small group (approximately 1% of students) will be citizens of industrialised, developed countries like those in Western Europe and the USA. A second, still relatively small, group (usually about 2% of students) will be citizens of an emerging economy (a developing country such as South Africa or India also known as newly industrialised countries). The third group, with the largest proportion of students (approximately 97%), will represent citizens of underdeveloped, so-called *third world* countries (e.g. Zimbabwe or Bangladesh). Based on the passport and the country it denotes, each student receives a predetermined amount of money in fictitious world dollars ($Ws). Those from so-called developed countries receive $W50, those from newly industrialised countries receive $W15, and the ones from developing countries receive a $W1, a few cents or no money at all.

A table is set with a variety of food items such as sandwiches, chocolates, fruit, biscuits, cakes, soft drinks and a very limited amount of unbuttered bread and/or dry crackers. The items range in price from a sandwich priced at $W8, to a soft drink at

$W5, and a slice of bread or a cracker at $W1. Students are invited to purchase items using their issued $Ws before returning to their respective predetermined discussion groups (which are made up of citizens from different countries) with what they have purchased. In essence, based on the prices and the $Ws issued, a student from a developing country will only be able to afford a slice of bread or a cracker, that is, until the supply runs out; a student from a newly industrialised country will be able to afford a sandwich and a soft drink or a piece of fruit and a biscuit, while citizens of a developed country will be able to purchase a number of basic and luxury food items.

After this exercise, in the company of their discussion groups, students are asked to study the contents of their plates and the plates of others in their group for a few minutes and reflect on their emotional reactions to the simulation. The following prompts are provided:

1. How did you feel about your own situation (circumstances) in the game?
2. How did you feel about the situation (circumstance) of others in your discussion group and the wider class?
3. What are the lessons you can learn from the simulation game for your role and task as a future teacher?

Thereafter, the session leader facilitates an open discussion of the issues that arise and concludes with a short PowerPoint presentation, which visually contrasts the contents and costs of an average family's weekly grocery items from a variety of contexts (different countries), approximating those in the simulation game.

Situating a simulation game within the context of an educational excursion

The education excursion (also known as an immersion field trip) is part of a first year course that focuses on the personal and professional development of student teachers. During the excursion student teachers from various backgrounds (different racial, language, religious and cultural groups) share common sleeping and recreational areas for one week and learn about each other's commonalities and differences. Situating the simulation game around food scarcity within the context of an educational excursion with its *expanded curriculum* and often playful, social tone (De Beer & Henning 2011) creates unique opportunities for critical thinking and for extending student learning (De Beer, Petersen & Dunbar-Krige 2010). There is a growing body of research showing that simulation games are increasingly entering formal education and being used in educational settings (Dempsey, Lucassen, Haynes & Casey 1998). For instance, during simulations students use one process to acquire knowledge about another and so they function as epistemic devices (Fisher 2006:420). This is in line with the views of Warren (1999, cited in Jakubowski 2003:25), who describes an educational excursion as a critically responsive component of experiential education.

In addition, the context of the excursion environment in an isolated environment where students are entirely dependent on the ground personnel and university staff for all their basic needs provides a level of interaction that is not possible in a university classroom. As students are supplied with all meals at the camp, the suggestion at the beginning of the simulation that they will not be provided with lunch and will have to consume what they get to buy, lends a measure of authenticity to the game and students reactions within it. The excursion activities are also framed by the conceptual framework guiding the overall teacher education programme of this university. This framework expresses a commitment to the education and training of "caring, accountable, critically reflective educational practitioners who are able to nurture and support learning in diverse educational contexts" (Gravett, 2009:1). It is precisely these features which make the *context* of the excursion as important as the *content* of the activities during the excursion, an issue I draw on most advantageously in the simulation game.

Research questions

The following questions guided this study:

1. What are first year childhood education student teachers' responses to a simulation game about food scarcity?
2. How does a simulation game serve as a conversation starter about the influence of food scarcity on educational provisioning in childhood education?

Methods

I collected data from three student groups of approximately 150–180 students in each), studying in childhood teacher education programmes. This included student teachers from the foundation phase and the senior phase teacher education programmes in the 2013 excursion. Data on the student teachers' reactions are captured via video recordings of the simulation game (approximately 40 minutes in duration). Video diaries and video recorded observations have been used for many years in a number of disciplinary areas (FitzGerald 2012:2) and are increasingly being used in education in the South African context (De Lange, Mitchell & Stuart 2007:19). Video data is useful for capturing how people interact with each other and the outside world. In the case of this research it was especially useful in enabling me to collect, share and analyse complex processes of student teacher interactions in the context of the simulation game as video captured *in situ* can contain a great richness of information, often revealing subtle yet important incidents relating to the interactions between people (FitzGerald 2012:4). The video data thus captures both student teachers' verbal reactions, as well as non-verbal data like facial expressions and the nuances of their responses during the discussion sessions. Data were also collected in the form of flip chart summary notes of the key points of the discussion session after the simulation game. A third set of data comes from student teachers' learning portfolios, where

specific reflection activities focus on the simulation game for their learning. Portfolios are submitted about four weeks after the excursion.

For the video data I used methods of qualitative analysis associated with visual data, although I did not use any CAQDAS (Computer Assisted Qualitative Data Analysis) packages such as Transana for this purpose. Capturing much of the data on video tape allowed me to apply a type of "retrospective analysis" (Edwards & Westgate 1987:86–87), which would not have been possible during the simulation game and discussions afterwards. This permitted openness to the data analysis process and provided for fuller categorisation of the data. The video footage also provided context, and multiple viewings of the same video sequences also showed how the sequence of events, including taking turns, occurred and how a specific utterance gained meaning because of its position in the communication flow (Bowman, 1994; Henning, Van Rensburg & Smit, 2004). I used a technique of analysis, taking both verbal and non-verbal interaction into consideration, which is derived from grounded theory and which meant that codes were categorised for their *goodness of fit*. This method can be described as qualitative content analysis, but also had elements of discourse analysis (Petersen 2007:170). I have used this method before, finding that it is helpful specifically because it deals with multimodal data. I did not, however, code every single episode or utterance, but scrutinised whether the data answered the questions of the inquiry. This is known as a "manifest approach" (Erickson 2006:180), where interactions that focus on particular subject or pedagogical content using critical incidents are selected and analysed. Critical incident analysis is commonly used in teacher education for encouraging reflective practice through analysis of videotaped lessons during micro lessons and it comes almost naturally to teacher educators who work with video regularly. In particular, I concentrated on incidences of "disputational talk", for instance where there were high levels of disagreement and "exploratory talk" where student teachers were encouraged to develop shared understanding through reasoned discussions, challenging ideas and examining/evaluating evidence (Mercer 2008:3).

The flip chart summaries and student portfolio data were analysed according to generic principles of qualitative content analysis (Merriam, 1998; Charmaz, 2002; Henning et al, 2004) and then coded, after which recurring themes were identified. In applying the analysis tools to search for prominent discourses and recurring themes, I worked with both the visual and written data and searched particularly for signifiers of how the students responded to the simulation game and how they described the influence of the simulation game on their ideas regarding food security on childhood education and teaching for equity. I also looked for evidence of the dominant discourses students used to describe themselves and their situations in the various parts of the simulation game, correlating this with the visual indicators of students' experiences as captured in the video data. The results of the analysis processes were discussed and verified with two colleagues with whom I work closely in the excursion.

Ethics

As students were identifiable on the video recordings and in their portfolios, I worked with a code of ethics captured in the ethical clearance certificate of the Faculty of Education. This guaranteed students' confidentiality, minimised risks and provided for voluntary participation as indicated in signed consent forms. To protect students' identities, video data and portfolio data are stored away from public fora and no student details are identified in reports emanating from the research.

Findings

First, I found that the simulation game provided a novel and powerful concrete introduction to the issue of food scarcity and unequal access to resources, as well as its influence on childhood education and teaching for equity. Students' reflective discourses reveal highly emotional responses to their involvement and is linked to their positioning in either the camp of the *alienated and excluded* or that of the *bountiful*. In the game, for those who did not have access to financial resources there was a gradual shift from a discourse of alienation and despair to one of anger and resentment. For those with sufficient funds the overwhelming discourse was that of guilt and shame, balanced equally with gratitude that they were better off than the majority.

Second, most students were able to relate the lessons learned from the simulation game to the classroom and educational situation, particularly with respect to food scarcity and its impact on educational provision. Others were able to make the conceptual shift to other aspects of equity and/or social injustice in society and its impact on educational provisioning. In the next section I report on each of these findings briefly and use descriptions from the video data and excerpts from the flip charts and the students' written reflections to illustrate the points I make.

In a role play about abundant food or nothing: The play becomes a visceral experience of inequity

The simulation game provided a powerful authentic emotional and cognitive introduction for students to the issue of food scarcity, perhaps because it dealt with such a basic need. Given that practically all the students found themselves citizens of countries where they had to survive on less than $W1, and were consequently only able to purchase a slice of bread or a dry cracker or when these had run out, no foodstuff, they were able to experience first-hand how an unequal distribution of resources impacted them. This is aptly reflected in the students' facial and verbal expressions captured on video both during the game and in the discussion afterwards.

Thereafter, when students were prompted to share their reflections on how the simulation game influenced them on both a personal and professional level, their responses are equally evocative and reveal a sharp awareness of the injustice of some participants having access to resources and others not. In terms of the verbal responses, most students reacted on a personal level first. For those without access

to financial resources, their discourse over the course of game shifted from one of alienation, hopelessness and despair to that of anger and resentment. For instance, students first used words such as "hopeless", "desperate", "sadness", "humiliated", "ashamed", "deprived", "frustration", "excluded" and "devalued" to describe their feelings about their situations. Examples of students' verbatim expressions captured on video included:

I feel sadness and humiliation that I have nothing on my plate today (video data cohort 2).

Those of us sitting over here feel deprived and devalued as people, we have nothing (video data cohort 3).

Students' facial expressions in the group of have-nots are evident in the close-up shots taken in their groups while they are examining the contents of each other's plates. Expressions of shock, annoyance and/or anger predominate, with students frequently glancing back and forth between their own meagre plates and the plates of those who were able to purchase many items. Towards the end of this period of time, there is evidence of angry glares towards those with full plates, with growing murmurings of discontent. For those with sufficient funding their facial expressions start off somewhat gleeful (as evidenced by the smiles on their faces) when they realise how much they have in comparison to the others and quickly change when they are exposed to the baleful glares of less fortunate students. Often most of these students then put their heads down and refuse to meet the gazes of the majority who have little or nothing. At the point at which students have compared the plates in their own smaller groupings, their attention tends to shift to those in other groups around them to see if they can spot which group has someone with something substantial.

After a short period of time the noise level in the video recording increases and the voices of students who have little are clearly audible with snatches of words such as "unfair", "disgusting" and "greedy rich people" clearly standing out above the general murmur of voices. When probed during the reflection time, students' descriptions of how they feel also change in tone and word choice and became more aligned with a discourse of anger and resentment. This is encapsulated in the following student remarks:

> I feel extreme anger at the greed of others (video data cohort 3).
>
> I am disgusted at how they eat in front of us; we are also hungry people (video data cohort 3).
>
> I am envious of what they have – it can drive one to desperate measures (video data cohort 1).
>
> I feel excluded and inferior. Am I not good enough to have what they have just because I come from a poorer country? (video data cohort 2)
>
> I cannot accept my situation because I cannot accept being hungry when others have so much on their plates (video cohort 3).

Some students who received $W1 revealed how they tried to find creative ways of dealing with their situations. These included pooling their resources and stealing $Ws from other students, many of whom also only received $W1. For instance, students said the following:

We banded together to survive; it empowered us, but even when we put our money together it was still not enough to buy anything from the table. Those with money had taken it all (video data cohort 1).

We felt justified in resorting to stealing from those who have more (video data cohort 3).

For those with sufficient funds the overwhelming discourse was that of guilt and shame, balanced equally with gratitude that they were better off than the majority: I feel so sorry for those that do not have anything, while my plate is so full (video data cohort 2). Another refused to get drawn into the discussion by stating that: People must learn to face the reality of inequity in society – some have and some do not. That's life (video data cohort 3).

Moving from and understanding of food scarcity to broader issues of equity and justice

Finally, in the general discussion session and in the reflective portfolio exercises completed after the excursion, most student teachers were able to relate the lessons learned from the simulation game to the classroom and educational situation. The initial focus was mainly on the issue of food scarcity on educational provision. This is encapsulated in the following student accounts:

> Children cannot learn when they are hungry. What if children in my class come from circumstances like this where they don't even have food? (video data cohort 2) .
>
> When there is no food there are unforeseen arising circumstances for children – it leads to health issues and even sexual exploitation in order to survive (student reflective journal entry).

With further discussion most student teachers were able to make the conceptual shift to other aspects of inequity and injustice in society and its impact on educational provisioning. This is evidenced by the following comments:

> I have begun to realise the impact of a lack of resources on children and their ability to learn (student reflective journal entry).
>
> Teachers must have an awareness of social justice issues and how it affects children's education. We cannot treat all the children the same – they do not come from the same circumstances (video data cohort 3).
>
> I have a constant awareness of how various factors intersect in children's lives and what this means for the teacher's job. It directly affects the teacher's level of care and accountability (student reflective journal entry).

> We have a moral imperative to teach our students about the circumstances of others in the world and the social injustice in societies (student reflective journal entry).

This game points me to take note of other ways in which social injustice manifests in the school environment and how it influences children. I can think of a few things – wealth, cognitive ability, education of the parents, etc (student reflective journal entry).

Discussion

In present-day South Africa, where there are huge inequities in society and between race groups, it becomes incumbent upon teacher educators to draw student teachers' attention to factors that influence children's learning very early on in their training. Using an issue such as food scarcity in a simulation game provides a catalyst for conversations about teaching for equity and justice, especially in a country where it is conservatively estimated that 60% of children are classified as poor (Hall & Woolard 2012:32). Tied to this is the fact that almost 26% of the poorest 20% of children experience food insecurity (where children sometimes or often go hungry) and live in poverty without adequate access to sanitation, housing, water, electricity and the like (Meintjies & Hall 2012:82). There is evidence that many students in the first year cohort at the institution at which the study was conducted are impacted negatively by financial constraints (Van Zyl 2012:25), which implies that some would have had experience of food scarcity. The simulation game allows such students the opportunity to verbalise how this feels without personalising it outside of the game. On the other hand, for those student teachers with little experience of food scarcity, the simulation game enables them to experience this issue first-hand.

To my mind the value of the simulation game as a concrete experience helps establish a starting point for conversation around the impact of food scarcity on education and teaching for equity and the role of the teacher in this regard. Kumashiro, Pinar and Ladson-Billings (2009:xxv) contend that teaching for justice involves preparing students to succeed in whatever context they find themselves and highlight several overlapping approaches to challenging oppressive practices in schools. One in particular refers to the role of educators in challenging the broader, and often invisible, dynamics in society that privilege certain groups and disadvantage others. It is my contention that the simulation game provides a pedagogical tool for teaching students to experience how one factor, namely food scarcity, can impact children's learning. Situating this conversation very early in student teachers' study programme, and within a course which aims to provide students with an overall view of the various aspects of teaching as profession, I hope to encourage them to adopt and develop a more critical orientation when they engage with their course material. During the excursion the foundation is also established for student teachers to begin thinking of the type of teacher they wish to become. I would argue that experiences such as simulation gaming food scarcity could position student teachers towards viewing teaching as a moral act (see for instance the work of Noddings 1984) in which

an awareness of inequity and injustice is paramount. This seems to be borne out in student teachers' reflective journal entries, extracts of which are included as evidence in this paper. To me, the experiences of the game provide student teachers with a lens and a language – that will develop in their training as teachers – that they will be more aware of how "differential access to resources" affects school children's learning (King & Castenell 2001:13). Thus, both the timing of the intervention in the students programme in their first year of study as teachers and the use of simulation game as pedagogy, speak to the imperative that King and Castenell (2001:11) refer to as "re-inventing teacher preparation towards an early understanding of social justice in education". This is also likely to help students understand what Cochran-Smith and Zeichner (2005) refer to as the pervasive influences of other social justice issues such as race, class and culture on schooling.

One downside of focusing students' attention on an issue such as food scarcity is that it can constrain students' elaboration on other factors that impact children's learning. For some student teachers in this study this one-dimensional view of the simulation game could be attributable to a variety of factors. One could be the powerful visceral impact of the simulation game and its focus on food scarcity. Another could be the students' relatively young age and inexperience in extending the conversation about food scarcity to other matters of injustice. It could also be because an awareness of and conversations about injustice and inequity are often not an explicit focus of study at school level, and student teachers may not have a well-developed enough language to describe their experiences and this impact sufficiently. These are the aspects that teacher educators need to work on consistently in their programmes. Although justice and equity often do not feature prominently in the discourse of many teacher education programmes, ultimately, as Zeichner (2009:56) entreats, teacher educators "must not exhibit moral cowardice and back off from the task of preparing teachers to be advocates for social justice for all children".

Conclusion

Many students enter teacher education with the belief that all children are similar and can be taught in the same way. Teacher education programmes commonly try to counter these ideas with courses on social justice, equity and multiculturalism, sometimes taught theoretically and sometimes linked to the school practicum. Research on exemplary teacher education programmes argues that work in this area cannot be limited to reading and discussions in class alone. It requires sustained input from teacher educators. It means teaching student teachers to move beyond their own "cultural lenses" (Delpit 1995:151) so that they learn through their own experiential lenses in which they put themselves in the shoes of the other and "understand the meaning of that experience for learning". Grimmett and MacKinnon (1992:389) refer to this type of learning as the development of "pedagogical learner knowledge" – knowledge of learners, the factors that affect their lives and circumstances which impact teaching and learning. For student teachers it is learning to consider the experience and perspectives of those whose lives are plagued by food scarcity,

inequity, injustice and discrimination. This is not easy for students who have not had those experiences.

In this paper I described how I used simulation game in an effort to begin the conversation around teaching for equity and helping student teachers confront the issues that they are bound to encounter in practice. Experiential learning opportunities such as a simulation game allow student teachers to be confronted with the realities of poverty and injustice through an issue such as food scarcity, so that it surfaces authentically (Darling-Hammond 2006:242) and so that it creates the tensions that must be worked through to get them to new levels of awareness. I am in agreement with Cochran-Smith (1991), Darling-Hammond (2006) and others that teacher educators are moral change agents, which means we have a responsibility to find ways of starting the conversations about teaching for equity and justice early and powerfully in teacher education programmes, providing opportunities for students to learn about it experientially so that it does not get lost. The simulation game described in this paper is one such effort on my part as a teacher educator.

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Endnotes

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