This paper discusses three distinct, yet overlapping and often exchangeable discourses of equity, diversity and social justice in mathematics education. Like all discourses in education, they are social constructs and have been subjected to development and critique from a variety of perspectives. This paper focuses on poststructuralist discourses, and in particular that of identity, that renders the traditional understandings of these constructs as problematic for policy and practice. The paper proposes that the discourse of ethics lies at the heart of the three discourses, and in turn places these discourses at the heart of mathematics education.

There is a range of linguistic constructs in the literature that aim at addressing the apparent correspondence between lack of participation and achievement in mathematics, and learners constituted according to a notion of their group identity. These linguistic constructs include, among others, equity, diversity, social justice and more recently, ethics. Each such construct heralds in a range of differing, often competing, perspectives that undergird assumptions within them. Atweh and Keitel (2007) argue that while equity and diversity discourses share many similar concerns, they differ in their aims and implications for group status. They argue that, instead, social justice may be a more useful construct. In particular, the authors utilise the model of social justice, explicated by Fraser (1995), as having two necessary, yet distinct components of recognition and distribution that roughly correspond with the two agendas of equity and diversity. On the one hand, the diversity discourse may result in an essentialising of differences between the different groups and it may fail to take into consideration the changing constructions of these labels and their contextual understandings across time and space. In particular, Swanson (2005) notes how difference in reference to race, class, gender, culture, language difference and other social difference discourses often become ‘recontextualised’ (Bernstein, 2000) into pedagogic disadvantage, thus constituting the ‘construction of disadvantage’ in school mathematics contexts. In other words, social difference becomes reconstituted in deficit terms. Thus, celebratory diversity discourses that might exoticise difference are insufficient in themselves to arrest the recontextualisation into constructions of disadvantage (Swanson, 2005). In the same vein, the diversity discourse fails to adequately take into consideration one of the greatest emphases of social inequality and exclusion in mathematics education, namely socio-economic background and poverty that are difficult to constitute in the same way as that of gender and cultural difference. On the other hand, Wenzel (2001) discusses the difficulties within the traditional equity discourse in

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1 While not insensitive to the biggest equity issues related to young people who are excluded from school altogether, we will restrict the discussion here to equity in the formal school contexts.
determining questions as to who is entitled to receive equity support and how to avoid the individualism inherent in such discourse at the expense of the group’s benefit. Similarly, he argues that the constitution of an individual as a member of a single social group deserving equity measures is, in itself, problematic. Finally, equity measures tend to deal with a single recipient of the benefits and not as a member of a social group that is systematically excluded. In this way, the individual targeted for measures is constructed in terms of group difference, carrying the burden of representation of that group, (Swanson, 2005) yet is treated individualistically while carrying the essentialisms of constructed group difference.

The equity agenda aims at reducing the effects of group differences, e.g. in achievement and participation, and hence its ultimate aim is to erase the effects of group differences in mathematics learning. Diversity discourse, on the other hand, aims at enhancing group differences and status through a more celebratory approach. This is the dilemma that Fraser (1995) refers to in discussing the multidimensional model of social justice. Atweh and Keitel (2007) discuss two further limitations of the equity and diversity agendas. On the one hand, remediating equity concerns might be vulnerable to a backlash of misrecognition (Fraser & Honneth, 2003) for the target group by constructing them as victims or as needy of special assistance, similarly to what Swanson (2005) argues in terms of the recontextualisation of difference into deficit and disadvantage, while the diversity construction promotes the group status, yet at times ignoring the issues of relations of power within group difference discourses. In this latter regard, the diversity agenda might be too susceptible to romanticising difference between groups by treating them as exotic, while the equity agenda highlights their exclusion and disadvantage, albeit that individualisation of such equity processes is in itself a form of essentialising. In this sense, the diversity discourse has been accused of being superficial in its ‘celebratory’ approach, and insufficient in addressing the hidden relations of power within and between groups in their hierarchical realisations within the social domain.

This paper deals with another complexity of the equity, diversity and social justice agendas posited by the recent theorisations from poststructuralist perspectives, which inform several writings in current mathematics education literature. In this context, we continue to use the construct of "equity" to refer to the three discourse, unless specific reference to the other two discourses is needed, not because it is the most comprehensive construct, but because it is the standard term used in many educational policies around the world.

In particular, the discussion paper for the ICME13 Topic Study Group 33 (Atweh et al. 2015) point out recent challenges to our traditional understanding of the equity agenda stemming from poststructural perspectives. These challenges are reflected in the alternative ways of understanding the construct of identity. Similarly, the discussion paper raised concerns whether these recent understandings of equity and identity lend themselves to the struggle for equity and justice by the different social groups, and whether they lend themselves to justice-oriented policy formulations.

We commence this paper with a discussion of the construct of identity as a 'signature' construct of postmodern approaches to literature from postmodern perspectives and consider some of its possible implications and limitations to inform policy in mathematics education.
ON IDENTITY

Atweh (2011b) note that identity is a construct that has re-entered educational discourse, as it did in social science and cultural studies, in significant ways during the last few decades in quite a distinct understanding from the past. In the 1960s, ‘identity’ (often referred to as ego identity) was used to refer to sense of individuality or the self. Sfard and Prusak (2005) refer to terms such as "character, nature and personality” (p.14) that are often associated with the construct of identity. Erikson (1968) framed it this way: "Ego identity, then, in its subjective aspect, is the awareness of the fact that there is a selfsameness and continuity to the ego’s synthesizing methods and a continuity of one’s meaning for others” (p. 50). Hence, identity is a sense of sameness and consistency. However, in the late 1960s, another understanding of identity became common - that relate to communal identities. As Brubaker and Cooper (2000) argue, this coincided with the rise of the Black Power and other ethnic identifications modelled around it and the weakening of the class consciousness in the USA. The understanding of the construct in these contexts refers to similarity between different members of the groups identified in their lifestyle, values, culture and practices. While the concern in individual identities was about 'how I am the same or similar in temporal sense', the concern with social identities was about 'how I am similar to other people who share same background or identification'. These notions framed within identity discourses carried the signature of modernism that constituted the individual subject’s identity as fixed, absolute and non-relational, and social identities that are also fixed, essentialised and innate, thus problematically constituting the individual as belonging to a distinct grouping also in terms of a construction of group traits (Swanson, 2005), in other words, enacting cultural homogenisation and essentialising individuals within these homogenisations.

Contemporary poststructural educational discourses on identity posit it as: socially constructed (i.e., not naturally given), fluid (i.e., as always changing), multiple (i.e., carrying variations), contingent (i.e., context dependent), fragmented (i.e., subject to different forces), unstable, (i.e. ephemeral and fallible), relational (i.e., constituted in terms of relative relationship to others) and hybrid (i.e., have different origins). For Bernstein (2000) and Dowling (1998), identity can be interchanged with subjectivity in that it poses the possibility of different multi-vocal realisations in different contexts across space and time. Here, identity is also conceived of as multiple, shifting, contingent on particular contexts for particular realisations, and works concomitantly with discourse, ideology and power. In this way, mathematics education can be said to offer particular "evoking contexts" (such as those of poverty or constructed disadvantage) in which certain positionalities within existing power relations become possible, while others are diminished (Swanson, 2005).

These understandings are referred to by Brubaker and Cooper (2000) as "weak" and non-essentialist versions of the previous "strong" essentialist understandings. The authors raise the question as to whether the weak versions of the construct avoid the problems of essentialism posed by the older understandings. They go on to note that often there is slippage between essentialist and constructivist stances in the use of the terms by many authors. In particular, they argue that this slippage is "not a matter of intellectual sloppiness. Rather, it reflects the dual orientation of many academic identitarians as both analysts and protagonists of identity politics" (p. 6). It could similarly be argued that their purposeful poststructural orientations are intended to be relativist in an attempt to undo the problematic essentialist and absolutist truth-making framings, in Foucauldian
Atweh and Swanson

terms, of modernism. The authors go on to discuss different uses of the identity construct in current academic and public literature. They summarise:

Clearly, the term "identity" is made to do a great deal of work. It is used to highlight non-instrumental modes of action; to focus on self-understanding rather than self interest; to designate sameness across persons or sameness over time; to capture allegedly core, foundational aspects of selfhood; to deny that such core, foundational aspects exist; to highlight the processual, interactive development of solidarity and collective self-understanding; and to stress the fragmented quality of the contemporary experience of "self," a self unstably patched together through shards of discourse and contingently "activated" in differing contexts. (p. 8)

With these ideas in mind, we pose the question, what does equity mean, and what does policy look like in this diversity of understandings of the construct of identity. While, arguably, these "weak" or poststructural understandings of identity may be useful for working with teachers and learners, their implications for policy formulations with regard to group differences in participation and achievement in school mathematics remain unclear, at best, and problematic at worse. In Brubaker and Cooper’s terms, these poststructuralist understandings of identity remain as "categories of analysis" rather than as "categories of practice", particularly at social group level and policy.

While accepting that the constructs of equity and identity are social constructions and ‘fictions’ (in much the same way as Heller (1992) spoke of human rights represented in international conventions as such (p. 351)), dependent on perspective and the particular ontologies from which they derive value, the participants in the field of endeavour cannot flee from the demand for normative criteria to reflect on their work and its effects. Of course, by saying they are fictions is not to dismiss them as whimsical and unnecessary, but to draw attention to their constant openness to reconstitution and redefinition depending on how they are to be valued and depending on the dominant perspective with which they are valued and through which they are imbued with particular truths. Then, can such a normative use be explained by epistemology? Arguably, knowledge and understanding are necessary for accepting the self and the other and to inform conversations about equity. However, as Roth (2007) explains, knowledge can also lead to oppression and domination. Taking on a Foucauldian perspective here, power and knowledge are invested in each other and are inextricably and concomitantly implicating. Hence, epistemology cannot in and of itself provide a foundation for the normative decisions required for action towards a justice-oriented social life - and more directly relevant to our purposes here, more equitable society. For that, we turn to consider equity in relation to an ontology of ethics. In the following section, we discuss the main ideas of Levinas on ethics and then introduce some of the advantages of placing ethics at the heart of the equity agenda.

ON ETHICS

First, we note that discourse of ethics is not unitary. Roth (2007) identifies some alternative approaches to constructing ethical decisions. A utilitarian approach bases ethical decisions on the consequences of action – in other words, an action or knowledge is neither good nor bad by itself. Its ethical value depends on what it leads to. A deontological approach identifies principles for ethical duties regardless of consequences. A number of contemporary writers have taken up the standard in bringing considerations to bear on an ethics of care in justice-oriented perspectives. Maheux, Swanson and Khan (2012) forefront ethical considerations with respect to mathematics
education. Swanson (2007, 2015) for one, also introduces the African indigenous epistemology of Ubuntu in advancing the need to consider alternative ontologies of being in relation to an ethics of care, and in decolonizing oppressive dominant discourses, such as neoliberal globalisation. It can be argued that discourse ethics establishes ethical claims on the same basis as claims of truth and fact – that is, on argumentation and the logic of communicative action. Hence, ethical norms can only be justified intersubjectively through the processes of argumentation between individuals in a dialectic and dialogical manner.

In another context, Atweh (2013) comments that Levinas’ (1969, 1997) original contribution to ethics is that he does not see ethics as a pre-determined set of principles that can be used to make decisions about particular instances of behaviour. Rather, he argues that to be human is to be in a relationship with the other, or more accurately, in a relationship for the other. This relation is even prior to mutual obligation or reciprocity. Maheux, Swanson and Khan (2012) refer to this as a pre-text, a way in which the ethical obligation precedes all knowledge of or encounter of the other or of his/her alterity. Hence, according to this understanding, ethics neither can be reduced to a code of behaviour nor is based on the equality of the other. On the contrary it is based on the other as totally other. Hence, ethics is based on the ‘radical unknowability’ of the other, and the other’s otherness cannot be collapsed into the sameness with the self. Similarly, ethics is an over-arching commitment and responsibility to the other beyond any judgement of the other or their otherness. It is not based on one’s ability to understand the other. On the contrary, it is based on one’s inability to understand the other. The other is not the same as the self, and one’s commitment to the other is not premised on rendering the other recognisable to the self, or ‘the same’ in relation to the self. The other comes before the self, ontologically, epistemologically and hence also ethically.

This relationship with the other (re)presents a “difficult freedom” for the self (Cohen, 2001; p. 7). It is at once free and binding. It is binding, not because of an external and transcendental commandment. It is the other who commands a responsibility over the self. For Levinas, this relationship with the other is the true being of humanity. It is the being-for-other before being-for-the-self. However, this obligation does not negate freedom because it does not dictate a particular way of responding. Levinas’ position indicates that we are not condemned to be free (as per Sartre), but our freedom is conferred through the other. Similarly, as Swanson (2007, 2012) attests, Ubuntu’s lived philosophy suggests that we gain our humanity and the meaning of what it means to be human through our humanity with others. It is our relationship to the other, to multiple others that renders us human and grants us the freedom from our isolated individuality and obsession with self. Davis (1996) notes that “without the other, freedom is without purpose, or foundation” (p. 49). Yet also, my infinite responsibility is conferred on me by the other. Davis adds:

[Levinas’] ethics turns out to be more demanding than any formal code. My responsibility and obligation to the other are absolute. They exceed my ability to fulfil them, [they] always demand more, are never satisfied by the completion of any action or service. As a moral subject, I am always found wanting, because ethics is not just a part of my existence, not simply one of the things I do amongst others; it defines the whole domain that I inhabit. (p. 54, italics in original)

Further, Levinas’ understanding of ethics is not outside politics. He was quick to acknowledge that ethics without politics is not possible in a world that has more than one other. He would agree with Kant who pointed out that ethical responsibility to one person may be in conflict with a responsibility towards another. The appearance of a third limits my responsibility for the other in
being infinite and nonreciprocal (Simmons, 1999) and necessitates entering into the realm of politics and justice.

The appearance of the third leads Levinas into the realm of justice and politics. Davis (1996) explains that in the face of the third, the social responsibility “turns into social justice” (p. 52). Levinas demonstrates how ethics and politics are necessarily independent. However, one needs the other. Ethics, which is the encounter with the other, needs politics since the other is not singular – as there are many others. On the other hand, politics needs ethics since politics is always open to the possibility of excess and needs to be kept in check. In Ubuntu philosophy, the multiple others are what make us human in our ongoing commitment and responsibility to their care as we come to encounter them and their needs, and in so far as it is possible for us to ethically respond to these. Such lived expressions of Ubuntu are aligned with a social justice orientation to the world, a politics of kindness and egalitarianism through the possibility of a political ontology of humanity.

In his later work, Levinas (1997), in response to Derrida’s claims that the encounter with the other is “violent” if it is based on language and discourse, introduced the distinction between saying and the said in the face-to-face encounters with the other. Further, he locates the initial encounter with the other as based on saying which precedes the ontological said. Simmons (1999) explains “Prior to the speech act, the speaker must address the other, and before the address is the approach of the other or proximity” (p. 88). Importantly for our purposes here, Levinas places ethics in the saying and politics and social justice in the realm of the said. He argues that peace is in the saying and the said is necessarily open to the possibility of violence. The said is always open to be un-said or re-said. In particular the said is based on knowledge in its concreteness and context.

REVISITING THE EQUITY AGENDA

What have we gained from an engagement with the Levinasian articulations of ethics in terms of our commitment to and action for the equity agenda?

First, as pointed above, a variety of perspectives exist in the literature with regard to dealing with learners who are - using the terms used often in the equity agenda - 'not participating and not achieving in mathematics'. Depending on the theoretical assumptions used to understand this lack of participation and achievement, they may be constituted as 'slow' or 'low ability' learners. Others have used the terms 'disadvantaged', 'marginalised' and 'excluded' learners. Others refer to them by their common background traits leading to their exclusion, 'females', 'indigenous', 'Latinos', 'Blacks', or 'learners with disabilities'. Swanson (2010) points out that the learner "within the educational stream of our progressive modernization project, is someone who most likely has been demographed and psychologized, but also, ironically, has been dehistoricized and decontextualized from community and environment” (p. 246/7). Arguably, all the constructs within the equity agenda have historical and geo-political origins and they continue to evolve, and as Swanson (2005) argues, are not value-free or neutral. However, one thing that is in common behind all the constituent agendas is an ethical concern for the learners who are ‘left behind’ and their communities. Conversely, how can an ethical concern for the learner and their communities not relate to equity, accepting of diversity, and aiming for social justice on their behalf?
Second, as pointed out above, several authors in the field of mathematics education have pointed out complexities within each of the discourses on equity, diversity, and social justice that are at the heart of the discourses of mathematics education. Many of these concerns stem from broad poststructuralist perspective(s). Adopting an ethical perspective from within a poststructuralist perspective that is based on diversity and places ethics before epistemology, both explains and justifies the commitment to the equity agenda irrespective of the contradictions encountered. The ethical stance allows us to "work with and work against" (Christie, 2005) the construct of equity on the level of policy, research and in the lived experience of every classroom and with each learner. Swanson (2010, p.246) raises the question "is justice a nicety to or necessity of education? Does it have an intrinsic or extrinsic relationship to it?" In a similar vein, Atweh (2103) raises the question: "is the good a desire, convenient politics or an obligation?". By pointing out the ethical obligation that we have to the other and multiple others as primary in all our undertakings, ethics becomes indisputable. An ethical perspective places equity on par with quality (Atweh, 2011a) in mathematics education. We may even argue that without ethicality in achieving equity, no quality could truly be achieved for all and for society at large. In this way, we may contend that these are not two separate and parallel agendas, but that they are two mutually informing commitments.

References


