Paper title: Education for Sustainability in Higher Education; Early Childhood Studies as a site for provocation, collaboration and Inquiry

Abstract

Fifteen years after they were created, the UN's Millenium Development Goals (MDGs) have reached their expiration date. The United Nations assert that surveys conducted in September 2015 suggested that only 4% of the UK public had heard of the MDG's. The renewed focus on the Sustainable Development Goals (SDGs) offer opportunities for higher education institutions (HEIs) to work alongside students to create a shared and contextualised awareness of sustainable development within Early Childhood Education. This aim is pertinent for those students studying Early Childhood Studies degrees with the potential goal of working with babies, young children and their families. The research was situated within a paradigm of critical educational research to establish a shared understanding of sustainable development within a newly validated BA (Hons) Early Childhood Studies programme at a HEI in the Northwest of England. Visual provocations were used as a pedagogical intervention to present a disorientating dilemma, critical reflection on personal perspective and an examination of world views. Findings suggested that visual methodologies supported students to appreciate the ambiguity and contested limits of knowledge, and to draw upon wider sources related to moral and ethical principles and to established rights and responsibilities.

Key words

Education for sustainability; Early Childhood Studies; Transformative learning; Visual Provocations.

Introduction

This paper surfaces from a research project with first year students on a newly validated BA (Hons) Early Childhood Studies degree. The new programme was designed to be cognisant of the extant research evidence, policy contexts, and the benchmark statement for the BA (Hons) Early Childhood Studies (QAA, 2014) which explicitly refers to the subject discipline of Early Childhood Studies (ECS) as;

"A critical analysis of children as active participants, their rights, and an anti-bias approach which considers early childhood as a site for democracy, sustainability and social justice underpins and permeates the subject"

(QAA, Pg8; 3.4, 2014).

This research aligns with multiple projects, borne from international collaborations with members of the group, Transnational Dialogues in Early Childhood Education *for* Sustainability (TND in ECEfS). The group was initiated in 2010, by Professor Julie Davis, and Professor Eva Johansson, thus, "their intention was to organize a forum where international researchers could share multi-national, multi-cultural and multi-disciplinary perspectives and experiences (Emery et al, 2016). The pedagogical use of visual cues in higher education is reminiscent of research by Holmes and Barron (2005), the arts and education for sustainability, (O'Gorman, 2014), the use of visual imagery in the transformation of feedback dialogues (Hirst, 2016) and sustainability research in higher education, to 'disrupt and transform anthropocentric mindsets' (Tillmanns & Holland, 2017, Tillmanns, 2017).

The ECS programme, which is the site of the research in this paper, is grounded in both local and global early childhood realities and framed with clear reference to both United Nations (UN) and United Kingdom (UK) policy and programmes. The global relevance and focus, places emphasis upon the UN Sustainable Development Goals and

the UN Convention on the Rights of the Child. Students are encouraged to consider a holistic lens when attempting to understand the Sustainable Development Goals which include (among the 17 goals), a recognition of Poverty (SDG1), Health and Well -Being (SDG3), Quality Education (SDG4), Gender Equality (SDG 5), Reduced Inequalities (SDG10). As advocates have suggested, despite the consternation among global development leaders about the 17 goals and 169 targets, (Kumar, 2017), they do have the capacity to reflect the 'complexity and heterogeneity of sustainability' (Tillmanns, 2017, 17). Critiques of the SDG's include textual analysis of 'fine words' (Pogge, 2015, 1) and recognition of the voluntary status of intergovernmental agreements like the 2030 Agenda. The agenda notes a 'historic decision' (6) to 'realize human rights' (5) and repeatedly highlights how the SDG's are grounded in the *Universal Declaration of* Human Rights, (8). The idea of interconnectedness within Early Childhood Education is reflected in post human perspectives (Harraway, 2015, Hirst, Boyd, Browder & Emery, 2018), and students are invited to consider the revisioning of rights with the 'evolution of children's rights from protection rights to children as rights holders' to include, 'collective rights, intergenerational rights and rights beyond those held by humans' (Davis, 2014, 22). Students are introduced to Early Childhood Education for Sustainability as an international and emergent field which is viewed by Davis and Elliot (2014) 'as a co-evolution of social and biophysical systems played out in responsive and responsible relationships' with a challenge to 'translate these ideals into early childhood educational praxis' (13). This qualitative pedagogic research was situated with a cohort of students who had completed their first year of study. The students were invited to join a focus group at the end of the academic year (2017), where visual provocations (see Fig 1 and Fig 2), were used to consider emerging thinking related to Education for Sustainability within Early Childhood Education

(EfSECE) and within the context of the Early Childhood Studies degree. The paper begins with an overview of the pioneers considered within the ECS degree, the relationship to EfSECE and the influences of Reggio Emilia as provocation.

This is followed by a discussion of the methodological considerations and a discussion of the findings with reference to theoretical ideas. The paper concludes with consideration of the limitations of the research and implications for practice and further inquiry.

The Pioneers and ESD within Early Childhood Studies

Students on the multidisciplinary ECS programme consider constructs of children and childhood, and an examination of grand theories, and theorists who have influenced practical developments in early childhood education, including experiential, child-centred learning. During the first year, students are guided through early pedagogical traditions with explicit exploration of their tacit connection to Education for sustainability. Despite some initial concerns from students about the relevance of 'dead theorists who lived in another world, at another time' (student comments), Comenius (1592-1670) (as cited by Joyce, 2012, Jarvis et al, 2016), offers an insight into 'the importance of learning new ways of thinking and doing, while developing lifelong values that underpin sustainability' (UNESCO, 2014b, 28), with his developing belief in lifelong education and the interconnectedness of man and nature, at a time where education was restricted to the wealthy in society and science was seen to challenge the dominance of religious doctrine (Joyce, 2012).

Pestalozzi (1746-1827) is also considered with his recognition of the link between social change and education (as cited by Joyce, 2012, Jarvis et al, 2016), and his 'learning by head, hand and heart' (Wals, 2017, 162). Viewing pioneers this way

helps students to make sense of (the often competing) narratives within early childhood education, for example, Pestalozzi's ideas related to early childhood *preparing* children for adulthood and society resonates with the current dominant discourse around readiness (Moss, 2013). Moss (2013) asserts that there are serious issues with the notion of 'readiness discourses' in general and this, he argues, is reflected in the very language used to describe stages in the educational systems (primary, secondary, further and higher), 'with knowledge becoming successively more demanding, more complex and more important' (4). Wals (2017) postulates 'returning to the early years' (158) as a way to reposition 'relational caring ways of being' and he argues that adults can learn a great deal from children when it comes to sustainability (159).

This paper also contends that adults (practising early childhood educators, students and tutors) can also learn a great deal by exploring constructs of children and childhood without a disconnect from the historical, political and economic context. The students who opted in to this research were familiar with the pioneering work of Elinor Goldschmied, (a Froebelian pioneer of the twentieth century) as they had been privileged to engage in a guest lecture and workshop with a close friend and colleague of Goldschmied, Dr Jacqui Cousins, who was entrusted with the full collection of films created by Elinor. These films were collated into *The Elinor Goldschmied Froebel Archive Project* funded by the Froebel Trust and Hughes (2016) discusses her own interview with Elinor Goldschmied, who advocated the power of the visual image to inform and educate, and this is evident in her extensive footage of interactions between children and their environment within Early Childhood Education. Hughes (2016, 10) offers an eloquent and provocative image of her initial responses to 'those grainy black and white films' which 'both shocked and distressed me and reminded me of the images which had been portrayed on the television of the Romanian orphans in the 1980's'.

Jacqui Cousins echoed Elinor's insistence that practitioners (and students) should be 'political' and this message percolates throughout this research. Indeed, Moss (2013) cites education itself as a properly political question.

Sustainability education itself has been influenced by the idea of lifelong and transformative learning (Freire, 1985; 1993; 1996; 2009), and this research with first year ECS students, captured the relationship between early childhood education, compulsory education and their emerging identities as students in higher education. In this sense, students are encouraged to consider lifelong learning and the incorporation of cultural, social, personal and professional development (Jackson, 2012). The Faure Report (1972), 'formally institutionalised the concept, acknowledged its diverse understanding in different cultural contexts; advocated individuals' rights to learn for social, economic, political and cultural development' (Tillmanns, 2017, 39) and UNESCO (2014a), captured the notion of Lifelong learning in the 2014 Global Action Plan and in the post 2015 development agenda, Transforming our World: The 2030 Agenda for Sustainable Development (UNESCO, 2015).

From Visual Cues to Reggio Emilia Inspired Provocations

The pedagogical walk through the pioneering timeline also establishes a connection to one of the most influential pioneers, Loris Malaguzzi, the founder of the world - renowned Reggio Emilia approach to early childhood education. Moss (2016) describes the powerful legacy of Loris Malaguzzi's work and the 'clearest testimony to his educational importance, visible in the educational project of a public network of schools, the municipal *nidi* and *scuole dell'infanzia* of Reggio Emilia' (Moss, 2016, xiii). Moss (2016) argues that Reggio Emilia is an example of a sustained and progressive public education system and Loris Malaguzzi's values of co-operation,

interconnectedness, subjectivity and uncertainty, wonder and surprise, research and experimentation, participation and democracy, help us to do things differently and to think politically. Moss (2016) asserts the need to consider a broader definition beyond party politics, with a reminder that Malaguzzi's ideas were more about asking questions and seeing differently, while searching for alternative perspectives. Pedagogical approaches, he argues, are political in themselves and reflect how a child is seen, for example, as strong and agentic or weak and passive. Moss (2014) validates Loris Malaguzzi's portrayal of the competent and rich child, and removes any accusation of naivety with recognition that many children live in extreme poverty, with lives devastated by inequality. Dahlberg & Moss (2006) also offer an important reminder that 'Reggio is not a model, a programme, a best practice or benchmark and it is not an exportable product', (20), moreover, Reggio is in itself a provocation by its very existence, with its 'critical thinking' and 'doubt, uncertainty and feelings of crisis' which are viewed as 'resources and qualities to value, and offer conditions for openness and listening as requirements for creating new thinking and perspectives' (18). With Reggio as a key methodological inspiration, students were invited to experience 'epistemological curiosity' (Friere, 1995, 71) with the introduction of visual provocations to encourage dialogue and reflection (see Fig 1 and Fig 2).

Philosophical, Ethical and Methodological Considerations

The research was situated within a paradigm of critical educational research and draws on a 'Reggio inspired philosophy with children' (Murris, 2016, 152), bringing the critical, philosophical collaborative inquiry (Bray et al, 2000) of the Reggio Emilia preschools into 'the higher education arena' (Boyd and Bath, 2017, 192). Ethical approval was granted by the university for pedagogical research and eighteen students

opted to be part of the focus group which was conducted within the familiar university environment. Lunch was provided to encourage the formation of the group prior to the recorded focus group session. The focus group started the session by sitting in a circle around a table where a visual provocation was displayed on a power point slide with no accompanying dialogue and at the request of the students, the focus group was captured by audio rather than a visual recording. Cohen et al (2011) suggest posing questions about chosen images rather than simply presenting, however, students were asked to consider the image and a text wall and post it notes were used to capture the diverse 'emotional repertoire' (Dixon, 2011, 5) related to the discourse analysis (Rose, 2016) of the initial reactions. Visual provocation (Fig 1) represents the iconic photograph of the sand sculpture created by the internationally acclaimed artist Sudarsan Pattnaik at Puri beach in Eastern India. This instantiation of cultural production (Kuttner,2015) captured the photographic media images of the 3 year old Syrian refugee, Alan Kurdi, and was positioned by Pattnaik as a homage to the atrocity of the Syrian refugee crisis.



Figure 1: Visual provocation 1

In her thesis focusing on the idea of disruptive learning for change agency, Tillmanns (2017) highlights the 'roots' of this approach as a key feature within transformative learning (Mezirow, 1991a, 2003) and in her visual cue research, the disrupting dilemmas were facilitated through the introduction of visual cues which were 'designed to elicit or cause emotional reactions and/or cognitive disjuncture within learners' (193). Drawing on this interesting methodology, the research with ECS students sought to provoke and disrupt rather than to disturb and adopted a Reggio lens to position the tutor and students as co constructors of knowledge (Rinaldi, 2006), with cognisance of the ethical differences between disruptive learning and pedagogies of discomfort. Tillmanns, (2017) illustrates the underpinning assumption that the affective domain is important to challenge existing frames of mind in order to create any possibility for transformation (208), however as she notes, the visual cues (and in this research, visual provocations) were introduced with a conscious awareness to guide critical dialogue and reflection in a 'safe space'. She further acknowledges the unethical leaning of a Pedagogy of discomfort as a 'relatively safe learning environment where democratic principles are imposed on participants, which may result in the creation of a form of ethical violence' (2017, 208).

Discourse with students supported any transitioning from a pedagogy of discomfort and this philosophical inquiry of the visual provocation focused on dialogue to engage learners in participatory learning. The dialogue was designed as a fluid and rhizomatic encounter (Deleuze & Guattari, 1987), with a political intention to create a safe space where all voices could be heard in equal measure, resonating with Mezirow's (1991a) rationale discourse of respectful, democratic, open discussion where students also had the 'right to silence' (Bath et al, 2014, 253). Philosophy for children (P4C) was pioneered and developed by Matthew Lipman (1988, 2003,2008) and Bath et al (2014)

illustrate a tacit reference to ESD with the juxtaposed value placed by Lipman on critical and 'caring thinking' (252). In 2017, Tang notes, how the momentum for Education for Sustainable Development (ESD), 'requires transformative ways of thinking and acting and an examination of values and attitudes with responsive education systems introducing pedagogies that empower learners' (Tang, 2017, 1). Within the ESD literature, authors note how Education for sustainability is as concerned with the nature and style of pedagogical approaches as much as the content of the learning material (Blake, Sterling & Goodson, 2013, Sterling & Thomas, 2006) and this pedagogical research embraced the educational ideas related to transformative learning, democratic dialogue and education as inquiry (Mezirow, 1991a, 2003, Friere, 1985; 1993; 1995; 1996; 2009, Dewey, 1997, 2011).

Critical education research has an affinity with equity, social justice, advocacy and transformative pedagogies (Cohen et al, 2011) as noted in the benchmark statement for Early Childhood Studies (QAA, 2014) which resound with the major contributions of Paulo Freire, with his approaches to learning and teaching, recognition of human rights and social justice and transformative action both inside and outside the educational setting (Quintero, 2017). Active engagement in research and inquiry are also considered significant components of Early Childhood Studies and 'entails students developing awareness and the ability to reflect upon self and others' and to 'develop the reflexivity necessary to explore the political, cultural and economic factors embedded in research and practice' (QAA, 2014, 8) with knowledge related to 'the global status of children' (QAA, 2014, 9). A personal belief in discussion, argumentation, examining understanding and construction of ideas through challenge and discourse (Johnston & Nahmad-Williams, 2009) situated the research as a facilitating endeavour, and as

interpret and operate in an already interpreted world (Cohen, Manion & Morrison, 2011, 31). In this sense, the behaviour of *self* as a researcher requires conscientization (Friere, 1995) of the process as recursive praxis in order to support the generation of new knowledge.

Loris Malaguzzi took inspiration from thinkers such as Piaget, Vygotsky,

Dewey and Bruner and the theoretical idea of scaffolding (coined by Bruner), posits
support for learners, whereby the idea is not so much to impart established knowledge,
but an inculturation into specific practices through internalisation of language and other
cultural tools (Murris,2016). In Frierian terms, the aim of the research was not to force
students to think like me, but to develop their own personal philosophies related to their
potential work with young children and their families. Friere (1995) argues that the role
of a teacher is not to 'impose on the passive body of the student your package of
knowledge, on the contrary, what you have to do is to challenge the epistemological
curiosity of the student' (1995, 73). This curiosity lends itself to dialogue and Socratic
questioning, and the more curious we become, Friere (1995) argues, the more the
rigidity of power is threatened, and here lies the Reggio spirit, with Malaguzzi noting
the need to challenge, to question, and to avoid following blindly (Cagliari et al, 2016).

Demissie et al (2010) noted the success of the P4C inquiry within an HE context, with recognition of the methodology itself as a 'scaffold for enabling students to become actively engaged in their learning' (77), and this research also borrows from Murris (2016, 171) and 'foregrounds (and makes space for) all the hundred languages, opening up possibilities to think differently about what knowledge is and who constructs new knowledges.....in this type of scaffolding the building materials are not made of steel or iron but of narrative'. With this in mind, the initial reactions captured on the text wall and post it notes fed into the conversations which were transcribed and

thematically explored. The students who opted in to the research also agreed to share their reflections related to the final assessment, a report based on their emerging understanding of sustainability within the context of their degree.

Focus group data, dialogue and debate

The theoretical and methodological approach of praxis (Friere, 1993) included a conscious decision to capture initial reactions to the visual provocation (Fig 1) which was displayed via the medium of a power point slide. This initial 'audiencing of the image' (Rose, 2016, 61) resulted in a plethora of emotional terms, alongside responses couched in explicitly moral vocabulary cited on the group text wall and post it notes. A visual Wordle (word cloud) was generated with the students from the submitted text and the cloud gave greater prominence to words that appeared more frequently during submission. (see figure 2 below)

Figure 2: Focus Group Wordle; The language of disruption

The image used for the initial provocation (Fig 1) was then supplemented by the visual Wordle, and these visual representations were subsequently read 'for the meaning they convey to, or elicit from the viewer' (Cohen et al, 2011, 589). Discourse analysis developed from conversation analysis where emphasis was placed on interpretative repertoires (Flick, 2011), thus with the conversational tone of the focus group, discourse analysis allowed for subjectivities as an intrinsic element of the research activity. The discussions were audio recorded and dialogue between students (and the two tutors who were also the researchers), supported the transition from initial provocation to an iterative and reiterative viewing of the images. Collaborative Inquiry aimed to provide a

level playing field for group inquiry and the linguistic relationship to collaboration is discussed by Bray et al (2000, 27), where they state that the removal of the separation between 'researcher' and 'subject' reiterates the lack of hierarchies, and ultimately favours the learning process over the research process. Indeed, their assertion that 'action inquiry methods celebrate a basic truism about much human learning—that it is a social activity' (30) mirrors the co construction valued within the Reggio Emilia preschools (Rinaldi, 2006), and was key to the development of the focus group. The combination of images (Fig 1 and Fig 2) were situated at the heart of the second phase of the group inquiry and resulted in further illocutionary dialogue which was 'open ended, multi directional with unpredictable outcomes' (Cohen et al, 2011, 579) with the images mediating the discussion. An organic element of the collaborative dialogue included philosophical questions posed by members of the group. As Cohen et al (2011) suggest, the images themselves take place in a 'social milieu' (591) both at the site of production and the sites of consumption (viewing), which may change over time. Themes from the ensuing dialogue captured vivid memories held by both students and tutors;

I remember the media stories at the time. You couldn't miss them as they were everywhere, in the newspapers, on the TV, Facebook, Twitter, Instagram ... basically this was big news and I remember feeling shocked that a child so young had died this way and we didn't do anything to help (S)

This image was one of many and isn't as real to me. It is a sculpture, a representation of the original so maybe that makes it more palatable for some (S)?

It is real though. Just because it is a sand sculpture, it does reflect a reality and we can't ignore this fact (S).

The original photographs were very upsetting, especially the one with the man carrying his little body (S)

There were many bodies on the beach in Turkey but the image of the child represented thousands of desperate people. The pose looked like the child was simply sleeping and this image was so powerful, it changed the tide in how the politicians and media talked about the crisis (T).

Student (S) /Tutor (T) dialogue during focus group

As the dialogue implies, the ubiquity of media (in multiple guises) has come to dominate screens (Jocson, 2015) and students articulated a familiarity with the image as one version of the multiple iterations. As Faulkner (2015, 54) argues, the original images of the child were reinvented multiple times, and as such became 'nomadic, as things that could be reframed in relation to very different cultural and political imaginaries'. As the audience of the image, the group focused on the subject matter, for example, the story behind the sand sculpture. Discourse analysis (Rose, 2016), supported further scrutiny with examination of the content of the image, including its provenance.

It's a political statement too, that's what art can be? I've just googled this artist and he is an activist, a bit like Bansky... he uses art to make statements too... (S).

Bansky says "art should comfort the disturbed and disturb the comfortable" and this image demands that we are disturbed and that we feel something. But how does being disturbed help us to reflect on our actions? (T).

I remember Jacqui Cousins told us to be political and she talked about political action.

Is this what she meant when she told us to be political (S)?

Student (S) /Tutor (T) dialogue during focus group

Students were keen to discuss their recognition of the media furore which surrounded the bodies on the beach and there was general agreement around the dominance of the image of provocation 1 which 'acted metonymically by representing the deaths of many by the death of one' (Goriunova, 2015, 7). The image itself functioned as a catalyst for multiple related conversations about refugees;

The crisis was overwhelming and people are still risking their lives to flee horrific situations (T).

There was mass migration so why are they being called refugees? I don't see the difference...(S)

They live in war torn countries so why wouldn't you do anything for a better life? (S)

It is tragic but they are trying to enter countries who can't take any more people (S)

The risks are huge and thousands still die trying to get to safety(S)

Why is it important to be clear whether people are migrants or refugees? (T).

Student (S) /Tutor (T) dialogue during focus group

The focus group captured the discourse related to party politics, for example, the Prime minister at the time, David Cameron announced an increase in assistance but later noted how the UK could be *overwhelmed with an influx of refugees* (Valdez-Symonds, 2017). Conversations captured the language used, for example, migrants have a choice and often cite an economical reason for wanting to move, whereas a refugee is someone who has no choice but to flee their country in order to survive, and the use of terms are important for subsequent humanitarian responses and policy making. Students saw the connection to their degree and potential work with babies, young children and their families and noted the Refugees welcome UK movement. Researchers at the University of Sheffield's Visual Social Media Lab analysed social media posts following the recovery of the child's body from the beach in Turkey in 2015 and reported how the story 'engaged a global audience' and changed the language used in the global discussions, with a dramatic shift from the use of the word 'migrant' with a 'radical flip' to 'refugees' (D'Orazio, 2015, 11). Authors of the report note how emotional engagement with the images of the child on the beach resulted in strong emotional responses with support for refugees captured in the 'refugees welcome' campaigns. However, they argue, statements related to the power of the image represented a heightened peak on social media rather than 'a sustained change in public discourse' (Burns, 2015 38) and political commentary was framed in relation to emotional public

outcry, for example 'never again', 'rather than an accurate reflection of shifts in attitudes' (Burns 2015, 39).

Changes in attitudes are difficult to measure, however analysis of the emotional responses during the focus group helped to pursue further dialogue, and where 'dissonance' was created, tutors and students were able to navigate 'learning on the edge' (Wals & Jickling 2002, 222) with differences of opinion accepted and challenged in equal measure. Talking at the institute in the mid 90's, Friere (1995) accused universities of 'covering curiosity with a veil' (73) and this is perhaps even more pertinent in a neo liberal culture of higher education where courses are sold as products to be purchased. Despite the democratic intention of the focus group forum, it could be argued that the dual role of module tutor and researcher resulted in student 'attentiveness' (Hirst, 2016, 7) to tutor comments. When confronted with overwhelming narratives around disadvantaged or deficit childhoods, this is often outside of the students frame of reference (Aitken and Powell, 2005) and discussions around the image helped to situate conversations whilst working together to make sense of some complex ideas. Quintero (2017) clearly positions Paulo Freire's influence on early childhood education with a vignette describing a student on placement, working with a parent and child who were refugees who had recently settled in a new place, and how her demand for information (from the child's school) be written in the child's home language. This 'exemplification of Friere's interpretation of critical theory was a form of transformative action' (Quintero, 2017, 166). An emerging familiarity with the Sustainable Development Goals equated with discussion related to equity and how this is often seen as making concessions to marginal groups, for example, *allowing* them access to the goods which the dominant or mainstream groups enjoy or by being kind to those less fortunate.

I am seeing more connections now than I did during the module. The pioneers seemed a little abstract but Jacqui Cousins told us how Elinor Goldshmeid worked with refugee and evacuated children. We should be humane and let people into the UK and give them food and shelter (S).

If someone knocked on my door, would I let them in? (S).

Student (S) /Tutor (T) dialogue during focus group

Mayblin (2015, 43) notes how responses to the image resulted in what he termed 'superficial changes', for example, David Cameron noted that the UK would *take* 20,000 refugees over 5 years and would offer £100 million in humanitarian aid. However, this rhetoric was damaged when the (then) Home Secretary forced an immigration bill through parliament to legalise the separation of families, so that parents could be deported and their children put into the care system in the UK (Ryan, 2015, 43). The use of language helped the focus group to grapple with alternative definitions of equity which needs to be reciprocal in all directions, thus, 'a truly equitable society is one in which the groups with greater access to economic, cultural and political goods see it as essential to have access to the linguistic and cultural resources of minority groups' (Kress 1995, 41).

Bray et al (2000) refer to the notion that the dialogue in a collaborative inquiry is the opposite of debate or heated discussion (where the object is to defeat an opponent's views) and this is where the focus group were working towards the assimilation of new knowledge by using 'devil's advocacy', 'would you allow a stranger into your home?'

(student comment to the group), to validate and help to formulate balanced arguments. Drawing on research with students in higher education, a recognition of Edward Said's (1993) notion of 'other' helped to consider post- colonial discourse where 'the white western world empowers a eurocentricity aimed at othering and primitivizing the non-western world' (Holmes, 2015, 165). The more stereotyped the 'other' becomes, for example, the language used by politicians to dehumanise and homogenise refugees in media coverage as 'swarms' (Elgot, 2016), the more 'other' it becomes. Discussion around provocation (Fig 1) helped to 'un-other' the child (Burns, 2015 39) with clear connections to students' frames of reference and tacit reference to general concern for human suffering and human rights.

I have little brothers and I can't imagine the trauma involved in making a journey to safety (S)

I have a child and a step child and I think it's important to think and act humanely (S)

Student (S) /Tutor (T) dialogue during focus group

The rhizome, reflection and reflexivity

Transformative learning is a 'deep, structural shift in basic premises of thought, feelings and actions' (Kitchenham, 2008, 104) and shapes how students see themselves in the world and interact with others as afforded by the visual provocations, and at the centre of this ontological shift are students who engaged in alternative and transformative thinking. Kitchenham (2008) highlights the influences on Mezirow's early theory which included ways of seeing the world, characterised by Kuhn's paradigm, Mezirow's frame of reference, Freire's ideas related to conscientization and Habermas's domains of learning. One student, who owns a dance school, engaged in fund raising for War Child

following a guest lecture related to Elinor Goldschmeid and noted in her assessed report;

The QAA (2014) has effectively conveyed an awareness of the nature of this degree and the importance of becoming an advocate for young children and their families. Sharing a deep passion for children I was astounded by the profound work Dr Jacqui Cousins and War Child undertake with vulnerable children and their families around the world. A donation was made on behalf of my dance school, from the profits made during a recent performance. A link to War Child's website was published in the dance school newsletter, this together with promoting knowledge directly to the children reached an estimated three hundred people. Student assessed report (March 2017)

Conclusion

In 2002, Wals and Jickling argued for 'grassroots sustainability' within higher education rather than a superficial 'technocratic conditioning' (226), this, they argued, is what sets higher education apart from 'training'. This paper combined the three conceptual ideas of visual provocations, political ideas and sustainability education within the context of the Early Childhood Studies degree which promotes early childhood education (SDG4). Owen (2017) notes how universities are challenged (target SDG 4b) to build in key sustainability concepts across the curriculum, including human rights and peace studies. The inclusion of visual material offered the potential for providing learners (both students and tutors) with multiple 'languages' and the opportunity to 'connect and confront some big ideas' (O'Gorman, 2014, 266). The transformative potential of the visual provocations connects strongly to the ECS degree, where students are encouraged to confront own beliefs, attitudes and actions and to challenge the status quo. This is exemplified through a student request for discussion

groups to be embedded within more ECS workshops, "When I was trained in childcare it was 2D and at the end of my first year, I am seeing things in 3D".

The research was small scale and limitations include the 'ambivalent nature of the concept of sustainability [which] can be a major conceptual impediment to those who like to work with crisp and clear, narrowly defined concepts' (Wals and Jickling, 2002, 226).

Tutors in Higher education are constantly facing political choices, in the selection of curriculum content, education as praxis and the recognition of power differentials in day to day communication with students. Bourn et al (2016) argue that it is too early to judge how the current *British values* debate will provide opportunities for global and sustainable development, and the themes of respect, tolerance and social justice have been encouraged by NGO's, subject associations and the Global learning Programme in England. For ECS students working towards a career *with* children and families, the visual provocations supported an interpretation of social justice and tolerance of *others* rather than 'a narrow interpretation of Britishness' (Bourn et al 2016,17). With the parallel rhetoric around *austerity* it is more important than ever to pursue an anti bias approach to practice (Hirst, 2017).

This research sought to avoid a naïve or 'victory narrative' (Holmes & Barron, 2005, 162), regarding the transformative element of the pedagogical approach, however, the focus group worked with students and tutors *as nomad* (Deleuze & Guatarri 1987) within the research process 'to unhinge habitual and reactive thinking, regularity and normalised inscriptions.....' (Sellers, 2013, 129).

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