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## Fostering Global Citizenship – Tree Planting as a Connective Practice

Martin Haigh (Oxford Brookes University)

### ABSTRACT

*Education for Global Citizenship is about living as though the future mattered. This evaluates learner reactions to a tree-planting exercise that invites reflection upon hopes for the world, personal responsibilities and acting locally while thinking globally. Participant hopes concerned: environmental sustainability, peace on earth, then the welfare of future generations and personal wellbeing. Global Citizenship concerns included sustainability, social justice, interdependencies and personal responsibilities. Some participants envisaged exercise outcomes to be mainly practical, others personal, such as reflection on lifestyle choices. Off-campus sessions generated higher grades, more concern for giving back to / defining a role in Nature and volunteering.*

Keywords: Sustainability, Global Citizenship, Connective Practice, Tree Planting, Volunteering, Reflective Practice, Aurobindo Integral Education.

### Introduction

Global Citizenship means learning to live together (plurality, cross-cultural awareness) and learning to live ethically (social justice, equity). It also means learning to live in harmony with our habitat: (eco-literacy, sustainability). The shift from a wholly anthropocentric to a more biocentric perspective requires 'Global Consciousness', a higher level of self-awareness (cf. Haigh, 2014; Naess, 1995). However, whether Education for Global 'Citizenship' or Global 'Consciousness' (EGC), this process aims to help learners expand the horizons of their thinking, and possibly their self-identity, to include other people in all their diversity and, ultimately, the whole living Earth.

EGC is a contested concept but it signals that humans share an interconnected world that is subject to environmental and socio-political challenges. Meeting these challenges will require the world's people to work together to create an acceptable habitat for future generations (Annan, 2001). Toward this goal, learners may need to self-construct three key attitudes. First is self-identification with the whole of humanity rather than merely some tribal or family group, which implies developing the understanding and emotional intelligence needed to interact constructively across cultural boundaries. Second is a willingness to recognise that humans must live sustainably within their environment, alongside its

non-human components, which implies 'ecoliteracy'. Third is ethical awareness, because the obstacles to the above involve our species' diverse notions of rights versus responsibilities, both for the individual and the collective, as also our various concepts about what constitutes fairness, equity, social and environmental justice, and the role of humans in Nature.

Since 2011, Global Citizenship has become one of five graduate attributes that Oxford Brookes University expects to develop in all of its graduates (OCSLD, 2011; Sharpe, 2012). These five are: academic literacy (disciplinary and professional knowledge and skills); research literacy; critical self-awareness and personal literacy (metacognitive reflection and emotional intelligence); digital and information literacy and active global citizenship. Originally, this last was mainly about cross-cultural awareness and valuing human diversity (Raftery, 2010). However, after a modest campaign, it now includes 'sustainability' (Tilbury et al., 2012). Inevitably, the institution of these five Graduate Attributes has initiated concern about how they might be developed through classroom practice, with colleagues finding EGC the most challenging. This paper emerges from a workshop that tackled issues of implementation (Haigh et al., 2012). It offers a case study of an 'act local, think global' exercise that uses tree planting as a vehicle for engaging participants in personal reflection about their role and personal responsibilities towards the world and its well-being (Haigh, 2004a).

### **Tree Planting as Connective Practice**

Objectively, a newly planted tree should outlive its human planter; this simple fact invites tree-planters to reflect on 'their tree' being alive long after they have gone and they may wonder about the future world it will inhabit (Haigh, 2004a). Sacks and Zumdick (2013, p.6) argue that such reflection involves a subjective, poetic, rather than objective, scientific, consciousness because "coming closer to the other is coming closer to oneself". People who plant trees often develop an interest in the welfare of the trees that they have planted. For example, some volunteers on the 'Cradle for Nature' tree planting project in Wales have returned, annually, for more than 20 years (Haigh, 1998, 2006). Sacks and Zumdick invoke an affective 'participation mystique': "where all difference is dissolved through inhabiting so deeply that we are indistinguishable from the thing perceived" (Sacks and Zumdick, 2013, p.7) as in Deep Ecology's ecological self-realization (Naess, 1995).

By contrast, Rabindranath Tagore's vision of the 'union of education and life' invites each learner to become a world-maker, a "*visvakarma*", someone who works for the welfare of all (Tagore, 1930, p.42; Ramakrishna Rao, 1998). Similarly, Mahatma Gandhi's educational system involves 'learning by doing', self-reliance through engaging in productive work (*swadeshi*), living without harming others (*ahimsa*, cf. Sita Rama das et al., 2014), accepting personal responsibility (*swaraj*) and working for the uplift of all (*sarvodaya*). Gandhi's follower, J.C. Kumarappa's pioneering book on sustainability: "The Economy of Permanence" (Kumarappa, 1946), offers that the highest economic system for human society is the economy of service, which he illustrates in terms of the parental service provided by birds to their nestlings. In Uttarakhand, Gandhi-influenced NGOs encourage school children to plant trees on degraded communal lands (cf. Jackson et al., 2012). Embedded is the idea that this engages each child's family in a quasi-parental determination to help their child's tree thrive. This viewpoint differs from those that imagine the Earth as a nurturing 'Mother' (e.g. Hanh, 2013). Typically, feelings for children are held more intensely than for parents

because they contain an added responsibility for their future development. The distinction is important because it carries EGC "... beyond what we habitually assume, beyond what seems to be fixed, beyond the inherited answers of systems that, unless we realise it, forcibly shape our lives" (Sacks and Zumdick, 2013, p.14). Tree planting is a time-honoured way of evoking this feeling of parentally-concerned service.

The big challenge for EGC is to break through the barriers of helplessness, cynicism and inertia that inhibit learners from making their own personal connection with the world. Decades of environmental research and disclosure demonstrate that knowledge, an abstract understanding, is not enough. Former United Nations Assistant Secretary-General, Olav Kjørven (Colwell et al., 2009, pp 15-16) notes: "the chief characteristic of the last 20 years of climate change negotiations has been everyone generally wanting to do as little as possible, while pushing for others to do as much as possible...to make sure that someone else pays the bill". Nearer home, how many other teachers have listened...to student presentations that express deep concern about environmental despoliation, then spent time after class cleaning a room those same students had trashed with litter? Plainly, knowledge and awareness are not enough; the global environmental crises are still with us (Palmer and Finlay, 2013). There is a need to find some way of evoking a deeper, more personal engagement, something that both affects and motivates action (cf. Chauhan et al., 2012).

This paper asks if the affective power of tree planting can be shaped into an exercise that helps undergraduates connect with the problems of their world. Is it possible to construct an affective connection between personal lifestyles and a future world that seems abstract, distant, and beyond control? This investigation has involved >400, mainly final year, Geography undergraduates across 13 years and the planting of more than 10,000 trees. For 9 years, planting was on campus. However, in 4 years, planting was off campus in support of Oxfordshire County Council's Wychwood Project, which aims to engage young people with volunteering and environmental reconstruction (Wychwood Project, 2012).

Initially, this tree-planting exercise was part of a module called "Gaia: the Earth as a Living System" (cf. Haigh, 2004a; 2014). However, from 2006 - 2013, it became part of a new course called "The Ethical Geographer" (Boyd, et al., 2010). For some years, "The Ethical Geographer" served as a final-semester capstone for Geography tackling issues including: ethics, (cross-cultural) empathy, sustainability and employability skills. The aim of this mid-Semester tree-planting exercise was to invite learners to consolidate their thinking about citizenship, sustainability and their personal responsibilities to the world. As Haigh (2004a) notes, it was constructed in response to the Dhaka speech of then Secretary General of the United Nations, Kofi Annan, who argued that: "Our biggest challenge in this new century is to take an idea that sounds abstract - sustainable development - and turn it into reality for all the world's people" (Annan, 2001, p2).

### **Design of the 'Mirrors in the Trees' Exercise**

At first glance, tree-planting may seem more physical exercise than learning invitation. However, this exercise, called "Mirrors in the Trees", is about reflection. It aims to connect fieldwork to the learner's EGC academic studies and, through guided reflection, into their psyche and way of life. Its design is inspired by Sri Aurobindo's system of Integral Education (Haigh, 2013a). Developing,

always, from that which is near and tangible to that which is further away and more abstract, this approach builds learning systematically through five personal levels from the physical, through the 'Vital' level of the emotional being, to higher levels of the intellect (Psychic), empathic consciousness and super-consciousness (Mohanty, 2007). Integral Education's three-fold process invites: first - self-knowledge, an awareness of both the workings of and influences that affect one's own being, second - harmonisation, which involves awakening a consciousness that the self is both independent of and deeply embedded within its external world, and finally - integration of the many strands of the self and its world (Partho, 2007).

So, the exercise begins with a physical activity – tree planting. Of course, this has its own benefits both for the planter and for the world, as suggested by Mahatma Gandhi's daily work at the spinning wheel (*swadeshi*). (However, for the instructor, setting up this activity creates several practical problems. First, it is necessary to find land where trees may be planted. In the author's case, the University has several large campuses with parkland, playing fields and some marginal rough grounds. The task involved working with the University Estates Directorate and being ready to use those areas they identified as being plant-able (Haigh, 2004b). Later, as such areas became consumed by plantings, the author linked with the planners of local community woodlands. The main challenge, throughout, was to explain that this exercise did not involve planting a token tree but planting hundreds of trees, nominally for Carbon sequestration purposes (Haigh, 2013b). Second, it was necessary to source trees (2-year whips as root trainers) from a local nursery, planting stakes, compost, fertiliser, and digging instruments. These costs, which average about £2 (US\$3) per planted stem, were offset by donations, by loans of equipment from individuals or NGOs, by the learners themselves, and by grants, some from the local authority. Third, of course, are the problems of completing full fieldwork health and safety evaluations and of providing suitable alternatives for those unable to attend the event. Fortunately, because these tree plantings involved team work, working to a planting plan, often on flat grassland, close to paved areas, the field activity was able to accommodate students who faced physical challenges. Not everyone had to dig, some could plant, some pass compost, stakes, etc., some make sure that the planting adhered to the planting plan.)

Attached to the physical exercise is a task designed to connect with the learners' emotions, the 'Vital' in Sri Aurobindo's system. Attaching personal mementoes during planting is a well – rehearsed way of linking a tree to its planter's feelings and, in this case, to their hopes for the future (Haigh, 2004a). Student participant volunteers (for they are offered alternative projects) are encouraged to compose and attach, to trees that they planted themselves, a message of 18 words containing their hopes for the future (Haigh, 2004a). Preparatory class sessions discuss Buddhist prayer flags, Diana Bell's 'Remembering' installation from the Museum of Modern Art, Oxford (Bell, 2004), and Yoko Ono's 'Wish Tree', which has invited >1 million participants to attach their personal messages for peace to a tree branch (Imagine Peace Tower, 2010).

Learners are also invited to submit their 18 words, not necessarily the same words they attached to their planted tree, as part of a larger participation questionnaire. This questionnaire guides participants to reflect upon their experience, first to develop their intellectual faculties (Huppes, 2001), then to stretch their conscious awareness to the consideration of others. This short, 4-5 open question, participation questionnaire is collected in the field as the class register then discussed, subsequently, by learners in the context of a reflective

learning journal. Table 1 lists the five questions in the participation questionnaire’s final version (cf. Haigh, 2004a).

**Table 1. ‘Mirrors in the Trees’ Participation Questionnaire.**

1. “My deepest hope for the future and the world is... “; the 18 words (or less) message that I would post on the trees that I planted ...
2. Given the curriculum of ‘The Ethical Geographer’ module, I believe that the purpose of this exercise is...
3. But, what (if any) significance does this exercise hold for me, personally?
4. Again, what (if any) significance might this exercise hold for my instructors, who designed this event? What is their real purpose?
5. What do I understand by the term: “Global Citizenship”? What are its main components?

Again, following Sri Aurobindo’s Integral Educational system (Aurobindo, 1995), questions work from the near to the far. Since nothing is nearer to the learner than their hopes and dreams – this comes first; the questionnaire begins with a restatement of the learners chosen message. It then asks them to reflect on the significance of the exercise in the context of the larger ‘Ethical Geographer’ course curriculum. Inevitably, the class engages with this ‘voluntary’ exercise because of its coursework context. Certainly, many learners write their appreciation of being able to participate and to ‘give back to Nature’ but whenever participation was made wholly optional, the numbers of volunteers declined to just two or three. Clearly, coursework is uppermost in most participants’ minds. Hence, Question 3, which inquires about any personal significance they might attach to these activities, is subsequent. Question 4 invites them to expand their empathic range by considering what moved their tutors to create the exercise; a question that confounded several. Finally, in 2012- 2013, a fifth question asked participants to make an explicit connection between the tree-planting and Brookes University’s Graduate Attribute of active Global Citizenship. This might seem a large intellectual leap except for the clamour surrounding the University’s 2011 launch of its Graduate Attributes (Sharpe, 2012), and the Geography programme’s determination to alert learners to EGC related course content on climate change, sustainable development, other-cultural perspectives, etc. Consequently, many participants, especially in 2013, were thinking about this issue and found ready answers, even in the off-the-cuff context of the field.

Later in the course, the tree planting experience would be revisited. Planting hundreds of trees tests the commitment and engagement of participants; inevitably, some get bored and some free-load. This last exercise focuses on team-forming, the emergence of leaders, and the performance, in a literal sense, of peers. It involves learners in reflecting upon their memories of the event from four perspectives: their individual interior thoughts, their individual behaviour as seen from the outside, the general culture of the class as a social group, and the role in the system of the curriculum (Haigh, 2013ab). Meanwhile, participants were invited to grant written permission for their anonymised comments from their submitted work (Tables 2-7) to be used in research. Just two students declined this permission while several more, each year, did not return consent forms. All such cases are excluded from this study.

Previously, Haigh (2004a, 2013b) undertook qualitative analysis of the questionnaires collected from individual planting events using multiple quotations from participation questionnaires. This paper analyses participation questionnaires from those 283 respondents who submitted on the day of the tree plantings in 2006 – 2013. The larger sample allows analysis to move beyond the individual

voices reported earlier and to tap broader themes using quantitative methods. For example, some 52% of respondents were female and 48% male; there is no significant (T-test) difference between the grades awarded to male *versus* female participants (cf. Cotton et al., 2013).

On each participation questionnaire, response patterns are coded by question and by theme on a presence/absence basis. Where names are provided, responses are linked to both the gender of the respondent and their grade for the entire module. Non-parametric analysis of the dichotomous, presence-absence, data-set so generated is undertaken by means of Pearson's (Mean Square Contingency) Coefficient Phi ( $r_\phi$ ), which is one of several measures of association appropriate for the analysis of nominal data sets. This test measures the association between the variable defining the rows and that defining the columns in a two by two contingency table and, through the calculated  $p$ -value, indicates the probability that random processes might result in an association as strong as the one observed.

## Results

Table 2 summarises the results of the questionnaire survey and lists the key themes detected. These are ranked according to their frequency in learner responses and each illustrated by a sample quotation or keyword. The exercise was part of a course section dedicated to 'Sustainability', so it is not too surprising that thoughts about environment and sustainability cluster near the top of Table 2, often connected to comments about Physical Geography. Further down emerge ideas about social interdependency and social justice, which are followed by a cluster of issues that relate to personal behaviour and responsibilities. Notions about the future appear next, followed by some more sanguine notions about the purpose of this practical class, which may be way to enhance the university campus cheaply, an excuse to get out of the classroom or, in reasons for participation, an easy way to win marks.

The idea that the purpose includes helping the local community through volunteering falls at the bottom of the table. This is surprising given that many were involved in plantings fronted by staff from Oxfordshire County Council's Wychwood Volunteers Community project (Wychwood Volunteers, 2012) and others in on-campus plantings funded by South Oxfordshire District Council...

The final column of the Table 2 indicates where a (Fisher Exact Test) significant ( $p > 0.05$ ) difference exists between the responses of students of different gender. Here, more male learners express concern for 'Future Generations' in their 18 words than female ( $p=0.038$ ), while more female learners feel that that doing 'Something for the Environment' was significant to them ( $p=0.001$ ) and that the work helped them recognise their 'Personal Responsibility' to the environment ( $p=0.047$ ).

The next section of this paper explores these findings question by question and grounds each concept with longer sample quotations from individual student reports (Tables 3-8). The quotations added here supplement those in published reports from the 2003 pilot study and the plantings of 2012 (Haigh, 2004a, 2013b), which also contain many photographs.

### **"My deepest hope for the future and the world is...?" (Q1)**

The 18-word statements, typically, concern the physical environment, sometimes social or economic conditions, and often link with the on-going class-room programme (Table 3: S243-12, S91-13).

Rank	Questionnaire Response Categories	N	Frequency
1	Q3 - Personal Significance - "I am doing Something for the Environment".	239	.73 <sup>*f</sup>
2	Q5 - Global Citizenship Attribute includes- "Sustainability".	35	.66
3	Q4 - Instructors' Aims include- "Education for Sustainable Development"	161	.65
4	Q5 - Global Citizenship Attribute includes- "Social Justice".	34	.65
5	Q1 - 18 word message attached to the trees focuses on "Environmental Sustainability".	267	.58
6	Q2 - Curriculum Aims include - "helping us think about our about Role in the Environment".	218	.54
7	Q5 - Global Citizenship Attribute includes- "Interdependency".	35	.49
8	Q2 - Curriculum Aims include - "encouraging us to give something back to the Environment".	218	.45
9	Q5 - Global Citizenship Attribute includes - "My Personal Responsibilities".	35	.43
10	Q4 - Instructors' Aims include - Reflection on "My own Life Practice".	162	.42
11	Q3 - Personal Significance - "I accept my Personal Responsibility"	239	.40 <sup>*f</sup>
12	Q2 - Curriculum Aims include - "helping us enhancing the Future World".	217	.39
13	Q1 - 18 word message attached to the trees focuses on - "Peace on Earth".	267	.38
14	Q3 - Personal Significance- "I am offering Help to the Future"	239	.33
15	Q3 - Personal Significance - "I am doing Practical Work".	239	.31
16	Q2 - Curriculum Aims include - "I am making this course Carbon Neutral".	218	.27
17	Q2 - Curriculum Aims include - "This is giving us Experience of Applied Ethics".	218	.24
18	Q4 - Instructors' Aims include - "I am creating Something for the Future".	161	.24
19	Q3 - Personal Significance - "This activity makes a Change from Class".	239	.23
20	Q2 - Curriculum Aims include - "Encouraging us to make our Personal Physical Contribution".	218	.21
21	Q1 - 18 word message attached to the trees focuses on - "Future Generations".	267	.20 <sup>*m</sup>
22	Q4 - Instructors' Aims include - "Improving the University's Image".	167	.16
23	Q5 - Global Citizenship Attribute - "Peace"	34	.15
24	Q5 - Global Citizenship Attribute - "Future"	36	.14
25	Q3 - Personal Significance - "I am Helping the Local Community".	239	.13
26	Q1 - 18 word message attached to the trees focuses on "My Personal Wellbeing".	267	.12
27	Q2 - Curriculum Aims include - "Helping the development of my 'Ecological Self'".	218	.12
28	Q3 - Personal Significance - "None, this is a Futile Gesture".	239	.11
29	Q3 - Personal Significance - "It is an easy way to Gain Marks".	239	.11
30	Q1 - 18 word message attached to the trees focuses on - "Economic Prosperity".	267	.08
31	Q3 - Personal Significance - "I am engaged in active Volunteering".	239	.07
32	Q1 - 18 word message attached to the trees focuses on - "My Family's Wellbeing".	267	.06
33	Q4 - Instructors' Aims include - "Support for our Local Community".	161	.06

**Table 2. Frequency of Themes in the Tree Planting Participation Questionnaires (2006-2013).** (Nb.\*m indicates that the category was included significantly more frequently by male, \*f by female, respondents; Q'x' refers to the question in the questionnaire (Table 1); a frequency of 0.73, means that the idea was contained by 73% of N responses to the question. Sample size 'N' varies because: i. the question Q5 - Global Citizenship was not asked until the final year of the study, ii. not all learners answered all questions and iii. some respondents offered combined answers to several questions. Capital letters in quotations denote words used as coding terms).

Of course, the 18 word statements explored here are not necessarily those attached to the trees, they are those submitted as coursework and, consequently, may contain elements oriented purely toward assessment (Table 3: S379-10). However, the time frame for the task was such that it is likely that, apart from some very personal statements on the trees, the two 18-word sets are broadly similar.

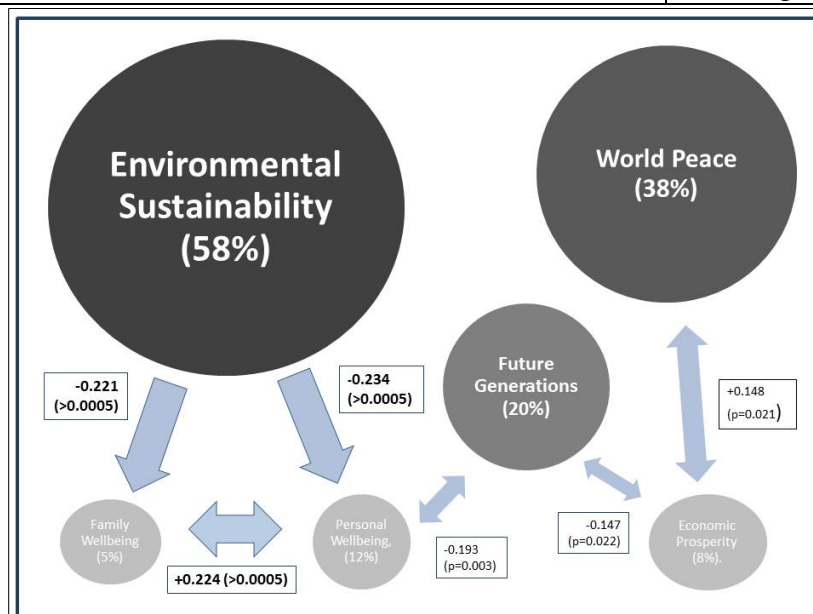
For analysis, each 18 word statement was coded by theme. One advantage of this approach is that the word limit encourages participants to focus on issues that are most important to them. In the



event, just six themes recurred in > 5% of responses. Inevitably, ‘Environmental Sustainability’ was most commonly listed (58%: Table 3: S91-13, S14-13, S127-09, S13-13, Figure 1). This was followed by wishes for World Peace (38%, Table 3: S41-06, S30-13), Future Generations (20%, Table 3: S30-06), and, in a variety of formats, Economic Prosperity (8%, Table 3: S379-10, S435-10). A minority of statements wished for Personal Wellbeing (12%) or Family Wellbeing (5%, Table 3: S149-09, S137-09). Some minor themes: Renewable Energy, Animal Welfare, the concept of ‘Service to the World’, Religion, and the futility of tree planting were mentioned - but by fewer than 4 (2%) respondents.

**Table 3. Major Themes in the messages to be attached to the trees.**

<b>My deepest hope for the future and the world is...</b>	<b>Coding Category</b>
<i>“For the world to become sustainable and more people realise that resources are not infinite” (S91-13)</i>	<b>Environmental Sustainability</b>
<i>“To counterbalance environmental damage caused by humans” (S14-13)</i>	<b>Environmental Sustainability</b>
<i>“peace, harmony and a sustainable future for the whole world” (S127-09)</i>	<b>World Peace / Environmental Sustainability</b>
<i>“World Peace and Equality for all” (S41-06)</i>	<b>World Peace</b>
<i>“I hope for peace, love and an end of suffering to everyone worldwide” (S30-13)</i>	<b>World Peace</b>
<i>“..that there will be a future and that people will live peacefully and in harmony with their natural environment” (S243-12)</i>	<b>Future Generations / Peace/ Environmental Sustainability</b>
<i>“Tomorrow is not someone else’s problem and that children will inherit a better world” (S30-06)</i>	<b>Future Generations</b>
<i>“My deepest hope is for fair division and use of scarce resources to avoid conflict” (S379-10)</i>	<b>Economic Prosperity / World Peace</b>
<i>“fairer working conditions in LEDCs and the abolishment of sweatshops to supply our clothing” (S435-10)</i>	<b>Economic Prosperity</b>
<i>“I want a happy and normal life and hope for a fair, sustainable and peaceful world” (S13-13)</i>	<b>Personal Wellbeing / Environmental Sustainability / World Peace</b>
<i>“I want to fly a helicopter and be extremely successful in all I do” (S149-09)</i>	<b>Personal Wellbeing</b>
<i>“Happiness for my myself and my family” (S137-09)</i>	<b>Personal Wellbeing / Family Wellbeing</b>



**Figure 1. Association between themes in the 18 word ‘hopes for the future’ messages.**

Figure 1 describes the relationships between these themes. Here, wishes for ‘Environmental Sustainability’ are negatively associated with self-centred wishes for ‘Personal’ and ‘Family Wellbeing’, which are strongly positively associated (Figure 1). Wishes for ‘World Peace’ are positively associated with ‘Economic Prosperity’. Altruistic, wishes for the welfare for Future Generations’ are negatively associated with wishes for ‘Economic Prosperity’ and for ‘Personal Wellbeing’.

**Table 4. The role of tree planting in an “Ethical Geography” curriculum.**

<b>Function within the Course Context</b>	<b>Coding Category</b>
“allows us to reflect upon the impact we have on the environment” (S127-09)	<b>Role in Environment</b>
“To reconnect with Nature and to emphasise the role of learning by doing... to think about ... what we could give back to the environment” (S243-12)	<b>Role in Environment / Giving Something Back</b>
“The aim is to give something back to the environment...” (S202-07)	<b>Giving Something Back</b>
“This is a way of apologising to the world for our resource use and the message will, hopefully, grow along with the trees” (S154-09)	<b>Giving Something Back</b>
“The ethos of the course is sharing and giving back to the planet, also there is the key theme of the future...” (S30-13)	<b>Giving Something Back / Enhance Future World</b>
“Our obligation to secure environmental resources for the future needs” (S24-12).	<b>Enhance Future World</b>
“to identify our morals and ethics, allowing us to express what we feel is right and wrong; it is right to plant a tree. ...” (S227-09)	<b>Applied Ethics</b>
“set an ethical example about respecting nature...” (S112-07)	<b>Applied Ethics</b>
“to make it a Carbon-neutral course, in keeping with the idea of sustainable development” (S30-06)	<b>Carbon Neutral</b>
“there is a big difference between actually talking about what we should be doing and actually doing something” (S157-09)	<b>Personal Physical Contribution</b>
“hard work, physical, will make a difference...” (S112-07)	<b>Personal Physical Contribution</b>
“ Provided a way in which we can connect with our ecological self and develop a sympathetic approach to our planet and all living things” (S244-12)	<b>Ecological Self / Role in Environment</b>

### **Why is tree planting “Ethical Geography”? (Q2)**

Question two invites learners to consider how this tree-planting exercise fits within ‘The Ethical Geographer’ curriculum (Boyd et al., 2010). The aim, targeting especially those who are merely ‘taking the course’, is to have learners think about the curriculum as a whole (Table 4: S157-09). Seven themes emerge in the short answers. Most learners recognise that the exercise aims to help them think about their ‘Role in the Environment’ (54%, Table 4: S127-09, Figure 2), many that it allows them to ‘Give Something Back’ (45%, Table 4: S154-09, S30-13), which may ‘Enhance the Future World’ (39%, Table 4, S24-12). Many repeat the ‘official line’ about making the course Carbon Neutral (27%, Table 4, S30-06) and that it offers experience of ‘Applied Ethics’ (24%, Table 4, S227-09). Others, noting the Gandhian ethic discussed in class, consider that it demonstrates making a ‘Personal Physical Contribution’ (21%, Table 4: S157-09, S112-07). Finally, a few recognise the aim of aiding the development of their ‘Ecological Self’ (12%, Table 4: S244-12).

Figure 2 illustrates the links between Table 4’s response themes. In this case, all the measures of association are negative, largely because several themes represent different aspects of the same idea. Negative associations divide respondents who declare that the exercise is designed to make them think about their ‘Role in the Environment’ from those who respond more specifically, arguing

that the point is to ‘Enhance the Future World’ or ensure that the course is ‘Carbon Neutral’. Similar negative associations separate those who think the aim to be to ‘Enhance the Future World’ rather than simply ‘Applied Ethics’ and those for whom the aim is to develop their ‘Ecological Self’ rather than simply achieve ‘Carbon Neutrality’. However, the negative associations between those who think the aim is to ‘Enhance the Future World’ and also those thinking it is about making ‘Personal Physical Contribution’ with the popular notion of ‘Giving Something Back’ suggests a degree of altruistic thinking is involved.



**Figure 2. Associations between responses to the question: “How does this tree planting exercise contribute to your learning of ‘Ethical Geography’?” (Q2).**

In sum, these responses divide learners who conceive the purpose of the exercise in practical or material terms from those who recognise deeper intellectual aims in either personal or altruistic terms. Naturally, the recognition of deeper aims also tends to be associated with higher grades. For example, positive associations link final grade and thinking that the exercise is about developing the ‘Ecological Self’ ( $r\phi: 0.273, p= 0.007$ ), but negative between final grade and those emphasising the trees as means to ‘Enhance the Future World’ ( $r\phi: -0.267, p= 0.008$ ).

**What does this tree planting mean to me, personally? (Q3).**

The third, in many respects, key question inquires if the exercise holds any personal significance for its participants. Nine key themes emerge. Most frequent is the idea of doing ‘Something for the Environment’ (73%, Table 5: S173-09 S035-10, and Figure 3), to help ‘Future Generations’ (34%, Table 5: S598-11) and, occasionally, to help the ‘Local Community’ (7%, Table 5: S116-10). A third of the respondents feel that the exercise connects them with their ‘Personal Responsibilities’ (33%, Table 5: S392-12, S245-12, S024-13, S164-09, S537-10, S142-09) and many are pleased to do something ‘Practical’ (31%, Table 5: S232-10, S142-10), although few mention the act of ‘Volunteering’ (7%, Table 5: S25-13). Many welcome a ‘Change from Class’ (23%, Table 5: S130-09)

and a painless way of ‘Gaining Marks’ (11%, Table 5: S6-13, S2-06), while some dismiss the exercise as a waste of time and effort, a ‘Futile Gesture’ (11%, Table 5: S39-06, S218-07).

**Table 5. What does this tree planting mean to me?**

<b>Student Voices: What (if any) significance does this exercise hold for me, personally?</b>	<b>Coding Category</b>
“This exercise, we should be doing more often ... a tiny step to a sustainable world, perhaps” (S173-09)	<b>Something for the Environment</b>
“no other field course has let us do something purely to benefit the environment. This is very important to me as I studied Geography to help the environment” (S035-10)	<b>Something for the Environment / Practical / Personal Responsibilities</b>
“ to do something worth doing for the environment” (S128-09)	<b>Something for the Environment</b>
“by planting today, I have offset 10 tonnes of carbon...”(S245-12)	<b>Something for the Environment</b>
“It was good to be thinking about the future rather than just myself “ (S598-11)	<b>Future Generations</b>
“This is a unique part of my degree because it allows for reflection and assessment of one’s behaviour in day to day life and the fulfilment of giving to a local community. (S116-10)	<b>Local Community / Personal Responsibilities</b>
“I believe that you have to start locally, by planting locally, I feel like I am giving something back to Nature and local wildlife as well” (S988-10)	<b>Local Community / Something for the Environment</b>
“It enabled me to think how I could adjust my daily life in order to protect the environment” (S392-12)	<b>Personal Responsibilities / Something for the Environment</b>
“..to develop our awareness of our responsibilities to the world, through learning by doing.” (S245-12)	<b>Personal Responsibilities / Practical</b>
“Starts to make me question what I am really doing in my life to make a difference and protect the world” (S164-09)	<b>Personal Responsibilities</b>
‘it gave me a good feeling for making a difference and it opened my eyes and made me realise what a difference I can make (S537-10).	<b>Personal Responsibilities</b>
“This allows me to put into practice what we have been preaching in the classroom” (S232-10)	<b>Practical</b>
“This exercise doesn’t affect me personally. However, it is interesting to put into practice things we have studied” (S142-09)	<b>Practical</b>
“I do not participate in much voluntary work, so it is a good step for me... although I do not think that it is necessary to go out and plant trees” (S25-13)	<b>Volunteering / Futile Gesture</b>
“To connect us with our subject, rather than just discussing it in the classroom” (S130-09)	<b>Change from Class</b>
“Primarily, it is the 10% on the Coursework but I also enjoy gardening” (S6-13)	<b>Gaining Marks</b>
“10% of easily obtainable marks... and the instructors can add 400 trees planted using student power to their resumes” (S2-06)	<b>Gaining Marks</b>
“Although everyone is here, we still all go back to our normal lives and do not act on our beliefs or ideals” (S39-06)	<b>Futile Gesture</b>
“Maybe it’s just ‘Greenwash’, universities are very polluting, it makes the public image better”( S218-07)	<b>Futile Gesture</b>

Figure 3 displays the associations between these themes and, again, spotlights the differences between those who engage with the spirit of the exercise and those who treat it more functionally. The idea of offering help to ‘Future Generations’ is linked by a lone positive association to ‘Volunteering’, but negatively to ‘Change from Class’, ‘Gaining Marks’, and doing something ‘Practical’. ‘Change from Class’ is also negatively associated with helping the ‘Local Community’ and

similarly, those considering the exercise a ‘Futile Gesture’ associate negatively those thinking about their ‘Personal Responsibilities’ or helping the ‘Local Community’.

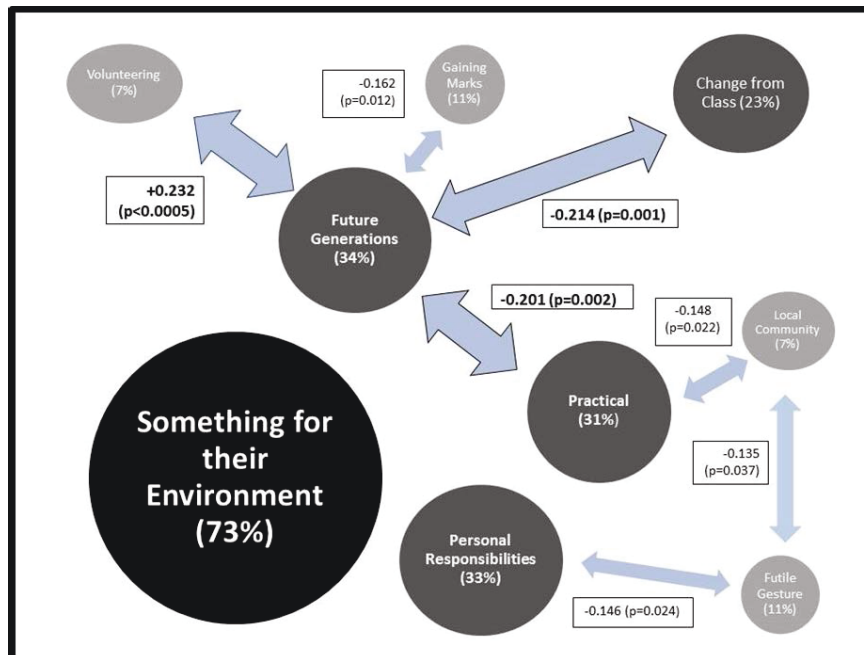


Figure 3. Associations between comments on the personal significance of this exercise (Q3).

#### Why have my instructors set up this exercise? (Q4).

Question 4 challenges participants to think harder about why this exercise was created and, ideally, to reflect upon assigned reading dealing with its pedagogic ideas (Boyd et al., 2010; Haigh, 2004ab). Despite recent class-work on Emotional Intelligence (Goleman, 1998) and cross-cultural empathy (cf. Haigh, 2012), many learners found it difficult to imagine that their instructor had any motivation apart from delivering a series of facts to be learnt and skills to be practiced, even if some accept that being able to reflect upon practice is a skill in itself. Just 57% of participants attempted this question and regurgitated course notes often replaced independent thought (Table 6: S537-13). The majority assume that the intention is simply ‘Education for Sustainable Development’ (65%, Table 6: S575-11, S227-12, S146-09). However, many also suggest that intention is to encourage them to ‘Reflect on their Life Practices’ (42%, Table 6: S27-12, S001-06) and do ‘Something for the Future’ (24%, Table 6: S537-13). A few thought that the exercise was essentially ‘greenwash’, an attempt to ‘Enhance the University’s Image’, but only 9 (6%), thought that their instructors intended to build ‘Links to the Local Community’, despite >120 sharing their field experience with the Wychwood Volunteers (Table 6: S113-07, S013-06, S6-07-11). There was only one significant, negative, association in this data, which opposes the idea that the aim is ‘Education for Sustainable Development’ with the more cynical perception that it’s about ‘Enhancing the University’s Image’ ( $r_{\phi}$ : -0.176,  $p$ = 0.026). Of course, those learners who thought that the instructor’s intentions ended with ‘Education for Sustainable Development’ also tended to achieve lower final grades ( $r_{\phi}$ : -0.325,  $p$ = 0.002).

#### What does “Global Citizenship” mean to you (Q5)?

The Global Citizenship question was posed to the 2012 and 2013 cohorts in the contexts of one on-campus and one off-campus planting and in response to the University’s roll-out of its aspirational

list of 5 Graduate Attributes to be attained by all learners. Just 35 learners tackled the question. Among these, two thirds suggest that Global Citizenship includes concern for ‘Sustainability’ (23/35: 66%; Table 7: S21-13) and ‘Social Justice’ (22/35: 65%, Table 6: S17-12). Many think that it includes recognition of the ‘Interdependence’ of human society and the environment (17/35:49%, Table 7: S28-13) as well as of ‘Personal Responsibilities’ towards the Earth (15/35: 43%, Table 7: S12-13, S07-13). Much smaller numbers mention that the concept includes concern for ‘Peaceful on Earth’ (5/35: 14%, Table 7: S392-12) and the welfare of ‘Future Generations’ (5/35: 14%, Table 7: S15-12), although this was often implicit. Curiously, while ‘Sustainability’ is widely mentioned, typically, it appears as the last addition to a longer list (Table 7: S02-13). Similarly, ‘Interdependence’ appears as qualification for other ideas.

<b>What purpose might this exercise hold for my instructors?</b>	<b>Category</b>
An active approach to improve environmental sustainability (S575-11)	<b>Education for Sustainable Development</b>
“Physically involving people in the environment ... promotes sustainability education” (S227-12)	<b>Education for Sustainable Development</b>
“to get us out in the open and show us first-hand what they are trying to show us in the classroom” (S146-09)	<b>Education for Sustainable Development</b>
“The module leader is keen to help us ... think for ourselves; purpose – to find our real selves and reflect”(S27-12)	<b>Reflection on Life Practice</b>
“the exercise is ... difficult to complete successfully without thinking deeply” (S001-06)	<b>Reflection on Life Practice</b>
“helps us connect with the physical world and our future” (S537-13)	<b>Something for the Future</b>
“Planting trees could be to enhance the University’s image “ (S114-07)	<b>Enhance University’s Image</b>
“make campus more visually appealing” (S013-06)	<b>Enhance University’s Image</b>
“helping the Wychwood Project take a little step nearer to their goals” S607-11.	<b>Link to Local Community</b>

**Table 6. What are my instructors trying to achieve with this exercise? (Q4)**

<b>Main components of “Global Citizenship”?</b>	<b>Theme</b>
To engage with the world and make it a more just and sustainable place” (S21-13)	<b>Personal Responsibility/ Social Justice / Sustainability</b>
It is based on the idea of equality and fair treatment of all people” (S17-12)	<b>Social Justice</b>
...In this interconnected world, any individuals decisions and actions are likely to affect others (S28-13)	<b>Interdependence / Personal Responsibility</b>
“Being aware, being accountable, responsible and being knowledgeable...”(S12-13)	<b>Personal Responsibility</b>
“Global citizenship is getting involved and doing things for the environment and community” (S07-13)	<b>Personal Responsibilities</b>
“Global citizenship encourages people to work together in order to create peace in the world” (S392-12)	<b>Peaceful Coexistence</b>
Global citizenship involves being sensitive and alert to the whole world and safeguarding it as such for the future...” (S15-12)	<b>Future Generations</b>
“Global Citizenship is about how we can act fairly, sustainably and peacefully in our diverse and interconnected world...” (S02-13)	<b>Peaceful Coexistence / Sustainability / Interdependence</b>

**Table 7. Learner definitions of Global Citizenship.**

Just two, marginally significant, negative associations were found between Global Citizenship themes. These, rather worryingly, linked opposed ‘Peaceful Coexistence’ with the acceptance of a ‘Personal Responsibility’ ( $r_{\phi}$ : -0.347,  $p=0.043$ ) and concern for ‘Future Generations’ with the recognition of ‘Interdependence’ of people and planet ( $r_{\phi}$ : -0.344,  $p=0.045$ ).

### **Is this Tree-planting Exercise more affective On-Campus or Off-Campus?**

Applying the Fisher Exact Test to contrast the impact of this exercise on learners when tree planting was undertaken off-campus with the Wychwood Volunteers rather than on-campus finds several differences. First, is that those who contribute to the offsite project record significantly higher grades ( $p < 0.0005$ ). Additionally, significantly more off-campus participants agree that the aim was to help them 'Give Something Back' to Nature ( $p = 0.001$ ), to think about their 'Role in the Environment' ( $p = 0.016$ ), to develop their 'Ecological Self' ( $p = 0.012$ ), and create a legacy for 'Future Generations' ( $p = 0.001$ ). By contrast, significantly fewer thought that the main intention of the instructor's exercise was merely 'Education for Sustainable Development' or having learners 'Reflect on their own Life Practice' ( $p = 0.018$ ) while more reported that working offsite encouraged them to think about helping the 'Local Community' ( $p = 0.025$ ) through additional 'Volunteering' ( $p < 0.0005$ ). The conclusion is that the 'real-world' off-site plantings had far greater affective strength than on-campus plantings.

### **Discussion.**

This exercise was designed with help from Sri Aurobindo's system of Integral Education (Aurobindo, 1995; Partho, 2007; cf. Haigh, 2013a). This addresses five levels: the physical, emotional ('vital'), individual intellectual ('psychic'), the higher state of awareness signalled by thoughts of altruism and empathy, and, finally, the highest level of consciousness that recognises the unity of all existence, as in Deep Ecology (Ranade, 2006; Naess, 1995). So, it is appropriate to evaluate the success of the venture using the same model.

*Level 1: Physical.* The 'Mirrors in the Trees' exercise took all of its participants into the open air and engaged many with the work of tree planting. Some 31% valued the 'Practical work' involved and 21% making their 'Personal Physical Contribution', while 23% enjoyed a 'Change from Class' (Table 1: Row 15, 19, 20).

*Level 2: Emotional.* Originally, this exercise was conceived as a 'Connective Practice', something emotionally affective. Here, acceptance of 'Personal Responsibilities' was mentioned by 43-40% (Table 1: Rows 9, 11), especially women, or as offering non-specific 'Help to the Future' (33%: Table 1: Rows 14, 12) or, especially among men, to 'Future Generations', (20%, Table 1: Row 21). However, arguably, the very act of posting the 18 word message on the trees, which was done by >75% of participants, indicates some kind of emotional affect. This may be echoed by those messages less obviously related to course context, for example, those invoking 'Peace on Earth' (38%) or the wellbeing of 'Future Generations' (20%), Self, Family as also, maybe, 'Economic Prosperity' (Table 1, Rows 13, 21, 26, 30, 32).

*Level 3: Individual Intellectual.* Several responses suggest that some participants went beyond simply recognising that they are doing 'Something for the Environment' (73%) to reflect on their 'Role in the Environment' (54%) and the possibility that they could 'Give Something Back' (45%) (Table 1: Rows 1, 6, 8). In many cases, the same learners were encouraged to think about their own 'Life Practices' (42%) and what might be their 'Personal Responsibilities'

(43, 40%: Table 1: Rows 9 11). Criticism is another sign that learners are thinking for themselves, as demonstrated by those who dismiss the exercise as “Greenwash”, simply ‘Enhancing the University’s Image’ (16%), or a ‘Futile Gesture’ (11%, Table 1: Row 22, 28). Of course, ‘Futile Gesture’ is negatively associated with the concept of ‘Giving Something Back’. This level is associated with the personal ‘I-sense’; Table 1 shows how the words ‘I’ and ‘My’ permeate more than a third of the learners’ discourse themes (Table 1: Rows 1, 9, 10, 11, 14, 15, 16, 18, 25, 26, 27, 31, 32).

*Level 4: Empathy and Consciousness of Others.* Empathy, emotional intelligence, understanding the worldviews of others, these were all key themes in “The Ethical Geographer” module that hosted this exercise and the subjects of previous practical classes (Boyd et al, 2008; Haigh, 2009, 2012). Of course, some recognised this exercise as ‘Applied Ethics’ (24%) although the word ‘us’, when used, applies only to the class (Table 1: Rows 17, 6, 8, 20). Relatively little thought was given to the ‘Local Community’ (Table 1: Rows 25, 33). Gallarza et al. (2013, p.125) explore the motivations of occasional volunteers but find the camaraderie of teamwork more important than “motivations such as the desire to help or to feel needed”. Here, S24-12 writes: “The chance to share in such a lasting activity with like-minded people and friends means the most to me”.

Again, there are hints of empathic thought in some comments relating to the ‘Future World’, Future Generations’ and Peace of Earth’ but only in a fairly abstract sense (Table 1: Rows 12, 13, 14, 21). However, the 35 responses to the final question on Global Citizenship attributes were dominated by thoughts about ‘Sustainability’ (66%) and ‘Social Justice’ (65%), which are followed by ‘Interdependency’ (49%) and ‘My Personal Responsibilities’ (43%) (Table 1: Rows, 2, 4, 7, 9). For a few, the work sparked thinking about how they might apply themselves elsewhere, by ‘Volunteering’ (7%, Table 1: Row 31). Of course, all those themes that involve service through helping, recognition of personal responsibility, and thought about sustainability and the future beyond the learner’s lifespan also contain empathic content (Table 1: Rows 19, 26, 29).

*Level 5: Oneness.* Addressing Sri Aurobindo’s highest level of consciousness was, of course, way beyond the scope of this exercise. However, the recognition of ‘Interdependency’ among the Global Citizenship attributes and that the aim included helping the development of a learner’s ‘Ecological Self’, a feeling of oneness with all living things (Naess, 1995), are both steps along this path.

So, is the Aurobindo Model, useful for Geographical education? Results here suggest that it offers a useful hierarchy of learning outcomes and a logical way of structuring a curriculum. Ontologically, it makes sense that the emotional level sits between the physical and mental. Epistemologically, it is more problematic because Geography’s ‘Affective Turn’ is a recent development and so subsequent to the mental level. For many years, geography, seeking objectivity, was “an emotionally barren terrain, a world devoid of passion” (Bondi et al., 2007, p.1). Its emotional spectrum ranged narrowly from subject enthusiasm through aesthetic appreciation to righteous indignation and did not include sentimental attachment to anything, let alone a tree.



From participant observation, it seems certain that some were not affected and were simply playing along and constructing writings designed to meet teacher wishes in hope of a better assessment. During the actual plantings, there was plenty of 'messaging about' and social loafing visible – not everyone took the task seriously. In any class, it is difficult to please everyone, especially those 'just taking the course', and some learners remain disengaged. Here, this includes some of those thinking that the aim was simply 'Carbon Neutrality' (27%) or, cynically, 'Enhancing the University's Image' (16%), an easy way to 'Gain Marks' (11%) or just a 'Change from Class' (23%) (Table 1: Rows: 19, 22, 29).

Today, "it is the people coming out of the world's best colleges and universities that are leading us down the current unhealthy, inequitable and unsustainable path" (Cortese, 2003, p.16). Clearly, some of the participants in this project could join them. There is a clear strand of capitalistic materialistic hedonism and self-interest in some respondents that echoes common critiques of the Western mind-set (cf. Jackson, 2003). Cortese (2003, p.17) adds: "Higher education institutions bear a profound, moral responsibility" because, despite the efforts of many, "education for a just and sustainable world is not a high priority". Murray's vision of the 'Sustainable Self' engages six attributes: awareness, motivation, empowerment, knowledge, skilful means, and practice, as well as the integration of personal values, attitudes, beliefs, knowledge, skills, and resources to positive ends (Murray, 2011). The vision applies equally to EGC. This tree planting exercise aims to develop these attributes by allowing learners to explore their own values, attitudes, beliefs and knowledge in the context of a questionnaire-guided meditation.

Geography teachers tend to value the 'holistic and authentic' aspects of out-door activities (Wilhelmsson et al., 2010). However, there can be major differences in the opinions of students and teachers about what is being taught and assessed (e.g. Haigh and Kilmartin, 1999). "Discovering students' conceptions of the purpose of fieldwork can help in designing activities and modes of delivery that, in turn, will shape and develop their conceptions in ways that are beneficial to their academic and personal progress" (Stokes et al., 2011, p.122). Inevitably, the learner's view of the real purpose of their education much influences what they learn. If they are unclear about what is being taught then their learning will be inhibited. Equally, if they accept what is taught uncritically, they risk being misled. In this case, there is plenty of evidence of healthy scepticism about the instructor's motives, which include using students as 'cheap labour to beautify campus', to pad the instructor's cv, or, as S28-13 writes: "to enjoy a cheerful day with his lovely students ... doing more meaningful work than in the classroom". Comprehension needs to be matched to critical thinking, through evaluation of, and reflect upon, information, experience and personal assumptions (Brookfield, 2012). For example S317-07 writes: "Planting trees is great... but I am not honestly that bothered about trees unless they are MY trees. The 18 words bit is hokey but it gets you to think about the future". Here, while the Course Guide describes this tree-planting exercise as a practical demonstration of "Education for Sustainable Development", 42% recognised that its purpose was to encourage reflection upon 'Personal Life Practices'.

Asked about the personal significance of this experience, learners appreciated being able to do 'Something for the Environment' (73%), something 'Practical' (31%), to help 'Future Generations' (34%) and, very occasionally, the Local Community (7%). Occasionally, there is resonance from deeper emotions, such as memories of previous tree plantings with parents.

This study found few gender differences but female learners more often felt that doing ‘Something for the Environment’ was important and, perhaps, that this connected them with their ‘Personal Responsibility’ to the world. Of course, the suggestion that, because of traditional roles, females are more likely to express environmental concern is contradicted by the comprehensive analysis of Hayes (2001). Similarly, more male learners attached a message of hope for ‘Future Generations’ to their trees, which qualifies previous work suggesting that males of college-age are less forward looking than their female counterparts (Bertrand, 2011).

“You don’t do fieldwork, fieldwork does you”, argues Simpson (2006, p.127). Fieldwork is affective and encourages learners to make their own connections (Gerber and Chuan, 2000). Here, 33% of respondents recognise this fieldwork invitation to connect with their ‘Personal Responsibilities’ in the world. However, <7% of participants countenanced further voluntary action and fewer still mention any wish to see how their trees progress. However, for the few, ‘Volunteering’ is positively associated with the idea of offering ‘Help to Future Generations’.

Here, those who engaged in the off-site plantings not only achieved significantly higher grades but also were more concerned to ‘Give Back to Nature’, to develop their ‘Ecological Self’, and to think of the legacy they were creating by ‘Helping the Local Community’. Fewer wrote the exercise off as being simply about ‘Education for Sustainability’. The finding substantiates earlier claims that off-site links with NGOs can be beneficial (Haigh, 2006).

For many, this field exercise was simply a nice ‘Change from Class’. Here, as in the ‘Cradle for Nature’ project in Wales (Haigh, 2008), the camaraderie of the fieldwork helps offset the, often, hard manual work involved (Gallarza et al, 2013). Moreover, the fact that the exercise was enjoyable may have helped participants learn, with its novelty providing a key memory episode, which could be explored later in the course (Chavan, 2011; Amos and Reiss, 2012, Haigh, 2013).

Equally, the fact that hard physical labour was involved may have hardened and, possibly, deepened the reflection, of those critical of the exercise as a ‘Futile Gesture’. In fact, the planting of a few trees has almost no impact of the world of the future and less on current environmental sustainability. Current survival rates in campus plantings stand at less than 20%, mainly because the university insists on redeveloping land it earlier released for tree planting. Plantings off campus may do rather better, although a 33% survival rate is considered normal. So, those one or two who argue that the exercise “makes long haul flights to exotic destinations on a yearly basis justifiable...” (S172-09) are seriously deluded. Similarly, they have a strong argument who thought the effort better spent, perhaps working for a social charity, which one or two did in place of this exercise, or campaigning to encourage the university to waste fewer resources on paper, energy, water, travel, etc., in line with its own ‘Net Positive Impact’ strategy (NETpositive, 2012). However, those who considered the task a ‘Futile Gesture’, but did it anyway, were not those who recognised that the task signalled their ‘Personal Responsibilities’ or who felt it offered ‘Help to the Local Community’.

While dissent may be a mark of reflection, responses here suggest the presence of a constituency who took a more mechanistic, self-centred, approach. Those who considered the exercise ‘Applied Ethics’, for example, were not those thinking to ‘Enhance the Future World’. Similarly, those considering the welfare of ‘Future Generations’, which suggests a strand of genuine altruism, were not those who thought the exercise a ‘Change from Class’, ‘Practical’, or a way of Gaining Marks.

Overall, responses divide between those who take the exercise at face value and those who seek deeper intellectual aims.

Just 11% of respondents admit that 'Gaining Marks' is key to their participation. The true total is likely several times greater; the fact that it counted as coursework was the reason most attended. As a general rule, the amount of effort expected from a volunteer should be scaled to the motivation that volunteer feels (Haigh, 1998). Elsewhere, research into the motives of environmental volunteers report several categories – helping and giving something back top the list, social contact and getting outside are also important, as is self-development and self-esteem – the feel-good factor in doing good (Bruyere and Rappe 2007; Measham and Barnett, 2008). For success, participants should feel a net positive benefit for the effort expended and 'Gaining Marks' is as much a reward component as working with friends, 'doing good', leading by example, creating a lasting legacy, having a novel or inspirational outdoor experience, "converting learning into practice" or having "an opportunity and incentive for personal action" (Haigh, 2006, p.335).

Much of this is reflected in these learners' initial 18-word message. These address 'Environmental Sustainability' and the welfare of 'Future Generations', which may echo the coursework context as well altruistic factors (Hustinx et al., 2010). However, wishes for 'Peace on Earth' and for 'Economic Prosperity' that involve compassion for the poor, reflect the learners' own altruistic concerns. Self-centred values appear as wishes for 'Personal' and 'Family Well Being' and occasionally 'Economic Prosperity'. It is tempting to link these findings to the three value systems of Deep Ecological thinking (Naess, 1995), which were explored quantitatively by Schultz and Zeleney (1999): Ecocentrism, Anthropocentrism, which links to social wellbeing, and Egocentrism. Commonly, the submitted messages incorporate wishes from multiple categories, for example many link Ecocentric 'Environmental Sustainability' with Anthropocentric concerns for 'World Peace'. Certainly, these three modes of thinking are clearly visible – the global habitat, the human condition and the individual self, with a self-security subtext strongly evident (see also: Schultz and Zeleney, 1999).

Idealists may argue that activities, like this tree-planting, both connect learners to their communities and habitat and help transform universities to "truly active places of learning" (McGonigle and Stark, 2006, p.183). However, here, there is little evidence of affective connection with either the community (Wychwood) volunteers or the university, whose motives elicit some scepticism; of course, those 'Futile Gesture' comments, both demonstrate critical thinking and a degree of openness, which, in the context of assessed coursework, is a sign of trust (Houston & Sokolow, 2006). Clarke (2012) may dream that learners will think holistically, ethically, equitably and with innovation; see interconnectedness and contexts in the living world system, and so develop a committed, idealistic appreciation of their world. However, reality is more pragmatic. Students have a job to do, which is to graduate with a good degree and, in the process, gain an education. From this perspective, coursework tasks have no greater significance than a level in a video game. This does not mean that most do not, sincerely, believe what they write - just that sincerity is not essential to the task (Haigh, 2014).

McGonigle & Stark (2006, p.211) envision "restoring planetary health, one university at a time, one place at a time... propelled by a global movement". It is attractive to think that future world development may shift the university to centre stage and (re)develop its role in terms of service to the community and the world. In such terms, this exercise's invitation to participants to be the

change they want to see in the world, to become the dutiful, responsible and ethical world-makers (*visvakarma*) envisaged by Tagore and Gandhi, seems apt (Tagore, 1930; Haigh, 2008). Indeed, EGC can only be comprehended as part of a larger social and educational transformation that aims to help learners self-create their future world. It involves transformational changes in consciousness that shift educational priorities from content, specialist skilling and immediate employment to community, sustainability, and the creation of active citizens, who are sensitive to their personal responsibilities for the welfare of all. Such changes cannot be enforced by exhortation but it may be cultivated in ways that respect individual differences as in this exercise. As Sri Aurobindo advises, "The first principle of true teaching is that nothing can be taught. The teacher is not an instructor or task-master [but] a helper and guide ... [whose duty is to show where knowledge lies and how it can] rise to the surface... The second is that the mind has to be consulted in its own growth... The chief aim of education should be to help the growing soul to draw out that in itself which is best and make it perfect for a noble use" (Aurobindo, 1992, p 119-120). This is a long process.

## **Conclusion**

The 'Mirrors in the Trees' exercise invites learners to reflect upon a tree-planting experience. It is a demonstration of how to act locally but think globally. Global Citizenship is about living as though the future matters and taking steps to underpin the future wellbeing of both planet and people (Gregg, 2012). EGC is also about persuading learners that they have agency in, ownership of, and a real responsibility for the world of the future (Annan, 2001). The EGC challenge to universities is to transform "from an instrument of industrial consciousness to an instrument of ecological consciousness" (Clarke, 2012, p.117). The challenge to teachers is to teach about the world in ways that are affective and foster critical self-reflection. Small exercises, like this tree-planting and reflection exercise suggest how this may be achieved. It demonstrates how, "meaningful actions are created by careful thinking and careful observation"(Roka, 2006, p. 144).

Statistical analysis of 283 questionnaires, which were completed by volunteer participants over a 7 year period, show that the following themes dominated participants 'wishes'. Messages attached to their trees concern, in ranked order: 'Environmental Sustainability', 'Peace on Earth', then the welfare of 'Future Generations', and wishes for 'Personal Wellbeing', 'Economic Prosperity' and 'Family Wellbeing'. More female learners emphasised environmental stewardship and their personal role while more males expressed concern for 'Future Generations'. Respondents from 2012 and 2013 offer the following key concerns for Global Citizenship: Sustainability, Social Justice and the recognition of both the 'Interdependence' of society and environment.

Participants found personal meaning in this exercise on two levels. For some, it was about creating a practical outcome, whether trees, Carbon Neutrality or course credit, while for others it was about their personal development. A substantial minority of the participants realised that the true aim was to have them reflect on their own lifestyle choices with respect to the Future World. The benefits of taking the exercise off-campus and working with an external NGO were proved by significantly higher grades, by more respondents that considered the aim was to help them 'Give Something Back' to Nature and think more deeply about their personal role.

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