

## INCORPORATING SUSTAINABILITY INTO OVERSEAS TRAVEL FOR PHYSICAL ACTIVITY STUDENTS

Sarah Sellar and Simon Middlemas

### INTRODUCTION

There is a widespread belief that if the world carries on with current levels of economic growth, it will be to the detriment of environmental systems and resources that we need to survive, and at the expense of quality of life, human health and equality for society. While there are many ways in which sustainability has been defined over the years, there is a consensus that education is an essential tool for achieving sustainability (ESD toolkit, n.d.). Educating about sustainability for youth (16 to 30-year-olds) – those who are best placed to take action and make change – can help make local communities more enjoyable places to live, while preserving natural ecosystems and processes. With educators increasingly looking to place greater emphasis on experiential or active learning pedagogies, programmes which place emphasis on travel, such as study abroad, field trips and internships abroad, are becoming more important. Education can enhance the travel experience for the student traveller by making them feel more connected to the local people and culture in the countries through which they travel. Some would argue that there is an acknowledged conflict at the heart of 'sustainable travel' (for example, carbon emissions from flights). However, today travel is extremely popular, particularly among students wanting to broaden their horizons (CN Staff, 2014). In order to manage the environmental and social impacts of students travelling overseas, implementing sustainable frameworks becomes imperative. As a result, higher education institutes across New Zealand and globally are recognising the value of educating about sustainability and are being called to step up in leading the movement, a challenge that these institutions are struggling to conceptualise (Packard, 2010).

The focus of this research is on educating youth about sustainability through an overseas travel programme. This paper explores effective ways of educating for sustainability before, during and after the travel experience.

### Factors influencing sustainability education

Sustainability, and sustainable travel, is not a new area for academic enquiry. Researchers have explored ways of educating youth, particularly higher education students, during overseas travel experiences (Liang, Caton & Hill, 2015; Moscardo & Murphy, 2014) and, separately, have discussed how best to educate youth about sustainability issues (Rohweder & Virtanen, 2009; Boyle, Wilson & Dimmock, 2015; Barth, 2014). Researchers have identified several factors that educators should consider when developing effective sustainability education programmes – such as the pedagogy employed, student values and beliefs, and the educators themselves.

The pedagogy behind sustainable travel education is based in *transformative learning theory*, a term coined by Jack Mezirow in 1978 in his paper "Perspective Transformation," which placed emphasis on individual empowerment and transformation (Teachers College – Columbia University, n.d.). This approach recognises the student as an adult learner and encourages a constructivist style of teaching – students construct their own individual sense of the world through exploration and discovery, rather than being told information (Honeyfield & Fraser, 2013). Participating in decision-making, planning and learning, as well as driving partnerships, all show that the student has ownership and direction over how they learn. Liang et al. (2015) have also identified many critical factors which help

facilitate transformational learning and empowerment among students. These include motivation, stepping outside one's 'comfort zone,' reflection and sharing, and keeping a traveller's diary or biography.

The literature shows that sustainable travel is a complex concept, and often contradictory in nature. Moscardo and Murphy (2014) critique the term *sustainable tourism* on the basis of the underlying assumption that some aspects of travel are routinely considered sustainable and very rarely is 'no tourism' accepted as a viable alternative. They argue that in some destinations, this latter course is necessary. Boley (2015) proposed an impact travel model that could be used to help ascertain whether travel is *net* positive or *net* negative. Not only does this model consider the host community's triple bottom line, but it also takes into account the greenhouse gas emissions that would have been used at home in comparison to those used while away. Perhaps other expended resources could be calculated in here as well.

Overall, researchers agree that sustainable tourism needs to address the "wider, cumulative, long-term" impacts of actions associated with it (Moscardo & Murphy, 2014). Moscardo and Murphy argue for a *quality of life* approach to assessing tourism sustainably, where the impact of tourism is measured by the quality of life achieved for the host country. They see tourism as part of a much wider system affecting the main types of capital (natural, social, human, cultural, political, built and financial) and consider impacts created well outside the travel experience as conventionally understood. This approach is particularly interesting in terms of the long-lasting behavioural changes – "sustainability beyond tourism and the destination region" – that would be a likely outcome of an educational programme focused on teaching sustainability.

### **Aim of the study**

There is very little consensus on the most effective way to educate youth about sustainability issues. Furthermore, few researchers or practitioners have asked whether participation in an overseas travel programme has led to sustainable behavioural changes in the life of the student traveller – that is, were they more sustainable practitioners post-travel? While researchers have identified the factors important for student travellers' growth and change, they have shown little interest in determining the learning derived from the experience of travel itself, or from the input of the educator or programme concerned. As a result of these deficits, this study addresses two questions regarding sustainable student travel. Firstly, what is the best way to educate about sustainability, including pedagogy and theory? And secondly, how can this be done most effectively in an overseas travel context in relation to physical activity students?

### **METHODS**

A qualitative focus group was employed in this study. The focus group was identified as the most effective way of bringing multiple groups of people (students, outdoor educators, high school and tertiary teachers, researchers and youth expedition employees) together to engage in dialogue on this subject.

### **Participants**

Participants were recruited to participate in the focus group (age,  $m = 34$ , range 20-56). Recruitment focused on three groups: (i) practitioners with knowledge of sustainable tourism; (ii) educators involved in sustainability; and (iii) students who were interested in sustainability and/or travel. Participants were recruited by email, face-to-face and via phone. They were invited to a focus group, and food and drinks were provided. Six participants attended the focus

group, representing a range of genders (male (n=1); female (n=5)), experience levels (practitioner (n=1); educator (n=4); student (n=1)) and ethnicity (NZ European (n=4); European (n=2)). There was a range of academic levels. The student was currently studying in a health and wellness degree programme. The other participants had all studied to undergraduate level, with two participants studying at postgraduate level.

## Data Collection

An interview guide was developed using the existing sustainability literature, through discussions with practitioners in the field, and by drawing on the personal experiences and reflections of the first author. The interview guide was divided into six parts: (1) Welcome and introduction; (2) What is sustainability? (3) What does a sustainable practitioner look like? (4) What is the role of education in fostering sustainability? (5) What could a sustainable education programme look like? (6) Closing remarks. The role of the first author was to lead the interviews, keep the discussion flowing and include all the participants equally in the discussion. Probing questions (such as “What are some examples of this?”, “Does anyone else share that view?”) and prompts (“Show interest,” “Share own thoughts,” “Listen, don’t interrupt”) were used to guide the interviewer. The second author took notes, managed the audio-recording equipment and was available to support the interviewer as needed. Following the focus group, informal communication continued via email with a number participant on the themes discussed.

## Data Analysis

Immediately following the focus group, the first author reflected on the material generated by the group and, using her notes and the audio-recording, drew together some initial conclusions and themes from the discussion. The discussion was transcribed verbatim by a professional transcription service. The first author then read and re-read the transcript, drawing out themes and points of interest. Through this process, and in consultation with the initial perceptions, key themes began to emerge from the data. In a series of meetings, the first and second author – who also sat in on the focus group – discussed and defined these key themes more clearly. The role of the second author was to act as critical friend, challenging the interpretations and conclusions of the first author, until there was consensus on the interpretation of the data.

## RESULTS

Our study found that there are many concepts that could be applied to existing youth travel programmes that would result in greater levels of sustainability, and that a new overseas programme could be justified if it operated within set parameters that include defined outcomes and structure. Six key themes emerged from the data analysis process: (i) What does it mean to be a sustainable practitioner? (ii) The complexity and contradictory nature of travel overseas and teaching sustainability; (iii) Instilling sustainable practice by starting with self or others; (iv) Mutual empowerment between the travellers and host communities; (v) Structure of the programme; and (vi) Outcomes of the programme. These six themes are discussed below, accompanied by direct quotes from the participants.

### 1. What does it Mean to be a Sustainable Practitioner?

The direction of the focus group was steered by the question: “How should people be educated regarding sustainability?” The opening questions looked at definitions of sustainability and the sustainable practitioner (a term coined by Otago Polytechnic members to define someone who embodies sustainable practice). Although the focus group members defined sustainability largely in environmental terms, they agreed that the concept is multifaceted:

“There’s lots of different ways of looking at sustainability ... but unless we focus on the environment first and make sure we have that right, then actually there isn’t gonna be a future” (outdoor and tertiary educator). It was more difficult to find agreement on what a sustainable practitioner does: “I think part of the power of the concept of sustainable practitioners is that it can mean so many different things depending on the field that you’re working in” (tertiary educator). A consensus emerged that role-modelling, demonstrating sustainable actions and being a conscious decision-maker were characteristics of a sustainable practitioner. It was asked whether this role required one having roots in a place and if and how it could be “fun.” It was also asked what was the best starting point in developing an identity as a sustainable practitioner. One strategy would be to narrow the approach and focus on a single area of a student’s life, whether their vocational path or another area. This was seen as an effective approach and one that might flow over into other areas of students’ lives.

## 2. The Complexity and Contradictory Nature of Travel Overseas and Teaching Sustainability

The first half of the focus group saw a major theme emerging – complexity and contradiction. Considering the question of what is sustainability, an educationalist in outdoor education noted that “you can’t not have any impact,” and that therefore it’s impossible to be completely sustainable. In considering how to educate students about sustainability through a travel experience, a contradiction was found in burning fossil fuels while trying to achieve a low impact on the environment. This was identified by one participant as a values conflict:

The point is that there’s a real values conflict there around what you’re trying to create, but also the impact that you’re having by jumping in a plane, and I have that conflict all the time, every time I go on a mission to go anywhere, it’s like, well, I’m going ... you know, like, but the other aspect as well. I enjoy many adventures and I enjoy travelling (outdoor and tertiary educator).

A further values conflict arose when the group attempted to decide between social and environmental sustainability. While everyone agreed that there is a values conflict between environmental sustainability and travel, a high value was also placed on social sustainability within travel (for example, celebrating diversity, promoting social justice).

| Conventional   | Green  | Sustainable  | Restorative   | Regenerative   |
|--|--|--|---|--|
|  |  |  |   |  |
| <p>‘Business as usual,’ where all decisions are based on price, availability and/or comfort.</p> | <p>Mainly ‘business as usual,’ but with some concessions to sustainable travel, where considerations of price and convenience are not dramatically challenged.</p> | <p>“Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry [sic], the environment and host communities” (United Nations World Tourism Organisation, 2005).</p> | <p>Following sustainable practice and pre-trip, doing appropriate research; during trip, learning to meet the needs of locals; and post trip, implementing new ways of living and giving back to one’s own community.</p> | <p>All travel practice positively enhances all systems and contributes to global equality. Dreaming the unthinkable.</p> |

Table 1. The stages of sustainable travel

### 3. Instilling Sustainable Practice by Starting with Self or Others

The question of where to start the education process was addressed in a number of ways. The group discussed whether the most effective place to start is by encouraging thinking about oneself or others first. It was noted that travel is a hedonistic activity that is designed for the wealthier, privileged minority and that can exploit people in poorer parts of the world. People can be motivated to travel in order to 'find themselves,' and this attitude can contribute to greater social sustainability later in life. People who want to change the way they travel need to be intrinsically motivated and be convinced of the benefits of changing: "What [researchers] found was there wasn't enough structure with it [the programme], so people didn't look after the environment or the places that they went; they didn't have intrinsic motivation to be able to look after it – they just went back into their old lives and did the same old thing, so" (outdoor and tertiary educator).

To encourage this attitude further as a facilitator, ensuring that students are achieving small, manageable actions is important, as is using positive psychology to build students' resilience, so that "when things hit them ... they've got the ability to pick themselves back up and actually start to look beyond themselves" (outdoor and tertiary educator). If the driving motivation for people to change the way they travel was through others, this would come about through exposure to new cultures and connecting with local people, hopefully leading to greater social sustainability. The consensus was that students would have to be first driven by their own wants and needs and then by interacting with others, thereby reinforcing positive change: "If you want them [students] to have co-environmental behaviours ... they've got to have the resilience and the resources to look beyond themselves and not be self-centred, and that in itself is not an easy thing" (outdoor and tertiary educator).

### 4. Mutual Empowerment Between the Travellers and Host Communities

The focus group agreed that if students are motivated and driven to travel and behave more sustainably, this would result in mutual empowerment between student travellers and host communities, leading to greater social sustainability. This discussion also highlighted the importance of making connection with local people. Dual interactions would be driven by respect. The desire to create long-lasting relationships could lead to "building bridges" (tertiary educator at Otago Polytechnic), maintaining links and seeking to extend opportunities back to local people in the host country. Travel doesn't have to exploit the Third World through First World privilege, but can also involve developing connections among First World nations and/or with Third World nations: "See how (First World cities) have implemented all this sustainability into their city and bring it back here, and see what we could do differently in Dunedin and start making change happen, and that could be part of the programme" (student).

While there was some consensus that a programme aimed at educating students about sustainability while overseas could be effective, there were clear conditions that would need to be followed regarding outcomes and structure. Another important question raised was whether a new programme needed to be created, or whether it would be more useful to improve existing youth expedition programmes by educating staff and students on sustainability and providing resources:

Interviewer: "Maybe it's better to look at existing programmes as opposed to begin a new programme and, with that type of programme [a new one], is it possible to justify the benefit or, you know, the contradiction of going overseas – is a net positive outcome justifiable?"

Participant F: "Until you run it, you wouldn't really know." [people nod]

Participant C: "And it would probably depend on who you obviously send over there and what prep you'd done before – depending what their background was and their knowledge and their interest ..."

Participant G: "... [and] how do you measure or not whether it's been successful?"

Suggestions for a programme included having an element based in nature, encouraging students to share their stories from the trip, and recognition that it is important but difficult to measure outcomes.

## 5. Structure of an Education Programme for Sustainability

There was a lot of discussion around the structure of such a programme. It was thought that a good starting platform might be created by offering students sound preparation and learning in advance of travel, and by having high entry criteria. It was suggested that “an educationalist” (an outdoor and tertiary educator) should facilitate such a programme. Academic leaders should integrate reflective practice into any programme, offering support and tools for students to adopt this approach with themselves and others. The location of the programme could be either in a developing or developed country, local or overseas – the choice of location would be driven by the agreed outcomes of the programme (the purpose for traveling). Travelling to a place in order to “be there,” rather than just passing through, would be an important result of travelling with a purpose. After the programme, it was seen as crucial to transfer the learning gained into everyday life; this could be achieved through follow-up sessions and/or mentoring: “Yeah, but most of the issue with most of those [outdoor education] programmes, and I think most of education, is the lack of follow-up; most things fall down because what we do is we run programmes and we run courses, and then we say goodbye, and then expect people to be able to transfer stuff over” (tertiary educator).

It was also noted that programmes designed for education, as opposed to profit, would best allow sustainability-focused learning outcomes to be met.

## 6. Outcomes of Such a Programme

Lastly, positive outcomes were seen as the driving force behind such a programme. There was general agreement that students should have a purpose for travel, rather than just travelling for the sake of it. Students should drive this process, and their ‘purpose’ could relate to a problem that they wanted to fix in their own community. This would further develop connections with their own place and community and help stimulate intrinsic motivation: “I think it’s, um, really good to get people involved in their local community, especially if you’re gonna be sending younger people over there [overseas], ‘cause more people need to be involved or know about what’s going on in their area” (tertiary educator).

It was agreed that having achievable, measurable outcomes was important, and could involve such diverse results as completing a project or driving legislative change. The goal of the facilitator is to inform the students. As one of the educators noted, “I’m an educationalist and my job is to lead people out of ignorance.”

## DISCUSSION

The aim of this study was to explore the views of educators, practitioners and students about sustainable student travel. The richness of the participants’ responses in the focus group justifies the decision to use this methodology to answer our research question. Despite the complexity of the topic, and its obvious contradictions, some clear ideas emerged about ways of educating students about sustainability through an overseas travel experience. Four key points were agreed. First, these ventures wouldn’t necessarily have to be new programmes, but could be adapted versions of existing ones. Second, such programmes wouldn’t necessarily have to be carried out overseas. Third, the destinations involved need not involve travel between First World and Third World nations, but could happen between nations on the same socio-economic scale. And, fourth, such programmes should be student-led and driven by student-oriented outcomes.

The findings of this study support the existing sustainable travel literature, which offers practitioners a very complex system to work within as well as ambiguities in terminology and various definitions and understandings

of sustainability. In regard to defining sustainability, the group agreed that environmental considerations are often added as an afterthought in planning travel. This echoes Rohweder and Virtanen (2009), who took an integrated and interconnected approach to sustainability and emphasise that ecological questions are not separate from economic, social and cultural issues. Like much of the literature, the focus group also stressed the importance of students having intrinsic motivation and purpose. An outdoor and tertiary educator from the group asserted that "if they're not intrinsically motivated, they'll do it [sustainable action], but there'll be no follow through afterwards," echoing Liang et al. (2015), who found that students' motivation was a key element in effective education about sustainability. The importance of purpose was also supported by Rohweder and Virtanen (2009), who refer to students having the ability for "envisioning a better future" as essential to actioning sustainability principles. If the purpose of travel is for physical activity, a more holistic approach can be communicated to students through questions such as: How does physical activity make a social and financial contribution to local communities? What would need to happen for your trip to have a positive impact on the environment? The focus group identified a positive purpose for travel as a non-negotiable structural element in justifying an overseas travel experience.

Resilience was another theme identified. According to McCool (2015), redefining sustainable tourism should involve an emphasis on creating greater resilience within communities. In the focus group, the subject of resilience was brought up several times:

How do you educate people to become less self-centred and have more positive resilience, and to be able to be in a position where they can think more outwards? And it doesn't mean that you become the martyr and that you look after everybody else in the world – what it means is that you are actually open to other points of view and that you are open to what's going on around you (outdoor and tertiary educator).

As we have seen, the contradictory nature of overseas travel and sustainability was also highlighted within this study. Hall & Kinnaird (1994) believe that travel to destinations "undertaken in fuel-hungry aeroplanes is in itself incompatible with sustainability" (quoted in Hunter & Shaw, 2007, p. 54, as cited in Boley, 2015). However, recent research has suggested that this is a narrowly focused approach that fails to consider a given destination's triple bottom line (environmental, economic and socio-cultural; Boley, 2015). Recognising that international travel is engrained in our society gives us an incentive to try and make it more sustainable. During the focus group, an outdoor and tertiary educator addressed this issue: "So it's about getting some balance ... if you're looking at an overseas experience which happens throughout the world, then maybe it's taking the best of the worst and saying, well, how can we [be more sustainable] if these trips are going to run [anyway]." Tourism is only projected to increase in terms of profits generated, numbers of people travelling and jobs created (World Travel and Tourism Council, 2015).

### **Education for sustainable travel: a new model**

Educators who accompany students on their travel experience are in a strong position to offer support, facilitate reflective practice and "direct their awareness towards ways their learning may be turned in the service of social transformation" (Liang et al., 2015). This can help students build an "empowerment bridge," transferring their personal change into impacts for the greater good of society (Liang et al., 2015). Approaching students as adult learners and applying teaching techniques such as allowing time to reflect and share; analysis of values; motivation for travel, linked to envisioning a better future; feeling challenged; and repeat travel as part of a student's biography have all been proven to deliver effective learning for students. Having a passionate, open and competent educator guide the students is an important element in fostering student growth and behavioural change. To help educators actively incorporate sustainability into an overseas travel experience, we offer the following recommendations: (i) Build a sustainability purpose into the travel experience, linked to the student's own vision of a better world; (ii) Attend to the sustainable and restorative purposes of travel (see Figure 2); and (iii) Implement a sound pedagogy before,

during and after the travel experience. Students should be encouraged to action sustainable practice behaviours and develop a mindset based on sustainability principles. This can be done by focusing on the 'sustainable' and 'restorative' pathways for travel summarised in Figure 2. This model has been adapted from Bill Reed's "Trajectory of Environmental Design" (2006), and defines and exemplifies the various 'stages' of travel, working from 'conventional' (poor examples of sustainable practice) through to 'regenerative' (best practice).

### **Developing a sustainable purpose**

When taking a group of students overseas, there should be a sustainability purpose attached to the journey – that is, it must be clear that the travel experience is not only about the physical activity planned, and is part of a greater purpose. Facilitating a reflective session for students, with leading questions to help them identify and agree on their sustainability purpose, is an important task. The pedagogy that should be applied for effective sustainability education pre, during and post trip needs to be deeply rooted in constructivist theory, experiential learning and transformational learning, and borrow ideas from education for sustainability. Students should be encouraged to work on long-term partnerships, either local or overseas, and to "build bridges" between different locations or physical activity institutions. This will also allow them to build "empowerment bridges," the ability to transform the personal change they have undergone into impacts for the greater good of society (Liang et al., 2015).

### **Pre-trip education**

This might involve learning about the culture and dominant religion (if any) of the host country, the political and social situation (past and present), and learning some elements of the language. This will prepare students for what they should take with them (for example, culturally appropriate clothing), inform their behaviour and begin to answer their questions about why the local people think and act as they do. Actions that meet baseline expectations for travelling sustainably include staying in locally owned and operated accommodation (homestays are a great options and good way to meet locals); eating local and in-season food; buying goods where the money will stay within the local economy; and choosing low-carbon transport options while in country (public transport versus private vehicles). Reflection sessions with the facilitator (an educationalist), as well as with other students, would be integrated throughout the programme and would open up space for values clarification and critical thinking.

### **Post-trip**

Following the trip, students would be encouraged to continue to build bridges with the culture they had experienced and to apply what they had learned or experienced to their own lives back home. This may be result in getting involved in a community group, supporting positive initiatives already underway, and/or being more vocal and action-orientated over causes they believe are worth standing up for. In terms of environmental sustainability, it is hoped that students will be more aware of resource wastage and their carbon emissions and choose to act at home to reduce their environmental footprint.

### **Strengths and limitations of the study**

As with any research project, this study had both strengths and limitations. The methods adopted – a qualitative focus group plus informal interviews – was deemed appropriate for the study. By following up the focus group with informal communication via email, a rich corpus of data was collected on the participants' views of education for

sustainable travel. Although not all the participants invited were able to attend, the focus group contained a wide range of experience, academic background and ages. The interview guide and methodology enabled the first author to include all participants by asking them questions, and to help them relax once the focus group commenced. One participant arrived late, meaning that they missed the introduction and were slower to become involved. However, they did end up contributing to the conversation. The first author was relatively inexperienced in terms of conducting research, and this was her first focus group. The second author, an experienced qualitative researcher, was involved throughout the data-collection and analysis process to provide support.

## CONCLUSION

This study was undertaken to explore the sustainable teaching outputs from overseas travel programmes for youth. The conclusion reached from this investigation is that educating about sustainability can be applied to an existing travel programme, or as part of a new programme, but only where certain parameters are followed. The study findings and model provide a roadmap for educators wishing to adapt an existing programme so that it is relevant to sport teams, school groups and others travelling to undertake physical activity programmes overseas. It was found that although some effective sustainability initiatives were already in place, there is scope to develop these further to create long-lasting behavioural change. Two courses of action were identified: (i) develop a new travel programme to test these theories or (ii) adapt an existing one. The latter was chosen as a focus in this paper; recommendations include clearer pedagogical practice before and after an overseas travel experience; developing a sustainability purpose; and following the 'sustainable' and 'restorative' guidelines for travel in Figure 2. Education for sustainability is a well-defined concept with an established pedagogy, and is considered by many scholars and organisations as "the optimal way to tackle contemporary global environmental, social, and economic problems" (Boyle et al., 2015, p. 253). Our investigation found that education 'for' sustainability is one strategy for effective teaching 'about' sustainability, and supports the contention of Boyle et al. (2015) that education for sustainability is an effective educational philosophy in empowering behavioural change in students and allowing them to critically reflect on their own values.

**Sarah Sellar** works at Otago Polytechnic. She teaches in the Institute of Sport and Adventure, lecturing on the Diploma in Outdoor Leadership, and is a sustainability advisor for the Sustainability Department. She holds a BA in environmental management, a Graduate Diploma in Tertiary Education and a Graduate Diploma in Sustainable Practice. She has travelled extensively and has led youth delegations overseas to South East Asia and Central America.

**Simon Middlemas** is a principal lecturer and research coordinator at the Otago Institute of Sport and Adventure at Otago Polytechnic. He completed a PhD in sport psychology and performance analysis in 2014, focused on the use of video feedback in the psychological preparation of elite youth football players and coaches. For the past decade, Simon has worked as a sport psychology consultant within elite and development sport, for the English Institute of Sport (EIS) and as a private consultant, with clients such as GB Swimming, GB Volleyball/Beach Volleyball, England Netball, the British Equestrian Federation and the English Football Association. He completed a Graduate Diploma

in Tertiary Education in 2015.

Correspondence to: Sarah Sellar, College Te Oha Ora, Sargood Centre, Otago Polytechnic, 40 Logan Park Drive, Dunedin 9016, New Zealand. Email: sarah.sellar@op.ac.nz

## REFERENCES

Barth, M. (2014). *Implementing Sustainability in Higher Education: Learning in an age of transformation*. Taylor and Francis, Florence.

Boyle, A., Wilson, E., & Dimmock, K. (2015). Transformative Education and Sustainable Tourism: The Influence of a Lecturer's Worldview, *Journal of Teaching in Travel & Tourism*, 15(3), 252-263.

Boyle, B. (2015). *To Travel or Not to Travel? Both Have Implications for Sustainable Tourism*. *Tourism planning and development*, 12 (2), 208 – 224.

CN Staff. (2014) Michelle Obama's reasons to study abroad - CNNPolitics.com. Retrieved from <http://edition.cnn.com/2014/03/25/politics/michelle-obama-study-abroad-interview/index.html>

ESD toolkit. (n.d.). *Introduction*. Retrieved from <http://www.esdtoolkit.org/discussion/default.htm>

Hall, D., Kinnaird, V. (1994). Ecotourism in Eastern Europe. In *Ecotourism: A Sustainable Option?* Eds Cater E, Lowman G (John Wiley, Chichester, Sussex) pp 111–136.

Honeyfield, J. & Fraser, C. (2013). *Goalposts*. Retrieved from <https://ako.aotearoa.ac.nz/ako-hub/ako-aotearoa-northern-hub/resources/pages/goalposts-professional-development-resource-new-tertiary-teachers-their-first>

Liang, K., Caton, K., and Hill, D. (2015). *Lessons from the Road: Travel, Lifewide Learning, and Higher Education*. *Journal of Teaching in Travel & Tourism*, (15) 4.

McCool, S., Butler, R., Buckley, R., Weaver, D. & Wheeler, B. (2015). Is the concept of sustainability utopian? Ideally perfect but hard to practice? In Singh, T.V. (Ed.), *Challenges in tourism research*. Bristol (UK), Buffalo (USA) and Toronto (Canada): Channel view publications.

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass

Moscardo, G. & Murphy, L. (2014). *There Is No Such Thing as Sustainable Tourism: Re-Conceptualizing Tourism as a Tool for Sustainability*. Retrieved from <http://www.mdpi.com/2071-1050/6/5/2538/htm> Packard, A. (2010). Sustainability in the NZ tertiary sector. Retrieved from <http://www.regeneration.org.nz/Sustainability-in-the-Tertiary-Sector.pdf>

Reed, B. (2006). *The Trajectory of Environmental Design*. Available from [http://www.integrativedesign.net/images/Trajectory\\_EnvironmentallyResponsibleDesign.pdf](http://www.integrativedesign.net/images/Trajectory_EnvironmentallyResponsibleDesign.pdf)

Rohweder, L. and Virtanen, A. (2009). Developing the model for learning for sustainable development in higher education, *Journal of Teacher Education for Sustainability*. 11(1), 31-42.

Teachers College - Columbia University. (n.d.). Jack Mezirow, *Who Transformed the Field of Adult Learning*, Dies at

91. Retrieved from <http://www.tc.columbia.edu/articles/2014/october/jack-mezirow-who-transformed-the-field-of-adult-learning-d/>

World Travel and Tourism Council. (2015). Economic Impact of Travel & Tourism 2015: Autumn Update, November 2015. Retrieved from [http://www.wttc.org/-/media/files/reports/economic%20impact%20research/economic%20impact\\_midyear%20update\\_161115%20\(2\).pdf](http://www.wttc.org/-/media/files/reports/economic%20impact%20research/economic%20impact_midyear%20update_161115%20(2).pdf)