Indicator development methodology for volunteer tourism in host communities: creating a low-cost, locally applicable, rapid assessment tool

Christopher A. Lupoli, Wayde C. Morse, Conner Bailey & John Schelhas

View supplementary material

Published online: 25 Feb 2015.

Submit your article to this journal

Article views: 181

View related articles

View Crossmark data

Routledge
Taylor & Francis Group

Indicator development methodology for volunteer tourism in host communities: creating a low-cost, locally applicable, rapid assessment tool

Christopher A. Lupoli[a]*, Wayde C. Morse[a], Conner Bailey[b] and John Schelhas[c]

[a]School of Forestry & Wildlife Sciences, Auburn University, Auburn, AL, USA; [b]Department of Agricultural Economics and Rural Sociology, Auburn University, Auburn, AL, USA; [c]USDA Forest Service, Athens, GA, USA

Two prominent critiques of volunteer tourism are that it is a top-down imposed form of development treating host communities as passive recipients of international aid, and that the impacts of volunteer tourism in host communities are not systematically evaluated. To address this we identified a pre-existing participatory methodology for assessing community sustainability (the compass of sustainability) and adapted it as a rapid low-cost indicator tool for volunteer tourism impact evaluation. We created and tested a development methodology that could be applied through local community workshops by local people and sending organizations within each unique host community, and repeated over time. Testing took place in five contrasting communities hosting volunteer tourism in Ecuador and Costa Rica. Each workshop generated and organized numerous indicators of community welfare, categorized into nature, economy, society and personal well-being. Interrelations were identified among the indicators to promote a systemic understanding of community well-being. Indicators were prioritized and strategies for measuring impacts were discussed to encourage the establishment of accomplishable goals. Evaluation of the compass method as a tool for community participation in indicator development is discussed as a potential facilitator for local voices and the construction of "third spaces" in volunteer tourism.

Keywords: volunteer tourism; indicators; participatory planning; tourism impacts; community participation

Introduction

It is becoming increasingly popular to combine travel with volunteer work in humanitarian aid, community development or environmental conservation projects. This type of travel, often referred to as "volunteer tourism", is a rapidly growing tourism sector (Butcher & Smith, 2010; McGehee, 2014; Tomazos & Butler, 2009; Tourism Research and Marketing, 2008). Volunteer tourism is defined by Wearing (2001) as:

a type of alternative tourism in which tourists volunteer in an organized way to undertake holidays that might involve aiding or alleviating the material poverty of some groups in society, the restoration of certain environments or research into aspects of society or environment.

One of the foundations of volunteer tourism is that it generates positive impacts in host communities of less-developed countries and fosters a mutually beneficial

---

relationship between hosts and guests (Butcher & Smith, 2010; McIntosh & Zahra, 2007; Sin, 2009, 2010). Wearing (2001) similarly asserts that the fundamental purpose of volunteer tourism is to promote international community development, environmental conservation and scientific research. However, commentaries on the local impacts of volunteer tourism rarely include host community voices (Fee & Mdee, 2011; Lyons, Hanley, Wearing, & Neil, 2012; Mdee & Emmott, 2008; Tourism Research and Marketing, 2008). Little research explores how to achieve mutual benefit between volunteer tourists and host communities and the perceptions and attitudes of community members exposed to volunteer tourists (Benson & Wearing, 2012; Gray & Campbell, 2007; McGehee, 2012; McGehee & Andereck, 2009; McIntosh & Zahra, 2007; Raymond, 2008; Sin, 2010). Numerous scholars suggest that additional research must be conducted to assess the impacts of volunteer tourism in host communities and the perspectives of host community members (Halpenny & Cassie, 2003; Lyons, 2003; Raymond, 2011; Sin, 2009; Wearing, 2004). Benson and Wearing (2012) recently concluded that mechanisms have not been developed to assess the impacts that volunteer tourists have in host communities: current evaluations are often anecdotal.

Any initiative to evaluate the local impacts of volunteer tourism must be cognizant of the strong critiques of volunteer tourism and its local impacts: volunteer tourism has been criticized as reinforcing the dominant hegemony and being a disempowering and top-down form of Western-imposed colonialism and development processes that portrays host communities are passive recipients of aid (Benson & Henderson, 2011; Cheong & Miller, 2000; Guttentag, 2011; Palacios, 2010; Simpson, 2004; Vodopivek & Jaffe, 2011). Simpson (2004) argues that volunteer tourism follows a top-down process which externalizes the course of development and places it in the hands of foreign organizations and mostly unskilled volunteer laborers, Eddins (2013) and Palacios (2010) assert that volunteer tourism pertains to a line of Western domination in the development process, and Devereux (2008) argues that volunteer tourism can be a form of imperialism and paternalistic charity while serving as an individual's quest for career and personal development.

Such severe critiques of volunteer tourism are not generalizable to all organizations and programs, but nevertheless provide insights for a future agenda of impact evaluation. Many development practitioners now promote a bottom-up and participatory approach to development (Simpson, 2004). Within the realm of tourism many argue for making host communities an integral part of the planning process and promoting active citizen participation to reduce dependency, obtain community support, generate appropriate decisions, increase motivation and acceptance of tourism projects, and link local benefits to community needs (Cole, 2006; Hitchcock, 1993; Sin, 2009).

Wearing and Wearing (2006) help frame this new direction of research focused on the three pillars of volunteer tourism including the tourists, the host community and the sending organization. They identify how a "third space" of host community interactions may be developed, "When the destination communities' views are considered and given some credence there are possibilities for alternate programs of tourism and counter-discourse to hegemonic modes of interaction" (p. 147). They suggest the importance of incorporating an element of bottom-up development and empowering host communities through their direct participation in planning and evaluating volunteer tourism. A recent study explored third spaces using a community participatory approach with a community capital perspective to understand volunteer tourism's impacts on host communities (Zahra & McGehee, 2013). They identify impacts across all of the capital categories, identify two new capitals, and examined how third space decommodified experiences were developed when all three stakeholders worked together.

This paucity of research on the local impacts of volunteer tourism and third space development justifies this paper's new research agenda to address it. There is a need for methodologies that acquire host community input in identifying and evaluating the local impacts of volunteer tourism, and methodologies that follow a participatory process to facilitate citizen engagement. Indicators and indicator development have been identified as critical elements to inform decision-makers and planners about "social trends and changes in resources related to ecological health and quality of life in host communities" (Choi & Sirakaya, 2006; Sirakaya, Jamal, & Choi, 2001). In their review and analysis, Sirkaya et al. (2001) highlight the critical role of the inclusion of local stakeholders in the indicator development process. Strickland-Munro and others (2010) also note that poorly selected indicators can lead to a misrepresentation of impacts suggesting that local perspectives are critical. This is a shift "away from the centrality of the tourist and towards the central role of the community" (Wearing & McGehee, 2013). Such a methodology must also involve the participation of volunteer tourism organizations and other stakeholders that make volunteer tourism projects possible and because "discrepancies between host communities and sending organizations can result in friction between host communities and volunteer tourists" (Zahra & McGehee, 2013). This perspective recognizes that volunteer tourism organizations can be sources "for positive sociocultural change or facilitators of neo-colonialism and dependency" (McGehee, 2012). Furthermore, a participatory method should be repeatable as both the life cycle of tourism and the host community context (Strickland-Munro, Allison, & Moore, 2010) and local's attitudes and preferences change over time (Gursoy, Chi, & Dryer, 2009). Finally, any participatory method must be practical and address the limited time, money and resources that volunteer tourism organizations and host communities themselves have available for conducting such an evaluation.

Research purpose

This research study responds to the need for a rapid participatory methodology to identify and assess the impacts of volunteer tourism in host communities. It identifies and tests a methodology that directly engages host community members as collaborators in the evaluation process. It is also designed to match-up with an indicator development process for sending organizations. Based on early scoping interviews with sending organizations, it was determined that a rapid assessment through a short workshop and follow-up is something that communities and sending organizations would both be interested, willing and able to conduct on a repeated basis within each destination community.

The methodology presented here for community participation is part of a larger project that also elicited the indicators that volunteer tourist sending organizations identified as important and useful for monitoring in host communities (Lupoli, Morse, Bailey, & Schelhas, 2014). Within this project the indicators developed from the sending organizations are compared to those developed in the communities. This is seen as a starting point for continued dialogue to develop common indicators of the impacts of volunteer tourism in the host communities from both perspectives. The design enables sending organizations to become catalysts of positive change, to empower communities to directly participate in planning and evaluating volunteer tourism and to facilitate third space development. Together the hosts and the sending organizations can begin to develop third spaces for volunteer tourists and community members by discussing the important indicators that each has developed.

The compass of sustainability by AtKisson (2011), an existing participatory methodology for evaluating community well-being and sustainability, was adapted as a

framework for this research. This methodology is designed to solicit the input of diverse stakeholders to develop indicators of community well-being that can be monitored to assess community sustainability. It was tested in five community workshops in Ecuador and Costa Rica. Analyses of the indicators derived in the workshops and the results of workshop activities are used: (1) to assess the appropriateness of the methodology for volunteer tourism in small rural communities; (2) to generate and categorize an extensive list of potential indicators for monitoring the community impacts of volunteer tourism; (3) to examine the effectiveness of the selected methodology as an organizational scheme for indicators; and (4) to refine the methodology as an instrument useful in guiding future impact evaluations. Strengths and weaknesses of the methodology, and potential future improvement and implementation are discussed. It is a contribution to the emerging field of participatory indicator development and local impact assessment for volunteer tourism.

Selecting a framework and methodology for indicator development

Scholars increasingly suggest the use of indirect measures, or indicators, as a strategy for assessing the varied community impacts of tourism and promoting sustainable development through tourism (Budruk & Phillips, 2011; Hughes, 2002; Miller & Twining-Ward, 2005; Roberts & Tribe, 2008; World Tourism Organization [WTO], 2004). The WTO (2004, p. 8) defines indicators as "measures of the existence or severity of current issues, signals of upcoming situations or problems, measures of risk and potential need for action, and means to identify and measure the results of our actions". According to Miller and Twining-Ward (2005), indicators provide an integrated view of tourism's relationship with the economy, environment, and society; they also serve to assess trends and indicate if a situation is moving in a sustainable direction.

Numerous indicator development frameworks exist to assess phenomena such as community well-being, community sustainability, sustainable development, and sustainable tourism. All are applicable to this research due to existing parallels between these phenomena and volunteer tourism, such as poverty alleviation, economic opportunity, increasing standard of living, and natural resource conservation. Examples include the triple bottom line framework of sustainability, incorporating economy, environment and socio-cultural aspects (Roberts & Tribe, 2008; Wood, 2004); the three systems of sustainable development (human, support, and natural systems) by Bossel (2001); the human and social capital and livelihoods approach of Njuki et al. (2008); the compass of sustainability by AtKisson (2011) that frames community sustainability as a system of nature, society, well-being and economy; and a framework by Meadows (2008) that focuses on a hierarchical triangle with four levels consisting of natural capital, built and human capital, human and social capital, with well-being at the top and as the end goal.

Having a clear and logical organizational framework can avoid long lists of unrelated indicators and reduce arbitrariness in the indicator development process (Miller & Twining-Ward, 2005; Reed et al., 2005). However, categorizing indicators thematically can disregard interrelations and causal chains between different systems (Meadows, 2008; Schianetz & Kavanagh, 2008). Meadows (2008) adds that thematic methodologies of indicator development are easily used in a bottom-up approach but that this approach must be accompanied by a systems approach to recognize such interrelations between systems. Many scholars, therefore, suggest that a framework for indicator development must be holistic and recognize the interconnectivity in the tourist system, including the environmental, economic and socio-cultural attributes of the destination (Bossell, 1999; Miller & Twining-Ward, 2005; Roberts & Tribe, 2008).

A myriad of frameworks for developing and organizing indicators of community well-being were considered for application in this research. Given the increasing importance placed on citizen participation and bottom-up development processes, the incorporation of diverse stakeholders, and the interrelations of the environmental, economic and socio-cultural factors of the tourist destination, the "compass of sustainability" framework was chosen. It was created by AtKisson (2011) for the purpose of guiding the development of indicators to assess sustainable community development.

The "compass of sustainability" (hereafter referred to as "the compass") framework incorporates the diverse impacts that development may have on a community, divided into four categories: nature (N), which refers to the "underlying health and sustainable management of key ecosystems, bio-geo-physical cycles and natural resources"; economy (E), which "refers to all the ways human beings work with nature, with knowledge and with each other to produce the things and services that they need or want": society (S), which refers to "the social systems, structures and institutions that are driven by people acting collectively": and well-being (W), which "focuses on the individual, as well as on the smaller webs of intimate relationships that are crucial to health and happiness" (AtKisson, 2011, pp. 145−146). These represent the four compass points and are intended to all be of equal value and equally considered. Figure 1 visually illustrates the four compass points in this framework.

The compass framework was chosen to frame this study and the community workshops for several reasons. It represents a holistic and systems perspective of the environmental, economic, social and personal well-being aspects of a community. It is also a highly participatory methodology that focuses on soliciting information from diverse stakeholders and community members, as well as directly involving community members in developing and monitoring indicators. Importantly, the compass framework is amenable to use as a rapid assessment tool in a short workshop. In this way, the compass provides an organizational scheme for indicators and promotes bottom-up process but maintains a systems perspective on indicator development.

The compass framework is also highly versatile and has been applied and adapted across a diversity of environments and circumstances though not published in the reviewed literature. For this research study, the compass framework was modified to fit a volunteer tourism model and the context of volunteer tourism in rural Latin America.
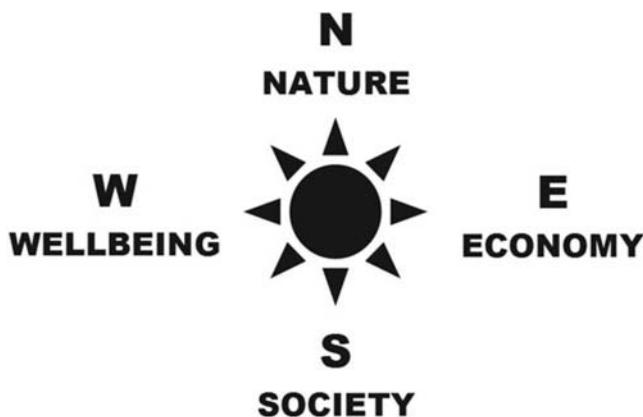
Figure 1.   The compass of sustainability.
Source: AtKisson Inc.

Literature on the compass framework (AtKisson, 2011) includes a method for conducting community workshops based on the four directions of the compass. It organizes discussion and an indicator development process around the four elements of community sustainability, represented as the four compass points. It also focuses on incorporating diverse individuals into group discussions to promote information-sharing and the expression of diverse viewpoints while also reaching common ground and identifying potential opportunities for change. This process was adapted to the context of the rural communities in Ecuador and Costa Rica where workshops were held.

Methods

A multiple case study design was employed. According to Yin (2009), this follows a replication design in which the same procedure (in this case, the compass methodology) is tested in several unique host communities. Due to the high degree of variability among communities and diverse cultural, social, environmental, economic and political factors, it would be difficult to control for certain community characteristics to predict similar or contrasting results. It is also unlikely that the results or conclusions from the five communities in this multiple case study can be extrapolated to other volunteer tourism host communities. For this reason, the multiple case study approach focuses on refining and testing a methodology (the compass) as a rapid, low-cost, assessment tool to identify and assess the diverse impacts that volunteer tourism may have in a host community. This sets the foundation for a community or sending organization to form a plan of action and have effective tools to assess and monitor the ongoing community impacts of their volunteer tourism program(s). Once tested and refined in five unique host communities, this methodology can then be employed in many other communities that host volunteer tourism projects by the communities themselves and/or in collaboration with the sending organization.

Two case studies were conducted in Ecuador and three in Costa Rica. Each case study was conducted in a community that hosts a volunteer tourism program and consisted of a one-day community workshop to acquire input from numerous stakeholders within the community and other stakeholders involved in the volunteer tourism program.

Effort was made to identify a diversity of communities and approaches to volunteer tourism to test the compass methodology in five unique case studies. Some specific considerations were the inclusion of the following elements: (1) indigenous and mestizo (non-indigenous) communities; (2) programs that represent diverse types of volunteer tourism activities; (3) communities that work with volunteer tourism organizations located outside the host country; (4) communities that work with volunteer tourism organizations located within the host country; (5) communities that work independently of other volunteer tourist recruiting organizations; and (6) volunteer tourism organizations of various sizes (<100 volunteers per year, 100−250 volunteers per year, and >250 volunteers per year).

The communities were selected based on contacts formed during the application of an Internet questionnaire and telephone interviews conducted from 2011 to 2012, all of which comprise an earlier phase of this research study (Lupoli, 2013). The questionnaire dealt with many aspects of volunteer tourism and was sent to representatives of volunteer tourism organizations based in the USA, Canada, UK, Australia, New Zealand and numerous Latin American countries (see Lupoli, 2013). A subset of questionnaire respondents was later interviewed over the telephone. Several of the questionnaire

respondents and interviewees expressed interest in being selected as case studies for this research project.

Only countries in Latin America were considered for the case studies because this study has an international focus and the authors of this paper have extensive experience working in Latin America. The questionnaire revealed that Costa Rica, Peru and Ecuador are the most popular volunteer tourism destinations in Latin America. Numerous communities and projects in these countries were considered and then narrowed down to Costa Rica and Ecuador. Travel logistics and costs made Costa Rica and Ecuador ideal destinations for this case study research.

Case study profiles

Community #1 is an indigenous community located in the mountains of northern Ecuador. It receives a small number of volunteer tourists per year (<10) who generally stay for several months at a time. The volunteer tourists are recruited by an Ecuadorian organization that recruits between 100 and 250 volunteers per year for placement in one of several host communities. The volunteer tourists in community #1 work primarily in education, natural resource conservation and agriculture projects alongside community members.

Community #2 is an indigenous community located in the Amazonian region of southern Ecuador. It receives $50-100$ volunteer tourists per year and the volunteers generally stay for short periods of time ($1-2$ weeks). The community recruits its own volunteer tourists through its website and is not dependent on any national or international organization for volunteer recruitment. Volunteers engage in daily community activities such as agriculture, gathering forest products and household duties, and also collaborate with the local school.

Community #3 is a non-indigenous community on Costa Rica's Atlantic coast. It receives a large number of volunteer tourists seasonally (during turtle nesting season), many of which are recruited by a Costa Rican organization that recruits under 250 international volunteers per year for placement in one of several host communities. Some volunteer tourists in this community stay for a short amount of time ($1-2$ weeks) and others stay several months as research assistants. Volunteer activities are almost exclusively oriented towards sea turtle conservation, monitoring and research.

Community #4 is a non-indigenous community located near Costa Rica's Pacific coast. Many of the volunteers in this community are initially recruited by a large volunteer tourism company based in the UK that recruits $250-500$ volunteers per year for projects in numerous countries. This company collaborates with a Spanish language school in Costa Rica to provide its volunteer recruits with an experience in Costa Rica that incorporates language study and volunteer service. Volunteer stays are generally short in community #4, lasting from one to several weeks. Volunteer activities are diverse and include work with an animal rescue center, agriculture, and education.

Community #5 is a non-indigenous community located in Costa Rica's mountainous interior. It receives volunteer tourists who are recruited by a very large international volunteer tourism organization based in the USA that recruits over 2000 volunteers per year for projects in numerous countries. Activities and trip logistics for volunteer tourists in community #5 are coordinated by a domestic tour company. Volunteer stays are short, lasting from one to several weeks. Volunteer activities are diverse and focus on recycling, natural resource conservation, infrastructure improvement and education.

Across all the communities, the typical volunteer tourists were from northern Europe or the USA, and relatively few had Spanish language skills.

Workshop procedure

The primary author of this paper, a fluent Spanish speaker, served as facilitator in all community workshops. The workshops were held during August and September 2012. Before arrival in each community, one or more local contacts were established (generally local coordinators) and were made aware of the purpose and details of the workshop. Each local contact was responsible for recruiting approximately 12 stakeholders to participate in the workshop and for arranging other necessary logistics. A start list of community member workshop participant profile suggestions was given to the local contact including descriptions such as: someone who directly works with the volunteer tourists, someone who does not have connections to the volunteer tourist project, teacher, men, women, etc. They were asked to use these profiles to form a diverse group within the community.

Workshops ranged in size from 8 to 21 participants; most participants were host community members who were involved in volunteer tourism in various ways, while some participants represented external volunteer tourism organizations or other entities that collaborate with volunteer tourism in the community, such as nearby schools, health clinics, NGOs and government offices. The workshops, conducted in Spanish, lasted an average of 4−5 hours each. They were simple, uncomplicated and informal events, held in local community buildings or schools, skillfully organized to encourage participation, and ensure relevance to the community and to the aims of the research.

The workshop began with an icebreaker activity in which each participant presented him/herself and his/her involvement with volunteer tourism. The workshop facilitator then presented the main points and purpose of the workshop: (1) to establish the desires and priorities of the community; (2) to discuss the diverse local impacts of volunteer tourism in the community; (3) to develop a list of impacts that are of high priority to the community; (4) to identify strategies for evaluating or measuring the high-priority impacts in order to establish future goals; and (5) to establish a path for the future of volunteer tourism in the community.

The creation of a long-term vision for the destination was included in the workshop procedure (point 1 in above paragraph) as a recommendation by the WTO (2004) for indicator development. This participatory activity is designed to define what the stakeholders wish to accomplish with respect to tourism in general, and helps determine what is important for the destination. To accomplish this first goal of the workshop, the group was presented with a large sheet of paper with the heading: *Community Vision*. The facilitator clarified the meaning of this term and presented to the participants the incomplete statement: *Through volunteer tourism, we hope to* _____ (translated from Spanish). Participants then brainstormed numerous ideas to fill in the blank. All participants were encouraged to present ideas. The purpose of this activity was to establish a set of community goals which could later serve as a point of reference to understand if and how volunteer tourism could help accomplish such goals, as well as to see if the workshop revealed new or underlying community priorities not present in the initial visioning exercise.

To organize the diverse impacts of volunteer tourism in the community, the compass framework was used. While the English version of the compass methodology uses the cardinal points (N, E, S, W) for differentiating indicators into four unique categories (nature, economy, society, well-being), this presented an obstacle when translated into Spanish. *Well-being* is translated as *bienestar* in Spanish, while the cardinal point *west* is translated as *oeste*. As the "O" of *oeste* does not match the "B" of *bienestar*, this element of the compass was modified. The term *oportunidades* (opportunities) was used because

it matches the "O" of *oeste*. The facilitator briefly explained the connection between the concepts of "opportunity" and "well-being". The other compass points did not present difficulty in the Spanish translation.

The compass framework was visually presented and explained to the participants. The participants brainstormed one or two examples of local volunteer tourism impacts for each compass point to ensure their comprehension of the compass framework. The participants then randomly divided into four small groups (approximately three participants per group) and the facilitator assigned one compass point to each group. Each group then worked together to brainstorm a list of the impacts that have been observed (or that they wish to achieve) as a result of volunteer tourism, focusing only on those that correspond to their compass point. Once finished, the groups placed their papers on the wall to form a visual compass and took turns presenting their ideas to the audience. The term "impacts" was used instead of "indicators" in the workshops because "impacts" is a more easily understandable term and can be understood as positive or negative in nature. The translation of "impacts" was combined with the term measures to promote the same concept as indicators. These terms were confirmed with a number of native Spanish speakers as preferred. These two terms are used interchangeably in this paper although literature on the compass methodology uses the term "indicator".

The compass methodology emphasizes the linkages between nature, economy, society and personal well-being, in particular how one impact in one of these categories can also have secondary impacts in the community that may correspond to other compass categories. To demonstrate this, two volunteer participants used pieces of string and tape to physically connect indicators on different points on the compass that are causally linked. Participants in the audience provided ideas on potential linkages between different indicators while the two volunteers connected them. This resulted in the beginning stages of a "systems map" (see Figure 3). This exercise allowed participants to see some of the leverage points in the system, which indicate areas that are causally linked to many other points and represent places to induce future changes.

To prioritize the numerous indicators that participants had identified and placed onto the compass, each participant received three stickers in four different colors (12 stickers per person). Each person then placed stickers on the three most important or desired indicators (according to his/her perspective) in each compass category. The string linkages may have helped participants to visually identify key leverage points and thus prioritize certain indicators in the voting process. The number of stickers placed onto each indicator was summed and participants were able to visualize identify the highest priority (most voted) indicators in each compass point.

The facilitator spoke about the importance of establishing community goals that can be achieved through volunteer tourism, and about the importance of being able to evaluate or measure the desired impacts of volunteer tourism. In this way, the community will be able to assess in the future whether or not such goals are being accomplished. The facilitator presented on a paper the most important impact from each compass category (as identified from the sticker count) and the participants brainstormed ideas on how each impact could be measured or evaluated in the future. This activity helped participants to think about how desired impacts could be assessed in the future, and also to think about the challenges present in assessing some impacts that cannot be easily quantified. The facilitator clarified that the results of the workshop would be used to produce a useful tool for developing indicators of the environmental, economic, social, and personal well-being impacts of volunteer tourism, with the goal that organizations and host communities collaborate in measuring and monitoring the impacts.

To conclude the workshop, the facilitator solicited feedback from participants regarding the success of the workshop and suggestions for future improvement. Two distinct strategies were tested by the facilitator to accomplish this. In initial workshops the evaluations were conducted orally as a group. In later workshops the facilitator experimented with a new technique: providing participants with a large piece of paper on the wall and markers to write individual comments in a more confidential manner.

Data analysis

All workshop data in written form (posters, indicators on the compass) were transcribed immediately after the workshop. Indicators such as supply of instructional materials and level of cultural exchange derived in the five workshops were summed (166 total indicators) and then coded into emergent thematic categories. Eighteen unique indicator themes were developed. A diversity of indicators is represented within each indicator theme and each theme is not mutually exclusive as some indicators could have been placed into more than one theme. In most cases the most relevant theme was chosen. A few indicators contained multiple ideas that corresponded to different themes. For this reason, five indicators were coded into two different themes.

For each community compass, several calculations were made: (1) the number of indicators on the compass that corresponded to each indicator theme; (2) the number of stickers (votes) received by each indicator theme (which represents a summation of sticker counts for all indicators of each theme on the compass); (3) the number of times that each indicator was connected to another indicator on the compass by the concept map; and (4) the average number of stickers that each indicator theme received per participant (achieved by dividing the total sticker count of each indicator theme by the number of workshop participants that participated in the sticker exercise). This final calculation allowed the data on sticker counts to be summed among all five workshops without being biased by the number of participants in each workshop.

The community vision statements from all five workshops were joined and coded to identify frequently occurring themes. The same themes used from the indicator list were applied to code the vision statements. One additional code (growth in tourism) was added because it did not occur directly in the indicator list.

Results

Community visions

Figure 2 represents the themes present in the community vision statements derived from the five workshops. Community development/organization and natural resource management were the most prevalent themes among vision statements in terms of the number of occurrences (seven occurrences each). However, community development/organization was only present in three community vision statements while natural resource management was only present in two community vision statements (indicated by the shaded bars). Education was almost as prevalent among all communities (six occurrences) but this theme was also present in all five community vision statements. Table 1 provides some examples of the coding process for community vision statements (translated from Spanish).
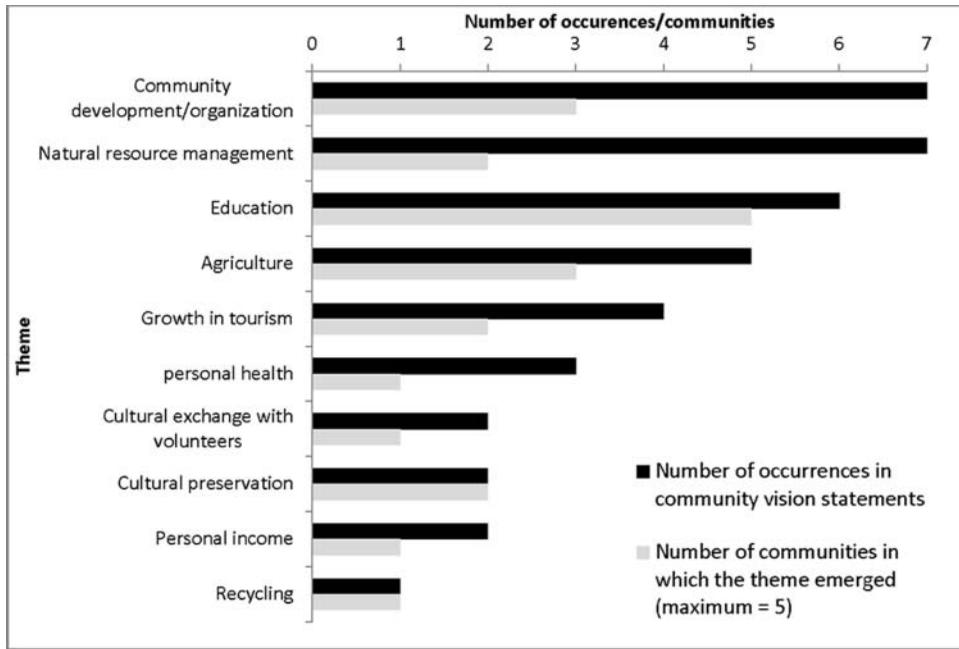
Figure 2.   Themes present in community vision statements.

Indicator development

Figure 3 represents a summation of all indicators derived in the five workshops, coded into 18 themes. Themes are organized in order of total indicator count, from top to bottom. Within each theme (horizontal bar), the number of its indicators that correspond to each compass point is represented to visually gauge how each indicator theme was distributed among the compass points.

Table 1.   Examples of categorization of community vision statements into themes.

| Theme	Through volunteer tourism, we hope to...
Community development/organization	...involve the community.
	...beautify the community.
	...improve infrastructure in the community.
	...produce more interpretive signs in the community.
Natural resource management	...maintain biodiversity.
	...protect the beach.
	...improve the turtle population.
	...motivate communities to conserve the environment.
Education	...create a center for language instruction.
	...change the mentality of community members.
	...fortify the educational system.
	...provide training for community members.
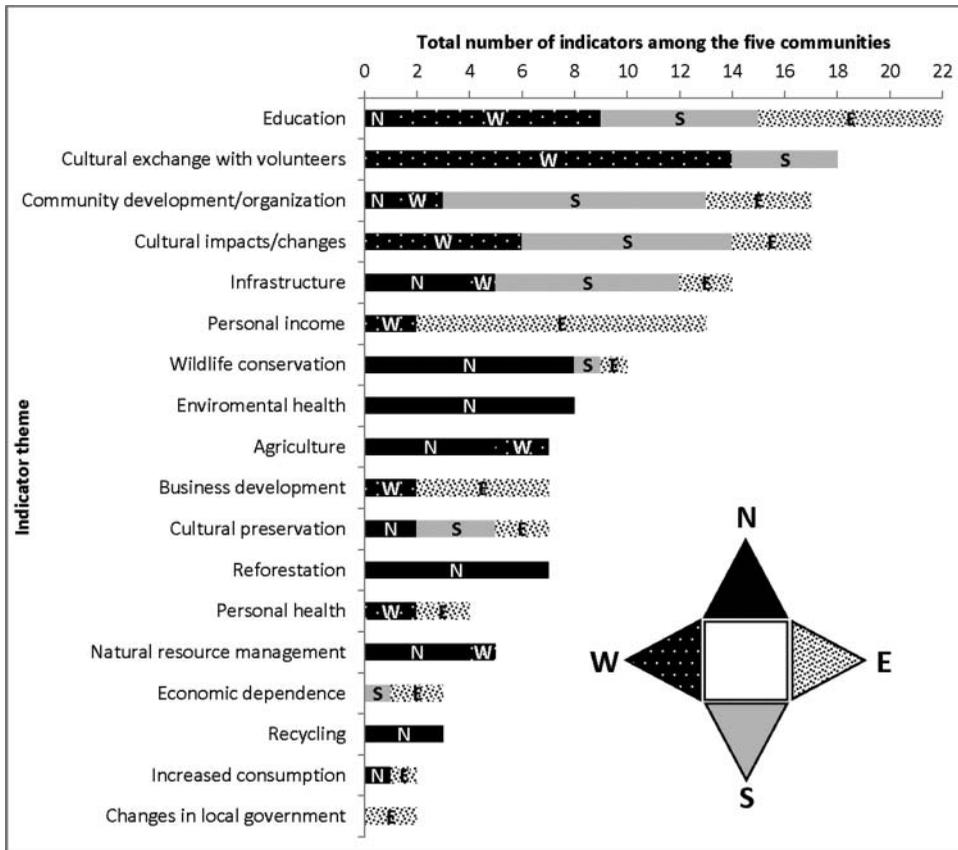
Figure 3.   Summation of workshop-derived indicators by theme/compass point.

The most prevalent theme was education, comprising 22 indicators. All four compass points are represented in this theme, though mostly E (economy), S (society), and W (well-being). Cultural exchange with volunteers is the second most predominant theme, comprising 18 indicators. It is much less evenly distributed along the compass, with most of the indicators in the W (well-being) compass point and a small number in S (society). Other prevalent themes such as community development/organization, cultural impacts/changes and infrastructure are slightly more evenly distributed along the compass. Some indicators such as environmental health and reforestation were exclusively categorized into the N (nature) compass point.

Table 2 illustrates some examples of the indicator coding process. The diversity among indicators within each theme can be appreciated, as well as the unifying elements among the indicators in each theme. A complete list of all indicators (translated from Spanish) and their corresponding thematic categories can be found in Lupoli (2013) and as Supplementary Data to the online version of this paper.

Figure 4 shows the average number of times that each indicator theme received a sticker vote by a workshop participant. To calculate this, the total number of sticker votes for each indicator theme was divided by the number of workshop participants. These five values (for the five communities) were then averaged together, representing a summation of all five case studies.

Table 2.   Examples of indicator thematic categories.

Theme	Example indicators
Education	Supplying instructional materials
	Training for people who have not had the opportunity to go to school
	Educational exchanges and scholarships
	Learning English
Cultural exchange with volunteers	Appreciation of cultures; cultural exchange
	Teaching of dance
	Learning about the culture of the volunteers
	Training/socialization among volunteers and locals (sports, soccer)
Community development/ organization	Improving the community (infrastructure, sanitation, education)
	Need to create a committee to plan volunteer tourism
	Community unity (more community wide events)
	Creating a social fund for the community

The indicator data attained in each workshop present three unique but correlated potential calculations to illustrate how each group of participants prioritized certain indicator themes. This consists of: (1) the number of times a theme appeared on the compass; (2) the number of votes (stickers) received for each indicator theme; and (3) the number
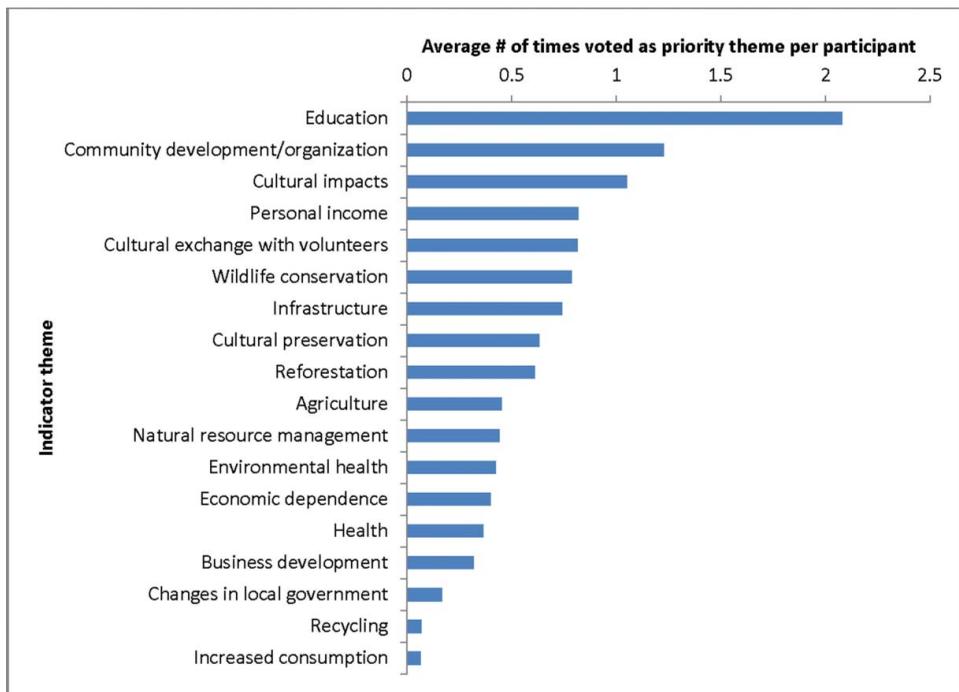

Figure 4.   Indicator theme prioritization by participant.

Table 3.   Three forms of calculating the importance of indicator themes.

	Community #1		
Indicator theme	Number of mentions	Number of votes (stickers)	Number of connections
Education	7	38	7
Cultural impacts	4	19	4
Agriculture	4	15	5
Health	1	10	2
Environmental health	2	8	1
Cultural preservation	1	8	1
Reforestation	1	9	0
Personal income	2	5	1
Wildlife conservation	1	4	1
Business development	2	1	2
Community development/organization	2	3	0
Cultural exchange with volunteers	3	1	1
Natural resource management	1	0	0
Recycling	1	0	0

of times that an indicator of a particular theme is connected to another indicator on the concept map. Table 3 provides an example of how this was done for one of the five case study communities. The most highly prioritized theme (education) received the highest number of mentions, highest number of votes, and had the highest number of connections on the concept map. Moving towards indicators of lower priority (from top to bottom in the table), the values in all three columns show a general pattern of decrease.

Although the aforementioned Figures 2−4 suggest general patterns among communities, there is a substantial amount of variation in indicator prioritization among communities. For example, Figure 3 illustrates the number of stickers (votes) achieved by the top three overall indicator themes from Figure 4 (education, community development/organization and cultural impacts) on a per community basis. Education is overall the most popular theme but varies greatly in importance among the communities. Community development/organization and cultural impacts also vary substantially in the degree to which they are prioritized among the five communities.

Discussion

Lessons learned from the data

The compass methodology functioned as a framework to develop and organize indicators of the impacts of volunteer tourism in the five host communities that comprise this multiple case study. The compass methodology also facilitated prioritization of the indicators from the perspective of diverse host community stakeholders.

Participants were able to complete the workshop within an afternoon providing a significant amount of information on indicators, how they were linked in a system, and how they ranked among the participants. Additionally, the mix of preferred indicators was not the same across the five communities indicating that the methodology was sensitive

enough to identify these differences. This is critical: selecting community appropriate indicators is essential for accurately measuring volunteer tourism's impacts in these different contexts (Mascarenhas et al. 2010; Strickland-Munro et al. 2010). Finally, feedback on the quick and simple method was that participants were both appreciative of the opportunity to give input and comfortable with the format, suggesting that they would be willing to do it again in the future.

Education was a prevalent indicator theme in the data from these communities: more indicators relate to education than any other theme and education was present in all five community vision statements. This suggests that the theme of education is a priority for all five host communities. Vision statements also suggest that some communities are heavily oriented towards the themes of community development/organization and natural resource management.

Personal income was also expected to be a prevalent theme due to the significant economic impacts of volunteer tourism. However, only one community vision statement had two mentions of personal income, while this theme was not present in the other four community vision statements. It was also not among the most frequently mentioned indicator themes and rated lower than social/cultural indicator themes. This may be due to the personal nature of this theme, while the community vision exercise is a discussion on community-level impacts which may de-emphasize personal impacts. Similarly, participants may also have been reluctant to admit that personal income was a priority. As personal income ranks higher in Figure 4 (sticker votes) than Figure 3 (number of mentions), it is possible that participants place a high value on this theme but are less reluctant to express it publicly.

Three other popular indicator themes (cultural exchange with volunteers, community development/organization and cultural impacts/changes) indicate a high priority placed on the socio-cultural and communal impacts of volunteer tourism. The cultural exchange items were frequently located within the well-being category of the compass framework. The cultural exchange indicators and language have been found by others as critical for third space development suggesting that including this new category has tangible benefits (Palacios, 2010; Zahra & McGehee, 2013). This suggests that host communities may value these indirect impacts of volunteer tourism more so than the direct impacts of some popular volunteer activities, such as infrastructure development and environmental conservation. Such activities are still important though, as a large amount of indicators related to categories such as "infrastructure" and "wildlife conservation".

These results propose a broader conclusion: the responses of many workshop participants suggest that they may value less tangible impacts (such as education and cultural exchange) more so than impacts that are more visible, measurable and tangible, such as infrastructure development and personal monetary income. Likewise, the differing results between Figures 2 and 3 are indicative of one of the advantages of the compass methodology: it forces participants to see impacts in four unique categories. The community vision exercise was conducted before the presentation of the compass and did not require that participants consider the personal and economic impacts of volunteer tourism. This may explain the existence of some economic indicators (such as income) and personal well-being indicators (such as teaching English) that were nearly or completely absent from community vision statements.

One of the strengths of the systems exercise (connecting participant developed indicators with strings) within the compass methodology is that it reinforces the concept of an integrated system and the interconnectedness of all indicators. Figure 3 demonstrates that several of the indicator themes represent three or four compass points. It is therefore

evident that workshop participants saw the ramifications of such impacts on several or all points of the compass. For example, indicators related to education and community development/organization represent all four compass categories, particularly economy, society and well-being. Other themes such as personal income, wildlife conservation, environmental health and reforestation were strongly linked to one compass point, such as economy or nature. This suggests that future workshops may focus on stressing the ways in which such indicators can also have unforeseen impacts in other compass categories. The second most popular theme (cultural exchange with volunteers) is primarily represented on the compass point of "personal well-being". This suggests that many workshop participants highly value the cultural exchange they have with volunteers and that this is a positive contribution to their lives.

This paper presents two approaches to identifying prevalent indicator themes: an overall count of the number of times that each theme was represented on a community compass (shown in Figure 3), and the average number of times than each indicator theme received a sticker from a workshop participant (shown in Figure 4). In many cases the latter strategy reinforces the findings of the first strategy. Education is a top priority in both cases: it was the most commonly mentioned indicator and the average participant selected over two education-related indicators in the voting process, substantially more than the majority of other indicator themes. Education, cultural exchange, community development/organization and cultural impacts are among the top five themes in both figures. Figure 4 also helps to confirm the validity of the compass methodology in establishing and prioritizing indicators. The most prevalent indicator themes also generally received the most stickers, suggesting that most frequently mentioned themes were viewed as high priority from the perspective of workshop participants. Another advantage of the sticker voting process was that it allowed participants to identify indicators of high personal priority in a less public manner, as the voting process was semi-confidential.

Table 3 revealed three distinct and useful measures for assessing the results of the indicator development and prioritization process. The theme of education is clearly predominant as it had the highest number of mentions, highest number of sticker votes, and the highest number of connections on the compass map. The pattern of decrease from top to bottom in each column indicates that any of these three variables is useful in prioritizing indicators. Future implementations of the compass methodology may also consider combining all three variables into an index. One caveat in using the number of connections as a variable is the need to produce a complete concept map. In the workshops conducted for this research, the concept map exercise was conducted more as a demonstration in systems thinking and the concept maps produced were not exhaustive. More time could have been spent identifying additional linkages among indicators on the compass. Doing so would have more clearly identified indicators of high priority due to their influence on other elements of the system.

Each community is unique in the types of indicators that it prioritizes and while some patterns are present, they are not generalizable to all communities. Another important point here is that many indicators are community-specific. While some indicators appeared several times across several communities (such as providing scholarships or creating international friendships − see online Supplementary Data), most indicators were unique. It is for this reason that an indicator theme approach was taken in this paper, rather than comparing individual indicators. These findings stress the importance of identifying locally specific indicators on a community-by-community basis to capture this heterogeneity among host communities.

Lessons learned in adapting the compass

The adaptation of the compass framework and method for indicator development to the context of rural communities in Ecuador and Costa Rica involved some challenges and some key lessons were also learned. The workshops focused on verbal expression and interactive activities because many of the participants had a low level of formal education and minimal reading/writing skills. The use of strings to produce the concept map and stickers to prioritize impacts are some examples of this. Visual aids were used when possible, such as the use of a ruler to introduce the concept of "impact measurement" and the visual illustration of an eye to discuss the concept of "vision". The facilitator also experimented with additional interactive activities to reinforce workshop concepts.

A significant challenge for this participatory methodology in the context of volunteer tourism in small rural communities is the divide between local community members who often have a low level of formal education and non-local stakeholders who have a higher level of formal education and knowledge of the volunteer tourism industry. In many occasions, these latter individuals dominated conversations and brainstorming exercises while some local community members were silent or much less vocal. This highlights the need for a skilled facilitator who can ensure that all workshop participants have the opportunity to provide input. If this does not occur, it can be unclear if the workshop data include input from both local and non-local workshop participants or if the data primarily reflect the ideas of non-local participants. As the workshop is designed to acquire the perspectives of local community members and promote a bottom-up development process, this is an issue that needs to be considered for further development of this methodology in the context of volunteer tourism.

The interactive elements of the workshop including the creation of the systems map with strings, and the use of stickers to prioritize impacts, were successful in communicating key concepts and steps of the methodology that would otherwise have been challenging. As such, future implementers of the compass methodology may consider these as potential additions to the methodology.

Conclusion

We believe that the methodology presented here has four primary benefits: (1) the ability to rapidly assess indicators in a cost and time effective manner; (2) the compass framework dimensions are easily understood and in their simplicity useful for eliciting a variety of indicators; (3) the simple systems activity was understandable and used in the rankings; and (4) the methodology opens the door for exploration of third space volunteer tourism development negotiations with sending organizations.

"When destination communities' views are given credence, possibilities emerge for alternate programs of tourism and counter-discourse to hegemonic modes of interaction" (Wearing & McGehee, 2013, p. 125). This research study contributes to the emerging field of participatory indicator development and local impact assessment for volunteer tourism and opens a dialogue to develop new "third space" volunteer tourism opportunities. The methodology presented here is one phase of engaging the community, the next phase is for the host community and sending organization to begin dialogue using their own indicator sets as a foundation for discussion. Furthermore, when assessed across cases, these indicators can be used to evaluate and highlight good practices that "maximize potential benefits and reduce potential negative impacts" (Wearing & McGehee, 2013, p. 124).

In this paper, a rapid participatory methodology was tested, refined and proved effective in identifying, organizing and prioritizing indicators that are locally appropriate and represent diverse local impacts of volunteer tourism. Some caveats presented themselves as the methodology was implemented and must be addressed for the future. By testing the compass methodology in five communities, an extensive indicator list was developed. This list serves several purposes: (1) it can be used in future workshops for communities to learn about how other communities are impacted by volunteer tourism to draw comparisons and contrasts and potentially plan for new desired impacts; (2) it serves to assess the effectiveness of the compass methodology in organizing indicators as well as promoting systems-thinking among indicators; and (3) it can help to draw conclusions regarding the overall desired impacts of volunteer tourism in the communities under study and then serve as a reference to the volunteer tourism industry in planning for desired impacts. These data obtained in the workshops are not generalizable beyond the five communities in this multiple case study. Additionally, the development of specific measures of these indicators that are "robust, credible, efficient (in time and cost of obtaining the data), and useful to decision makers" (Sirakaya et al., 2001) will come when the community and the sending organizations come together to discuss their own indicator sets. However, the data indicate some trends that can help to guide the volunteer tourism industry and inspire further exploration of the compass methodology as a tool for impact assessment.

It is important to point out that the literature on indicator development offers many "master lists" of potential indicators (see, for example, the extensive indicator lists in WTO, 2004). Each is unique but none are all-encompassing due to the location-specific indicators likely to be generated in a participatory workshop conducted in situ. One contribution of this paper is that it began with the development of a list of locally produced indicators, identified themes in the indicator data, and ranked these indicator themes in several ways. These themes and the ways in which they were prioritized can serve as a reference for future implementation of the compass methodology to ensure that the indicator development process does not overlook key indicator themes that may be of high importance for communities.

This paper also contributes to the development and dissemination of a tool for host communities and volunteer tourism organizations to identify and evaluate the local impacts of volunteer projects. The host communities and organizations that supported this multiple case study have already received informational booklets with a summary of individual workshop results and the compass methodology. They will also receive more detailed information with complete results, lessons learned, a summation of all data obtained from all workshops, and a detailed explanation of the compass methodology and other steps suggested by AtKisson (2004, 2011) and AtKisson Inc. (2011) as a follow-up to the compass methodology. These will pave the way for future negotiations of third space opportunities. By sharing information in this way, the volunteer tourism industry and host communities will have a new tool in their reach for conducting impact evaluations.

The compass approach was successful in identifying community priorities and developing and prioritizing indicators to evaluate the local impacts of volunteer tourism. Each community case study was very culturally distinct and each corresponding volunteer tourism program was also unique. One of the fundamental lessons drawn from this research is that this tool (the compass) may be useful and adaptable to many other cultures and contexts in Latin America and across the developing world. Possible challenges may include illiteracy, uneasiness with an activity based on writing and reading, cultural opposition to

outside ideas, unfamiliarity with a compass and little conceptual understanding of the four compass points, and power differentials among participants.

This paper does not propose that the compass methodology is the only or the most effective methodology for identifying and evaluating the community impacts of volunteer tourism. A myriad of frameworks and methodologies exist in the literature on community well-being, community development, sustainability, sustainable tourism, and other related fields. Although very few of these have been applied to volunteer tourism, there is potential for other useful methodologies to be applied to conduct impact evaluations for volunteer tourism. Our selection of the compass methodology implies an emphasis on the use of indicators, participatory process and community-level and bottom-up development, in response to current literature on volunteer tourism that stresses these aspects.

Overall, we found the compass methodology was effective in developing and organizing indicators, promoting systems-thinking on the interrelations among indicators, prioritizing indicators, goal-setting for the future, and stressing the importance of measuring or evaluating impacts. The compass required workshop participants to think of four unique ways that volunteer tourism impacted them and their communities. The compass framework and associated methodology also promotes a participatory process that empowers community members, seeks their input, and regards all stakeholders as equally important in the process. The use of the compass methodology may be another tool for promoting bottom-up participatory development processes in volunteer tourism while encouraging meaningful collaboration with international volunteer tourism organizations for developing third space opportunities for volunteer tourists.

Some challenges that were encountered must be addressed for future improvement of the compass methodology, leading to further refinement of the compass and other effective methodologies, so that the many stakeholders present in the field of international volunteer tourism can acquire the tools they need to effectively evaluate the local impacts of volunteer tourism projects.

Disclosure statement

Notes on contributors

Dr Christopher Lupoli completed his PhD at the School of Forestry and Wildlife Sciences at Auburn University in 2013. His research focused on the social and ecological impacts of international volunteer tourism, with a particular emphasis on programs in Latin America. He now directs a study abroad program in Quito, Ecuador.

Dr Wayde Morse is an assistant professor in the School of Forestry and Wildlife Sciences at Auburn University. His research interests include the linkages among social and ecological systems, recreation, environmental services, conservation incentive programs, landowner decision-making and rural livelihoods.

Dr Conner Bailey is a professor of rural sociology in the Department of Agricultural Economics and Rural Sociology at Auburn University. His research interests include commodity systems, the human dimensions of fisheries and coastal resources, grassroots environmental movements, environmental justice and problems of persistent poverty associated with resource dependence.

Dr John Schelhas is a researcher at the Southern Research Station of the USDA Forest Service. His research focuses on the social and cultural dimensions of natural resource use and conservation, and natural resource management and policy.

References

AtKisson, A. (2011). *The sustainability transformation: How to accelerate positive change in challenging times*. CPI Antony Rowe.

AtKisson, A., Hatcher, R.L., & Green, S. (2004). Introducing Pyramid: A versatile process and planning tool for accelerating sustainable development. Draft paper for publication. Retrieved 12 December 2014 from http://www.rrcap.unep.org/uneptg06/course/Robert/PyramidArticle-v4b.pdf

AtKisson, Inc. (2011). Pyramid Lite: A simplified version of the Pyramid workshop process − PYRAMID 2012 special edition. Retrieved 12 December 2014 from http://www.balticuniv.uu.se/index.php/component/docman/doc_download/768-pyramid-lite

Benson, A., & Henderson, S. (2011). A strategic analysis of volunteer tourism organizations. *The Service Industries Journal, 31*(3), 405−424.

Benson, A., & Wearing, S. (2012). Volunteer tourism: Commodified trend or new phenomenon? In O. Moufakkir & P. Burns (Eds.), *Controversies in tourism* (pp. 242−254). Wallingford: CABI.

Bossel, H. (1999). *Indicators for sustainable development: Theory, method, applications. A report to the Balaton Group*. Winnipeg: International Institute for Sustainable Development.

Bossel, H. (2001). Assessing viability and sustainability: A systems-based approach for deriving comprehensive indicator sets. *Conservation Ecology, 5*(2), 12. Retrieved 12 December 2014 from http://www.consecol.org/vol5/iss2/art12/

Budruk, M., & Phillips, R. (2011). *Quality-of-life community indicators for parks, recreation and tourism management*. London: Springer Science+Business Media.

Butcher, J., & Smith, P. (2010). "Making a difference": Volunteer tourism and development. *Tourism Recreation Research, 35*(1), 27−36.

Butler, R., & Hinch, T. (eds) (1996). *Tourism and indigenous peoples*. London: International Thomson Business Press.

Cheong, S., & Miller, M. (2000). Power and tourism: A Foucauldian observation. *Annals of Tourism Research, 27*(2), 371−390.

Cole, S. (2006). Information and empowerment: The keys to achieving sustainable tourism. *Journal of Sustainable Tourism, 14*(6), 629−644.

Choi, H.C., & Sirakaya, E. (2006). Sustainability indicators for managing community tourism. *Tourism Management, 27*, 1274−1289.

Devereux, P. (2008). International volunteering for development and sustainability: Outdated paternalism or a radical response to globalization? *Development in Practice, 18*(3), 357−370.

Eddins, E. (2013). Bridging the gap: Volunteer tourism's role in global partnership development. In K. Bricker, R. Black & S. Cottrell (Eds.) *Sustainable tourism & the millennium development goals* (pp. 251−264). Burlington, MA: Jones & Bartlett Learning.

Fee, L., & Mdee, A. (2011). How does it make a difference? Towards "accreditation" of the development impact of volunteer tourism. In A.M. Benson (Ed.), *Volunteer tourism: Theory framework to practical applications* (pp. 223−251). New York, NY: Routledge.

Gray, N., & Campbell, L. (2007). A decommodified experience? Exploring aesthetic, economic and ethical values for volunteer ecotourism in Costa Rica. *Journal of Sustainable Tourism, 15*(5), 463−482.

Guttentag, D. (2011). Volunteer tourism: As good as it seems? *Tourism Recreation Research, 36*(1), 69−74.

Gursoy, D. Chi, C.G., & Dryer, P. (2009). An examination of local's attitudes. *Annals of Tourism Research, 36*, 715−734.

Halpenny, E.A., & Caissie, L.T. (2003). Volunteering on nature conservation projects: Volunteer experience, attitudes and values. *Tourism Recreation Research, 28*(3), 25−33.

Hitchcock, M. (1993). Tourism in South East Asia: Introduction. In M. Hitchcock, V. King and M. Parnwell (Eds.), *Tourism in South East Asia* (pp. 1−42). London: Routledge.

Hughes, G. (2002). Environmental indicators. *Annals of Tourism Research, 29*(2), 457−477.

Lupoli, C. (2013). An examination of volunteer tourism as a catalyst for promoting community development and conservation. (Unpublished doctoral dissertation). Auburn University, Auburn.

Lupoli, C., Morse, W.C., Bailey, C., & Schelhas, J. (2014). A survey of volunteer tourism organizations: Understanding how indicators are used to evaluate the impacts of volunteer tourism in host countries. *Journal of Sustainable Tourism, 22*(6), 898−921.

Lyons, K.D. (2003). Ambiguities in volunteer tourism: A case study of Australians participating in a J-1 visitor exchange programme. *Tourism Recreation Research, 28*(3), 5−13.

Lyons, K., Hanley, J., Wearing, S., & Neil, J. (2012). Gap year volunteer tourism: Myths of global citizenship? *Annals of Tourism Research, 39*(1), 361−378.

Mascarenhas, A., Coelho, P., Subtil, E., & Ramos, T.B. (2010). The role of common local indicators in regional sustainability assessment. *Ecological Indicators, 10*(3), 646−656.

McGehee, N. (2012). Oppression, emancipation, and volunteer tourism: Research propositions. *Annals of Tourism Research, 39*(1), 84−107.

McGehee, N. (2014). Volunteer tourism: Evolution, issues and futures. *Journal of Sustainable Tourism, 22*(6), 847−854.

McGehee, N., & Andereck, K. (2009). Volunteer tourism and the "voluntoured": The case of Tijuana, Mexico. *Journal of Sustainable Tourism, 17*(1), 39−51.

McIntosh, A., & Zahra, A. (2007). A cultural encounter through volunteer tourism: Towards the ideals of sustainable tourism? *Journal of Sustainable Tourism, 15*(5), 541−556.

Mdee, A., & Emmott, R. (2008). Social enterprise with international impact: The case for fair trade certification of volunteer tourism. *Education, Knowledge & Economy, 2*(3), 191−201.

Meadows, D. (2008). Indicators and information systems for sustainable development. A report to the Balaton Group. Hartland Four Corners: The Sustainability Institute.

Miller, G., & Twining-Ward, L. (2005). *Monitoring for a sustainable tourism transition*. Wallingford: CABI.

Njuki, J., Mapila, M., Kaaria, S., & Magombo, T. (2008). Using community indicators for evaluating research and development programmes: Experiences from Malawi. *Development in Practice, 18*(4−5), 633−642.

Palacios, C. (2010). Volunteer tourism, development and education in a postcolonial world: Conceiving global connections beyond aid. *Journal of Sustainable Tourism, 19*(7), 861−878.

Raymond, E. (2008). "Make a Difference!": The role of sending organizations in volunteer tourism. In K.D. Lyons & S. Wearing (Eds.), *Journeys of discover in volunteer tourism* (pp. 48−60). Wallingford: CABI.

Raymond, E. (2011). Volunteer tourism: Looking forward. *Tourism Recreation Research, 36*(1), 77−79.

Reed, M., Fraser, E., & Dougill, A. (2005). An adaptive learning process for developing and applying sustainability indicators with local communities. *Ecological Economics, 59*, 406−418.

Roberts, S., & Tribe, J. (2008). Sustainability indicators for small tourism enterprises − an exploratory perspective. *Journal of Sustainable Tourism, 16*(5), 575−594.

Schianetz, K., & Kavanagh, L. (2008). Sustainability indicators for tourism destinations: A complex adaptive systems approach using systemic indicator systems. *Journal of Sustainable Tourism, 16*(6), 601−628.

Simpson, K. (2004). "Doing Development": The gap year, volunteer-tourists and a popular practice of development. *Journal of International Development, 16*, 681−692.

Sin, H.L. (2009). Volunteer tourism − "Involve me and I will learn?" *Annals of Tourism Research, 36*(3), 480−501.

Sin, H. (2010). Who are we responsible to? Locals' tales of volunteer tourism. *Geoforum, 41*, 983−992.

Sirakaya, E., Jamal, T.B., & Choi, H.-S. (2001). Developing indicators for destination sustainability. In D.B. Weaver (Ed.), *The encyclopedia of ecotourism* (pp. 411−432). New York, NY: CAP International.

Strickland-Munro, Allison, H.E., & Moore, S.A. (2010). Using resilience concepts to investigate the impacts of protected area tourism on communities. *Annals of Tourism Research, 37*, 499−519.

Tomazos, K., & Butler, R. (2009). Volunteer tourism: The new ecotourism? *Anatolia: An International Journal of Tourism and Hospitality Research, 20*(1), 196−211.

Tourism Research and Marketing. (2008). *Volunteer tourism: A global analysis*. Barcelona: Atlas.

Vodopivek, B., & Jaffe, R. (2011). Save the world in a week: Volunteer tourism, development and difference. *European Journal of Development Research, 23*, 111−128.

Wearing, S. (2001). *Volunteer tourism: Experiences that make a difference*. New York: CABI.

Wearing, S. (2004). Examining best practice in volunteer tourism. In R. Stebbins & M. Graham (Eds.), *Volunteering as leisure/leisure as volunteering: An international assessment* (pp. 209−224). Wallingford: CABI.

Wearing, S., & McGehee, N.G. (2013). Volunteer tourism: A review. *Tourism Management, 38*, 120−130.

Wearing, S., & Wearing, M. (2006). Rereading the subjugating tourist in neoliberalism: Postcolonial otherness and the tourist experience. *Tourism Analysis, 11*, 145−163.

Wood, M.E. (2004). A triple bottom line for sustainable tourism development for international donors: Defining indicators for conservation, community and local enterprise development. Retrieved 9 December 2014 from http://www.eplerwood.com/pdf/EplerWood_Report_Jun04.pdf

World Tourism Organization. (2004). *Indicators of sustainable development for tourism destinations: A guidebook*. Madrid: Author.

Yin, R. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

Zahra, A., & McGehee, N.G. (2013). Volunteer tourism: A host community capital perspective. *Annals of Tourism Research, 42*, 22−45.