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Place-based education as a framework for tourism education in secondary schools: A case study from the Okavango Delta in Southern Africa

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ABSTRACT

Tourism has been identified as a potential source of economic development and diversification in many developing countries. However, many of these countries are unable to fully leverage this potential due to a lack of human resource capacity within the hospitality and tourism industry. This lack of capacity is due in part to inadequate educational programming in the area of hospitality and tourism at secondary and tertiary levels. This study sought to address this problem through an exploration of the extent to which tourism education is incorporated into the secondary school curriculum in Botswana as well as ways to more fully do so. In particular, the researchers considered the potential value of place-based education as a theoretical framework for more fully incorporating tourism education into the secondary school curriculum in Botswana. The researchers relied on findings from a case study of a secondary school located in the Okavango Delta of Botswana to accomplish these two aims. The researchers found that tourism is addressed only to a limited extent within the school curriculum and that clear opportunities exist to enhance tourism education in secondary schools in Botswana.

1. Background

Tourism has been identified as a key source of economic development and diversification in many developing countries (Adukaite, van Zyl, Er, & Cantoni, 2017; Chili, 2013; Gossling, Hansson, Horstmeier, & Saggel, 2002; Government of Botswana, 2016; Ribeiro, do Valle, & Silva, 2013). However, research has shown that many of these countries are unable to leverage this potential due to a lack of human resource capacity within the tourism industry (e.g., Addison & Taumoepeau, 2016; Avornvo, 2013; Chili, 2013; Howell & Uysal, 1987; Mayaka & Akama, 2007; Obi, 2013; Roberts, Andreassen, O'Donnell & Neill, 2018; World Tourism Organization, 2017). This study focuses on opportunities to address this need in the nation of Botswana. The national economy of Botswana currently is largely reliant on the diamond industry (Government of Botswana, 2016; Republic of Botswana, 2002). However, the refrain 'Diamonds are forever only in the hearts of young women' highlights the need for economic diversification and sustainable development in Botswana. Recognizing the need to expand the nation's economy beyond a reliance on non-renewable resources such as diamonds, the Government of Botswana is looking to sustainable tourism, particularly safari tourism, as an economic alternative.

Tourism is the second largest contributor in Gross Domestic Product (GDP) to Botswana's economy and is a major source of

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revenue and economic diversification. Tourism is viewed as “a catalyst for job creation, sustainable economic development in remote, rural areas and key to achieving some of the objectives of Botswana's Vision 2016 such as prosperity and productivity” (Human Resource Development Council, 2014, pg. 9). The World Travel and Tourism Council (2018) reports that the direct contribution of travel and tourism to Botswana's GDP was “BWP7,129.6mn (USD687.5mn), 3.8% of total GDP in 2017 and is forecast to rise by 5.8% in 2018, and to rise by 4.5% pa, from 2018 to 2028, to BWP11,737.0mn (USD1,131.8mn), 3.9% of total GDP in 2028” (p. 5). The Government of Botswana (2016) stated as follows: “the tourism industry will be diversified to provide economic growth and employment opportunities for local communities” (p.16). Accordingly, there is the opportunity and need for enlightened and committed tourism professionals in Botswana to provide high quality services in the tourism industry. Providing more effective tourism education programs through secondary education can help to fulfill this human resource need in the tourism industry in Botswana and other developing countries.

The government of Botswana strongly supports local engagement in tourism occupations (Human Resource Development Council, 2016; Republic of Botswana, 2000 & 2007). With respect to training and education for the tourism industry, the Republic of Botswana (2000) reported: “The long-term objective is to make Botswana self-sufficient in all matters of education and training for the development of human resources for the hotel, catering and tourism sector” (p. 15). However, Botswana has yet to realize this objective (Manwa, Chipfuva, & Mahachi, 2011). Most employees in the safari tourism sector lack formal training and professional competency in the hospitality and tourism industry (Botswana Education Hub, 2018; Botswana Tourism Board, 2009; Manwa et al., 2011). Furthermore, Manwa et al. (2011) suggested that many academic institutions in Botswana do not provide practical training related to operations in hospitality and tourism because they lack qualified specialists in professions such as Food Cost Control, Menu Planning, Ticketing, and Hotel chefs.

This paper is intended to help address the above concerns by exploring ways in which human resource capacity in the tourism industry in Botswana can be enhanced through the development of tourism education programming at the secondary educational level. The paper also considers the potential value of place-based education as an educational methodology that can be used to accomplish this aim. The authors relied on findings from a case study in a junior secondary school located in the Okavango Delta of Botswana to illustrate how this aim can be accomplished.

1.1. The role of secondary schools in promoting tourism education

Tourism education began approximately 50 years ago in vocational institutions in Europe where students were trained in areas of hospitality and business operations (Airey, 2016; Morgan, 2004). As the tourism industry grew and evolved, educators started to redefine tourism education to include skills necessary for employability in the industry (Jameson-Charles, 2012; Tribe, 2001 and 2002). While tourism education took root in colleges and universities, it has traditionally been limited in secondary schools. Goeldner, Ritchie, and McIntosh (2000) highlight the potential that secondary schools can play in promoting tourism education. However, they also highlight the fact that tourism education is rarely found at the secondary school level.

While the tourism industry has established itself as a vehicle for social and economic development around the world, its potential has not been fully realized in southern Africa due to a lack of strategic plans and policy guidelines on the development of tourism education, especially in secondary schools (Adukaite, van Zyl, & Cantoni, 2016). Chili (2013) reported that tourism education was meant to enable social justice and job creation in South Africa; however, he found that efforts to incorporate tourism education into schools in South Africa have been hindered by a shortage of well-trained and committed teachers as tourism education specialists. The introduction of tourism programs at senior secondary schools by the department of education was embraced by teachers in social sciences with the hope of fulfilling the need for expanded human resource capacity within the tourism industry among South Africans. Chili (2013) pointed to similarities between the Caribbean and South African contexts, writing:

What is claimed in the Caribbean is similar to the situation of South Africa where tourism is grouped with geography and history in the township schools. Most secondary teachers in the township schools had little or no training in teaching tourism. Very little integration of tourism into other related subjects, such as geography, history and agriculture was found in the Caribbean. (p. 36)

Chili (2013) suggests that tourism education in secondary public schools is perceived as the beginning of public awareness of hospitality, travel and tourism industry in South Africa. However, there are few students who graduate from the public school system and view tourism as a viable career option. Chili (2013) suggests that it is not an easy task for Principals in secondary schools to hire tourism education specialists, because tourism education is not offered in colleges of education at universities.

Sun International (2017) reported that in March 2017, hospitality and tourism programs were implemented in senior secondary schools in South Africa. This report indicated that teachers and subject specialists from eight provinces participated in comprehensive training to familiarize themselves with the curriculum content and to ensure that they have competent information technology (IT) skills (e.g., training in online management systems) for hospitality and tourism. Sun International is a consortium of facilities focusing on hotels, gaming and entertainment. Saayman (2005) suggests that in some situations in South Africa, tourism education is offered merely to enrich the more established disciplines because of the shortage of suitable tourism teachers with required qualifications. Similarly, based on a case study focused on tourism education in Kenya, Mayaka and Akama (2007) concluded: “There is lack of coherence in the teaching and training approaches adopted in the numerous tourism-related programs. Provision of quality tourism training and education remains a key challenge” (p. 300).

In Nigeria, there are also calls to incorporate tourism education into secondary school curriculum (Obi, 2013). For instance, the Head of the Department in Theatre and Performing Arts, in Ahmadu Bello University, suggested that tourism education should be incorporated in the Nigerian Secondary School curriculum because there are many tourist attractions and destinations in Nigeria, but

the country has not been able to fulfill the demands of the tourism industry itself. [Obi \(2013\)](#) argued that the integration of tourism education into the secondary school curriculum could serve to inculcate the younger generation into hospitality, recreation and leisure and cultural tourism. Effective integration of tourism education into the secondary school curriculum can enable learners to improve skills and abilities related to communication and strategic thinking, adaptability, leadership and numeracy. These are some of the skills and abilities needed in the tourism industry. Therefore, there is a definite need for education and training, at all levels, in the hospitality and tourism industry. [Fletcher, Fyall, Gilbert, and Wanhill \(2013\)](#) warn that the reliance on untrained employees is responsible for low quality tourism services and products.

1.2. The potential value of place-based education in promoting tourism education in Botswana

Place-based education emphasizes the value of local environmental and cultural resources in the educational process. [Sobel \(2005\)](#) characterized place-based education as an educational approach based on real-world learning experiences that enable learners to develop a sense of connection to their surrounding natural and cultural environments. [Gruenewald \(2003\)](#) argues that place-based pedagogies are essential to educating citizens to care for the social and ecological spaces that they inhabit. The [Rural School and Community Trust \(2004\)](#) notes that place-based education is rooted in local environments, which consist of the unique history, environment, culture, economy, literature, and art of a particular place. "The community provides the context for learning, student focuses on community needs and interests, and community members serve as resources and partners in every aspect of teaching and learning" ([Rural School and Community Trust, 2004, p. 4](#)). Similarly, [Powers \(2004\)](#) states that place-based education is grounded on resources, issues, and values of the local community and focuses on using the local community as an integrating context for learning at all levels.

Since the origins of place-based education in the 1990s, scholars have continued to emphasize the value of this educational approach. [Howley, Howley, Camper, and Perko \(2011\)](#), for example, highlight numerous benefits of place-based education. Some of these include engaging students in authentic learning opportunities, connecting new learning with students' prior lived experiences, and supporting linkages between school and local communities. Additionally, [Lundahl \(2011\)](#) states that place-based education includes past and present stories of people in a place, which can help foster a sense of cultural identity in students and an understanding of how that identity is connected to places in which they live. [Cumming and Nash \(2015\)](#) state that place-based education offers the opportunity to embed outdoor learning pedagogies into the school's education framework, which can result in a deeper understanding and sense of belonging to the world in which people live. [Jennings, Swidler, and Koliba \(2005\)](#) argue that rural schools are particularly well-suited to use place-based approaches to education, noting that rural schools have traditionally used locally responsive curriculum. This is due in part to the fact that rural schools are typically limited in educational resources and this requires teachers to construct learning and teaching opportunities around their unique histories and cultural assets.

[Ramkissoon \(2015\)](#) investigated authenticity, satisfaction, and place attachment for cultural tourism in African Island economies and found that these economies have experienced growth due to increased numbers of tourists who seek authentic cultural and natural heritage tourism attractions. Cultural tourism has gained increasing significance in developing countries due to rich culture, historical sites and monuments, and distinctive natural environments. Place-based education can be used to help students develop competencies needed to celebrate these cultural and environmental resource attractions with visitors to their communities. In other words, place-based education can be used to help students prepare for professional opportunities in the tourism industry in their communities and in turn help students realize the economic value of the cultural and environmental resource attractions that draw tourists to their home communities. Realizing the economic value of these resources would in turn incentivize the preservation of cultural identities and practices as well as local natural resources that hold value as tourism attractions.

This study is intended to explore the potential value of place-based education in promoting tourism education in schools in Botswana and other locales whose economies rely on cultural and nature-based tourism (including safari tourism). Botswana is rich with tourism attractions such as the Okavango Delta, yet low quality services continue ([Majube, 2014](#)). In 2014, the Delta became the 1000th site to be inscribed in the UNESCO World Heritage Site. It is home to Africa's largest elephant population. The abundance of flora and fauna in the Okavango Delta has made northern Botswana a popular tourist destination for safari and photographic activities, amongst other recreational activities. The Delta has expanses of open waterways, grasslands, savannas, and it is rich in biodiversity. Although the abundance of wildlife resources in Botswana sometimes enables local people to sustain their livelihoods by engaging in tourism enterprises, the growth of tourism in the Okavango Delta has changed the traditional subsistence economy once prevalent in the region to a modern monetary economy ([Mbaiwa, 2011](#)). Local people in Sankuyo, Mababe and Khwai villages have begun seeking job opportunities in the tourism industry, working at campsites and lodges and as safari tourism guides. Remarkably, some local people have started to shun their cultural practices. [Mbaiwa \(2011\)](#) wrote, "The collection of veld products like berries, tubers, wild fruits and insects (except thatching grass) has drastically gone down. The collection of veld products was ranked 8th position in the three villages" (p. 1055). The erosion of local cultural practices in host communities of tourists suggests that there are also ineffective tourism strategic plans and policy guidelines for the tourism sector. While cultural commodification is not considered to be positive by critical scholars who abhor neoliberalism, traditional cultural practices are part of the broader attraction of tourists in southern Africa. Local people can generate money through traditional cultural performance and displaying their cultural resources. Tourism education can help prepare local people to take advantage of these economic opportunities. Place-based approaches to tourism education in particular can serve to help capitalize on the economic value of local environmental and cultural resources that draw visitors to these locales.

2. Methodology

The authors relied on a qualitative case study conducted at a junior secondary school in the Okavango Delta of Botswana to illustrate how the incorporation of tourism education into secondary schools can help prepare students in the school to take advantage of economic opportunities associated with the tourism industry in their surrounding communities. In doing so, the authors aimed to highlight ways in which place-based education can be used to more effectively promote tourism education within the school.

The data presented in this paper were collected by the primary researcher during the second term (May, June, and July) of 2014 at a junior secondary school situated in the Okavango Delta. Data were collected through semi-structured interviews, participant-observation in a form three classroom of 34 students, and an archival analysis of curriculum materials. The primary researcher kept field notes to capture his observations during classroom instruction. Semi-structured interviews were conducted with 26 parents of students in the form three class, teachers and ten (10) educational authorities. Local people were from five rural villages (Kauxwi, Xakao, Sekondomboro, Mohembo, and Gani) that serve as catchment places for the secondary school. The interviews were purposefully conducted to gain an understanding of parents' perceptions of broader natural resources (including tourism) and the relevance of these resources to teaching and learning in their local secondary school. Interviewees were experienced about issues of investigation and were available and willing to participate in the study. The interviews were conducted during the latter stages of the primary researcher's fieldwork. In addition to observations and semi-structured interviews, an archival analysis of lesson plans, textbooks, government documents, and academic literature related to tourism education was conducted.

2.1. Data analysis

To gain an extensive understanding of the data, the researcher engaged in three levels of coding: open, axial, and selective coding (Corbin & Strauss, 2014). Initially the researcher engaged in a process of line-by-line manual analysis (i.e. open coding), reading and re-reading the data at length and noting codes and themes that were evident in the data. This is the analytical framework the researchers followed to shape and discuss the emerging themes from the data. During the broader data analysis, the researcher followed steps suggested by Rubin and Rubin (2012), which include (1) transcribing interviews, (2) manually coding excerpts (examples, concepts, themes), and (3) sorting interviews that have excerpts with the same code. The marking of interview data (using a pencil) that illustrated relevant concepts was initially done on printed transcripts while at the junior secondary school. This was the period of preliminary coding. The researcher wrote the broader research questions on manila charts. Then, through repeatedly and carefully reading the transcripts and identifying data pertaining to the research questions and theoretical framework of place-based education, relevant concepts (e.g. income generation through tourism) were identified and noted on manila charts. Some concepts related to tourism education. The second phase of coding (writing blocks of raw data in columns and aligning each block with an emerging concept and category) occurred when texts were further written in notebooks for fieldwork. The third phase of coding and revisiting the coded texts was done through saving the coded texts, and creating categories, in Nvivo 10, a qualitative data analysis software program. In the above analytical framework, the primary researcher kept revisiting the completed text and codes in order not to decontextualize data and thus misinterpret them.

Credibility of the study. The study's reliance on three primary data sources (i.e. participant observation, interviews, and archival analysis) enabled the triangulation of data sources (Newman & Hitchcock, 2011). Moreover, the researcher spent significant amount of time, three months, in the field collecting data. The researcher arrived in Maun (northern Botswana) on 24 May 2014 and spent the first two days interacting (to strengthen rapport and connection) with educational authorities at the Maun Education Centre and securing the research permit, at the regional level. The researcher arrived in the panhandle of the Okavango Delta on 29 May 2014 and spent the first five days interacting with local people and teachers. The prolonged engagement with participants enabled continuous learning of local culture and strengthened rapport and credibility of findings. The teacher of social studies was asked to check and read the transcript, correct and confirm the transcribed data. This process of member checking strengthened the validity of the study by allowing the participant to ensure that the data provided an accurate representation of lived experiences (LeCompte, 2000; Marshall & Rossman, 2011). The primary researcher continuously engaged in a process of reflexivity as the study progressed, which enabled the researcher to recognize and reflect critically on how the inquiry was affected by his own personality, beliefs, and previous experiences. The primary researcher taught the subject of social studies in 2003 and 2004 in another secondary school in the Okavango Delta. As a result, he is familiar with the curriculum, tourist attractions, local culture and natural resources in the Okavango Delta.

3. Findings

In reporting the findings of this study, it is important to note that there are no secondary schools in Botswana that offer tourism education as a specific subject of study. Educational topics related to tourism in Junior Secondary Schools are taught primarily within Social Studies in an educational unit on Economic Development (Ministry of Education, 2010; Ngongola & Montsho, 2010). The Social Studies textbook includes content related to tourism education such as Cultural Heritage and Tourism in Botswana. The general objective of the unit of Economic Development is as follows: "Learners should be able to appreciate the importance of tourism to Botswana's economy" (p. 506). The specific objectives of the unit are as follows: (1) identify tourist attractions in Botswana; (2) evaluate the importance of tourism in Botswana; (3) identify opportunities and challenges in the tourist sector; (4) suggest ways in which tourism can be enhanced; (5) evaluate attempts made to develop eco-tourism in Botswana; (6) analyze the land use conflict/

competition between humans, livestock and wildlife; (7) assess the negative and positive effects of tourism on the environment; and, (8) evaluate attempts made to promote Botswana's tourism. Furthermore, secondary school teachers in Botswana train mainly in colleges of education (e.g. Molepolole College of Education and Tonota College of Education) and at the University of Botswana and Botswana University of Agriculture and Natural Resources. Nonetheless, tourism is not offered as a single subject in colleges of education; instead, it is incorporated as a learning area mainly within social science subjects.

3.1. Tourism content and the school curriculum

Despite the fact that there is not a specific area of study around tourism, the topic is reflected within the junior secondary school curriculum. This was evident during instruction where the teacher of Social Studies demonstrated rich knowledge in delivering content area of tourism to students. During data collection at the Junior Secondary School, Mr. Marshal, the Social Studies teacher, highlighted to students the ongoing construction of tourism infrastructure, such as hotels and lodges, in the Okavango Delta. He emphasized the need for equal access to environmental resources, such as thatch grass by local people. Mr. Marshal stated that local people have historically occupied the Okavango Delta and should therefore maintain the right to continue accessing natural resources such as veldt products. The lesson taught by Mr. Marshall, to secondary school learners, promote objectives of the Community Based Natural Resource Management (CBNRM) policy, which prioritizes (1) specifying land tenure and natural resource user rights, which may be devolved to communities, and (2) protecting the intellectual property rights of communities with regard to natural resources and the management of such natural resources (Republic of Botswana, 2007). The 2018 draft Tourism Policy of Botswana emphasizes that CBNRM policy is needed to safeguard the interests of communities in natural resource management and attract investment in natural resources based enterprises (Republic of Botswana, 2018). Mr. Marshal reiterated as follows,

As citizens of the Okavango region, if there is any development taking place on the land, it is very important that you are consulted about the particular development. The government must involve local communities who are affected. Therefore, Environmental Impact Assessment has to be conducted before any development take place. Currently, there are lodges along the river. Local people, culturally, go fishing in the river. Owners of hospitality facilities found the local people, who must be consulted and not denied their rights to the natural resources.

On July 23, Mr. Marshal taught about transport systems in Botswana. One of the discussions focused on airports. After students mentioned airports such as Sir Seretse Khama International airport in Gaborone, Francistown Airport, Maun airport, and Kasane airport, Mr. Marshal stated: "As you can see here in Botswana we do have airports that contribute a lot to our tourism industry. Kasane airport was constructed due to increasing numbers of tourists and apart from that we also have what we call airstrips." This shows that within the topic of Transport Systems, students were also taught about the role played by increasing numbers of tourists in a destination. During data collection, the researcher found that tourism contents were taught in the second term of the school year in 2014 for the form three south class. Mr. Marshal was asked to explain teaching strategies he employs during lessons. He stated that he prefers to use field work and sometimes invite local people to the school to talk about natural resources that are found in the local environment. On July 23, Mr. Marshal mentioned that the Okavango River is one of the perennial rivers in Botswana, and it acts as a major tourist attraction. The river is well known to students in the region and they have lived experiences of lodges and hotels in the region.

3.1.1. Textbook emphasis on local tourism attractions

The Social Studies textbook, written by Ngongola and Montsho (2010), contained the following contents that relate to tourism education: Chapter 5 (Botswana's Cultural Heritage), and Chapter 15 (Tourism in Botswana). The Social Studies textbook also illustrates images that describe how inland deltas are formed and what exactly an inland delta is. Ngongola and Montsho (2010) wrote: "The water in the Delta attracts wild animals. These in turn attract tourists, for example, the Okavango Delta in Botswana is a major tourist attraction. Tourism is an important source of income" (p. 209). Furthermore, Ngongola and Montsho (2010) stated: "The Okavango Delta is unique because it is the world's largest inland Delta covering up to 13,000 km². The Delta's uniqueness, natural beauty and abundant wildlife attract many tourists" (p. 209). In the chapter on Tourism in Botswana, Ngongola and Montsho (2010) stated that people use lakes for various leisure purposes such as canoeing, swimming, and fishing. Moreover, they stated: "countries and local communities earn money from tourists who visit the lakes. Tourism creates employment for local people" (Ngongola & Montsho, 2010, p. 209). They wrote: "Botswana's tourist attraction includes wildlife and the wilderness experience, physical features, historical sites, cultural heritage and museums. Tourists activities include game viewing, photographic safaris, hunting safaris and bird watching" (p. 209). Regarding the importance of tourism and education, Ngongola and Montsho (2010) stated:

Tourism creates an opportunity to educate people about the importance of protecting and caring for the environment and the natural resources it provides. It encourages the conservation of resources that attract tourists. For example, there are laws that protect historical sites and monuments. Wildlife is protected in game reserves and national parks such as Moremi Game Reserve, Makgadikgadi National Parks. (p. 212)

It is also through the Community Based Natural Resource Management program that local people utilize natural resources in their places and engage in tourism related businesses. This encourages them to conserve and use the resources sustainably. When local people engage in tourism related businesses such as campsites or game drive, learners in schools also make observations and internalize the importance of natural resources.

3.1.2. Educational authorities encourage tourism education

The abundance of tourism attractions was acknowledged by some educational authorities who were interviewed. For his part the Educational Authority, who is a teacher in a junior secondary school in Maun, acknowledged that the 1994 Revised National Policy of Education has some elements of sustainability. Therefore, teachers need to be proficient in elements of sustainability and incorporate indigenous knowledge systems into schools that are situated in tourism destinations. He explained:

There is also the Wildlife Conservation and National Parks Act, which deals with how national parks should be regulated. This act also caters for the CBNRM, which emphasizes that people should benefit from tourism activities that take place in their localities. For example, the people of Sankuyo village have formed a CBNRM trust.

The Educational Authority, who is a Principal Officer for Regional Education Office in Maun, indicated that teachers need to take advantage of tourist attractions (e.g. wildlife resources) that are found in the Okavango Delta and integrate them into the curriculum with the purpose of promoting tourism education. The above indication suggests that teachers should teach through tourist attractions and integrate them into the curriculum. Once again, the Educational Authority who is a teacher in a junior secondary school in Maun advised that teachers should engage in conducting research and consult the 1994 Revised National Policy of Education and the 1992 Botswana Wildlife and National Parks Act. He argued that these government documents include elements of indigenous knowledge as well as tourism and sustainability practices. However, some authorities expressed concern about continuous negative transformation of local people's lives from traditional lifestyle to the modern lifestyle as a result of the tourism industry. The Educational Authority, who is a researcher at the Okavango Research Institute, explained that according to the findings of his research in three communities (Sankuyo, Mababe and Khwai) of the Okavango Delta, the growth of tourism gradually shift the traditional lifestyle of local people from harvesting veldt products to working in modern lodges and campsites.

The above findings on tourism content and the school curriculum suggests that the secondary school in the Okavango Delta stand better chances of providing teaching and learning about tourism. Nonetheless, the school was not doing a good job of equipping students with relevant knowledge and skills to engage in the tourism industry. The eight (8) objectives of tourism in the unit on Economic Development (Ministry of Education, 2010) as discussed under the literature review are too general. The professional competencies needed in the present hospitality and tourism industry of 21st century were rarely taught to students. Recently, Manwa et al., (2011) reported that some of the competences needed in tourism industry include food cost control, menu planning, ticketing, and hotel chefs. In addition, the Human Resource Development Council (2016) of Botswana listed the following occupations and specializations needed in tourism and hospitality that have potential for growth and creation of employment: Chefs (cultural cuisine, fish preparation, desserts), Food and Beverage (waiter, bar tender, events coordination), Front office (guest relations, reception), Tour guide (bird watching, horseback, culture and heritage, dugout canoe polling, nature walks, and night drive guide), Landscape and gardening (golf course management), Environmental officer (ecotourism), Sales and Marketing (Product and financial management, sports and adventure, agro-tourism, cultural tourism), and Management (safari camp manager, restaurant manager, and lodge manager). The above skills require strategic thinking, adaptability, leadership, numeracy, and understanding of international tourism. The secondary school curriculum did not specifically focus on the above competencies.

3.2. Place-based education vis-à-vis tourism education

Responses from local people suggest that learners should have the opportunity to see and learn about local wild animals, such as buffalos and elephants, that are roaming in the Okavango Delta. One of the participants, who is the headman of Gowa ward in Kauxwi village stated: "They should not only read about them in books, but should see them with their eyes. Wild animals attract tourists and they are a source of income, which is channeled towards the development of public projects." One of the explanations offered by the participant is the recognition of income that is generated due to existence of wild animals. This explanation is also in line with the definition of Sustainable Development offered by the World Commission on Environment and Development of 1987, which is development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (p.8). Wild animals attract tourists in host communities, and, consequently, the generated income enables development of public infrastructures. In Xakao village, a female participant said this when asked about the importance of wild animals and consideration of culture by teachers:

Wild animals are important in people's lives. Visitors from other countries come to see wild animals and some engage in hunting and the government uses the money to help citizens. We cannot forsake our culture. Teachers should also learn cultural practices in our region. They must know our culture through us and understand how we live.

In a related process, when young people learn and engage in handcraft production (e.g. basket designs and weaving etc.), there is the preservation of local cultural practices, which has potential of promoting cultural and heritage tourism. Engagement in handcraft production may enable students to develop tourism related skills and abilities. Handicraft production could be attractive to young people if it serves as an opportunity to increase rural incomes and promote a sustained rural economy. Regarding handicraft production, Mbaiwa (2004) stated: "this can promote the preservation of traditional or indigenous knowledge and skills in basket weaving, which are otherwise important aspects of cultural tourism" (p. 233). Another female participant responded as follows when asked to explain environmental education: "we must protect wild animals. We must not kill them. When our children grow up, they should find them and again if we have protected areas, our children could work there in camp-sites and earn some income." The responses above suggest the potential value that could be derived from utilizing place-based education in schools. The responses do not explicitly call for place-based education in the school. Rather they place more emphasis on the importance of environmental and

cultural knowledge in safari tourism in the Okavango Delta.

Income is generated in local places when tourists visit a destination that is endowed with rich attractions. One of the participants in Kauxwi village explained:

We did not really perceive the importance of tourism in the past. We lacked knowledge, but now we are learning how we can benefit from nature. Some people from various countries do not have these kinds of natural resources in their places. So they visit to see and learn here in Botswana. In return, they also bring money to our country.

The participant informed that it is this tourist's expenditure that is requested from the government and used to provide for the construction of shelter for community gathering. According to the participant there is an informal community camping site that tourists normally visit and utilize during nature walk in the village of Kauxwi. The participant stated:

When tourists arrive in the village, they meet with me here as the local headmen. They would explain that they are going to camp here. We then arrange for local traditional dancers to entertain and educate them. Some San (*Basarwa*) people prepare to dance here (staged traditional dancing). Tourists take them photographs. Tourists also gather around fire made of local woods. They prefer to camp in this area as well as under the Umbrella tree or White thorn (*more-o-mosetlha*, *Acacia sieberiana*). This is why government officials state that we are likely to be relocated to dryland places of the Okavango region. When wild animals roam around in the wetland, they should not be disturbed by people.

The participant ended his explanation by asking the question, "Did you hear that the Okavango Delta has become number one internationally in Doha?" Participants acknowledged the role of wild animals in attracting tourists to the Delta. One of the female participants, who cultivates crops for feeding her family members in Mohembo village, explained: "wild animals such as elephants attract tourists in our region. Nature photography is also promoted by the existence of wild animals. As a result, income is generated, and the government is able to purchase medicines such as Anti-Retroviral drugs."

Some participants stated negative sentiments about tourism. Seya, who lives in Sekondomboro village, for example, stated:

At first wild animals were important to us. But now, although they could be important, the benefits of wild animals are not experienced by us, local people, in the Okavango region. The income that is generated from wild animals goes to government coffers. The region of Okavango has remained behind in terms of infrastructural development.

The question that was asked aimed at finding out how the participant perceives the importance of wild animals, which mainly attract tourists. Moreover, Seya, who raise mainly cattle, continued to explain:

To the people here wild animals do not have importance. Wild animals benefit the government. Those who want to do photography pay money to the government. If a foreigner arrives and says that he wants to do safari hunting, he or she pays money to the Government.

The above explanations suggest that the practice of tourism has both positive and negative outcomes. Sondi, a male participant, in Xakao village, explained:

We have been living in this place for a long time. There are visitors who come from foreign countries. They consider how to utilize this environment. They should do this taking into account how local people have been surviving. In the past, the Okavango River was not congested. There was less accumulation of waste. Lately, there are visitors who came and introduced their businesses. They brought a variety of infrastructure and disposable products. We are now emphasizing that this waste should be disposed in a safe manner. If litter is not contained, it has the potential to develop rust and affect indigenous plants that naturally grow in the Okavango. Then, right now we are confused and not able to discern what is right for us and what is not right because visitors also want us to conform to their ways of living.

The above perception suggested that tourism operators should be sensitive to issues of conservation, waste management, and the values of local people. Moreover, it is important that teachers equip students with relevant knowledge and skills so that they are able to take advantage of economic opportunities in the hospitality and tourism industry. The above section presented findings on the tourism content in the school curriculum and the importance of environmental and cultural knowledge in the tourism industry. The ensuing section discusses the findings that are presented in this paper.

4. Discussion

The purpose of this paper was to explore ways in which human resource capacity in the tourism industry in Botswana can be enhanced through the development of tourism education programming at the secondary educational level in Botswana. The researchers sought to illustrate the potential value of place-based education as an educational methodology that can be used to accomplish this aim. We were interested in presenting and interrogating tourism education in the Okavango Delta, which is an international tourism destination. We found instances where the social studies teacher in the school integrated tourism content into the curriculum. For example, the teacher of social studies introduced discussion of tourism infrastructure (e.g. lodges and campsites) mushrooming in the Okavango Delta. He mentioned this when teaching about Environmental Impact Assessment. The above kind of integration is similar to what [Chili \(2013\)](#) stated that in South Africa and the Caribbean there is very little integration of tourism content in subjects such as geography. The topic of Transport System was also a platform where the teacher integrated tourism contents. One of the discussions related to this topic focused on airports and airstrips in Botswana. The integration of tourism

education into the curriculum shows how the teacher in the secondary school taught the content of tourism within broader learning topics. Real world learning experiences were used by the teacher to help learners develop connection to local environmental resources and issues and consequently develop a deeper sense of place (Powers, 2004). The textbook that was used by learners also showed local environmental resources in the form of pictures of the Okavango Delta - a major tourist attraction. Educational authorities also emphasized use of local resources, as teaching aids. They stated that teachers should take advantage of local tourist attractions, which are known by learners, and include them in lesson plans.

The above findings suggest that if teachers and staff in the school utilize place-based education approach and make practical linkage with community, the approach can help deliver effective tourism education in Botswana's schools. It is this kind of education that also helps the learners to progress further in higher education. Sobel (2005) suggested that community vitality and environmental quality are improved when there is active engagement of local citizens and organizations, and environmental resources in the life of the school. Tourism products are also part of environmental resources. Goeldner et al. (2000) suggest that supplies of tourism product depend on educational institutions such as secondary schools. As noted in the background of this paper, this study contributes to this body of literature by presenting and interrogating tourism education in the Okavango Delta. The findings illustrate rich local knowledge that teachers can employ during teaching and learning through place-based approaches to education. We believe that place-based education can help to enrich tourism education and enable competent and professional tourism training. We hope that through the above approaches there should be coherence in teaching and training approaches not only in Botswana but in other developing countries as well. Mayaka and Akama (2007), for example, concluded that in Kenya there is lack of coherence in teaching and training approaches of tourism. Such an approach could be adopted in Kenya as well.

Findings suggest that teachers stand better chances of benefitting from employing the approach of place-based education as a framework for tourism education. Local people carry wealth of place-based and local knowledge. We heard from one of the local elders that when learners actually see and experience wild animals in their natural context, they stand a better chance of knowing and fully understanding the nature and value of tourist attractions in their local environments. Learners should not only read about wild animals but should make sure they see them with their eyes. They should appreciate that wild animals are a source of revenue (through tourism receipts) for local people and the government. The above perceptions seem to be aligned with the general objective of Unit 2.6 of Economic Development, in Social Studies, which says that learners should be able to appreciate the importance of tourism to Botswana's economy and specifically identify tourist attractions in Botswana (Ministry of Education, 2010). The appreciation of wild animals and local tourism by the learner is what Sobel (2005), in using the approach of place-based education, calls reintegration of the learner to study the local environment. In the process of reintegration there is enhancement of the curriculum and instruction of tourism in schools. For instance, in Gani village, the participant had this to say: "Teachers need to visit families of learners at their homes and ask about the local lifestyles. Then in the classroom the teacher would teach on local elements they also understand".

Tourism education does not only take place in the classroom with the students. When tourists interact with local people and appreciate their funds of knowledge, they indulge in the process of learning. The local headman explained that when tourists arrive in the village, some dancers (*mainly San people*) prepare themselves to entertain the tourists, who then indulge in the process of learning informally about cultural dances, indigenous language, food, and other local home chores. The headman drew attention to the informal camping site that tourists occupy during nature walk (excursions) in Kauxwi village. The above perceptions have implications for the CBNRM program. It may offer effective means of teaching and learning about tourism in destination areas. We believe that local level management initiatives have the potential to leverage local people's sense of responsibility and thus strengthening visitor engagement. Eventually, this initiative may enrich experiences of all stakeholders. Another related comment on tourism education was made by one of the participants as follows, "we have been living in this place for a long time. There are visitors who come from foreign countries. They consider how to utilize this environment. They should do this considering how local people have been surviving." Although the participant appeared to raise caution, there is also an emerging lesson that in the process of arriving at a pristine environment, tourists should learn from available unique resources and these resources (e.g. land resources) need to be kept clean and not be over utilized.

5. Conclusion and recommendations

This paper expands the literature on tourism education in developing countries and explores the potential value of place-based education as a framework for incorporating tourism education in the secondary school curriculum. The paper has presented findings about tourism education in a secondary school that is located in one of the important ecotourism destinations in sub-Saharan Africa. The interpretation in this paper is socially constructed and situated. It is important that teachers nurture students' strengths and weaknesses in classrooms through lived experiences with the purpose of imbuing a deep sense of place. Therefore, instruction must be linked to students' lives, and details of effective pedagogy should be linked to local histories and community context. This is because learning is a social process and practice and cannot be easily divorced from the local society, where the school is situated. One of the assertions is that the teaching and learning of tourism has to unlock and capitalize on the knowledge that students already possess from their households. Tourism education is crucial not only in enabling support to the industry itself, but also on how it responds to broader issues within tourism development that affect wider society, for instance, access and use of natural resources by local people adjacent to lodges and campsites. The local environmental and cultural knowledge that students could learn through place-based education approach would be of great value to anyone aspiring to work in tourism industry in Botswana, especially in safari tourism industry. This has potential to address lack of human resource capacity in the hospitality and tourism industry and providing relevant competencies. We are hoping that through this study of tourism education in Botswana we are also contributing to strengthening

respectful relationships between rural schools and communities in order to avoid mismatch, particularly in worldwide natural environments that have rich biodiversity.

As it was envisaged, some principal issues about tourism education in a school in the Okavango Delta have been raised. These issues need to be taken seriously by stakeholders if tourism is to become much more sustainable. It is crucial that local people (e.g. learners, parents, and guardians) have a strong voice in curricula development and contribute to effective realization of a place-based education approach. In this manner, the curricula that integrate tourism should stem from the socio-economic and cultural context of local people, but still bearing in mind that tourism industry functions in a global market place. We are hoping that through this approach, tourism education is not likely to be seen as preparing people for industry occupations, but educating people for life-long career opportunities. Paris (2011) also suggested, “promoting a classroom experience based on the social constructivist perspective of learning will not only advance successful learning in the classroom, but will also provide the foundations for successful lifelong learning” (p. 2).

6. Limitations

We endeavored to explore tourism education in a secondary school in the Okavango Delta. Our findings reflect several limitations. Readers should understand that this was a qualitative case study. We believe the findings that we presented in this paper are not actually generalizable, particularly that they emerge from observations and interviews in a doctoral study which focused in Environmental Education. The primary researcher was also limited to one secondary school in five villages in the panhandle of the Okavango Delta of Botswana. We believe that there might have been some elements of tourism that were taught in the school during the field work, but not captured by the researcher. This is because observations were mainly conducted in one classroom of form three students. We suggest further studies to be carried out to confirm our findings and explore the extent to which place-based education can be utilized for competent tourism education in secondary schools. Studies may also investigate if other junior secondary schools in Botswana are incorporating tourism content into the curriculum.

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