Field learning the ecotourism way: Perspectives of students at the Durban University of Technology

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Abstract

Universities in South Africa face numerous challenges related to student success, student experience, pass rates, throughput rates, graduation rates, funding from the government and employability. Universities and the programmes that they offer are also criticized for non-alignment with industry needs and the overproduction of graduates that struggle to find employment after graduation. This paper argues that for programmes to enhance alignment with industry needs, etiquette and standards, it is crucial to collaborate with industry in the teaching, learning and assessment processes of a programme. This collaboration could be achieved through the use of industry experts as guest lecturers in authentic industry environments. Ninety third year students from the Department of Ecotourism were exposed to this kind of authentic and future-oriented ecotourism learning at Hluhluwe uMfolozi Game Reserve in South Africa, for an entire week in 2017. This paper provides perspectives shared after their field learning experience. The study discovered that the experience was ‘thrilling’, ‘incredible’, ‘fun’, ‘educational’, ‘informative’ and ‘different’ allowing the students to use all their senses while also giving opportunities to do well to those students who tend to struggle in class. Most of the students thought that they had acquired enough knowledge and skills during their field-trip, to be able to provide the same experience to paying guests. It was also interesting to note that the training had afforded about 22% of the students an opportunity to decide that they were not cut-out for a career or business in the wilderness. However, the same training validated field-guiding as a career or business choice for about 78% of the students.

Keywords: authentic learning, experiential, task-based learning, future-oriented learning, South Africa

Introduction

In recent years, Ecotourism Management students were performing badly especially in their subject called Wildlife Management. The staff realised that this may have been a result of trying unsuccessfully to bring wildlife into the classroom in the form of pictures. The department decided to use student levies (an amount of money that is added to the tuition fees for specified reasons) to take the students to wildlife in natural and authentic settings at least once in the three year period that the students spend in the department during the course of their studies. This was intended to be an important experience for most of the students who would never have been exposed to wildlife before, so as to ensure that they obtain at least a modicum of an authentic experience prior to joining the industry as employees. This kind of learning in authentic environments was advanced by the classical Greek philosopher Aristotle as the best way of learning, supported by Kolb (1984) as being meaningful and key to learning endeavours and it is
an important moment in learning allowing for novel encounters in natural settings (Base, 2016). Palmer (2009) asserts that it is a driver behind students’ interest in quality learning. Lave and Wenger (1991) described it as constructivist, thus allowing students to develop their own understanding of learning materials within real life situations as they interact with others within natural settings (Bandura, 1978). This ultimately leads to both enhanced cognitive and affective development (DeWitt and Storksdieck, 2008) and widens students’ experiences through exposure to new contexts (Bonderup Dohn, 2011).

Enhancement of interest in the programme and field guiding as a subject was observed during field activities and captured using a questionnaire when the students emphasised the importance of providing this kind of training to all the students that enroll for the programme from the first year level. This was also emphasised by the perceptual words used to describe the experience which included exciting, fun, rejuvenating, epic, best experience ever, and others. The students also had quite a number of suggestions to improve the experience of future students. These included inter alia, night bush walks to be able to see more animals, inclusion of the experience to sleep in tents in the bush instead of the hotel, more room for creativity using natural resources, less formal lectures and more field activities.

Literature review

Game reserves, zoological gardens, mountains, canyons, beaches, etc. provide authentic learning environments for ecotourism students. Such environments provide chances to explore and construct knowledge based on personal experience and are grounded in real-life situations (Newmann, Marks and Gamoran, 1996). Driscoll (2005) argued that learning that is removed and unrelated to the real world creates inert knowledge which students find difficult to use beyond the walls of the classroom, while Fremerey and Bogner (2015) seemed to think that learning in authentic environments is motivating, and makes tasks easier to understand thus leading to a far longer retention of information. McGrath (2015) supported learning in authentic environments because he asserts that it generates enthusiasm, builds relationships, enhances creativity and releases energy through closing the gap between learning and doing. McGrath (2015) further pointed out that learning in authentic environments ‘accurately mirrors reality of work’ as students attempt to comprehend the task, plan execution, identify possible challenges and contingency, seek advice, receive critical feedback, and improve. This notion is supported by Herrington and Herrington (2006) who state that it is crucial to make learning tasks authentic in higher education as students are being prepared for the world of work as (Herrington, Reeves and Oliver, 2014) authentic learning is robust and future-oriented.

According to Behrendt and Franklin (2014:237) experiential learning in authentic environments enhances learning as it provides opportunities to learn by doing, experiencing, watching, touching, smelling, tasting, anxiety and fear. Experiential learning in real-life settings is learning in which learners are directly in touch with the realities being studied thus becoming active participants in their own learning (Wong and Wong, 2009; Mathias, 2014:8) allowing them to construct meaning through interaction, uncover what things mean and how they relate for themselves (Passarelli and Kolb, 2012:2). Wurđinger and Carlson (2010:1) stated that experiential learning enables students to apply knowledge and concepts to real-world situations and problems (Berer, 2017) in a student-centred way that is (Benckendorff and Zehrer, 2017:307) grounded in experience, critical thinking, reflection and action while also teaching them the competencies and behaviour needed for them to thrive in the real-world. Such students are thrown in the deep end where they can collaborate to integrate numerous voices to deal with complex learning challenges (McGrath, 2015) complete...
complex tasks, learn in a problem-based fashion thus discovering multiple approaches to problem-solving, integrate different module outcomes, integrate assessment into learning, reflect of the learning process and accept their lecturers as partners in the learning journey (Nikitina, 2011).

Figure 1 captures the essence of learning in authentic environments where students get to understand the task in the context of the open environment where they live and will likely work in the future. Some of the resources come from the university (books, syllabus, lecturer, funding, etc.) while other resources are provided by the open environments (game reserve, animals, industry experts, real environment, etc.) with learning outcomes providing a nexus between learning task, resources and support. As reflected in figure 1 students get to perform activities and tasks using all these resources provided by both formal lectures and authentic environments under the guidance and support of industry experts.

Christofi, Kylitsias, Michael-Grigoriou, Anastasiadou, Michaelidou, Papamichael and Pieri (2017) observed strong improvement in learning performance of the learners and marked change in their interest on cultural heritage after a visit to archeological site, and they concluded that virtual reality can have positive influence on the performance of learners back in the classroom. Güneş and Bozna (2018:281) have argued that modern day students have more opportunities to improve themselves and their skills about any topic of interest due to abundant advanced technology and ubiquitous flexible learning environments assisted by the sophisticated technical skills of the teachers. Such opportunities imply that they tend to think and process information fundamentally differently and faster than their predecessors. Lectures thus have to utilise these resources that the open environments provide to facilitate a seamless transition from university to the workplace.
Methodology

The study was an exploratory case design seeking to establish a deeper understanding of field-trips as way to foster life-long learning that is student-centered. All third year Ecotourism students from Durban University of Technology, Riverside Campus, constituted the population of the study group. Gomm, Hammersley and Foster, (2000) and Yin (2009), posit that a case can be a group. This group of students was therefore regarded as a single case in this study. The whole group of ninety students was purposively selected (Patton, 2002) because they were final year students having covered all the contents of the programme. These students embarked on the field-trip based on their modules called Ecotourism Interpretation 3 incorporating important elements of another subject called Wildlife Management 1 and 2. This is a task based module requiring students to learn theories in the classroom and then to practice and show their skills in the field. This practice took place in the form of a field-trip and bush retreat over a period of five days and four nights. The main outcome for the field-trip was to apply field craft knowledge during field guiding in natural settings. This knowledge was to include survival skills, orientation skills (using constellations, sun, topographical features, etc.), tracking knowledge and how to approach dangerous animals on foot. This could not be taught in class, students had to experience it first-hand for learning to be authentic.

The instrument used to gather relevant data for this study was a qualitative questionnaire. This paper concentrates on the post field learning period. The students had their normal module lectures and following those lectures, they went to Hluhluwe Imfolozi Park (HIP) to experience wildlife and based on their interpretation and perceptions, were assessed in the natural environment by industry experts. The post field-trip study sought to gather information on their overall impression of the experience provided and sought to gather suggestions for future learning.

The field-trip itself lasted five days. The students were given the qualitative survey to complete upon completion of the field learning. The data obtained from the instruments were analysed and organised using theoretical proposition, and then developing a case proposition as Yin (2003) suggests. The dominant data analysis technique used in this study was pattern-matching, explanation-building and replication logic (Yin, 2003).

Findings

The students were asked to complete a questionnaire comprised of six qualitative questions. They were at liberty to write as much as possible but were told not to exceed the spaces provided. Consequently, a number of responses tended to be repeated as the students shared their perspectives of the nature training course they had undergone.

While the study was not quantitative, it was important to check the number of times that certain responses emerged from the 90 students who participated in the training. The themes that emerged from the responses to the first question were the natural environment, enhanced learning experience, integration of theory and practice and of course, fun.

The training inculcated love for nature and appreciation of the natural resources as illustrated in table 1. The majority of students thought that the training was very educational and informative. They shared that the training had exceeded their expectations as they had learnt a lot of new
things. They seemed to be very impressed by the practicality of the course as everything they learnt was activity-based. The training also enhanced their wilderness survival skills.

Theme four highlights the words they used to describe their feelings about this kind of learning. It was ‘fun’, ‘exciting’, ‘awesome’, ‘amazing’, ‘incredible’, ‘entertaining’, ‘thrilling’ ‘phenomenal’ and ‘rejuvenating’. The nature training session provided the students with opportunity to access meaningful learning as opposed to them having the lecturer tell them what they have to learn. The most important information shared by the students was that the experience prepared them for the industry as they interacted with industry experts and got to see and do what field guides get to do on a daily basis.

Table 1: What was your overall impression of the nature training?

<table>
<thead>
<tr>
<th>Responses according to themes</th>
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<tbody>
<tr>
<td><strong>Theme 1: Natural environment</strong></td>
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<tr>
<td>I fell in love with nature, interacted and connected with nature, made me feel responsible</td>
<td>6</td>
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<tr>
<td>Taught me things I did not know about nature and natural resources</td>
<td>7</td>
</tr>
<tr>
<td>Importance of preservation of nature and ecosystems for future generations and boost the economy through attraction of international tourists</td>
<td>7</td>
</tr>
<tr>
<td><strong>Theme 2: Enhanced learning experience</strong></td>
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<tr>
<td>Exposure to wilderness and wildlife, saw animals I had never seen live, saw Big Five not on TV for first time, animals in their natural settings, new experience, encountered dangerous animals on foot, made everything we learn real Learnt about natural and cultural heritage, Learnt about animal behaviour and how to behave around dangerous animals Interpretation of environmental settings, Learnt how different species depend on each other for survival in the ecosystem, Saw first-hand how things connect, integration of many subjects right from first year, interrelationship between nature and humans We discovered things for ourselves We learnt more than we had expected, learnt new things, beyond my expectation Integration of theory and practice, outside learning, integration of different subjects Changed my perception of ecotourism as a programme, increased respect for my course Very helpful in shaping my career, persuaded me to take guiding as a career, impactful on my qualification and career, saw new opportunities in ecotourism, became eager to learn more about ecotourism and nature Very educational and informative, enlightening, no repetition Great experience Excellent briefings, expert first-hand knowledge and passion, share their experiences Deep learning, challenging, pressure associated with this work Learn as a team, sharing learning experience</td>
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<td><strong>Theme 3: Integration of theory with practice</strong></td>
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<tr>
<td>Integration of different skills, tracking skills based on footprints, star gazing, bush walks Field and wilderness survival skills were enhanced The training was practical, activity-based, flexible learning, opportunity for people not good in theory to perform well A glimpse of what the ecotourism industry is all about, ready and look forward to go to industry, insight based on industry needs, felt like a tour guide myself</td>
<td>20</td>
</tr>
<tr>
<td><strong>Theme 4: Fun</strong></td>
<td></td>
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<tr>
<td>Exciting, awesome experience, amazing, incredible experience ever Impressive, excellent, phenomenal experience, exceptional experience Interesting, entertaining, thrilling experience Enjoyable and fun learning experience Rejuvenating and happy learning experience</td>
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</table>
The students were then asked to explain differences between classroom lectures and field learning. Table 2 captured the responses of the students regarding what they thought the differences between classroom lectures and field learning were. Clearly, they had a lot more to say about field learning as opposed to regular lectures. This kind of learning engaged most of their senses and catered for different learning styles. They learnt through observation and participation, which enabled them to ‘connect the dots’ between theory and practice. They were not merely told about the skills that they should have in preparation for the industry, but they had prepared industry experts actually guiding them through the practical activities of what they would be expected to do. This was learning in the authentic environment as they encountered dangerous animals in their natural habitats. As opposed to theorizing and fantasizing about wildlife, their fears were real as they got to experience wildlife first-hand. This kind of learning is not always possible, but departments have to attempt to cater for the learning styles of all of the students at least some of the time, instead of catering for the needs of some of the students all of the time, as the modality of lectures does.

Table 2: Classroom lectures vs field learning

<table>
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<tr>
<th>Classroom learning:</th>
<th>Field learning:</th>
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<tr>
<td>Theoretic all the time, theoretical background, lectures are formal, tense and not free, textbook information, teach the basics, not enjoyable, not realistic, We imagine things and sometimes fail to get the point, learning is limited, reality is simulated, Lectures are not broad as they do not allow us to get into contact with reality, Classroom learning is boring, the lecturer speaks and we sit and listen, the lecturer asks questions and you have to answer them, Lectures are easy to forget, We get told about do’s, don’ts and skills required to be field guide</td>
<td>Practical, and experiential and not fantasizing about animals and industry, we learnt through observation and participation, fully involved in our learning, in-depth and insightful learning that involved feelings as fear was real, Presentations, notes and then step outside to put theory into action integrating survival skills around dangerous animals, Vivid and clear, puts stamp onto the notes leading to better understanding, helps us see things clearly, We get to connect the dots between theory and practice, Taught by industry experts, makes learning fun as we played a lot of games while learning Got to see real animals in the game park/their natural setting, relevant learning that is directly connected to what we are learning about/wildlife, More relaxed and friendly, free and open discussions, First-hand experience, have fun while learning, allowed us to use all our senses as we got to touch things, We speak about what we see and we are in contact with nature, Interactive open and exciting skills-based learning, able to express yourself with ideas coming from all corners, Field training was the actual industry which allowed for a lot of creativity and you get to position yourself, Application of what is happening in the real world, an opportunity to interpret environment on our own, Taught me things I would never have learnt in the classroom, The training complements classroom learning</td>
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The department need to establish the whether the students would recommend this kind of training to future ecotourism students. They had a fair number of reasons for recommending it.
As illustrated in figure 2, the most popular reason for recommending the training for future students was that it was relevant to industry because it involved a diversity of numerous practical activities. This reason was followed by their perception that the training leads to a better understanding of the theory which is taught to them during lectures. Another important reason given was that the training would help the students to decide whether they wanted a career in field guiding or some other career options of the programme.

Aspects with 15 responses from the students were wilderness survival skills and the adventure incorporated in the training as well as the inculcation of field guiding skills through personal experiences. These were closely followed by learning about the importance of nature and conservation. The perception that the training was information packed and interesting came seventh, and was closely followed by understanding of animal behaviour and industry readiness. The students also rated being taught by industry experts as an important aspect with the frequency of 7.

It was important to try and determine the impact that the training had on the level of confidence of the students as field guides. They were therefore asked the question of whether they felt that they were ready to give the same kind of experience to paying guests. An overwhelming majority of the students (n=80, 89%) thought that they were ready to give a similar experience to paying guests and the remaining 10 were either not yet ready (6), not sure (3) and one offered no response. The reasons for feeling the way they felt were then captured in table 3 that follows.

The students gave a number of reasons why they felt confident that they would be able to give the same kind of experience to paying guests. As shown on table 3 the most important reasons given were the knowledge and skills that the training equipped the students with. Their experience enhanced their level of confidence and validated field guiding as a career of choice for them. A few of the students felt that they were not ready as they still needed to improve their knowledge and skills. The responses of the students illustrate the importance of this kind of training in improving the skills, enhancing knowledge and building confidence while also inculcating love for their chosen career option.
Table 3: Reasons given for being ready or not ready

<table>
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<tr>
<th>Not yet ready</th>
<th>Not sure</th>
<th>Ready</th>
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<tbody>
<tr>
<td>I need more training because my knowledge of trees and birds is still weak,</td>
<td>I am still afraid to communicate with guests because I do not have full information,</td>
<td>I gained a number of skills from the facilitators and I also learnt quite a lot, the experience was valuable,</td>
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<tr>
<td>I still need to develop certain attributes before paying guest can enjoy the</td>
<td>I still need to improve my skills,</td>
<td>I had opportunities to interpret nature for other students and gained guiding skills,</td>
</tr>
<tr>
<td>experience, Some of the information given by the guides was conflicting and</td>
<td>Partially confident I still need more practice before I take paying guests</td>
<td>I know the rules and animal behaviour to be able to give paying guest value for money,</td>
</tr>
<tr>
<td>confusing, I am not interested in nature guiding, I have not had enough</td>
<td></td>
<td>I acquired some valuable skills that I can share with guest such as star gazing, animal tracking, story-telling and others,</td>
</tr>
<tr>
<td>training and I need to polish my people skills</td>
<td></td>
<td>I understand customer behaviour,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The training was well organised and executed, I learnt a lot,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I am now able to brief and debrief the guests,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I do not have all the information about nature but I can interpret the environment and wildlife on the game reserve that we went to,</td>
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<tr>
<td></td>
<td></td>
<td>I have been volunteering at WESSA as a guide and environmental educator and the training added to my knowledge and understanding,</td>
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<tr>
<td></td>
<td></td>
<td>I love nature guiding,</td>
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<tr>
<td></td>
<td></td>
<td>I know what field guides do and this boosted my confidence.</td>
</tr>
</tbody>
</table>

On the question of whether or not the training experience had encouraged them to craft a career or start a business in nature guiding, the students shared information reflected in figure 2. The overwhelming majority of the students 88% (no=70) were positive that they would like to start a business in field guiding. It was interesting to note that about 22% (no=20) of the students responded that they would neither like to start a career nor create a business in field guiding. The experience was however still deemed to be beneficial in the sense that it made them realise that they were not cut-out for the wilderness. This decision would not be a problem for them since the programme does provide them with a range of other career options such as ecotourism marketing and ecotourism development. The reasons for not wanting to venture into a career of managing a business in field guiding included their preference for a career in the hospitality sector, the fear of wild animals and not imagining themselves spending the rest of their lives in the bush.
As illustrated in figure 3 the majority of students (85%) would start a career or business in field guiding because they would like to further conservation efforts. This theme was closely followed by the idea of starting and growing their own businesses and being independent (75%). Ability to share their knowledge and skills as well as helping in the economic growth of local people and the country came third with about 14 frequency each. Some of the students (with 10 frequencies) felt that they had gained so much information and skills that they would like to share with local and international guests. It is important to note that the students were free to write as much as possible, so they did not necessarily give one reason for wanting a career of business in field guiding.

![Figure 3: Why students' would start a career of business in field guiding](image1)

Other comments and suggestions

- Tourches and bottled water
- There is a need for backup guide...
- More time for the training
- Research, self discovery,
- Evening bush walks to see more animals
- Fun, awesome, best department ever,
- Less classroom lectures
- This kind of training should continue

![Figure 4: Other comments and suggestions by students’](image2)
The students were also asked to give other comments pertaining to their experience of wildlife as afforded by the opportunity presented by the department. Their responses were grouped into themes that are reflected in figure 4. The suggestion that came most frequently was that the field training should continue, and that if possible the students should be exposed to it from the first year level of university education. This suggestion was closely followed by the request for more bush walks and more opportunities for the students to participate in nature activities. The field training seemed to have elevated the status of the department in the mind of the students as they felt that the department was ‘good’, and they were having fun while learning and being exposed to industry requirements. There were some complaints about formal classroom lectures as the students felt that there was repetition of content already covered. They recommended that in future, even briefing sessions could be done on the field to reduce formal lecture time and thus not duplicate work.

Figure 5: The hilltop where the students were accommodated for a period of 5 days during their field learning experience

Figure 6: Field learning and animal tracking in smaller groups under the guidance of an expert
This experience gave the students an opportunity to decide whether they were interested in field guiding as a career, or if they would rather venture into other areas that the programme prepared them for such as ecotourism development, ecotourism marketing and others. They were ‘hands on’ in the learning process and had fun while learning and their fears for wildlife were real and not imaginary as portrayed in videos and internet images. Staying at the hotel also provided them with first-hand experience of the hospitality that their future guests would expect and hope to experience. Being taught by field experts and practitioners allowed them the opportunity to ask authentic field questions that the average lecturer could possibly find difficult to answer based on theory alone.

Figures 5 to 7 illustrate how the students were exposed to both formal classroom learning and field sessions which were conducted and guided by the field experts. This enabled them to immediately see the link between theory and practice and have their queries attended to by field practitioners. While this model of delivery of learning is costly, it has been applauded by teaching and learning experts (Newmann, Marks and Gamoran, 1996; Discroll, 2005; Fremerey and Bogner, 2015; McGrath, 2015; Herrington and Herrington, 2006; Herrington, Reeves and Oliver, 2014; Behrendt and Franklin, 2014; Wong and Wong, 2009; Mathias, 2014; Collins, 2011; Passarelli and Kolb, 2012; Wurdinger and Carlson, 2010; Benckendorff and Zehrer, 2017; and others), for allowing students to engage most of their senses during the learning process, participate actively in their own learning, and also get first-hand experience of what the industry they want to venture into entails.

Conclusion
Tuchman and Lalane (2011) argue that integrating classroom and field learning promotes a deeper, more comprehensive and critical understanding of the learning content within both the confines of the classroom and the authentic learning environment. The study discovered that the issue of formal classroom learning (see figure 7) was regarded as unnecessary and redundant by some of the students because it duplicated the formal walled setting of the university. In their recommendations they stated that they would like to see more bush walks and activities as they had acquired enough theory by the time they ventured into the bush. Based on their recommendations, the department will have to find funds to ensure that every student that enrolls for the programme gets exposed to the same kind of experience even though it might be difficult and more costly to increase the number of days as suggested. This experience was also crucial in making them decide whether they wanted a career in field guiding because the experiences were real. Some of the recommendations that came forth were actually surprising and unexpected, as the lecturers were unaware of the level of development that the students had reached over the three years of their studies and the week that they had spent with industry experts.

References


