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# The Influence of Training on Guides and Their Environmentally Responsible Behaviors and Transformational Leadership Abilities

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THE INFLUENCE OF TRAINING ON GUIDES AND THEIR ENVIRONMENTALLY  
RESPONSIBLE BEHAVIORS AND TRANSFORMATIONAL LEADERSHIP  
ABILITIES

by

Nancy Qwynne Lackey

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INFLUENCE OF TRAINING ON GUIDES AND THEIR ENVIRONMENTALLY  
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University of Nebraska, 2016

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The ecotourism and interpretive fields were established, in part, to protect natural environments. This goal is achieved by implementing environmentally responsible practices and by providing transformative experiences for visitors. Previous research suggests that ecotour and interpretive guides play a vital role in implementing environmentally responsible behaviors (ERBs) and creating transformative visitor experiences. Other researchers have found that guide training yields many benefits for guides and their abilities, but few have explored the influence of training on guides in detail. The purpose of this research was to explore the influence of established training programs on guides and their ERBs and transformational leadership abilities using qualitative methods, including participant observation and interviews, and quantitative survey methods. Case studies were performed on populations of current and former student and instructors affiliated with two training providers: EcoTraining, a guide training program based in South Africa and Botswana, and a National Association for Interpretation Certified Interpretive Guide program. In both cases, a statistically significant relationship was found between students' self-reported guiding competency scores and transformational leadership abilities. The majority of students surveyed in

each case also self-reported practicing the majority of measured ERBs, but the qualitative data indicates that students' ERBs are influenced by training only if certain emphases and activities are included. The qualitative findings also highlight the importance incorporating role modeling, experiential learning activities, and instructors who exhibit transformational leadership characteristics. Structured and unstructured time in nature and alone time are also important to include, as it allows students to recover from mental fatigue and engage in the self-reflection necessary to grow as an individual and develop connection to nature. Though training was found to increase guides' ability to lead transformative experiences, interview data shows that guides' abilities and behaviors are also influenced by factors outside of training, such as visitors, other guides, and managers.

## DEDICATION

I proudly dedicate this thesis to the participants of the study, especially those who agreed to interviews. I am honored that you shared and entrusted your stories to me, and I truly loved hearing every word you had to say. I want all of you to know your words will not only be remembered in the following pages but in my head and heart.

To the participants of the EcoTraining study, I want to sincerely thank you for teaching that not everything fits into boxes, to carry a light pack through life, and to listen to the whispers of my own heart.

To those participated in the NAI CIG study, thank you for embracing me a member of your team and relighting my passion for interpretation at a time when I needed it most.

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I also want to thank Dr. Rick Edwards and the Center for Great Plains Studies for their interest and support. I hope this research can be used as a valuable tool to help fulfill the vision of a growing and thriving ecotourism industry in the Great Plains.

Last but not least, I want to give a huge thank you to my friends, family, and fellow grad students. I do not know how I would have gotten through these past two years without your support, sympathetic ears, and advice. Thank you for being a part of this long, life-altering journey.

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## CHAPTER I: INTRODUCTION

### **Research Problem and Purpose**

In the wake of technological advancements and significant human population growth, the collective human impact on natural resource systems is greater than ever before (Berkhout, 2014; Hardin, 1968; Steffen et al., 2011). Thus, it is increasingly important to understand how to mitigate human impacts and increase the environmentally responsible behaviors (ERBs) of people who live, work, and play within natural resource systems. One area that deserves this type of attention is ecotourism.

Ecotourism is a type of tourism formally established in the mid-1980s (O'Neill, 2002; Weaver, 2008). This sub-sector was originally developed to alleviate concerns for and the negative impacts of mass tourism, as mass tourism was infamous around the world for exploiting local cultures and damaging local environments (Honey, 1999; O'Neill, 2002). In recent decades, ecotourism has been championed as a solution to a variety of community development and environmental issues, leading to the proliferation of ecotourism operations around the globe (Ananthaswamy, 2004; Honey, 1999; Weaver, 2008). However, some authors are calling into question the ability of ecotourism operations to deliver such results (Honey, 1999; O'Neill, 2002; Weaver, 2008). Though the literature provides evidence that some operations excel in fulfilling the goals of ecotourism, other operations do not deliver on their promises, especially in regards to mitigating the detrimental impacts of tourism and improving the pro-environmental attitudes and behaviors of ecotourists (Ananthaswamy, 2004; Gilbert, 2003; Lee & Moscardo, 2005; O'Neill, 2002).

This thesis attempts to explain why ecotourism operations exhibit varying levels of success by examining ecotour guide training programs. As will be discussed, ecotour guides play a vital role within an ecotourism operation. Therefore, understanding how guides are trained and how these processes influence a guide's behaviors and abilities may be the key to understanding how to improve ecotourism's success in minimizing environmental impacts and increasing ERB.

This research, which takes the form of two separate case studies, used both qualitative and quantitative techniques. In the first case study, EcoTraining, an established guide training program based in South Africa and Botswana, was explored using participant observation, semi-structured interviews, and a quantitative survey. In the second case, the National Association for Interpretation's Certified Interpretive Guide program (NAI CIG), an interpretive training and certification program, was investigated using the same techniques. The following three central research questions guided the research:

- RQ1: What is the influence of EcoTraining's or NAI CIG's guide training program on student guides?
- RQ2: What is the relationship between EcoTraining's or NAI CIG's guide training program and students' environmentally responsible behaviors?
- RQ3: What is the relationship between EcoTraining's or NAI CIG's guide training program and students' transformational leadership abilities?

### Literature behind the Research Questions

The research questions and sub-questions that guided this thesis research project are outlined in Table 1. In the following section, a brief literature review is presented to justify the selection of these questions.

Table 1

#### *Research Questions*

Question		Sub-Questions
1. What is the influence of EcoTraining's or NAI CIG's guide training program on student guides?	1.1	What are the general characteristics of the guide training programs?
	1.2	What are the training techniques used by the trainers?
	1.3	What characteristics or training techniques have the strongest influence on student guides?
2. What is the relationship between EcoTraining's or NAI CIG's guide training program and students' environmentally responsible behaviors?	2.1	Does time duration since training impact this relationship?
	2.2	Does gender impact this relationship?
	2.3	Does educational attainment impact this relationship?
3. What is the relationship between EcoTraining's or NAI CIG's guide training program and students' transformational leadership abilities?	3.1	Does time duration since training impact this relationship?
	3.2	Does gender impact this relationship?
	3.3	Does educational attainment impact this relationship?

#### **Ecotour Guides: The Vital Roles They Play**

Ecotour guide training was selected as a research topic due to the important role that ecotour guides play within an ecotourism operation. An ecotour guide is defined as:

A nature-based guide who is working for an ecotour operator and is therefore expected to guide in a manner consistent with the principles of ecotourism. This includes interpretation of the natural and cultural

environment, using minimal impact behaviors, and ensuring sustainability of the natural and cultural environment. (Black, 2007, p.316)

Much literature focuses on the role that ecotour guides play within an ecotour operation. An accepted conceptualization is Weiler and Davis' (1993) adaptation of Cohen's (1985) conceptualization of a guide's role (see Table 2). Within this conceptualization, an ecotour guide's role is divided into six different roles: the instrumental, interactionary, motivator (of ERB), social, communicative, and environmental interpreter role (Black, Ham, & Weiler, 2010; Rollins & Randall, 2009). The instrumental, interactionary, and motivator roles are referred to as outer-directed roles, meaning the focus is directed outward toward the operation and management goals (Randal & Rollins, 2009). The social, communicative, and environmental interpreter roles are inner-directed roles, meaning that the emphasis is on leadership goals (Randal & Rollins, 2009).

Table 2

*A Conceptualization of a Guide's Roles.*

	<b>Outer Directed (resourced from outside the group)</b>	<b>Inner Directed (resourced from inside the group)</b>
<b>Leadership Sphere (focus on the group)</b>	Instrumental	Social
<b>Mediatory Sphere (focus on the individual)</b>	Interactionary	Communicative
<b>Resource Management (focus on the environment)</b>	Motivator	Environmental Interpreter

*Note.* Developed originally by Cohen (1985) and adapted by Weiler & Davis (1993).

Taken from Randal & Rollins, 2009.

To be most effective, an ecotour guide should simultaneously fulfill each of these six roles (Rollins & Randall, 2009; Weiler & Davis, 1993); however, many guides are either unaware of their responsibilities or unable to fulfill them, especially in regards to their roles as motivators and environmental interpreters (Ballantyne & Hughes, 2001; Weiler & Ham, 2001). A plausible explanation for this is the lack of quality guide training opportunities available to guides, a problem identified by Ap and Wong (2001), Carmondy (2013), and Skanavis and Giannoulis (2009).

### **Former Research on Ecotour Guide Training**

Within recent decades, a number of researchers have turned their focus toward ecotour guide training. In some studies, guide training was found to have several positive benefits. For example, Carmondy (2013) found that one guide training program created culture sharing groups in which guides passed down norms and beliefs regarding ecotour guiding behaviors to new guides. In another study, training workshops positively impacted guiding behaviors – most notably the use of interpretation techniques – as reported by guides (Ballantyne & Hughes, 2001). Likewise, even short-term training had positive benefits for guides. Black and King (2002) found that after a three-day course in Vanuatu, guides were better prepared to limit negative impacts of ecotourism than before the course, and Chamas and Schmidt (2011) found that a free 76-hour course helped ecotourism staff become better on-site monitors of environmental and cultural protection.

Though previous research increased our understanding of how training programs can better prepare guides to fulfill their roles and uphold the principles of ecotourism, there is more to be discovered. This gap – highlighted in the literature by Peake, Innes,



and Dyer (2009), Randall and Rollins (2009), and Black, Ham, and Weiler (2010) – emphasizes the need for more exploratory research, such as the research performed to answer RQ1 in this thesis, “What is the influence of EcoTraining’s or NAI CIG’s guide training program on student guides?” The case study on EcoTraining, whose courses cater to students who typically enter the ecotourism industry directly upon graduation (EcoTraining, 2016), is an ideal place to begin such an exploration. Likewise, the case on the NAI CIG is equally valuable. Though the NAI CIG course was not developed specifically with ecotour guides in mind, it is a training option available to many naturalists and park guides focused on improving interpretation skills – previously noted as a weakness of many guides (Ballantyne & Hughes, 2001; Weiler & Ham, 2001).

**Guide training and environmentally responsible behaviors.** To answer RQ2 (What is the relationship between EcoTraining’s or NAI CIG’s guide training program and students’ environmentally responsible behaviors?), a survey analysis was used to quantitatively test the relationship between the training programs and students’ ERB. Understanding this relationship is important, not only because it directly aligns with Black’s (2007) definition of an ecotour guide but also because it aligns with the purpose of this research. Ecotour guides spend a significant amount of time in natural environments; thus, their behavior directly influences the environmental impact of an ecotourism operation.

Additionally, a guides’ ability to influence tourists’ ERB may partially hinge on their ability to be a role model of ERBs (Littlefair & Buckley, 2008). The significance of role modeling in increasing ERB is most likely due to its impact on social desirability

and/or social norms. For example, Cialdini (2003) described that individuals have a lower tendency to litter, remove items from national parks, and a higher tendency to recycle when injunctive norms (depictions of acceptable behaviors) and pro-environmental descriptive norms (depictions of common behaviors) are invoked. Similarly, a study on tourism guides in Garhwal, India showed that guides' compliance or non-compliance with ERB were influenced by external social influences, suggesting that guides will practice ERB if they believe ERB is desirable and/or the norm (Serenari, Bosak, & Attarian, 2013).

This same phenomenon occurs between ecotour guides and ecotourists. Research has shown that guides were able to successfully reduce ecotourists' environmentally unfriendly behaviors when they used appeals (i.e. asking ecotourists to refrain from certain behaviors) and role modeling (i.e. modeling ERB; Littlefair & Buckley, 2008). Thus, it is important to determine whether or not guide training programs can produce guides who are committed to practicing ERB.

**Guide training and transformational leadership.** RQ3 (What is the relationship between EcoTraining's or NAI CIG's guide training program and students' transformational leadership abilities?) was developed by looking across disciplinary lines, which is increasingly acceptable and common when researchers hit a theoretical or methodological roadblock (Smith & Larimer, 2013). Because half of an ecotour guide's role is inner-directed emphasizing leadership goals (Randal & Rollins, 2009), a discipline that may be especially helpful in understanding how training can improve ecotourism is leadership research. Leadership research has produced a great deal of work on the

relationships that develop between individuals (Northouse, 2007). One theory that is particularly relevant to ecotourism is transformational leadership theory.

Transformational leadership theory – developed by Bass (1985) – views effective leadership as a process that causes change and transformation within followers, causing them to achieve extraordinary outcomes and become leaders in their own right (Bass and Riggio, 2006; Northouse, 2007; Yukl, 2006). Transformational leaders exhibit many of the characteristics of an ideal ecotour guide including charisma, confidence, commitment to values, strong communication skills, role modeling, as well as the ability to influence others, satisfy their needs, arouse motivation, and articulate high expectations (Northouse, 2007). These characteristics and abilities allow transformational leaders to profoundly affect their followers, resulting in higher levels of motivation and morality in both parties (Northouse, 2007). One avenue ecotourism operations could use to mitigate their negative impacts and increase ecotourists' ERB is through the use of guides who are transformational leaders. However, transformational leadership has not been examined in the context of ecotourism; thus, research is needed to determine if guide training programs can produce transformational leaders. In order to answer RQ3, the relationship between established guide training programs and students' transformational leadership abilities was tested using a quantitative survey.

### **Structure of the Thesis**

This thesis follows the format recommended by the University of Nebraska—Lincoln's Office of Graduate Studies. The style is consistent with the American Psychological Association. As mentioned, the research for this project was structured into

two standalone case studies and is written as such. Each chapter contains its own literature review, methods, results, and conclusion section. This format was chosen to simplify any potential publications that may be pursued upon approval of this thesis.

The case study on EcoTraining's guide training programs is presented before the case study on the NAI CIG training and certification program. Chapter II presents the qualitative findings of the EcoTraining study. Chapter III presents the findings of the quantitative findings of the EcoTraining study in the form of a research note, which is written according to the guidelines of the *Anatolia: An International Journal of Tourism and Hospitality Research*. Chapter IV presents both the qualitative and quantitative findings of the NAI CIG case study.

## CHAPTER 2: ECOTRAINING CASE STUDY

### **Introduction**

In recent decades, critics have acknowledged the mass tourism industry's negative impacts on local cultures and environments around the globe (Honey, 1999; O'Neill, 2002). Ecotourism, a sub-sector of the tourism industry, was developed in the 1980s as a response to this criticism and is defined as "responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education" (TIES, 2015). Ecotourism operations strive to minimize their negative impacts on communities and environments and to support community development and conservation initiatives.

### **Ecotour Guides: The Vital Roles They Play**

However, ecotourism operations can unfortunately fall short of these goals, especially in terms of environmental education and responsibility (O'Neill, 2002). Achieving these goals depends on many groups of key individuals within an ecotourism operation, one of the most important of which are ecotour guides. An ecotour guide is:

A nature-based guide who is working for an ecotour operator and is therefore expected to guide in a manner consistent with the principles of ecotourism. This includes interpretation of the natural and cultural environment, using minimal impact behaviors, and ensuring sustainability of the natural and cultural environment. (Black, 2007, p.316)

Ecotour guides are in a pivotal position within an ecotourism operation, as they typically come into contact with all major participants of the operation (i.e. the operators,

the tourists, and the local community members). Many consider guides as the “heart and soul of the ecotourism industry” (Black, 2007, p.316) and “key front-line players” (Ap & Wong, 2001, p. 551). Indeed, there can be little doubt that ecotour guides are largely responsible for ensuring the quality of tourists’ experiences, interpreting the operation’s mission, delivering information to ecotourists, and providing conservation and sustainability education (Ballantyne & Hughes, 2001; Black, Ham, & Weiler, 2010; Carmondy, 2013; Skanavis & Giannoulis, 2009). Guides also spend the most time within the natural environment, giving them significant influence over an ecotourism operations environmental and cultural impacts.

To positively impact an ecotourism operation, guides must play multiple roles. Guides must be managers, educators, environmental interpreters, creators of positive group dynamics, motivators of short- and long-term environmentally responsible behavior, and representatives of the operation, local area, and culture (Black, Ham, & Weiler, 2010; Cohen, 1985; Randal & Rollins, 2009; Weiler & Davis, 1993).

Although it is widely acknowledged that ecotour guides need to simultaneously play many sub-roles to be effective, researchers found that many guides are unaware of this necessity. In a survey of ecotourism guides who attended a guide training workshop in Queensland, Australia, the majority of guides thought they were only responsible for knowledge provision and audience awareness; only 12 percent viewed minimizing negative environmental impacts and encouraging environmental values and behaviors as being the most important part of their job (Ballantyne & Hughes, 2001). Similarly, the guides surveyed ranked the importance of utilizing interpretation techniques—which are

essential to helping tourists develop a deep understanding and appreciation for the environment—well below the importance of knowing factual information and understanding their audience (i.e. audience awareness; Ballantyne & Hughes, 2001). These conclusions do not necessarily indicate that the ecotour guides are not performing those lower ranked roles, but it does highlight the need for researchers, trainers, and guides to communicate and work together to ensure that the guides are more aware of and responsive to their roles as environmental interpreters and motivators. This is important, because these roles arguably set ecotour guides, and perhaps even ecotourism as a whole, apart from mass tourism and other subsectors of nature-based and adventure tourism.

Even if a guide understands the need to fulfill many roles, they may not be confident or competent enough to do so. Interpretation skill was a weakness identified by 90% of guides surveyed by Ballantyne and Hughes (2001). Weiler and Ham (2001) also found that tour operators, staff, and guides lack understanding of interpretation as well as skill in presenting organized and thematic messages, both of which are needed to effectively interpret information. One possible explanation for guides' lack of confidence and/or competence in their roles is a paucity in effective guide training opportunities. Indeed, research indicates that ecotour guides often receive little quality training preparing them to fulfill their roles (Ap & Wong, 2001; Carmondy, 2013; Skanavis & Giannoulis, 2009).

### **Former Research on Ecotour Guide Training.**

Based on the survey of guide training and professional development programs by Black, Ham, and Weiler (2010), there is great variability within established guide training

programs. The major differences between programs included time duration (ranging from seven to 140 days), structure (formal vs. informal), and content (focusing on interpretation skills, group management, content knowledge, communication, first aid, and/or customer relations).

Previous studies found guide training had several positive benefits, including the establishment of culture sharing groups in which norms and beliefs regarding ecotourism guiding behaviors could be passed to new guides (Carmondy, 2013). In some cases, guides reported that training workshops improved their use of interpretation techniques (Ballentyne & Hughes, 2001). Likewise, guide training and certification programs established shared frameworks for teaching guides, provided potential avenues for performance improvement, and provided maintenance of guiding standards (Black, Ham, & Weiler, 2010). Even short term training was found to be beneficial. For example, a three day course in Vanuatu increased guides' understanding of ecotourism and better prepared them to limit the negative impacts of ecotourism operations (Black & King, 2002). Similarly, Chamas and Schmidt (2011) found that free 76-hour courses targeting monitoring behaviors helped ecotourism staff members become better at monitoring environmental and cultural protection of the site.

Though previous research has increased our understanding of how training programs can better prepare guides to fulfill their roles and uphold the principles of ecotourism, there is more to be discovered. Peake, Innes, and Dyer (2009) highlight this gap, calling for more research on the training methods and programs that yield competent and effective ecotour guides. Similarly, Randall and Rollins (2009) discuss the need for



research specifically focused on how tour guide education can help guides develop interpretation skills and knowledge of environmentally responsible behaviors.

Furthermore, Black, Ham, and Weiler (2010) call for more evaluations of existing ecotour guide training programs to gain a better understanding of the optimal content and length of training programs, the most effective training approaches, and the most appropriate assessment for ecotour student guides.

The purpose of this study was to gain a better understanding of optimal ecotour guide training program characteristics by exploring an established, ecotour guide training program (EcoTraining). Specifically, an instrumental case study was performed to gain insight into training techniques used by instructors and the influence of the program on student guides and their ability to perform their roles. The questions that guided this research are: (a) what is the influence of an established guide training program on student guides; (b) what were the training characteristics and techniques that create that influence; (c) what is the relationship between training and students' environmentally responsible behaviors; (d) what is the relationship between training and students' transformational leadership abilities?

## **Methods**

To explore the research questions, this case study used three modes of data collection: participant observation of a guide training course by the primary researcher, qualitative interviews, and surveys of current and former students. Participant observations were performed during a 28-day course in July 2015 at two EcoTraining guide training locations in South Africa. While on site, semi-structured in-depth

interviews were conducted in person with EcoTraining instructors and current and former students of EcoTraining's long-term training courses (i.e. courses lasting 28 days, 55 days, or one year). Surveys of former students of the guide training program were conducted on site or online using Qualtrics software and social media (i.e. Facebook) to study the relationship between the levels of guiding competence students achieve and their transformational leadership abilities as well as their environmentally responsible behaviors (ERBs). However, this paper primarily focuses on the analysis of the qualitative data.

### **Qualitative Methodology**

According to Merriam (2009), qualitative methods are used by researchers to investigate phenomena that are novel subjects of study or difficult to measure quantitatively. Likewise, Creswell (2013) and Merriam (2009) suggest qualitative methods are suited to studies that require in-depth exploration. Little published research exists about guide training programs and their influence on student guides. Therefore, this study is both novel and exploratory in nature. Additionally, the goal of the study is to understand phenomena such as "influence" and "change," which are difficult to quantify and require detailed analysis and explanation.

Qualitative research is also described as emergent and flexible (Merriam, 2009). This flexibility allowed the primary researcher to follow leads—within the parameters approved by the Institutional Review Board—as they emerged during the course of the study. Additionally, qualitative research is used to understand the meanings that individuals have constructed regarding a phenomenon (Creswell, 2013; Denzin &

Lincoln, 2011; Merriam, 2009). At this exploratory stage, the best way to uncover the heart of the central phenomenon was to observe and listen to what the participants know to be the greatest influence they experienced.

Case studies are investigations carried out within real-life, bounded systems (Creswell, 2013; Merriam, 2009). Studying a guide training program in a real-life context allows exploration to occur naturally, unaltered by time or unnatural settings. According to Yin (2008), case studies are suited for studies where the variables are deeply embedded in the phenomenon and impossible to identify in advance. As suggested, there are a multitude of variables that may be relevant to research question and too little previous research to select a narrow focus. Further, where an intrinsic case study simply illustrates an issue in a specific case, an instrumental case study is intended to provide insight into an issue that can be generalized to other cases (Baxter & Jack, 2008; Creswell, 2013; Merriam, 2009). An instrumental case study is appropriate for this study, because it allows focusing at a level where the phenomenon in question (the influence of an established guide training program) was more easily observed.

EcoTraining, an accredited guide training company founded in 1993 and based in South Africa, was selected as the case. EcoTraining has graduated well over 100 guides in their 21 years of operation. EcoTraining facilitates five career oriented guide training courses, three of which are accredited by the Field Guides Association of Southern Africa (FGASA) and two accredited by the Botswana Qualification Authority. Courses are held at one or more of six camps stationed in South Africa, Botswana, Kenya, or Zimbabwe. These courses are considered long-term, ranging from 28 days to one year in duration.

## **Participants**

Twenty purposefully selected individuals (14 males and six females) agreed to participate in interviews. All individuals were affiliated with EcoTraining in a variety of ways (see Table 3). Several participants had multiple affiliations; for example, some former EcoTraining students were employed as EcoTraining instructors or EcoTraining support staff. Affiliations also varied between the 10 current students. Six of the current students were completing the final half of a FGASA accredited course—which consisted of a six-month internship—but had already received their FGASA Level 1 accreditation. The remaining four students were completing a non-accredited short course (28 days in length) and were interested in guiding outside of South Africa or completing an accredited course at a later date.

All individuals were aged 19 and older and came from diverse cultural backgrounds. Ten participants were citizens of South Africa; four were originally citizens of the United Kingdom; two were citizens of Germany; and four participants were each a citizen of Australia, Belgium, Namibia, or Switzerland. Sixteen participants earned the FGASA Level 1 accreditation, which is the basic certification for nature guides in South Africa. Fourteen participants had experience as a nature guide in South Africa (with experience ranging from five days to over 18 years), and three participants had experience as a nature and/or tour guide in other African countries and/or various European countries.

Table 3

*Participants' Affiliation with EcoTraining*

Major Affiliation	Specific Affiliation	n	Total n
Instructor	EcoTraining graduate (FGASA accredited 1-year course)	2	<b>6</b>
	Graduate of non-EcoTraining course	4	
Current student	Completing internship (FGASA accredited 1-year course)	6	<b>10</b>
	Non-accredited course (28-day course)	4	
Former student*	Current guide (FGASA accredited 1-year course)	2	<b>4</b>
	Current guide (FGASA accredited 55-day course)	1	
	Current support staff (FGASA accredited 1-year course)	1	
<b>Total</b>			<b>20</b>

\*Category excludes former students who were affiliated as EcoTraining instructors

**Data Collection Procedures**

**Semi-Structured Interviews.** Two in-depth semi-structured interview guides were developed. One interview guide pertained to instructors (see Appendix A), while the other pertained to current and former students (see Appendix B). In both interview guides, initial questions asked about training and guiding experience as well as impressions of their instructors and/or themselves as instructors. Intermediate questions were more specific, asking about changes in students' guiding perception before and after training, favorite and least favorite aspects of training, instructors' characteristics and training methods, and knowledge of ecotourism. Concluding questions asked about personal changes before and after training, the most important lessons learned during training, and what should have been included in training. Participants were also given the opportunity to expand upon or clarify their answers and ask the researcher questions.

Interviews averaged 30 minutes, with the longest lasting 1 hour and 15 minutes and the shortest lasting 17 minutes. All interviews were recorded and transcribed

verbatim. Excerpts from these interviews included in this paper to highlight themes were edited to remove any identifying material and minor repetitions and stumble words (e.g., um, ah, etc.).

**Participant observations.** To perform participant observations, the primary researcher participated in a guide training course. The course was a non-accredited short-course (28 days in length). This course is the original guide training course developed by EcoTraining before stricter FGASA requirements were established. It is still being taught as a condensed, non-career oriented version of the 55-day or 1-year FGASA Level 1 courses that the career oriented guides take. However, this condensed course is taught by the same instructors, in the same camps, using the same training techniques as the accredited courses. Thus, participation in this course allowed the primary research to interact with instructors and experience authentic guide training techniques in a reasonable amount of time. Throughout this process, careful notes were taken during and after all training activities.

**Surveys.** A 55-item survey was also adapted and developed to gather quantitative data on the relationship between the guiding competency students acquire through EcoTraining's program and students' transformational leadership abilities and environmentally responsible behaviors (see Appendix C). The 20 Likert-type questions used to measure transformational leadership were taken from the multifactor leadership questionnaire developed by Avolio and Bass (1995) and purchased from Mind Garden, Inc. To measure guiding competency, 14 questions were developed based on the current the FGASA Level 1 Field Guide syllabus (FGASA, 2015) to measure how well students

mastered course content. Students' ERBs were measured with 12 questions developed based on relevant literature (FGASA, 2015; Littlefair & Buckley, 2008). The survey was distributed in-person at the guide training course by the primary researcher and online through Qualtrics software and social media. Some conclusions from the statistical analysis of the survey data are used in this paper to support the findings of the qualitative data analysis. A complete presentation of the survey results can be found in Chapter III.

### **Data Analysis**

The interview data were transcribed verbatim and then organized and reduced into meaningful themes through a process of coding text (Creswell, 2013; Merriam, 2009). The researcher began this process by immersing herself in the data. The transcripts were read once and then a second time. The transcripts were then coded to highlight key points—both explicit and implicit—in the data. This process was repeated with the primary researcher's observation notes. Next, all codes were compiled, compared, and recoded repeatedly until broad themes relevant to the central research question and sub-questions emerged. These themes were validated through a triangulation process (Creswell, 2013). This process involved the secondary researcher, who is an experienced qualitative researcher. The secondary researcher evaluated the transcripts and observations independently to develop broad themes through the inductive coding process described above. Finally, the primary and secondary researchers collaboratively compared, combined, and refined their themes until a single set of themes that sufficiently represented the data was established.

## **Discussion of Bias**

When doing qualitative research, it is important to recognize that a researcher's biases can influence the study (Creswell, 2013). A major bias present here is an interest in transformational leadership theory. While designing this case study, the primary researcher saw the potential to apply transformational leadership theory to ecotour guide training. In particular, transformational leadership theory could explain in part how and why students may be influenced by guide training programs. Thus, throughout this process, the primary researcher was looking for signs of transformational leadership and an opportunity to apply the theory to the findings.

## **Results and Discussion**

Eight themes emerged in the data. Related themes were organized into four categories: training philosophy, training methods, training outcomes, and training system limitations. Each category and its theme(s) are discussed in the following sections.

### **Training Philosophy**

**Guiding is more than showcasing charismatic megafauna.** For many, the actual purpose of a guide in Southern Africa is unclear. The image emphasized by the media and marketing campaigns often suggest that a guide's main purpose is to get tourists into exciting close encounters with "the Big 5" (i.e. African elephant, rhinoceros, African lion, African leopard, and Cape buffalo). Several instructors commented on this emphasis. For example, instructor Graham remarked sarcastically, "...[the marketing] all revolves around the big five, the most dangerous animals, blah, blah, blah, blah." Additionally, previous experience as a tourist impacts one's definition of guide. Current



student Denis said, “As a tourist, you meet one guide or two guides, and [you think] okay this is guiding – a challenge finding the nice animals, being as close as possible.”

Portrayals and experiences such as these have a strong influence on how student guides view their role as guides before they begin training. Former student Kaylee recalled, “Before I started I was like, ‘Okay cool. So you drive people around and see animals,’” and former student and instructor Vaughn remembered, “Yeah, I suppose you have this romantic view of a guide before you start. It’s going to be this amazing life where you just drive around and play with lions and elephants all day.” However, these conceptions of a guide’s purpose misalign with core components of EcoTraining’s implicit philosophy, the first theme that emerged through the data, which emphasized that guiding is more than showcasing charismatic megafauna. EcoTraining’s philosophy can be described in three sub-themes: (a) effective presentation skills, (b) providing a customized guest experience, and (c) showcasing ecological interrelationships.

***Effective presentation skills.*** Though EcoTraining’s syllabus emphasizes factual knowledge, course lectures and activities focus on how to effectively present rather than memorize information. Training activities relevant to learning effective presentation skills—such as body positioning, eye contact, tone, use of props, etc.—included instructor-led safaris (where presentation skills were modeled and discussed) and student-led mock guiding safaris (where skills were practiced and critiqued by instructors and fellow students). Both instructor modeling and student practice sessions occurred daily, lasting two to four hours approximately twice a day. The importance of effective presentation skills was explicitly expressed by instructors during observations and

interviews. When asked about the most important thing students learn in training, instructor Ben answered:

You can have all the knowledge in the world, but if you can't deliver that knowledge that is the problem. So we spend a lot of time, especially in the second half of the FGASA level 1 course, trying to teach people how to present the knowledge that they have learned in the first half of the course.

***Providing a customized guest experience.*** Additionally, EcoTraining emphasizes the importance of creating a customized guest experience. According to EcoTraining, customizing a guest experience requires guides to understand and tailor their guided programs to their audience's comfort level, needs, and interests. Instruction on creating customized guest experiences primarily occurred during instructor-led safaris and student-led mock guiding safaris. However, instruction and discussions on providing customized experiences occasionally occurred during lectures (which typically occurred daily for approximately one hour) and informally during meals, social gatherings, and unstructured free time. Based on the interview data, students understand and remember the importance of creating a customized guest experience once they become guides. As former student Nick explains, "It's going to take a while to read your guests and understand what they want to see and they want done...and just customizing their experience to them."

***Showcasing ecological interrelationships.*** EcoTraining's philosophy also centers on conveying the awe-inspiring complexity of nature by showcasing ecological concepts and interrelationships. Instructor Bruce described this in his interview stating:

You do focus on [guests' special interests] but you bring everything else in. You bring the ecology in. You bring the geology in. The vegetation. You bring the birds. You bring everything. You link it all into that, and that's what we try to teach students to do.

Again, students learned to convey ecological concepts to guests by watching and participating in instructor- and student-led safaris. Based on the interview data and observed discussions, conveying these relationship has two main purposes. First, it helps guides customize experiences to guests' interests, especially when their interest cannot be located. For example, if a guest's interested in lions but the guide cannot find a lion, the guide can engage the guest's interest by locating a prey species to showcase while describing how a lion hunts and depends on that species. Second, EcoTraining believes that conveying ecological relationships creates awareness of and appreciation within guests and guides for nature's complexity and one's impact on nature. Thus it provides guests with a deeper understanding, connection to nature and hopefully, an understanding of impact that they will take home with them.

Interestingly, though not explicitly stated during observation or interviews (with the exception of one instructor), EcoTraining's implicit philosophy aligns with the core principles of interpretation, specifically those which state interpretation is more than information, that interpretation is relevant to visitor's needs and interests, and presents a whole rather than a part (Cable & Beck, 2011; National Association for Interpretation, 2009; Ham, 2013; Tilden, 1957). In addition to preparing students to fulfill their roles as environmental interpreters, EcoTraining's changes students' inaccurate or incomplete

preconceived notions of what it means to be a guide. As current student Denis stated, “EcoTraining showed me that guiding is something different or can be or should be something different... It’s not ‘like I must see the big five and in one hour’ .... It’s much more than the big five.”

### **Training Methods**

The follow sub-sections discuss the emerging themes and their sub-themes related to effective training methods identified by instructors, students, and the primary researcher’s observations.

**Experiential learning and role modeling.** The most effective training methods in EcoTraining’s programs incorporated experiential learning and role modeling, which also align with established research in educational practices and interpretive principles. Experiential learning is a process where individuals create knowledge through the transformation of their own experiences (Kolb, 1984). EcoTraining engages students in as many experiential learning opportunities as possible by incorporating practical, multisensory activities in nature at least twice a day during instructor-led safaris and student-led mock guiding safaris. All students and instructors interviewed found these learning opportunities to be highly effective and preferable to lectures.

The more practical stuff that you can do the better. It is all really well me telling you that you can make tea from the pods of a russet bushwillow, but you will probably forget that five minutes down the line. But if we actually make tea and use hot water and soak them and drink it afterwards that’s something that will stay with you for a long time. (Instructor Ben)

In fact, most students only considered formal lectures (which were usually given once a day) effective learning opportunities when they coincided with a practical experiential learning opportunity.

I've always struggled to learn in the lecture environment, but it was different with the lectures we had here because you're doing it coinciding with doing the lectures out in the field. So it's so much easier to take in information, to visualize it when you're... out there looking at all these animals and talking about it. (Current student Andrew)

EcoTraining also engaged students in experiential learning by structuring training to mimic actual guiding as closely as possible. For example, the EcoTraining course daily event schedule mimics the daily schedule of events at a lodge. When students take turns acting as the lead guide, students are taking on the same responsibilities as a professional guide, such as waking the other students, hosting meals, driving the vehicle on activities, identifying and interpreting the plants, animals and objects encountered on drives and walks. This forces students to engage in the same activities they will be responsible for as guides on a practical, multisensory level. This had a significant impact on students.

Current student Elizabeth recalled:

When you first start, the instructors will take you out and be your guide and they'll teach you things. Then like within three or so weeks, you're guiding.... You have to guide, and it's just hard. But you learn so much more by doing it. And I love that.

In previous ecotourism related studies, role modeling was found to be a highly effective method for establishing and reinforcing desired behaviors, specifically environmentally responsible behaviors such as picking up litter, not going off-road, etc. (Littlefair & Buckley, 2008). At training, instructors utilized role modeling techniques to accomplish similar goals. During courses, instructors showcased their guiding ethics and skills on a daily basis by teaching students in the same way they guided tourists: leading walks and drives, interpreting information, and sharing personal experiences. As instructor Norman describes it, “I think training and guiding is the same thing. It’s just in training...we go into [more] details.”

Thus, students are presented with a guiding role model(s) on a daily basis, and this seems to strongly influence students’ guiding abilities. When asked how his instructors taught guiding ethics and skills, current student Renoux answered, “By showing us what they do.” Student Nick explained, “Just watching [the instructor] and how he approaches encounters, and just how he walks. Just everything he does when he’s out in the bush. [I] pick up a lot from that.”

**Diverse exposure.** Diversity is a characteristic that often sets EcoTraining’s programs apart from others and was a theme that emerged through three subthemes: (a) diverse locations, (b) peer groups, and (c) instructors.

***Diverse locations.*** Students received exposure to different areas in Southern Africa. On the 55 day FGASA accredited Level 1 course, students study at two of EcoTraining’s six camps, while students on the year-long course study at four of the six camps as well as an additional location during their six-month lodge placement. Because

students may not guide in the same area they were trained, they benefit from learning to guide in different areas that vary greatly in regards to geology, biodiversity, etc.

***Diverse peer groups.*** Students interacted with a diverse peer group during courses. While the majority of students are South African, EcoTraining attracts students from around the world. In the observed course, students originated from five countries. The long-term, close-quarter exposure to a variety of cultures forces students to develop communication and conflict resolution skills. Current student Mike described this:

You get put together. Boom. The next four months you are with these people, and you don't always like everyone...but you know, you kind of learn how to because you can't really start confrontations or fights because you are going to be stuck with them.... you do develop your people skills by meeting people from different cultures and different nations and people who view things different to you.

Experiences like the one Mike described give students an advantage once they join the guiding industry, because the South African ecotourism industry attracts tourists from around the globe. Thus, it is important for guides to be comfortable and competent in interacting with individuals who have backgrounds different from their own.

***Diverse instructors.*** Students are exposed to a large, diverse group of instructors. One participant reported having 13 instructors during her year-long course, and even during the observed month-long non-accredited training course, students were exposed to six instructors. All students interviewed described their instructors as knowledgeable and competent, but all students also commented on their instructors' varying guiding styles

and guiding expertise. Exposure to many competent yet unique instructors is powerful because it helps students recognize that there is no one right way to guide and that unique guiding styles are encouraged. This allows students to experiment with various techniques to create their own unique guiding style that both suits and potentially sets them apart in the industry.

I think if I just had one instructor you would be set in one way, but when you've had 10 or 15 different instructors in your year, you're set in 15 different ways and that allows you to find your own way. (Current student Tan)

**Feedback loops.** Dialogue continually occurred between instructors and students throughout the observed course. Often, this dialogue was in the form of feedback or constructive criticism, which was an important evaluation tool for EcoTraining on internal and external levels. At the most basic internal level, feedback occurred almost on a daily basis between the students and the instructors. Current student Tan described this continuous feedback process explaining:

You get your constructive criticism as well, as you probably know, when you're doing your [mock] guiding, and, you know, you finish it and your instructor says, 'Well this was good. You can improve on this,' so you are constantly getting feedback.

The continuous stream of positive reinforcement and constructive criticism allows students to evaluate and improve their performance throughout the entirety of the course.



However, the feedback also flowed from students to instructors, completing a feedback loop allowing instructors to also learn from the students. Students complete evaluations before leaving each camp during a course. For instance, on the observed course, students studied in two camps, so feedback forms were completed by students on two occasions. Instructors took these evaluations seriously. “We challenge them to give us constructive criticism,” said instructor Ben. “Any suggestions they can offer to make it better, then we would love to hear it.” Nearly all instructors interviewed and observed expressed a desire to both improve the guiding industry and be lifelong learners. Feedback received from students helps instructors pursue both goals.

Additionally, feedback occurs externally between the instructors and FGASA. Though the syllabus and certification requirements are dictated by FGASA, FGASA is open to constructive criticism from EcoTraining instructors and staff.

We can certainly contact [FGASA] and suggest changes. We’re the guys on the front line and if there are holes in it, we are quite at liberty to discuss it with [FGASA] and try and get them to change what is required.

(Instructor Ben)

FGASA’s willingness to listen to instructors helps maintain effective and up-to-date standards and assessments, improving the certification process on a national level.

**Transformational leadership.** Though all EcoTraining instructors are unique, all observed instructors displayed strong leadership skills, specifically transformational leadership skills. Transformational leadership is a process that causes change and transformation within followers, causing them to achieve extraordinary outcomes and

become leaders in their own right (Bass, 1985; Bass and Riggio, 2006; Northouse, 2007; Yukl, 2006). This process consists of four components – idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Northouse, 2007). Excerpts from the interviews illustrate EcoTraining instructors facilitating each component during training.

***Idealized influence.*** Idealized influence is a transformational leader’s ability to be a role model and gain the respect, admiration, and trust of his or her followers (Bass, 1985). Followers often view their leader so highly that they wish to emulate her or him (Bass, 1985). Almost all students described at least one of their instructors as an idealized influence. For example, former student and instructor Vaughn remembered, “Yeah well I think when I first started I was in awe of my trainers. I thought they were awesome. I wanted to be just like them.” Likewise, Mike stated, “[My instructor] really loves elephants. And for me, now I love elephants a whole lot because of that guy.”

***Intellectual stimulation.*** Intellectual stimulation is a leader’s ability to get followers to recognize their own values and beliefs through the emphasis of problem solving skills and intelligent, rational thought (Bass, 1985). This is done by encouraging creativity and novel ways of completing tasks (Bass, 1985). This occurred at EcoTraining when instructors encouraged students to experiment and find their own unique guiding style. Former student Kaylee explained, “It’s just amazing how different each and every [instructor] is. And that’s something they also taught us. You know, be yourself and mold yourself into the guiding person you want to be instead of copying another person.”

***Individualized consideration.*** Individualized consideration is a leader's ability to provide a supportive environment that meets the unique needs of his or her followers by opening lines of communication (Bass, 1985). Many EcoTraining students felt that instructors were always available and willing to go the extra mile to meet their individual needs. For example, student Tan explained, "Like you feel like you can talk to them about anything. If you are struggling you can just go and speak to them. Very approachable." Current Student Tan also felt her instructors cared about her and the other students.

Like all these guys here, they care. They care a lot and they want to make the best guides, you know? It's their name you're representing and things like that. So I think they want to make the best guides, and they want to make you a better human being. (Current student Tan)

Likewise, former student and current guide Kara recalled:

[The instructor] went the extra mile for those students who wanted to go the extra mile as well, you know, like he focused on that. If you as a student were keen to go out and like get more out of your day, then he would totally be in and he would go out with you.

***Inspirational motivation.*** Inspirational motivation is a leader's ability to inspire and motivate her or his followers through the use of examples, symbols, emotional appeals, and/or clearly communicated expectations (Bass, 1985). Indeed, inspiring passion and motivating future guides were goals mentioned by several instructors. For instance, when asked why he chose to become an instructor, Graham stated, "We [the

instructors] kind of, I think we kind of felt that [the guiding industry] was lacking a passion, you know? See we wanted to try and instill that passion for the job.”

Based on the interviews with current and former students, EcoTraining instructors often inspire and motivate their students. “[The instructors] always wanted you to go further,” said former student Kaylee. “They always inspired me to go and pick up a book and just read something.” Kara had similar experiences with her instructors:

“They’ve inspired me to go further even after finishing the course...I’ve gotten that inspiration because they like, [my instructor]...just kept me motivated and he kept me going and I think that, I tried to take a piece of that with me even after the course finished to stay motivated and to want more.”

***Quantitative support for transformational leadership.*** The survey distributed to current and former students of the 55-day and 1-year courses was designed, in part, to quantitatively measure the relationship between students’ success in guide training and their transformational leadership score. Analysis of the 25 usable surveys that were returned revealed the Pearson’s correlation between transformational leadership and guide training success scores was significant ( $r(17) = .56, p = .006$ ). This supports the qualitative data indicating that transformational leadership plays a role in EcoTraining’s programs. Not only were EcoTraining instructors observed displaying transformational leadership qualities, their students are becoming transformational leaders in their own right as they gain skills and competence as guides. A more complete discussion of the methods used to develop and analyze this quantitative survey can be found in Chapter III.

## Training Outcomes

Two themes emerged that were related to the outcomes of EcoTraining's guide training program. They are discussed in the following sub-sections.

**Student development as transformative experiences.** Despite the lengthy timelines of the non-accredited 28-day courses and the accredited 55-day or year-long Level 1 courses, time was a barrier identified by several participants. However, due to the influential training methods described, many participants in the 55-day or 1-year courses reported observations of or experiences with transformative experiences in regards to guiding abilities or personal growth.

You have to show them everything from day one, and three weeks later, it's like they've metamorphosed into these real bush people, and it's absolutely fantastic to see how comfortable they could become in a very, very short space of time. (Instructor Bruce)

While participants reported experiences that extended beyond skill development. Former student and instructor Vaughn explained:

As an instructor, it's more than just teaching a person bush skills, how to identify a kudu track or what tree this is. You can help them with other skills, people skills, life skills, so I think an instructor plays a much bigger role.

The personal growth described by individual students varied widely. For example, while former student and instructor Vaughn developed self-confidence and former student Kaylee improved her public speaking skills, current student Oliver learned to be

proactive, former student and current guide Nick became more mature, current student Denis developed patience, and current student Elizabeth became more sensitive to her environmental impacts.

For several instructors, watching students grow and develop is one of the most rewarding parts of training. When asked about his favorite part of training, instructor Bruce replied, “Actually seeing the development of the students when they come through for me is, I suppose, that is the most rewarding.” Several instructors also stressed that the growth students undergo does not only benefit students in their future guiding career but in any future career path students may follow. Instructor Gerhard explains:

[The students] actually feel that they can go out there being a guide or not and make a positive difference, you know, in the society or in another workplace.... They have a different view holistically of not only the workplace but of Earth and the universe and the whole place that you know we live in.

Evidence of transformative experiences in regards to personal development were less prominent in the interviews with the 28-day safari guide students. One potential explanation for this is the reduced course length, as safari guide students only spend one month at the camps. This increases mental fatigue and reduces the amount of time student have to reflect upon their experience, both of which hinder the experiential learning process (Kolb, 1984; Kolb & Kolb, 2008). An alternative explanation lies with the different expectations instructors and students have for the 28-day course as compared to the longer, accredited courses. Though safari guides stay in the same camps, complete the

same activities, and are taught by the same instructors as the accredited courses, the depth of required material, expectations, and time spent with instructors is reduced.

**Increased passion for and connection to nature.** Another pattern that emerged from the interviews involved connection to nature. Participants from all courses reported a stronger passion for and connection to nature after training.

I view the Bush in a different way. Before you know it was like a holiday, and I was like ‘Yes I’m going into the bush.’ But now like, it’s hard to explain, it’s like a cool feeling you get when you’re out there now. Like you feel more part of it. (Current student Mike)

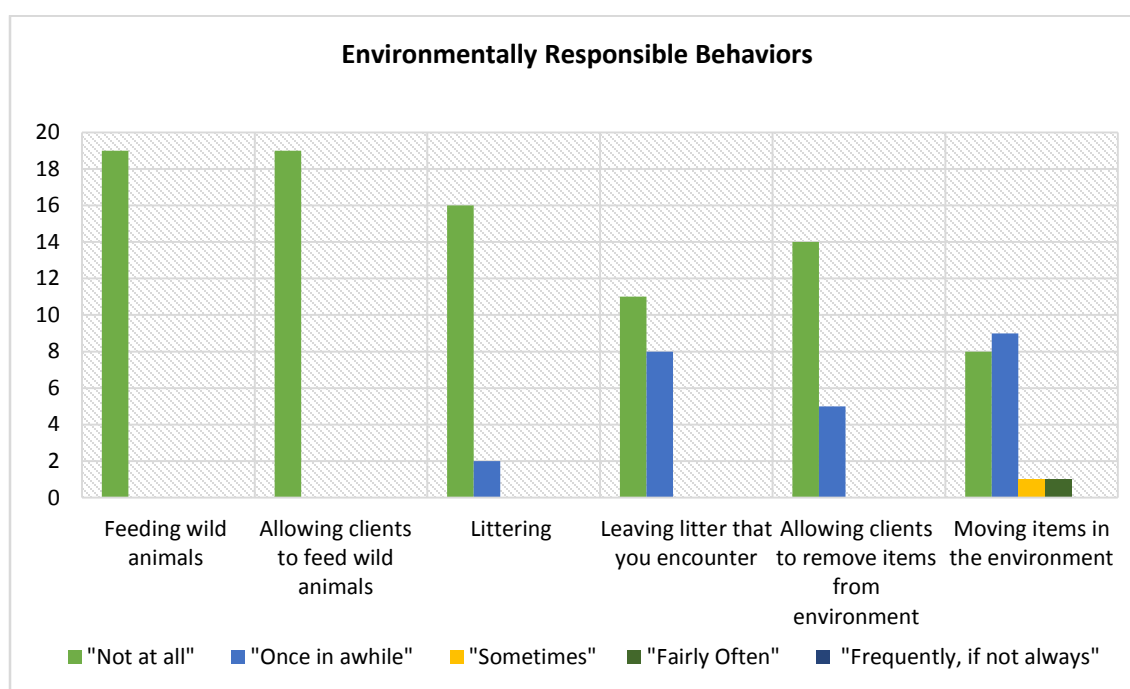
Some of these reports were tied to first hand experiences in nature. “I think most people that would start this course already have an interest in nature,” said former student and current guide Kara, “and then that can just grow. And for me it’s grown a lot...the more experience you get, the deeper that connection is.” This is excellent news, corresponding with previous studies showed that immersion in nature develops and strengthens connection to nature (Mayer, Frantz, Bruehlman-Senecal, & Dolliver, 2009; Schultz & Tabanico, 2007; Weinstein, Przybylski, & Ryan, 2009).

The increase in passion and connection to nature experienced by students promoted ERBs and pro-environmental attitudes within students. Examples of the ERBs cited by participants were removing litter from the environment, refraining from off-roading, not disturbing wildlife, and not damaging or removing items from natural areas.

I’ve become way more sensitive to the environment. Like I remember as a kid it would probably be really fun to just snap this off a tree or step on the

termite mound, but now it's nicer to just look at it. (Current student Elizabeth)

This finding was supported by results of the quantitative survey analysis, which revealed that students practiced a variety of environmentally responsible behaviors most or all of the time (see Figure 1). For a more complete description of the processes used to develop, distribute, and analyze this quantitative survey, please see Chapter III.



*Figure 1.* A graph displaying a portion of the students' self-reported ERBs.

Reports and observations of environmentally responsible behaviors coincide with results of other studies, which found that intrinsic values, such as connection to nature, are more effective at increasing one's environmentally responsible behaviors than other tactics like fear or guilt (De Young, 2000; McKenzie-Mohr, 2000; McKenzie-Mohr & Smith, 1999; Mayer, Frantz, Bruehlman-Senecal, & Dolliver, 2009; Ryan & Deci, 2000; Schultz, 2000). Additionally, several participants expressed their desire and confidence to



influence the pro-environmental behaviors and attitudes, either of their fellow guides or tourists. When asked about the most important thing he learned during training, student Mike answered, “For me, the most important thing I’ve learned is that you can influence people. You can influence people very easily, like I’ve been influenced.”

### **Training Limitations**

The qualitative data also highlighted some of the limitations of training. We discuss these limitations and their implications in the following sub-sections.

**Training does not produce expert guides.** A major limitation of the training program is that the accredited 55-day and 1-year courses only provide foundational training. These courses are intended to give students the basic tools to succeed in the industry, but the courses do not produce expert guides. Furthermore, training can never be a perfect mimic of the real guiding industry. For instance, while role playing activities, such as mock guiding, are largely effective, they do not fully prepare students for guiding actual tourists. The consensus between students and instructors is that post-graduate experience is required to develop guiding expertise.

You know you can learn a lot of theory, and then you get chucked out there in the Bush, but to me, you only really come to grips with what this job is after doing it, after about a minimum of 3 to 4 years, then you start getting your grits at that. Up until that stage it’s a learning curve, and you’re constantly learning. I mean you never stop learning in the Bush, ever. (Instructor Graham)

Former student and current guide Kara would agree, saying “[Learning to guide] started through training, but like I said, like every day you’re out there, the bush is your teacher and your guests are your teacher.”

However, students generally feel well-prepared for the challenge. When asked if he felt unprepared for anything after his training, Denis stated, “Definitely there will be a situation where I’m not prepared...but my opinion is that a one year course gives you lots of skills to handle situations.” Renoux gave a similar answer, saying, “After my training? Not really. I think I’ll manage anything that comes my way.”

**Training does not guarantee ethical guiding.** An additional limitation of training is that it is not guaranteed to produce ethical guides. Previous research on ecotour guides in India found that a guide’s compliance or non-compliance with ERB was influenced by external social influences (Serenari, Bosak, & Attarian, 2013). The same phenomenon was found in this study. Though environmentally responsible behaviors were taught, modeled, and practiced every day during the observed course, some graduates reported in interviews that norms and occupational pressures occasionally persuaded them to adopt behaviors and attitudes that conflicted with their training. For example, tourists often pressured or enticed guides with tips to get closer to animals, drive off road, etc. This pressure can be difficult to ignore, especially when a guide saw other guides modeling behaviors that are not environmental friendly or was hired by a lodge manager who encourages environmentally irresponsible behaviors.

From what I’ve heard from people, a lot of the managers don’t necessarily view things in the same way. For them it’s a business. This is not all, this

is a big generalization, but so they want the, you know, the guest experience and that, but they don't necessarily know of the implications of [chasing] that leopard through the Bush off-road.... (Current student Mike)

I've worked at a lodge before where my head Ranger was probably the most unethical guide I've ever met, and management didn't seem to mind because if you can get within two meters of a pride of lions sleeping on the ground, it makes a lodge look good. They don't look necessarily at the impacts that it will have on the animals. So trying to then provide my guests with a similar Bush experience, keeping them as happy without getting them two meters from the lion, was very challenging. (EcoTraining instructor).

In these situations, graduates may choose to or even be coerced into behaving contrary to their training when faced with such pressures. One EcoTraining instructor described the reality of this situation:

They need the job first. That's kind of bottom line is they can't say 'no we're not going there because we don't believe in the ethics.' They will find out that not everything is how they imagine it to be or how they're hoping it will be and how I teach them.

Though nearly all former and current students reported practicing environmentally responsible behaviors, one participant described a situation where they were pressured to practice non-ERBs once they became a guide.

There were numerous times in which I had to go off roading...One day I saw the elephants across this plain...so I cut straight through the rock...I did off road quite technically straight through this big block, but got to the elephants. I made my guests happy...but then also took the responsibility to phone the reserve manager and say 'look, I off roaded here and there,' but I went back on the actual road and covered my tracks, and my guests and I, we all walked around that area to kind of get the grasses to stand back up again so that you couldn't see that somebody went off roading there...but it's all about pleasing guests so that was one instance where I pleased my guests.

In general, the interviews show that most students stayed committed to practicing environmentally responsible behaviors. This commitment is tied to the increased passion and connection to nature they experience during training as well as to the respect students develop for their reputation and instructors. The ending of former student and instructor Vaughn's story about his own personal experiences with occupational pressures illustrates this:

I'm very fortunate in that the mentors I've had in my career, at the beginning of my career, particularly when I was here, are very ethical and

very steadfast, and that confidence they have kind of rubs off on you. So that helped me to be able stand my ground and stick to my ethics.

### **Conclusion**

This case study revealed nine themes which established a better understanding of the characteristics of EcoTraining's guide training programs and their influence on students. In regards to philosophy, EcoTraining focused less on showcasing charismatic megafauna and more on effective presentation skills, customized guest experiences, and conveying ecological relationships. Successful training methods included experiential learning and role modeling; diverse exposure to a diverse group of locations, students, and instructors; feedback loops; and transformational leadership. Outcomes included increased guiding skills and connection to nature for all students as well as personally transformative experiences for students of the 55-day and 1-year courses. However, training did not guarantee that all students went on to be expert or ethical guides.

Furthermore, several themes – such as experiential learning and role modeling and increased connection to nature – and subthemes – including effective presentation skills, customizing guest experiences, showcasing ecological relationships – aligned with established interpretive principles and practices, which state interpretation is more than presenting information and should be relevant to the audience, conceptual explaining relationships, and provocative (Cable & Beck, 2011; Ham, 2013; National Association of Interpretation, 2009; Tilden, 1957). However, this alignment or even the word “interpretation” was not used explicitly during the observed training or by participants during interviews, with one exception. The failure to use a common language may

explain why Weiler and Ham (2001) and Ballantyne and Hughes (2001) found that guides lacked understanding of interpretation and identified interpretation skills as a weakness. This highlights an opportunity for researchers and training providers to work together to establish a common framework and language to improve guides' efficacy in regards to their role as ecotour guides.

As an instrumental case study, these findings, regarding successful guide training methods, can be generalized to other ecotour guide training programs. Primarily, training programs should optimize the amount and diversity of realistic, first-hand experiences. Examples include extended periods of time in nature, mock guiding, internships, and exposure to multiple locations, cultures, trainers and points of view. These experiences are instrumental in developing well-rounded guides prepared to enter the guiding industry. Further, these activities increased students' commitment to environmentally responsible behaviors. Thus, incorporating such activities into training programs can better prepare guides to uphold the principles of ecotourism by minimizing negative environmental impacts.

Evidence also suggests that the instructors are just as important as the activities included in training. Training providers must select instructors that are not only knowledgeable but strong leaders and role models. Much of the development students reported in this case – including individualized personal growth, increased connection to nature, and commitment to practicing environmentally responsible behaviors – was linked to time spent with highly qualified instructors who were passionate about nature and helping their students succeed.

However, guide training does not guarantee that students will go on to be expert or ethical guides. Evidence from the interviews suggest that the behaviors and expectations of other guides, lodge managers, and tourists influence the behavioral decisions of guides, especially new guides. This is a phenomenon observed by other researchers (Serenari, Bosak, & Attarian, 2013). Therefore, ecotourism improvement initiatives must also focus on decreasing these pressures to maximize and increase the longevity of training program benefits. This may include more instruction in how to resist pressures, how to explain environmental impacts to guests, and reporting systems tied to lodge certification levels.

### **Theoretical Contribution**

In addition to providing applicable recommendations, these conclusions offer valuable theoretical contributions to the literature. For example, this study is an addition to a growing body of literature – such as Carmondy (2013), Chamas and Schmidt (2011), Black, Ham, and Weiler (2010), Black and King (2002), Ballantyne and Hughes (2001) – that shows guide training programs can provide numerous benefits to both ecotour guiding and ecotourism alike. Most notably, similar to Chamas and Schmidt (2011) and Black and King (2002), this study shows that effective training programs can play a part in helping the ecotourism industry reach its environmental sustainability goals.

However, these conclusions go further, highlighting mechanisms for increasing ERBs and attitudes during training: connection to nature developed through experiential learning and reflective time in nature as well as transformational leaders as role models of ERBs. The positive influence of connection to nature on ERB was observed in other

studies, such as Mayer, Frantz, Bruehlman-Senecal, and Dolliver (2009), Schultz and Tabanico (2007), Weinstein, Przybylski, and Ryan (2011). Additionally, the influence of transformational leaders as role models likens Carmondy's (2013) observation that training creates culture sharing groups within which beliefs and norms are passed from experienced to new guides.

Another notable contribution of this study is what it says about the role of an ecotour guide. Previous researcher (Cohen, 1985; Randal & Rollins, 2009; Weiler & Davis, 1993) discussed a commonly used six-part conceptualization of a guide's role. The current research aligns with this conceptualization. As discussed, EcoTraining instructors emphasize that effective guiding is much more than knowledge dissemination, citing responsibilities that arguably fall into each of the six categories of the conceptualization (i.e. the instrumental, interactionary, motivator [of ERB], social, communicative, and environmental interpreter roles, Weiler & Davis, 1993). Thus, this study offers further evidence from the field that confirms the viability of the six-part conceptualization.

### **Implications for Future Studies**

In terms of generalizability, the results of this study are limited. Although using EcoTraining courses as the case made this exploratory study reasonable to conduct, it does raise the question about the applicability of the findings. More studies need to be conducted with other training providers and in other guiding industries to understand how and where these findings can be applied. Likewise, similar studies aimed at understanding occupational pressures from the tourists' and lodge managers' perspectives



should be conducted. Such studies will provide more insight into the problems facing new guides entering the guiding industry as reported by former students and instructors.

Additionally, as is the case with most exploratory studies, the results of this study raise as many questions as they answer. One such question pertains to the temporal aspects of training. As mentioned, students on month long courses reported less personal development and growth than students on the 55 day or year-long courses. The major reason for this difference is likely course length and structure. Several theories, including attention restoration theory (Kaplan & Kaplan, 1989; Kaplan, 1995) and experiential learning theory (Kolb, 1984; Kolb & Kolb, 2008), stress the importance of directed attention and self-reflection in the learning and development process. Because there is so much to learn and do in those 28-days, students are susceptible to mental fatigue and have little time to engage in self-reflection, resulting in little awareness of transformation that may have occurred. It is possible that once students leave the 28-day course, they do engage in reflection and become aware of more significant personal growth. This would be an interesting hypothesis to test using qualitative interviews with 28-day course graduates that occur weeks or months after the end of the course.

Likewise, though several participants had years or even decades of experience in the guiding industry, the majority of participants had little to no guiding experience. Thus, there is a little indication of how long the connection to nature and commitment to environmentally responsible practices that most students demonstrated took to develop. Likewise, there is little indication regarding how long and under what circumstances these connections and commitments persist. Therefore, though this study increased

understanding about the influence and benefits of guide training, there is room to explore, in more detail, how long the influence and benefits of training last.

## CHAPTER 3: ECOTRAINING RESEARCH NOTE

### **Introduction**

Born out of concern for the wellbeing of local cultures and environments, ecotourism has become an increasingly popular form of tourism (Christie & Crompton, 2001; Honey, 1999; O'Neil, 2002). Ecotourism, as defined by The International Ecotourism Society, is "responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education" (TIES, 2015). Though ecotourism largely lives up to its definition, there is evidence that ecotourism can fall short of its goals.

At some sites, ecotourists introduced invasive species, transmitted diseases to wildlife populations, interrupted resting periods, or compromised the hunting and reproductive success of various species (Ananthaswamy, 2004; Barnett, Payne, Semmens, & Fitzpatrick, 2016; Honey, 1999). Additionally, though studies indicate that ecotourism experiences can increase ecotourists' on-site environmentally responsible behaviors (ERBs) and long-term behavioral intentions (Gilbert, 2003; Lee & Moscardo, 2005; Littlefair & Buckley, 2008; Powell & Ham, 2008; Zeppel, 2008), these results only occurred when effective educational and interpretive practices were employed. Furthermore, these studies are unable to confirm that actual behavioral changes occur and persist once an ecotourist returns home.

One avenue for improving ecotourism's ability to minimize damage to the natural environment and increase tourists' environmentally responsible behaviors (ERBs) is through effective ecotour guide training. To have a positive impact on tourists' on-site

behaviors, guides must act as positive role models for ERBs (Littlefair & Buckley, 2008).

Likewise, to lead tourists through a transformative process that results in long-term behavioral changes, guides arguably have to be transformational leaders.

Transformational leaders have the ability to influence and motivate followers with their charisma, confidence, communication skill, role modeling proficiency, and ability to articulate goals (Bass and Riggio, 2006; Northouse, 2007; Yukl, 2006). Both ERBs and transformational leadership abilities can be learned or developed through effective guide training; however, the relationship between ERBs, transformational leadership, and guide training is not well explored in the literature.

The purpose of this research note is to examine the relationship between ecotour guiding competencies emphasized in a training program, student guides' self-reported pro-environmental behaviors, and student guides' self-reported transformational leadership scores. The research questions ask about the relationship between the following: (1) guiding competency and students' pro-environmental behaviors and (2) guiding competency and students' transformational leadership scores.

### **Methods**

Participants selected for the study were students of an established South African guide training company that offers 55 day and 1 year-long courses at several wildlife reserves in South Africa and Botswana. All participants passed the Field Guide Association of South Africa's (FGASA) national standardized Level 1 Field Guide examination, qualifying them to guide safaris in South Africa. A 55 item survey

containing Likert-scale items (with “1” representing the lowest score and “5” the highest), open-ended, and multiple choice items was developed (see Appendix C).

Both established and original Likert-type measures were used to develop the survey. Transformational leadership was measured using a 20 item portion of the Multifactor Leadership Questionnaire, the standard measure of transformational leadership (Bass & Avolio, 1993). The 20 items specifically measured idealized influence, intellectual stimulation, individualized consideration and inspirational motivation ERBs were measured with an original scale of 12 items based on ERBs relevant to ecotourism, including items measuring direct, indirect and proactive behaviors (Littlefair & Buckley, 2007; The International Ecotourism Society, 2015), and guiding competency was measured with an original 14 item scale based on the FGASA Level 1 Field Guide syllabus. Three open-ended questions were developed to ask about influential training methods, factors that tempt students to act differently than trained, and what should be included in training. Six multiple choice questions were used to gather demographic data.

The survey was distributed online through Qualtrics to 150 participants, in-person to 15 participants, and through social media to an unknown number of participants. A total of 25 usable surveys were returned. Of those who completed surveys, 56% were male, 67% completed high school, and 33% earned an associate’s or bachelor’s degree.

## **Results**

The data was analyzed using SSPS software. While the majority of participants approached in person completed the survey ( $n = 13$ ), few participants completed the

survey online ( $n = 12$ ). A Shapiro-Wilk's Test of Normality was run to test the normality of the data. The significance was  $>.05$ , suggesting normality. Pearson's correlations were used to test relationships in the data (see Table 1).

Table 4

*Relationships between Competency, Transformational Leadership, and ERB.*

Variable	<i>M</i> ( <i>N</i> )	<i>SD</i>	<i>r</i>	Significance
Transformational Leadership	3.81 (19)	.37	.56	.006*
- Idealized influence	3.69	.47		
- Intellectual stimulation	3.69	.52		
- Individualized consideration	4.00	.38		
- Inspirational Motivation	3.91	.52		
ERB	4.19 (17)	.31	.005	.492
- Direct	4.49	.46		
- Indirect	4.43	.35		
- Proactive	3.71	.49		

\* $p < .01$

The correlation between the mean transformational leadership and guide training competencies was significant. This suggests that students who achieve greater competency in or after training exhibit greater transformational leadership abilities.

No significant linear relationship between guiding competency & ERB was found. However, this non-significance is likely caused by a lack of variability from a ceiling effect. For 5 of the 12 items measuring ERB, 100% of participants reporting practicing an ERB "Fairly often" or "Frequently, if not always." For 6 of the 7 remaining items, over 50% of participants reported practicing ERBs "Fairly often" or "Frequently, if not always." Therefore, the data suggest that the majority of participants practice ERBs after training regardless of their guiding competency.

Analysis of the open-ended questions revealed 56% of respondents reported their instructors as the most influential aspect of training. Remaining respondents cited specific training activities (33%) or specific lessons (11%) as the most influential aspect. When asked about factors tempting guides to act differently than they were trained, 50% described pressures from tourists, 12.5% cited occupational pressures, such as the actions of other guides or lodge restrictions, and 37.5% reported that they never act differently. While 29% of respondents felt well prepared, several wanted more practice interacting with tourists (29%) or with driving and radio procedures (23.5%) during training.

### **Conclusion**

This study identified a significant positive relationship between students' guiding competencies and their transformational leadership abilities. Though no significant relationship was found between guide competency scores and ERB, the high frequency of participants who reported practicing ERBs suggests that students practice ERBs after training. These relationships are influenced by positive characteristics of the training program, such as qualified instructors who were highly regarded by most respondents, as well as the inclusion of influential lessons and activities.

This study highlights a need to optimize activities that give students more direction and experience with tourist interactions. Because half of participants reported tourist demands as a factor leading them to act contrary to their training, improving or increasing the number of activities that prepare students for tourist interactions may improve their ability to be strong role models of ERB. This may also improve students' satisfaction with training, since over a quarter of students requested more practice in this

area. Likewise, training programs should prepare students for the various pressures from tourists, fellow guides, and lodge managers that may cause them to forgo the ERBs learned in training.

Further research is needed to fully explore this area, especially in regards to the relationship between training and ERBs. The results of this study are limited due to the ERB scale used that resulted in a ceiling effect, and the small sample size. Future studies should focus less on online data collection venues, since they were largely unsuccessful in gathering data from this population. This lack of success in collecting data was also noted by three other researchers, when attempting to use online surveys with this population (R. Powell, personal communication, January 29, 2016; L. Candelario, personal communication, March, 8, 2016).



## CHAPTER 4: NAI CASE

### **Introduction**

Since Freeman Tilden wrote his seminal work *Interpreting Our Heritage* in 1957, the interpretive field has recognized the importance of connecting visitors to resources, whether they be cultural or natural, through first-hand experiences. Facilitating this connection is the heart of an interpreter's role (Ham, 2013; National Association for Interpretation, NAI, 2016; Rollins & Randall, 2009). When interpreters are successful, the results take many forms, including increases in visitors' connection to nature (Mayer, Frantz, Bruehlman-Senecal, & Dolliver, 2009; Schultz & Tabanico, 2007; Weinstein, Przybylski, & Ryan, 2011), desire to care for and protect nature (Tilden, 1957), environmentally responsible behaviors (ERBs; Littlefair & Buckley, 2008), and support for conservation initiatives (Powell & Ham, 2008; Sharp, Larson, Green, and Tomek, 2012).

Interpreters, specifically interpretive naturalists, also play a significant role in protecting and preserving natural areas. Research indicates that visitors' on-site ERBs are positively related to the interpreter's ability to model those behaviors (Littlefair & Buckley, 2008). This suggests that an interpreter's decision to practice or not to practice ERBs can have a profound impact on the health of natural areas. This is vitally important, because if interpreters and visitors fail to practice ERBs, the impacts on natural areas can be devastating, including soil erosion and compaction (Buckley & Pannell, 1990); damage to vegetation (Buckley & Pannell, 1990; Littlefair & Buckley, 2008); disturbance and threats to wildlife (Ananthaswamy, 2004; Buckley & Pannell, 1990; Honey, 1999;

Orams & Hill, 1998); water pollution (Buckley & Pannell, 1990); vandalism (Buckley & Pannell, 1990; Widner & Roggenbuck, 2000); and noise (Buckley & Pannell, 1990; Littlefair & Buckley, 2008). This concern increases as tourism in natural areas continues to increase; for instance, US National Parks had over 51 million more visitors in 2015 than in 1990 (National Parks Service, 2016).

At their best, interpretive experiences can be transformative for visitors, inspiring them to change the way they think about and interact with the world around them. Thus, interpretation relates to transformational leadership theory. Transformational leadership theory describes leadership as a process that causes change within followers, helping them achieve extraordinary outcomes and become leaders in their own right (Bass and Riggio, 2006; Northouse, 2007; Yukl, 2006). Transformational leaders demonstrate abilities and characteristics that fall into four categories: intellectual stimulation, individualized consideration, inspirational motivation, and idealized influence. These categories respectively parallel effective interpreters' abilities to educate and help visitors make their own intellectual and emotional connections to resources, make programs relevant to the audiences' needs and interests, provoke action, and serve a reliable, respected authority (Cable & Beck, 2011; NAI, 2009; National Parks Service, 2007; Ham, 2013).

### **The Importance of Interpretive Guide Training and Certification**

Interpretation is an art that one must learn (Tilden, 1957). Interpretation research and research from related fields suggests that training and certification programs can help prepare interpreters to fulfill their roles. Harrison, Banks, and James (2010) found that

river guides who completed an interpretive training program were more successful at increasing visitors' environmental knowledge and interest than guides who did not attend training. An Australian guide training workshop positively impacted guides' use of interpretation techniques (Ballentyne & Hughes, 2001). Furthermore, training has created culture sharing groups allowing new guides to learn from experienced guides, and these shared frameworks can be used to improve and maintain guiding standards (Black, Ham, and Weiler, 2010; Carmondy, 2013)

One training option available to interpreters is the National Association for Interpretation's (NAI) Certified Interpretive Guide (CIG) training and certification program. The NAI CIG course was established in 2000 with the purpose of providing a training option for interpreters and volunteers without substantial interpretive training or experience (Brochu, 2008; E. Jacobs, personal communication, April, 6, 2016). CIG courses are taught by Certified Interpretive Instructors (CITs) required to have either a bachelor's degree; an associate's degree or 64 hours of college credit hours and 5,000 hours of relevant experience; or 8,000 hours of relevant experience before becoming a CIT. To date, the program boasts over 8,200 active CIGs and 560 active CITs (NAI, 2016).

The purpose of this study is to explore the influence of the National Association for Interpretation (NAI) Certified Interpretive Guide (CIG) course on students, including how well the course prepares students to fulfill their roles as interpreters. This study also examines the NAI CIG's relationship to students' transformational leadership abilities and ERBs. The research questions are as follows:

RQ1. What is the influence of the NAI CIG course on CIG students?

RQ2. How well does the NAI CIG course prepare CIGs to fulfill their roles as interpreters?

RQ3. What is the relationship between the CIG training and CIGs' transformational leadership abilities?

RQ4. What is the relationship between the CIG training and CIG's ERBs?

### **Methods**

The researchers chose to approach the case as an instrumental case study, utilizing both qualitative and quantitative data collection techniques. Qualitative methods included participant observation and in-depth, semi structured interviews. Participant observations occurred on site during a four-day NAI CIG training in the spring of 2016, and interviews were conducted with CIG students and CITs during the three weeks following training. A survey instrument was used to quantitatively explore the relationship between the CIG training and students' transformational leadership abilities and ERBs. Individuals who received the NAI CIG certification or recertification since 2014 had the opportunity to complete the survey online.

### **The Case**

An NAI CIG course scheduled during the spring of 2016 in a Midwestern state (within NAI's Great Lakes region) was chosen as the case. This course was selected due to a combination of its convenient location and the high number of interpretive naturalists expected to attend the training. After selecting the course, the researchers discovered that the NAI CIG course was blended with the host organization's annual non-NAI

interpretive naturalist training. The course attracted 18 CIG students and approximately 60 interpretive naturalists who did not participate in the observed CIG certification process. The CIG students completed all of the activities required to receive the CIG certification, including a 50 question literature review exam and a 10 minute interpretive talk. However, CIG students had the opportunity to interact with more interpreters and participate in more programs where instructors modeled interpretive skills, outdoor activities, and experiential learning opportunities than students of other NAI CIG courses (CIG Instructor, personal communication, March 25, 2016). On the other hand, CIG students who attended this course had less time to interact directly with CITs and spent less time utilizing the NAI CIG workbook (CIG Instructor, personal communication, March 25, 2016).

### **Qualitative Methodology**

Qualitative methods are described as emergent, flexible methods utilized to explore phenomena that are difficult to measure quantitatively (Creswell, 2013; Merriam, 2009). Such methods allow researchers to circumvent some problems that can arise when quantitative methods are the only methods chosen and forced onto a study. For example, qualitative methods do not prevent researchers from following leads that emerge during the study nor do they prevent participants – the experts of their own experience – from telling their stories (Creswell, 2013; Denzin & Lincoln, 2011; Merriam, 2009). Thus, qualitative studies can reach beyond the scope of a quantitative survey.

Specifically, an instrumental case study approach was selected for the study. Instrumental case studies are intended to provide insight into a phenomenon as it occurs

in a real-life, bounded system. Further, unlike a simple case study, the aim of instrumental case studies is to generate results that can be generalized to other cases (Baxter & Jack, 2008; Creswell, 2013; Merriam, 2009). In this case, the results generated may be applicable to other CIG courses and non-NAI interpretive trainings.

**Participant observations.** The primary researcher performed participant observations by participating in the observed course. Detailed notes were taken throughout the training, documenting characteristics of the training content, activities, students, and instructors as well as the primary researcher's reflections on those characteristics.

**Semi-structured interviews.** In-depth, semi-structured interviews were completed by the primary researcher with CIG students and CITs who participated in the observed course or a previous course that took place at the same location. Two interview guides, one designed for students (see Appendix A) and the other for instructors (see Appendix B), were developed and utilized during interviews. Both interview guides contained initial, intermediate, and concluding questions designed to gather information on participants' perceptions of training, what they learned, what promoted or inhibited learning, and any changes experienced during training.

Twelve purposefully selected individuals (3 males and 9 females) who participated in the observed training were interviewed. Participants were involved with NAI in different capacities (see Table 1). Two were CIT instructors of the observed course; seven were CIG students in the observed course; two were participants in prior CIG courses that occurred at the same location as the observed course, one of which was

a non-CIT instructor at the observed course. All participants were aged 19 and older, ranging from recent college graduates to retirees, and residents of Midwestern US states.

Table 5

*Participants' affiliation with the NAI CIG course*

Major Affiliation	Specific Affiliation	n	Total n
CIT		2	2
CIG student (2016)	Employed interpreter	5	8
	Interpretive volunteer	3	
*CIG student (prior to 2016)	Employed interpreter	1	2
	Employed interpreter; non-CIT instructor	1	
<b>Total</b>			<b>12</b>

\*Category excludes former CIT students affiliated as CITs. All CITs received their CIG

certification prior to completing their CIT certification.

Interviews averaged 30 minutes, with the longest lasting approximately 53 minutes and the shortest lasting 23 minutes. All interviews were recorded and transcribed 6 verbatim. Excerpts from these interviews included in this paper were edited to remove any identifying information, minor repetitions, or stumble words (e.g., um, ah, etc.).

**Qualitative Data Analysis.** The interview data were transcribed verbatim and then organized and reduced into meaningful themes through a coding process (Creswell, 2013; Merriam, 2009). The primary researcher began this process by immersing herself in the data. The transcripts were read once and then a second time. The transcripts as well as observation notes were then coded to highlight key points—both explicit and implicit—in the data. The primary researcher then used inductive approach to analyze the data (Creswell, 2013). All interview and observation codes were compiled, compared,

and recoded repeatedly until broad themes relevant to the central research questions emerged. Validation of the themes occurred through a process of triangulation (Creswell, 2013). This process involved the work of the secondary researcher – a trained qualitative researcher – who evaluated the data independently and either confirmed or redefined the emerging categories and themes.

### **Quantitative Methods**

**Surveys.** A 57-item survey was used to gather quantitative data on the relationship between students' interpretive competency after the NAI CIG certification program and students' transformational leadership abilities and environmentally responsible behaviors (see Appendix D). Specifically, the survey consisted of 20 Likert-type questions selected from the Multifactor Leadership Questionnaire 5x short (MLQ; the standard measure of transformational leadership developed by Bass & Avolio; 1995); 14 Likert-type questions developed to measure common ERBs (Buckley & Pannell, 1990; Leave No Trace, 2012; Littlefair & Buckley, 2008;); and 15 Likert-type questions designed based on the NAI CIG syllabus to measure interpretive competency. The survey also contained five multiple choice questions designed to gather demographic data and three open-ended questions asking about the most influential aspects of training, how well training prepared participants to practice interpretation, and factors that cause students to forgo training.

The survey was distributed online using Qualtrics software to individuals who completed the NAI CIG certification or recertification process since 2014. Email addresses for 530 individuals was obtained from NAI, of which only 502 were valid. The



survey was distributed according to a modified version of Dillman's (2000) survey protocol. The survey was distributed a total of four times at equal intervals over a four week period in May 2016.

## **Results**

Analysis of the qualitative interview data yielded a total of nine themes. Three themes highlight successful characteristics of CIG training program; three themes described the characteristics of successful trainers; and three themes described successful student outcomes of the CIG training program. These themes are discussed in more detail in the following three sub-sections.

A separate analysis of the survey data revealed information about the CIG graduates' self-reported interpretive competency, ERBs, and transformational leadership abilities using SPSS software. A total of 84 usable surveys were returned, with 52 fully completed. Of the 52 respondents that completed all demographic questions, 63% ( $n = 33$ ) were female and 37% ( $n = 19$ ) male. Approximately, over half of the participants ( $n = 26$ ) reported a bachelor's degree as their highest level of education, 46% ( $n = 24$ ) reported a graduate degree, and less than 4% ( $n = 2$ ) reported a high school diploma or associate's degree. In regards to interpretive experience, 40% ( $n = 21$ ) reported having 7 or more years of experience, 15% ( $n = 8$ ) had 4-6 years of experience, 25% ( $n = 13$ ) had 1-3 years of experience, less than 2% ( $n = 1$ ) had less than 1 year of experience, and 17% ( $n = 9$ ) had no experience.

A significant relationship was found between CIGs' interpretive competency and transformational leadership abilities, but no relationship was found between interpretive

competency and ERBs. These conclusions are explained in the last two sub-sections of this results section.

### **Characteristics of Successful Training**

During interviews, participants were asked about their favorite and least favorite parts of training as well as the parts of training that helped them learn the most. Through their answers, patterns emerged, highlighting three positive characteristics of training that facilitated learning and development: role modeling and experiential learning, community, and the emphasis that training is only the start of a learning process.

**Role modeling and experiential learning.** Participants reported role modeling activities as both their favorite and most effective training activities. Role modeling activities, such as model interpretive talks and hikes, gave students the opportunity to see instructors and other students put the content emphasized in lectures and the literature into practice. “I was just basically like a sponge the whole week and stared at them as I’m trying to pick up all the little nuances and what they’re doing out in the field,” said CIG student Jude.

Experiential learning was also a student favorite. Experiential activities included student-led interpretive hikes, program planning exercises and 10 minutes student-led interpretive talks. Experiential learning activities gave students the opportunity to practice the skills they learned and saw modeled in training. These activities were also an opportunity for students to receive constructive feedback on their performance.

Role modeling and experiential learning opportunities provided influential moments for students because they allowed students to connect the training content to

their own experiences or values. Most often, students connected training content to their own interpretive experience. Students with less interpretive experience connected training content or characteristics to their own non-interpretive experiences or values. “I had 43 years in sales, and a lot of that is interacting with people and talking with people,” explained CIG Elmer. “So the same sort of skills that you would use as an effective interpreter, you would use as a salesman.”

With few exceptions, the lectures and literature review were participants’ least favorite activities. These activities were described as less engaging, and many students claimed they did not retain much of the information presented in these formats.

I didn’t really get a whole lot out of the [literature review]. Now, reflecting back on that, I understand why they do it. But for me, my learning style, I do not do well reading the book and just absorbing the material that way. (CIG Annie)

**Community.** Training is a platform where a sense of community is established among the interpreters. As CIG Jack described, “I feel a little more integrated into the community I think. Like our general community of naturalists...I guess I feel a bit more connected to all of them.”

Training attracted a large group of approximately 80 individual interpreters. Though likeminded in many regards, they came from a variety of different organizations, backgrounds, demographics, and levels of interpretive experience. Additionally, each interpreter brought their own unique interpretive identity. Students benefited by engaging in discussion with this cohesive yet diverse group and observing various interpretive

styles. Students reported feeling like part of a team of equals regardless of their experience level. CIG Elmer described his impression of this experience:

It was interesting to me that there was just a common bond and common commitment to the preservation of the natural environment, the preservation of cultural history, and the will to pass that onto subsequent generations. The way in which that bonded folks from a wide range of ages, from retirees like myself to folks who were just recent college graduates, an ability regardless of age and background to communicate and get along with one another, I think that says a lot about the program.

Idea sharing was an outcome of this community development; many participants reported gathering ideas from others that they will apply in their own programs. Sharing and community contributed to motivation to engage in interpretation, which will be discussed later in this section.

**The beginning of a learning process.** Training is one of the steps in the process to becoming an expert interpreter. No participant reported feeling prepared for every situation they may encounter as an interpreter. Rather, all understood that more practical experience in the field is needed to master the skills learned in training. However, students said that training helped them identify the skills they needed to improve and gave them the tools and confidence they needed to continue learning after training. “I see that I have strengths and weaknesses, but yet I feel like I can address those,” said CIG Daisy May. “I see that there are ways that you can learn the art and improve upon it.” Students were motivated and excited rather than apprehensive about continuing to learn

on their own. “I thought I was good at my job, but there’s so much more to learn,” said CIG Jane. “It’s an encouraging thought, because it’s exciting to know more, and I’m excited to learn more.”

### **Characteristics of Successful Trainers**

Several interview questions asked students how they perceived their instructors or how instructors perceived themselves. Through their answers, key characteristics of successful instructors were highlighted. These characteristics included transformational leadership characteristics, the ability to create a comfortable, communal environment, and experience as interpreters and instructors.

**Transformational leadership characteristics.** Based on interview data and observations, some of the Certified Interpretive Trainers (CITs) displayed transformational leadership characteristics, such as confidence, charisma, and mastery of interpretive skills, an ability to adapt to students’ needs, and willingness to go above and beyond to help students. Several participants described one or all of their CITs as mentors, dedicated to and willing to go above and beyond to help their students succeed. CIG Rose remembered:

They were more like mentors because they had been in it for so long that you just kind of watch them and learn. And they’re willing and they’re ready to help you, and not just to instruct, but to help guide you. They want to work with you.

Participants who had extended working relationships with their CIT(s) before or after training aspired to be like their CIT(s), and some even reported that their CIT(s) had an

influence on them as an interpreter or person. Jerome, a CIG who completed his CIG course 6 years ago and continued a working relationship with his CITs after training stated, “[One of my CITs] certainly became a mentor of sorts, somebody that I hope to reach his level of skill.” However, students who did not have an extended relationship with their CITs did not report experiencing any significant influence or change attributed to interactions with CITs. This suggests that some CITs are transformational leaders but there is too little time during the four-day training for students and CITs to complete the transformational leadership process.

**Communal, comfortable environment.** Collectively, the four CITs succeeded in creating a positive learning environment where students felt comfortable engaging in discussions and activities. As CIG Phoebe explained, “[The CITs] gave me a comfort in front of a friendly environment. They critiqued me, not necessarily to try to cut me down, but with a positive influence and aspects.” Students reported feeling not only comfortable but encouraged to ask questions and share their ideas. Both interview data and observations indicated that this positive learning environment was created primarily by the instructors’ humble and engaging personalities, transformational leadership characteristics, and teaching methods, all of which optimized classroom discussions and modeling activities. The CIG students also played a part in creating the positive learning environment. Students bought into the CITs teaching methods and vision for the course, and this acceptance and participation was needed to make the CITs’ vision of a supportive learning environment possible.

**Experience.** CITs experience level also influenced the quality of students' training experience and success. All CITs were described positively by students. However, a few participants preferred engaging with CITs that had 10 or more years of experience training interpreters than CITs that had only a year of training experience. Those students found more experienced instructors more competent and helpful. Additionally, they thought more interaction with the experienced CITs would result in a more positive training experience. As student Jude remarked, "A more seasoned group of CITs would have been for me, having such minimal training, incredibly beneficial."

Additionally, a student's level of interpretation experience influences the relationship they have with their CITs. CITs were available to help all students, but the majority of their time was spent assisting students with little (less than two years) interpretive experience. Students who had more experience reported not needing as much instruction, and thus, spent less time interacting with CITs.

### **Successful Student Outcomes**

As they completed interviews, students and their instructors commented on how students developed over the course of the four-day CIG training. These changes – including an increased understanding of interpretation, awareness of their identity as an interpreter, and motivation – are explained below.

**Understanding of interpretation.** The most common takeaways from training were increased understanding of the history of the interpretive field and the basic principles of interpretation outlined by NAI and the authors of the literature review resources (Beck & Cable, 2011; Ham, 2013; Tilden, 1957). The principles most

commonly referred to in the training where those related to program development, connecting with visitors, and providing visitors with relevant, personalized experiences. Furthermore, when asked about the goals or purpose of interpretation, most interview responses included education, instilling appreciation, provoking action, and connecting visitors to resources. Additionally, some participants with little interpretive experience (less than two years) mentioned that their understanding of interpretation changed significantly, stating that prior to training, they thought the only purpose of interpretation was to share knowledge.

Another important outcome of training is a shared language and framework for understanding, applying, and explaining interpretation and the role of an interpreter. For many, this was the most important takeaway from training, because it put concise, clear definitions and a theoretical orientation to concepts students already knew from their previous interpretive or life experiences. Reflecting back on her CIG training, CIT Leyla remembered, “Some of the great things that came out [of training] were a more succinct definition of what interpretation is. I really very much like how NAI defines interpretation, so that was a great benefit.” Similarly, CIG Daisy May explained, “I think I see that over the years...that we kind of follow some of those principles, but we don’t know why we’re doing them. So knowing the reasons behind makes a lot more sense now.” Several participants thought this language and framework will improve the communication process between visitors and other interpreters.

Students’ prior experience as interpreters influenced their training outcomes regarding their comprehension of interpretation. Students with less interpretation



experience reported learning more and experiencing greater changes as interpreters. Students with more experience (typically more than two years of experience) did not report significant learning or changes as interpreters. Instead, they reported growth as interpreters, improving the skills developed prior to training. CIT Leyla, who had over a decade of interpretation experience before completing her CIG course, stated, “The whole background of interpretation [taught in training] was in addition to my knowledge but not something that I think changed how I viewed interpretation altogether. It didn’t change, but it added to [my view].”

**Identity.** Another commonly reported student outcome was increased awareness of their identity as an interpreter. Before attending training, some participants were unaware of their unique identity as an interpreter. However, as students progressed through training, they were exposed to many different interpretive styles by individuals who expressed the importance of having a unique, genuine interpretive style. After training, several participants reported becoming aware of their own interpretive style and identity, recognized its significance. Student Annie explained her experience with this concept:

Something that I learned about myself is that do have a style after all.

Before the program, when they said every interpreter has their own style, I was thinking ‘I don’t really have my own style.’ But I realize that I actually do. I have my own style. That was really enjoyable.

**Motivation.** Another outcome reported by both students and instructors was increased motivation and inspiration to interpret. This was linked, in part, to the

communal elements of training, such as gathering new ideas and interacting with a positive, supportive, likeminded peer group. As CIG Jane described:

Being surrounded by people who love nature and are there for one purpose always feels great for me. It kind of re-sparked or rejuvenated my love for interpretation and what I do, because I realize how many people love doing it, and we got to talk about how much we love doing it. I think that was very influential for me was everybody who attended.

Increased confidence in their skills as an interpreter also played a role in motivating and inspiring students.

### **Quantitative Evidence of Transformational Leadership Development**

One of the concepts that the researchers specifically looked for in training was transformational leadership. As previously stated, CITs did display transformational leadership characteristics during training. However, there was not enough evidence from the qualitative portion of the study to indicate whether or not students developed their own transformational leadership abilities during training. It is possible that training helps students develop transformational leadership abilities or starts students on a path to developing those abilities after training. This relationship was tested using the quantitative survey instrument.

Analysis of the surveys revealed a statistically significant relationship between CIG students' interpretive competency and transformational leadership abilities. Simple regression analysis showed that interpretive competency scores significantly predicted transformational leadership scores,  $b = .42$ ,  $t(59) = 4.19$ ,  $p = .001$ , explaining a significant

proportion of the variance in transformational leadership scores,  $R^2 = .18$ ,  $F(1,59) = 12.54$ ,  $p = .001$ .

Further analysis revealed that gender and interpretive experience had an effect on transformational leadership abilities. Males ( $M = 4.23$ ,  $SD = .40$ ) had a significantly higher mean transformational leadership scores than females ( $M = 3.97$ ,  $SD = .44$ ),  $t(57) = 2.29$ ,  $p < .05$ . Additionally, Those with 7 years of experience or more ( $M = 4.14$ ,  $SD = .39$ ) had significantly higher transformational leadership scores than those with less than 1 year of experience ( $M = 3.65$ ,  $SD = .23$ ),  $t(27) = 2.13$ ,  $p < .05$ . This shows that interpreters improve their transformational leadership abilities as they gain interpretive experience.

The pattern between transformational leadership ability and interpretive experience is mirrored by the pattern observed between interpretive competency and interpretive experience. Independent t-tests revealed that individuals with 7 or more years of experience ( $n = 29$ ) had higher mean interpretive competency scores than those without experience ( $n = 15$ ,  $t(39) = 3.99$ ,  $p < .001$ ), 1-3 years of experience ( $t(42) = 2.59$ ,  $p < .05$ ), and 4-6 years of experience ( $n = 10$ ,  $t(37) = 2.54$ ,  $p < .05$ ). Altogether, the data show that with more years of experience, CIG students develop increasingly higher levels of success and confidence as an interpreter and transformational leadership ability.

### **The relationship between ERB and Training**

ERB is not part of the NAI CIG syllabus, and it was not formally addressed at training. However, ERB was informally modeled or discussed during outdoor activities. Some felt ERB instruction would be helpful in regards to teaching ERB to visitors, while

others thought that formally addressing ERB would take valuable time away from more important, universally applicable concepts. Interestingly, some participants thought that teaching ERB during training was unnecessary, because they thought most interpreters already practiced ERB. This assumption was tested using the survey instrument.

Regression results did not indicate that interpretive competency scores were a significant predictor of ERB,  $b = .17$ ,  $t(61) = 8.90$ ,  $n.s.$ . Gender did not have a significant effect on participants' mean ERB scores. Participants with 1-3 years of interpretive experience ( $M = 3.76$ ,  $SD = .17$ ) had significantly higher ERB scores than those with less than 1 year of experience ( $M = 4.19$ ,  $SD = .26$ ),  $t(13) = 2.66$ ,  $p < .05$ . No other significant differences were found between mean ERB scores of the other various levels of interpretive experience. Therefore, gender and interpretive experience do not impact interpreters ERBs.

However, it does appear that most survey participants do practice 11 of the 15 ERBs measured. For two ERBs (i.e. not feeding wild animals and not allowing clients to feed wild animals), 100% of participants reported practicing those behaviors "frequently, if not always" or "fairly often." Additionally, 50% of more of participants reported practicing nine of the remaining ERBs measured "frequently, if not always" or "fairly often." The four ERBs not practiced "frequently, if not always" or "fairly often" by the majority of participants were walking off trail, encouraging visitors to pick up litter, encouraging visitors to support local business, and encouraging visitors to support eco-friendly accommodations. These results show that the majority of interpreters sampled are practicing most of the ERBs measured. However, these results also show that all interpreters are not practicing ERBs most or all of the time as suggested by some

participants. These results are both positive and negative. The results that show interpreters practice 11 of the 15 measured ERBs are encouraging, because these practices will reduce the negative environmental impacts such as damage to vegetation, disturbance and threats to wildlife, water pollution, vandalism, and noise (Ananthaswamy, 2004; Buckley & Pannell, 1990; Honey, 1999; Littlefair & Buckley, 2008; Orams & Hill, 1998; Widner & Roggenbuck, 2000). However, the behaviors not practiced by the majority, especially walking off trail, are alarming, because they can increase the aforementioned negative environmental impacts.

### **Discussion**

The results of this instrumental case highlight successful elements of the NAI CIG training course as well as its limitations. The most preferred and effective training methods actively engaged participants through role modeling and experiential learning activities. Other effective aspects of training were creating platforms for community development amongst interpreters for students to begin the process of becoming expert interpreters. The most successful instructors displayed transformational leadership qualities (Northouse, 2007), created a comfortable learning environment for students, and had many years or even decades of experience training interpreters. Together, these positive elements of training and instructor characteristics helped students achieve successful outcomes, including a greater understanding of the history and principles of interpretation, awareness of one's identity as an interpreter, and increased motivation to engage in interpretation. Additionally, the analysis of the survey data showed a positive linear relationship between the CIGs' interpretive competency scores and students' transformational leadership abilities. Transformational leadership scores were also related

to interpretive experience, as CIGs with more experience had higher transformational leadership scores.

Based on the evidence, the NAI CIG course does provide a basic foundation that prepares students to practice interpretation. The CIGs surveyed and interviewed were most knowledgeable and competent with interpretive skills pertaining to understanding how to make programs relevant to visitors of all ages and backgrounds, understanding the audience's needs and interests, and program development. These are all skills emphasized in the NAI syllabus and by CITs during training skills. They also align with three of the five most important skills (i.e. understanding how visitors learn at different ages, the ability to read the audience, and the ability to develop program outlines) identified by interpretive naturalists as the most important communications skills interpreters should develop (Ivey & Bixler, 2013). This suggests that the CIG course does prepare students to fulfill their roles as interpreters.

The majority of participants reported learning the skills mentioned above primarily through role modeling and experiential learning activities. Interestingly, these training methods align with and showcase effective interpretive practices emphasized by the NAI CIG syllabus, such as making interpretive programs enjoyable, relevant, and unique. On the opposite side of the spectrum, students and instructors overwhelmingly cited lectures and the literature review activities as the least preferred and effective learning opportunities. Students found them less interesting, and in the case of the literature review, overwhelming and stressful. The students said there was not enough time for the literature review. Indeed, students did not receive the literature until they arrived at training and had to work on the after other training activities were complete,

often working on the activity long into the night. However, students did appreciate the content presented during these activities, the discussions they inspired, and the balance between these activities and the preferred modeling and experiential learning activities.

The importance of modeling is not just preferred by students; it is vitally important for practicing effective interpretation. These results align with previous research. In a similar study by Grenier (2008), the researcher observed the impacts of two interpretive training programs where instructors emphasized the use of effective interpretive practices though passive, linear modes of lecture. After training, students did not implement effective interpretive practices; rather, students went on to lead lecture style programs similar to those modeled in training (Grenier, 2008). This highlights the importance of optimizing the number of modeling and experiential learning activities during interpretive training programs. At a minimum, if lecture and book-oriented learning activities are utilized in training, they should be short in duration (one hour or less) and well-balanced with more engaging activities. In addition, there should be adequate time before hand to read materials.

Another noteworthy finding is the significant, positive relationship found between CIGs' interpretive competency scores and transformational leadership scores. This finding can be interpreted several ways. First, this relationship suggests that the comparison between successful interpreters and transformational leaders described in the introduction is appropriate. Second, it suggests that the NAI CIG course helps students or prepares students to develop transformational leadership skills. This interpretation is supported by the observation that some CITs display transformational leadership characteristics during training. It is possible that having a transformational leader role

model interpretive skills during training helps students become leaders in their own right, as transformational leadership theory suggests (Northouse, 2007). Third, this relationship, as well as the significantly higher scores measured in participants with seven years of experience, might indicate that transformational leadership is causally related to ones' interpretive experience rather than success in training. However, the data is insufficient to indicate which of these interpretations is most appropriate.

On a related note, the results indicate that experience level impacts the students' training success. Students who had less interpretive experience reported experiencing significant change as interpreters, while students with at least two years of interpretive experience felt that training only reinforced and helped hone the skills developed prior to training. Likewise, students' interpretive experience influenced the relationship they had with CITs. Inexperienced students had more interaction with CITs when compared to experienced students, who reported spending little to no time with CITs. These observations raise concerns about whether or not the CIG training is a positive, worthwhile experience for all students. In this study, all participants, regardless of interpretive experience, felt that training was worthwhile. However, there is insufficient data to indicate whether the characteristics that made training "worthwhile" were unique to this atypical CIG course – such as the large number of interpreters and increased modeling, experiential, and outdoor learning activities – or characteristics inherent in all CIG courses.

Similarly, the amount of CITs' training experience impacted the influence of training on students. Students who interacted more with CITs with many years of training experience experienced greater success and had less criticism of training than those who



interacted with less experienced CITs. Interestingly, to have this affect, instructors' training experience did not have to be limited to teaching CIG courses. One of the CITs that was most highly praised by students during interviews had 15 years of experience training interpreters, only one of which was as a CIT training CIG students. These observations should not discourage new instructors. Rather, it should emphasize the importance of training experience after receiving CIT certification to become an expert interpretive trainer. This finding also suggests that CIG courses would benefit by including multiple CITs with varying levels of training experience. This will provide inexperienced CITs with valuable role models and give CIG students access to at least one experienced interpretive trainer.

Likewise, it is important to note that the CIG training is not intended nor does it produce expert interpretive guides. Instead, the CIG course gives students the necessary tools, such as program planning guides, an introduction to useful literature, and the confidence to continue learning through their own experiences. This limitation was emphasized by instructors during the observed course and repeated by CIG students during interviews, indicating that students were well aware of and prepared for the challenge of learning and developing as interpreters on their own.

While training did produce the positive outcomes described, the data also revealed weaknesses in the training syllabus. Multiple students wished training better prepared them to engage with audiences with special needs, such as visitors with physical, emotional, or cognitive disabilities. This was not a topic addressed in the observed course, but it is important to consider as previous research indicates naturalists identified

understanding disabilities as the fifth most important communication skill a naturalist can have (Ivey & Bixler, 2013).

This study also indicates that training has a limited ability to impact interpreters' environmentally responsible behaviors (ERBs). Several students interviewed expressed a desire for instruction on incorporating ERBs in programs and communicate the importance of ERBs to visitors. Research shows that it is difficult for interpreters to positively influence visitors' ERBs if they do not practice ERB themselves or cannot clearly communicate to visitors why and how ERBs should be practiced (Littlefair & Buckley, 2008; Powell & Ham, 2008; Sharp, et al., 2012). During training and interviews, students expressed anxiety and concern about asking people to change their behaviors, support environmental issues, or even discuss climate, as these subjects may be considered controversial and intimidating. Therefore, it is a subject where interpreters would need training.

### **Recommendations for Practice**

Recommendations for the CIG training therefore include how to engage audiences with special needs and how to model ERBs and discuss ERB and environmental issues with visitors. At the very least, CITs should emphasize the need for students to learn these skills after training and provide instruction on where students can find resources to help develop these skills and behaviors. Likewise, in regards to the literature review, students should obtain the literature early and be instructed on how to prepare for activities to increase comprehension and engagement while reducing associated stress.

Furthermore, NAI and other agencies should develop consider training addressing environmentally responsible training. Visitors expect parks, ecotourism operations, and

other such agencies to be green and environmentally responsible (Weiler & Ham, 2001; Wight, 2001). While the subject may seem controversial, there are communication and behavior change techniques that can be employed that can help interpreters fulfill this expectation. The conservation psychology literature provides a number of communication and behavior change techniques for ERBs (Cialdini, 2003; Schultz, 2000). This is an important discussion. After all, should we not be inspiring our visitors to care for our natural and cultural resources?

### **Conclusion**

The results of this case study highlights the strengths and limitations of the observed NAI CIG course. Most notably, the importance of optimizing the amount of modeling and experiential learning opportunities during training as well the importance of experienced instructors who display transformational leadership abilities while creating a comfortable learning environment cannot be understated. Training established a sense of community amongst interpreters and placed students on the path to becoming expert interpreters. Successful outcomes of the training included increased understanding of the basic principles, practices, and history of the interpretive field, increased confidence and awareness of one's unique interpretive identity, and motivation to engage in interpretation. Additionally, the survey of CIG students who were recently certified or recertified revealed that students' success in mastering training content was a significant predictor of their transformational leadership abilities. However, the survey did not indicate that success in training related to ERBs.

The results of this study are limited. As noted, the observed course was an atypical NAI CIG course. Therefore, it is inconclusive whether the findings are

representative of this particular course or all CIG courses. Likewise, the small sample size is not representative of the total population of CIGs, thereby limiting the generalizability of the results. Furthermore, while the survey results indicated a relationship between training and transformational leadership, this relationship is based on self-reported data acquired using the Self form version of the MLQ. More research is needed to test the validity of the relationship.

### **Theoretical Contributions**

In regards to theory, the current research bridges the gap between interpretive training philosophy and Kolb and Kolb's (1985) experiential learning theory. The data clearly show that hands-on, multisensory experiential learning methods are far superior and preferential to unidirectional lecture- or literature-based methods. This relationship between experiential learning theory and effective training methods was also implicitly highlighted in Grenier's (2008) article "Practice What We Preach," where the researcher presented evidence against lecture-style learning. Collectively, the current and previous research provides strong evidence for embracing a "show me, don't tell me" style philosophy when it comes to interpretive training.

The current findings also highlight the potential utility of transformational leadership theory as an alternative conceptualization of effective interpretation. Currently, there are many commonly cited conceptualizations, including Tilden's (1957) six principles, Ham's (2013) TORE model, and Cable and Beck's (2011) 15 principles. Transformational leadership theory overlaps substantially with these conceptualizations. In addition, as seen in this study, transformational leadership theory goes beyond by offering a validated measurement tool. Hence, with additional research, transformational

leadership theory can offer a valuable alternative, changing the way we discuss and measure effective interpretation.

### **Future Research**

Opportunities for future research are rich and abundant. Future projects should look more closely at the link between guide training and transformational leadership to determine how best to interpret and perhaps develop this relationship. Using pre- and post-tests to measure CIG students' transformational leadership scores before and after training is recommended to establish a causal relationship. Another option for exploring this relationship is using the Rater form of the MLQ, which allows CIG students or visitors to rate the transformational leadership ability of their CIT or interpreter respectively. This exercise can more strongly confirm the relationship between effective interpretation and transformational leadership. Additionally, practitioners and researchers should collaborate to discover new, innovative ways to engage students in more role modeling and experiential learning activities and to revise lecture and literature-based activities to make them more engaging. All of these research paths offer exciting opportunities to make interpretive training programs even more effective in preparing interpreters to connect visitors to and protect our natural resources.

## CHAPTER 5: CONCLUSION

In previous chapters, the two case studies – the EcoTraining case and the NAI case – were described separately as standalone papers. In the following section, the findings of these cases are discussed together. The aim of this discussion is to distinguish between what was unique about each case and what was similar between them. This is an important exercise, because any similarities between the two cases may indicate noteworthy conclusions or universal truths about guide and interpretive training in general. The limitations of this thesis as a whole and the researcher's concluding remarks are also included in this chapter.

### **Comparison of the Courses**

Before the EcoTraining and NAI CIG courses are compared, it is important to outline important physical difference between the courses that may influence the following conclusions. One of the most obvious differences is the physical locations of the courses. EcoTraining is based in Southern Africa – influenced largely by the principles and practices of the South African and Botswanan ecotourism industries – while the observed NAI CIG course occurred in the US and was influenced, in particular, by a state park system. Additionally, there is a severe difference in course length. EcoTraining courses last 28 days, 55 days, or one year; while the NAI CIG course spans a mere four days. Furthermore, there is a difference in who attends the courses. In the EcoTraining case, all participants had experience or a desire to work within the natural environment. On the other hand, while some NAI CIG case participants had experience or interest working within the natural environment, others worked at cultural or historic

sites. It is important to note that any or all of these differences influence the following conclusions. However, researchers were cognisant of these differences and did their best to draw conclusions based only on the courses' similarities or explicitly stated differences.

### **Philosophies and Emphases**

On the surface, the EcoTraining and the NAI CIG courses are very different. They differ in regards to purpose (training safari guides vs. training interpreters), location (Southern Africa vs. the United States), and duration (28 days, 55 day, or 1 year vs. four days). However, despite these dramatic differences, the observed courses had very similar philosophies and emphases regarding what constitutes effective guide training, whether it be ecotour or interpretive guide training (see Table 6). The similarities between EcoTraining and the CIG course targeted at improving interpretive skills suggests that EcoTraining's program does prepare ecotour guides to fulfill their roles as interpreters. This is an encouraging observation, as it differs from the observations of previous studies that concluded many ecotour guides were not prepared to be effective interpreters (Ballantyne & Hughes, 2001; Weiler & Ham, 2001).

Table 6

*The programs' emphases relevant to effective guiding and interpretation.*

<b>EcoTraining</b>	<b>Emphases Shared by Both Programs</b>	<b>NAI</b>
Content knowledge of resources  Present a whole rather than a part	Guiding is more than sharing facts  Create relevant, customized guest experiences  Establish a personal connection between guides and guests  Connect guests to resources  Instill appreciation for resources  Provoke guests to act	Organized, thematic program development

*Note:* Table 1 is based on observations of what was taught during training. Training providers may have recognized or discussed the importance of emphases not listed in their category, but activities in the observed courses did not strongly facilitate skill development in those areas.

### **Role Modeling and Experiential Learning**

In both cases, the preferred and most influential training activities were those that included role modeling and experiential learning opportunities. Static or unidirectional activities – such as lectures and book learning – were cited as the least preferred activities in both cases. Participants only found lectures useful when short in duration and followed by a relevant role modeling or experiential learning activity. Likewise, book learning activities were only effective if they provoked discussions amongst the students and/or instructors.



This is not a surprising. These observations align well with the very interpretive principles that each course explicitly or implicitly teach, such as including more than factual content, making programs or tours relevant and enjoyable for guests. These findings also align with the findings of other studies that stress the importance and benefits of role modeling techniques (Hughes, 1990; Littlefair & Buckley, 2008; Morgan & Gramann, 1989) or incorporating effective interpretive practices into training programs (Grenier, 2008).

### **Effects of Group Dynamics and Setting**

The characteristics of the group dynamics observed and commented on by participants in both cases were interesting. In each case, students interacted with multiple instructors. Though participants regarded most or all instructors as extremely knowledgeable and competent in their craft, many students commented on how unique each instructor was in terms of their expertise, interpretive or guiding style, and training approach. Similarly, participants in both cases also described their peer groups as “likeminded,” explaining that they all had an appreciation for natural and/or cultural resources and a desire to share their passions with others. However, at the same time, participants described their peers as diverse, citing their peers’ different cultural or demographic backgrounds, different interpretive or guiding styles, and beliefs on how resources should be managed or protected.

The balance between similarity and diversity observed in these groups created a type of “Goldilocks” scenario. Individuals were similar enough to create a comfortable, communal environment, yet different enough to challenge each other’s’ beliefs and

practices and encourage critical reflection and development. One example of the development this environment supported included increased awareness of one's unique guiding or interpretive identity. Participants thought that the combination of seeing many different styles, with instructors' emphasizing the importance of having a distinct style, helped them recognize that it was not only acceptable but beneficial to develop a style corresponding with their personality that was uniquely their own.

Another outcome of time spent in these groups was increased motivation, but motivation manifested differently in each case. In the EcoTraining case, students predominantly expressed an increase in connection to nature, motivating them to share this connection to inspire others to protect natural environments. In the NAI case, students were more motivated to engage in interpretation. These different motivations are related but distinct; one focuses on the effects of interpretation and the latter on the act of interpretation. This difference is likely due to varying characteristics and emphases of the programs. EcoTraining caps classes at 20 students, spending the majority of training in the natural environment. Due to the amount of time spent in nature with few people, the stronger connection to and focus on natural environments is understandable. In contrast, the observed NAI CIG course attracted over 80 interpreters, with CIG students spending a larger proportion of training indoors. Because of this environment, social interaction took place on a much grander scale than it did in the observed EcoTraining course. All participants enjoyed interacting with such a large group of individuals who were engaged in sharing and improving their interpretation skills, so it is unsurprising that CIG students' were driven to continue a similar engagement in interpretation after training.

### **Transformational Leadership and Transformative Experiences**

Evidence from the quantitative surveys support a relationship between ecotour and interpretive guides' self-reported competency and transformational leadership. In both cases, the relationship between guiding competency and transformational leadership was statistically significant. This is an intriguing finding. With the limited amount of post-test only data collected in the two studies ( $n = 25$ ,  $n = 84$ ), it is impossible to causally attribute this relationship to the training programs. However, future studies should look at training's influence on the relationship between guiding competency and transformational leadership using a randomized design or pre- and post-tests to see if training has any causal influence on this relationship.

Furthermore, the relationship between self-reported guiding competency and transformational leadership may indicate that there is potential to utilize transformational leadership as another way to conceptualize the role and characteristics of effective interpreters and ecotour guides. As noted previously, the description of a transformational leader aligns with those of a good interpreter and guide on an academic level, and this data suggests they align on a practical level as well. Using transformational leadership to explain effective interpretation and guiding could prove useful in improving and simplifying the way we define and talk about interpretation and guiding. It could also be an effective addition to training programs to help student guides understand their role as a guide and measure their effectiveness as a guide. The Multifactor Leadership Questionnaire (the standard measure of transformational leadership; Bass & Avolio, 1995) offers an established standard measurement of transformational leadership that could be

incorporated into training to help students understand their strengths, weaknesses, and development as a guide. This potential is worth exploring and discussing further.

In both case studies, the quality and effectiveness of the training program was strongly related to the quality of instructors. For the most part, EcoTraining instructors and CITs were praised by students for their knowledge, experience, and ability to meet the needs of all students. Instructors from both training programs also demonstrated all four components of transformational leadership (i.e. idealized influence, individualized consideration, intellectual stimulation, and inspirational motivation).

The combination of high quality instructors, effective training methods, and inspiring environments – such as the natural environment for EcoTraining students and the positive social environment for CIG students – led to growth and development within students. For CIG students, this growth and development was largely professional development, as all students either improved or honed their interpretive skills. The majority of students, with few exceptions, did not report any other substantial change. On the other hand, development for all EcoTraining students was more transformative in regards to guiding abilities and connection to nature, and EcoTraining students on the 55-day and 1-year courses also grew as individuals in ways unique to their needs and personalities.

We can speculate the reasons for the differences in the amount of transformation observed between and within the two courses. An obvious hypothesis is the difference in course length and structure. The observed CIG courses only lasted four days, and students were kept busy from the time they woke up early in the morning until they went

to bed late at night, and spent little to no unstructured, solitary time in natural environments, or alone. According to attention restoration theory (Kaplan & Kaplan, 1989; Kaplan, 1995) and experiential learning theory (Kolb, 1984), recovery from mental fatigue and self-reflection are needed to process information, learn, and develop. Under these conditions, CIG students did not have time to recover from mental fatigue or engage in self-reflection and thus did not experience any substantial changes as individuals. Also, solitary time in natural or nature-like environments improves connection to nature (Mayer, Frantz, Bruehlman-Senecal, & Dolliver, 2009; Schultz & Tabanico, 2007). Since this did not occur during the CIG course, an increase in connection to nature is unlikely.

Additionally, the difference could be due to the different experience levels. Students who attend CIG courses have varying levels of interpretive experience; some have no experience but many have years or even decades of experience. For students with more experience, training may not produce significant change because they have already developed significantly through their prior experiences. This notion is supported by the interview data as well as the survey data, which showed CIGs with more experience exhibited greater self-reported interpretive competency. On the contrary, the majority of EcoTraining students have little to no guiding experience or experience in the natural environment they are immersed in during training. Therefore, they have much more room to grow.

### **Training and Environmentally Responsible Behaviors**

ERBs played a much more substantial role in the EcoTraining case than in the NAI case. In EcoTraining's program, ERB was part of the course content, as it was discussed formally as well as modeled and practiced daily. Likewise, EcoTraining courses took place within the natural environment, immersing students as groups and individuals in structured or unstructured experiences in nature 24 hours a day. The impact of this emphasis and environment was reflected in the qualitative data. Most EcoTraining participants commented on the importance of and/or their commitment to ERBs, which was supported by the quantitative data. The majority of participants survey ( $n = 9$  or more) practiced 11 out of the 12 ERBs measured "Fairly often" or "Frequently, if not always." This highlights the importance of using repetitious role modeling, experiential learning, and immersive experience in nature which emphasize ERBs and increase connection to nature during training.

The NAI CIG course broadly focused on interpretation – which includes natural, historical, and cultural emphases – and ERB is not part of the syllabus and was only modeled or discussed informally during the observed training. The CIG course largely took place indoors with some structured outdoor activities included, which allowed instructors to informally discuss or model ERBs. Most participants recalled this informal discussion and modeling, but interviewees reported that modeling did not have a noticeable influence on their ERBs. Likewise, increased connection to nature was not a theme that emerged through interviews with CIG students. However, the majority of survey participants ( $n = 33$  or more) reported practicing and encouraging 11 of the 15

measured ERBs during programs “Fairly often” or “Frequently, if not always.” This means while trainees said the modeled behavior did not have an impact, survey data indicated interpreters practice ERBs. This raises two main questions. First, if training is not significantly influencing CIGs’ decision to practice ERB, then what does? Answering this question is key to improving efforts aimed at increasing the ERBs practiced by interpreters and their visitors and lowering the environmental impacts of interpretive programs. Second, should NAI consider placing greater emphasis on ERBs in the CIG course? During interviews, several CIGs expressed concerns about their ability to incorporate ERBs – which can be difficult to explain or controversial (Sarewitz, 2004) – in programs. Emphasizing ERB formally during CIG training can better prepare interpreters to educate and engage visitors in ERB during programs.

### **The Limits of Training**

If one thing was made clear by instructors and students in both cases, it was that training is not intended to produce expert guides or interpreters. The data strongly supports the notion that training is the beginning of a learning process that needs to continue through experience in the field. However, students in both cases felt that training adequately prepared them for this challenge by building their confidence and giving them the tools necessary for success. The instructors’ transparency is the greatest reason for the optimism surrounding this limitation. Rather than giving students a false impression about the challenges that lay ahead, instructors warned students that more practice is needed to become a fully competent guide or interpreter. Students took this warning to heart and embraced the challenge. This is an important takeaway, suggesting

that the limited ability of any training program to produce expert, ethical guides can be compensated if instructors are honest and prepare students for the challenges faced post-training.

### **Limitations of the Study**

As in any study, there were several limitations affecting the utility of the findings presented in this thesis. The following list outlines specific limitations identified by the researcher:

- The survey sample sizes, especially in the EcoTraining case, were too small to draw strong statistical conclusions about the hypotheses.
- The quantitative data was restricted to post-test only data. Therefore, causal relationships between the variables cannot be inferred based on the survey data.
- Part of the survey instrument (approximately 2/3<sup>rd</sup>) was developed originally by the researchers. A ceiling effect was found when analyzing responses to the originally developed survey questions, and a statistical relationship between the guiding competency and ERB was not found. More testing is needed to determine if a relationship between guiding competency and ERB is nonexistent or was undetectable with the current instrument.
- In the NAI case, the observed course was atypical compared to the majority of CIG courses due to the increased number of role modeling, experiential learning, and outdoor activities. This limits the ability to generalize the qualitative findings to other NAI CIG courses.



- This study did not explore factors that were reported to influence guides' ERBs, such as occupational pressures from tourists, other guides, or their managers. Observations, interviews, and surveys need to be conducted with tourists, guides from other training programs, and managers to better understand how they influence guides' ERBs.
- This study only incorporated the Self form of the MLQ, yielding self-reported data on students' transformational leadership ability. While valid, stronger, more holistic conclusions could have been drawn if the Rater form of the MLQ was incorporated into the study.

The following measures would address the noted limitations. In-person distribution of the EcoTraining survey distribution had a much higher return rate than online survey distribution. In hindsight, this is unsurprising. Many guides in Southern Africa have little to no internet access for extended periods of time and are thus unlikely to take online surveys. Future efforts should consider this obstacle before data collection methods are selected. Likewise, randomized designs with a control group or a pre- and post-test designs should be considered, as they allow the possibility to identify causal relationships. Additionally, studies should be conducted on different CIG courses. This will allow researchers to distinguish between characteristics and outcomes universal to all CIG programs and those unique to a particular CIG program. Finally, both the Self and Rater forms of the MQL need to be incorporated into the study in additional ways. For instance, instructors' transformational leadership abilities was not measured in the current study. In future studies, both MLQ forms can be used to measure instructors'

transformational leadership abilities through instructors' own eyes and the eyes of students, which will allow interesting comparisons. Likewise, the Rater form can be distributed to tourists, other guides and interpreters, and lodge managers to provide a non-self-reported measure of students' transformational leadership abilities. Such exercises will allow researchers to further investigate the observed relationship between effective guiding and interpretation and transformational leadership.

### **Concluding Remarks on Guide Training**

Together, these two cases studies – one on EcoTraining's ecotour guide training program and NAI's CIG training program – yield very important conclusions about guide training programs in general. Both programs ultimately have roots in initiatives aimed at improving the way we see, value, and interact with the natural environment. Freeman Tilden, a founding father of interpretation, had a vision; interpretation should not only create knowledge but also connect people to nature and provoke them to act favorably on her behalf. Similarly, ecotourism – which includes interpretation – was predominantly born out of concern for the natural environment. Ecotourism is also a mechanism for preserving natural environments through environmentally sound practices and by inspiring visitors to respect and protect the nature on site and when they return home (Honey, 1999; Powell & Ham, 2008). Through these two case studies, and others (Ballentyne & Hughes, 2001; Black & King, 2002; Carmondy, 2013; Chamas & Schmidt, 2011), we see that training is an effective method for preparing ecotour and interpretive guides to fulfill the visions the founders of interpretation and ecotourism had for their fields.

These case studies show that guide training programs should be as educational, inspirational, and transformative as the experiences guides are expected to create. Training should include role modeling and experiential learning opportunities to show students what it feels like to be part of high quality interpretive and ecotourism experiences. These activities should enhance or be balanced with activities that encourage social interaction and dynamic discussion amongst students and/or instructors. The communication creates a sense of community, allowing students to share their skills and experiences with one another, increasing awareness of their own unique guiding style, and in the case with EcoTraining, hardens their commitment to ERBs. Collaboratively, these findings and theories strongly support our recommendations to include role modeling, experiential learning, social interaction, and dynamic discussion in training, as it is in the best interest of both the interpretive and ecotourism field.

However, it is not only what you do in training but who you include. In interviews, students from both programs named their instructors as one of the most influential parts of their training experience. These influential instructors can be described as transformational leaders; who were competent, charismatic and capable of earning students' respect and awe, yet humble and approachable enough to create a collaborative, comfortable, and adaptable learning environment that met the needs of all students. Time spent with these instructors was motivating; encouraging students to succeed in their training programs, and in some instances, continue professional and personal growth even after becoming employed as a guide. On the other hand, student experiences with less competent instructors had the opposite effect, hindering students'

ability to achieve the highest level of success during training. These findings emphasize the importance of selecting high quality instructors who exhibit transformational leadership characteristics to lead guide training programs.

One of the major purposes of this research was to investigate training's influence on guides' ERB and transformational leadership. In regards to ERB, these case studies show that training can influence students' ERBs if the right elements are built-in. Such elements include positive role modeling, expectations to practice ERB during training, and immersive experiences – both structured and unstructured – in nature that increase students' connection to nature. However, these studies also showed that training is not the only influence on students' ERB. Other influences – such as pressures from tourists, occupational norms established with other guides, and expectations of guide managers – all play a part in shaping students' post-training commitment to ERBs. This suggests that training can be a valuable tool for increasing guides' ERBs, but it should be expanded. Training activities that force students to think about and respond to these pressures, such as mock guiding and discussions that occurred on EcoTraining courses, prepare students to handle situations where their ERBs are challenged. However, all barriers, including those that occur after training, need to be addressed before we can expect all guides to stay committed to and be effective role models of ERBs.

Likewise, the relationship identified between ecotour or interpretive guiding competency and transformational leadership is encouraging. Transformational leadership theory places a new lens on guides' ability to influence visitors and their ERBs during tours and programs. The consequences of this are vast, as transformational leadership

theory can be applied to this situation in a multitude of ways, informing and improving the way we view, teach, and measure the effectiveness of guides. This offers an exciting future for researchers and practitioners who delve into this new line of work.

In conclusion, this thesis research shows that training can have a profound impact on students' guiding abilities, ERBs, and transformational leadership abilities if the right activities, people, and environments are included. These case studies also show that training is not the end-all solution to the problems associated with ineffective ecotourism and interpretation, as they were found to be the start of a learning and development process. Training can better prepare guides to address pressure that challenge their ERBs, but their behaviors are ultimately also influenced by additional factors outside of training. Despite these limitations, training is an effective method for improving ecotourism and interpretation, helping the fields live up to the expectations of their founders. If more guides partake in effective training opportunities like the ones observed at EcoTraining and NAI, perhaps we can all expect to live in a better world, surrounded by unspoiled natural environments and people dedicated to their preservation.

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## APPENDIX A. Student Interview Protocol

### Interview Protocol for Student Guides

#### Initial Questions

- 1) Tell me about your guiding experience.
  - a. How much guiding experience do you currently have?
  - b. What experience or knowledge did you have with guiding before you completed training?
- 2) Tell me about the guide training program you completed.
  - a. Can you describe a typical day during training?
  - b. Looking back, can you describe any events that stand out in your mind?
- 3) Why did you choose to complete this training program?
- 4) Who, if anyone, was influential during training?
  - a. Can you describe the influence that they had on you?
- 5) Describe your trainer or trainers?
  - a. What was your impression of them?

#### Intermediate Questions

- 1) How would you describe your view of guiding before training?
- 2) Can you tell me about what you learned during the training course?
  - a. What guiding skills did you develop or improve?
  - b. What was the most important lesson or skill that you learned? Why was this the most important?
- 3) What was your favorite part of training and why?
- 4) What was your least favorite aspect of training and why?
  - a. What did you gain from this aspect of training?
- 5) How, if at all, did training change your initial view of guiding?
  - a. What was it about training that influenced this change?
  - b. Was there a particular event or series of events that led to this change?
- 6) Has this view changed since training? If so, how?
  - a. Why do you think your view has changed?
  - b. What experiences have caused this?
- 7) What was your favorite thing about your trainer(s)?
- 8) Can you describe your trainer's personality? His training style?
- 9) What training techniques did he use?
  - a. How did these techniques impact you?
  - b. Which techniques impacted you the most? Why do you think this particular technique had the greatest impact on you?
- 10) What are the goals of ecotourism?
  - a. How do you try to meet these goals?
- 11) Do you try to influence your clients in any way? How?

#### Ending Questions

- 1) Looking back on yourself before and after training, how, if at all, did you change?

- a. Can you tell me about any weakness you identified and strengths you developed?
- 2) What was the most important thing that you learned during training?
  - a. What experiences helped you learn this?
- 3) What was the overall impact that your trainer(s) had on you as a guide and as a person?
- 4) What do you wish would have been included in training? What, if anything, do you still feel unprepared for?
- 5) Is there anything else you would like to tell me about your experience with training or your trainers?
- 6) Is there anything you would like to ask me?



## APPENDIX B. Instructor Interview Protocol

### Interview Protocol for Instructors

#### Initial Questions

- 1) Tell me about your training experience.
  - b. How much training experience do you currently have?
- 2) Why did you choose to become a trainer?
- 3) Who, if anyone, was influential in your decision to become a trainer?
  - a. Can you describe the influence that they had on you?
- 4) Describe your students?
  - a. What is your general impression of them?

#### Intermediate Questions

- 1) How would you describe your view of the training course(s) you teach?
- 2) Can you tell me about what you think your students learn during the training course?
  - a. What guiding skills do your students develop or improve?
  - b. What is the most important lesson or skill that you think that they learn?  
Why do you think this is such an important lesson to learn?
- 3) What is your favorite part of training and why?
  - a. What do you see your students gaining from this part?
- 4) What is your least favorite aspect of training and why?
  - a. What do you the students gain from this aspect of training?
- 5) How, if at all, does training change your students' initial view of guiding?
  - a. What is it about training that influences this change?
  - b. Is there a particular event or series of events that lead to this change?
- 6) Does this view change once your students become employed as guides? If so, how?
  - a. Why do you think their view changes?
  - b. What experiences cause this?
- 7) What was your favorite thing about yourself as a trainer?
- 8) Can you describe your personality as a trainer? Your training style?
- 9) What training techniques do you use?
  - a. How do these techniques impact your students?
  - b. Which techniques impacted them the most? Why do you think this particular technique has the greatest impact?

#### Ending Questions

- 1) Looking back on your students before and after training, how, if at all, do they change?
  - b. Can you tell me about any common weakness and strengths they identify and develop?
- 2) Can you describe what training does for your students' guiding abilities?
- 3) What was the most important thing that students learn during training?

- a. What training experiences help them learn this?
- 4) What do you wish could be included in training? What, if anything, do you still feel unprepared your students graduate unprepared for?
- 5) Is there anything else you would like to tell me about your experience with your students or as a trainer?
- 6) Is there anything you would like to ask me?

## APPENDIX C. EcoTraining Survey

### Survey Used in the EcoTraining Case

Please use the following rating scale to answer the following questions:

Not at all always	Once in awhile	Sometimes	Fairly often	Frequently, if not
0	1	2	3	4

### Transformational Leadership Measurement (Examples from Each Item)

- 1) I re-examine critical assumptions to question whether they are appropriate (Intellectual stimulation)
- 2) I talk about my most important values and beliefs (Idealized influence)
- 3) I talk optimistically about the future (Inspirational motivation)
- 4) I help others to develop their strengths (Individualized consideration)

### Guide Competency Measurement

- 1) I am able to identify any of the plant species I encounter during a tour that I lead. (Knowledge)
- 2) I am able to identify any mammal, reptile, bird, amphibian, fish, and arthropod species I encounter during a tour that I lead. (Knowledge)
- 3) I am able to identify the calls of any mammal, bird, and amphibian species I hear during a tour that I lead. (Knowledge)
- 4) I am able to understand the various behaviors of any of the animal species I encounter during a tour that I lead (Knowledge).
- 5) I am able to verbally interpret the behavior of any animal species I encounter during a tour that I lead. (Comm.)
- 6) I am able to verbally interpret interesting facts about any animal or plant species I encounter during a tour that I lead. (Comm.)
- 7) I am able to verbally interpret the ecological role that any plant, animal, or geologic element I encounter during a tour. (Comm.)
- 8) I am confident that I could treat minor injuries suffered by myself or my clients. (Safety).
- 9) In the event of a major injury, I am confident I could handle the situation until medical professionals were available. (Safety)
- 10) I am confident that I could successfully orient myself and my clients if we were to get lost. (Safety).
- 11) I am confident that I could locate food, water, and shelter for my clients if we were to get lost or stranded. (Safety)
- 12) I have a good understanding of my clients' special interests before departing on a guided experience. (Comm.)

- 13) I am able to involve all my clients as individuals during guided experiences.  
(Comm.)

### **Environmentally Responsible Behavior Measurement**

- 1) How often do you drive off-road or walk off-trail? (Littlefair & Buckley, L&B, 2008; Direct ERB)
- 2) How often do you allow your clients to exit vehicles in undesignated areas or to walk off-trail? (Littlefair & Buckley, L&B, 2008; Direct ERB)
- 3) How often do you feed wild animals? (The Ecotourism Society, TIES, 2015; Direct ERB)
- 4) How often do you allow your clients to feed wild animals? (TIES, 2015; Direct ERB)
- 5) How often does noise from your group distress or disturb wild animals? (The Ecotourism Society, TIES, 2015; Indirect ERB)
- 6) How often do you move rocks, plants, and/or animals in the natural environment during a tour that you lead? (TIES, 2015; Indirect ERB)
- 7) How often do your clients purchase or remove rocks, plants, and/or animals from the natural environment? (TIES, 2015; Indirect ERB)
- 8) How often does litter from your group end up in places that are not designated for garbage disposal? (L&B, 2008; TIES, 2015; Indirect ERB)
- 9) When you see litter in areas that are not designated for garbage disposal, how often do you remove it and place it in a designated garbage disposal? (L&B, 2008; Proactive ERB)
- 10) When your clients see litter in areas that are not designated for garbage disposal, how often do they remove it and place it in a designated garbage disposal? (L&B, 2008; Proactive ERB)
- 11) How often do you support eco-friendly accommodation facilities (i.e. lodges, camps, vendors, or businesses that support or contribute to local conservation initiatives)? (TIES, 2015; Proactive ERB)
- 12) How often do you encourage your clients to support eco-friendly accommodation facilities (i.e. lodges, camps, vendors, or businesses that support or contribute to local conservation initiatives)? (TIES, 2015; Proactive ERB)

### **Open Ended**

- 1) What aspects of your guide training were most influential on your guiding behaviors?
- 2) What factors, if any, tempt or cause you to act differently than you were trained to during your guide training program?
- 3) What do you wish training had better prepared you for? Please describe an example(s).

### **Demographics**

Please select one answer to the following 5 questions:

- 1) How many years have you been employed as a guide?

- a. Less than 1 year
  - b. 1-3 years
  - c. 4-6 years
  - d. 7 years or more
- 2) Have you received the FGASA Level 1 qualification?
- a. Yes
  - b. No
- 3) How many years has it been since you completed the most recent guide training course through Ecotraining?
- a. Less than 1 year
  - b. 1-3 years
  - c. 4-6 years
  - d. 7 years or more
- 4) What is your highest level of educational attainment?
- a. Less than a secondary education
  - b. Secondary education (National Certificate Vocational or National Senior Certificate)
  - c. Tertiary degree (undergraduate or graduate)
- 5) What is your gender?
- a. Male
  - b. Female

## APPENDIX D. NAI Survey

### Survey Used in the NAI Case

Please use the following rating scale to answer the following questions:

Not at all always	Once in awhile	Sometimes	Fairly often	Frequently, if not
0	1	2	3	4

#### Transformational Leadership Measurement

- 1) I re-examine critical assumptions to question whether they are appropriate (Intellectual stimulation)
- 2) I talk about my most important values and beliefs (Idealized influence)
- 3) I talk optimistically about the future (Inspirational motivation)
- 4) I help others to develop their strengths (Individualized consideration)

#### Interpretive Competency Measurement (Based on NAI CIG syllabus)

- 1) I can design programs using the principles of interpretation.
- 2) I can describe the important historical figures in the interpretive field.
- 3) I can summarize the current literature in the interpretive field.
- 4) I can explain the value of thematic interpretation.
- 5) I can effectively outline presentations around a theme and subthemes.
- 6) I can create interpretive programs with effective introductions and conclusions.
- 7) I can effectively design interpretive programs for any type of audience.
- 8) I make sure my presentations include measurable objective(s)
- 9) I make sure to understand my audience before starting an interpretive program.
- 10) I involve all my visitors as individuals during an interpretive program.
- 11) I ethically handle situations where my visitors have different opinions, desires, or needs.
- 12) I effectively incorporate tangibles and intangibles into my interpretive programs.
- 13) I use multiple reliable sources of information when designing an interpretive program.
- 14) I evaluate my interpretive programs using at least one measurable objective.

#### Environmentally Responsible Behavior Measurement

- 1) How often do you walk off-trail? (Leave No Trace, LNT, 2012; Littlefair & Buckley, L&B, 2008 Direct ERB)
- 2) How often do you allow your visitors to walk off-trail? (LNT, 2012; L&B, 2008; Direct ERB)
- 3) How often do you feed wild animals? (The Ecotourism Society, TIES, 2015; Direct ERB)

- 4) How often do you allow your clients to feed wild animals? (TIES, 2015; Direct ERB)
- 5) How often does noise from your group distress or disturb wild animals? (The Ecotourism Society , TIES, 2015; Indirect ERB)
- 6) How often do you displace rocks, plants, and/or animals in the natural environment during a tour that you lead? (LNT, 2012; TIES, 2015; Indirect ERB)
- 7) How often do your visitors displace rocks, plants, and/or animals? (LNT, 2012; L&B, 2008; Indirect ERB)
- 8) How often do you discuss environmentally responsible behaviors with your participants? (L&B, 2008)
- 9) How often do your clients purchase or remove rocks, plants, and/or animals in the natural environment during a program that you lead? (TIES, 2015; Indirect ERB)
- 10) How often does your group litter? (LNT, 2012; L&B, 2008; TIES, 2015; Indirect ERB)
- 11) When you see litter, how often do you pick it up? (LNT, 2012; L&B, 2008; Proactive ERB)
- 12) When your visitors see litter, how often do you they pick it up? (LNT, 2012; L&B, 2008; Proactive ERB)
- 13) How often do you support local businesses? (TIES, 2015; Proactive ERB)
- 14) How often do you encourage your visitors to support local businesses? (TIES, 2015; Proactive ERB)
- 15) How often do you encourage visitors to support eco-friendly accommodations (i.e. camps, lodges, hotels)? (TIES, 2015; Proactive ERB)
- 16) How often do you recycle at work? (Proactive ERB)

### **Open Ended**

- 1) What aspects of your guide training were most influential on your guiding behaviors?
- 2) What factors, if any, tempt or cause you to act differently than you were trained to during your guide training program?
- 3) What do you wish training had better prepared you for? Please describe an example(s).

### **Demographics**

Please select one answer to the following 5 questions:

- 1) Please choose the environment in which you typically work?
  - a. State/National park
  - b. State/National forests
  - c. Cultural site
  - d. Historical site
  - e. Nature center
  - f. Zoo or aquarium
  - g. Formal educational institution (e.g. school or university)

- h. Other (Please explain) \_\_\_\_\_
- 2) How many years have you been employed as an interpreter or guide?
  - a. Less than 1 year
  - b. 1-3 years
  - c. 4-6 years
  - d. 7 years or more
- 3) How many years has it been since you completed the NAI CIG training?
  - a. Less than 1 year
  - b. 1-3 years
  - c. 4-6 years
  - d. 7 years or more
- 4) What is your highest level of educational attainment?
  - a. Primary school
  - b. High school
  - c. Diploma
  - d. Bachelor's degree
  - e. Graduate degree (Master's or doctorate)
- 5) What is your gender?
  - a. Male
  - b. Female



## APPENDIX E. IRB Approval Letter



## Official Approval Letter for IRB project #15186

May 8, 2015

Nancy Lackey  
School of Natural Resources  
5025 Vine St, Lincoln, NE 68504

Lisa Pennisi  
School of Natural Resources  
HARH 410, UNL, 68583-0974

IRB Number: 20150515186 EX

Project ID: 15186

Project Title: The influence of guide training on ecotour guides and their transformational leadership and environmentally responsible behaviors: A qualitative and quantitative case study

Dear Nancy:

This letter is to officially notify you of the certification of exemption of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46) and has been classified as Exempt Category 2.

You are authorized to implement this study as of the Date of Exemption Determination: 05/08/2015.

1. Your stamped and approved informed consent documents have been uploaded to NUgrant (files with Approved.pdf in the file name). Please use these documents to distribute to participants. If you need to make changes to the informed consent documents, please submit the revised documents to the IRB for review and approval prior to using them.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

- \* Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
- \* Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
- \* Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- \* Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- \* Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

This project should be conducted in full accordance with all applicable sections of the IRB Guidelines and you should notify the IRB immediately of any proposed changes that may affect the exempt status of your research project. You should report any unanticipated problems involving risks to the participants or others to the Board.

If you have any questions, please contact the IRB office at 472-6965.

Sincerely,

Becky R. Freeman, CIP  
for the IRB



## APPENDIX F. IRB Change Request Form



## Official Approval Letter for IRB project #15186 - Change Request Form

May 11, 2016

Nancy Lackey  
School of Natural Resources  
5062 R St Lincoln, NE 68504

Lisa Pennisi  
School of Natural Resources  
HARH 410, UNL, 68583-0974

IRB Number: 20150515186 EX  
Project ID: 15186

Project Title: The influence of guide training on ecotour guides and their transformational leadership and environmentally responsible behaviors: A qualitative and quantitative case study

Dear Nancy:

The Institutional Review Board for the Protection of Human Subjects has completed its review of the Request for Change in Protocol submitted to the IRB.

The change request form has been approved to include the following changes and procedures as described in the form:

- Inclusion of individuals who have completed the National Association of Interpretation (NAI) Certified Guide Training Course as participants in the interview and survey
- Access to a private list contact information for potential participants from NAI

The stamped and approved form(s) has been uploaded to NUgrant. Please use the stamped form(s) to make copies to distribute to participants. If changes need to be made, please submit the revised form to the IRB for approval prior to use.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

- \* Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
- \* Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
- \* Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- \* Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- \* Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

This letter constitutes official notification of the approval of the protocol change. You are therefore authorized to implement this change accordingly.

If you have any questions, please contact the IRB office at 402-472-6965.

Sincerely,

*Becky R. Freeman*

Becky R. Freeman, CIP  
for the IRB

