The story begins
This study aims to explore basic competencies of Environmental Education (EE) Educator, and relevant internal and external influential factors of competency in Environmental Learning Centers (ELC) educators of Taiwan. This study was conducted during Aug, 2014 to July, 2015. The objectives are (1) to understand working status of the EE educators of ELC; (2) to identify the key competencies which EE educators recognize in the working context; and (3) to understand internal psychological and external environmental factors influencing those competencies.

This study adopted in-depth interview to collect data. There are totally 28 EE educators who have been working at an ELC or ever working for accumulating more than 4 years. After transcribing the interviews into texts, the grounded theory coding methods were conducted for the data analysis. The findings are:

1. Working status: The 28 educators either have permanent positions or are employed with contract. Their monthly salary range is from USD 730 to USD 1,700. They recognize their job and role as a connector between nature and human beings, as well as a mediator between ELC and the public. This study has also identified nine main tasks of their position at ELC.

2. Key competencies: There are 14 key competencies of educators are identified in this study. They fall into four dimensions: general personal competence, effective teaching competence, EE content competence, and ELC operational competence.

3. Internal and external factors: There are three main internal and four main external factors influencing the competencies of these educators. Three internal factors are (1) personality, (2) background and experience (study background, nature experience, personal environmental behavior), and (3) educator’s perception toward their job (perceive for job’s well-being, satisfaction, and self-confidence).

4. Four main external factors are: (1) feedback from audience, (2) relationship with colleagues (relationship with other educator, supporting by leader.), (3) ELC managements and policies (organizational operational vision and system), and (4) successful role model.

These results provide the basic direction and structure to the researchers for the following questionnaire design. Researcher is going to explore key influence factors of competence by empirical research on next stage.

Key words: Environmental Learning Center; Environmental Education Educator; Competency; Internal Psychological Factors; External Environmental Factors.
Certified Interpretive Trainer Role Perceptions

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Professional development trainers are familiar with and facilitate content and expected learning outcomes of professional development training. Qualities of effective trainers include creative training methods, accurate and expert knowledge, and proficient interpersonal skills.

For this study, trainers are individuals maintaining Certified Interpretive Trainer (CIT) status through the National Association for Interpretation. The purpose of this research was to explore how CITs perceive their role or roles in the field of interpretation. Perceived roles influence behavior; receiving evaluations and feedback from training participants may contribute to trainer role validation. The paradigm under which this research was conducted was constructivism with a framework of role theory. The design of this study is qualitative, explorative, descriptive, and contextual, using purposive sampling. Qualitative design offered opportunity to explore the perspectives and experiences of professional development trainers in the field of interpretation. Data were collected from five research participants through individual semi-structured interviews within one week in March 2015. The limited timeframe for data collection restricted the number of potential available research participants. Analysis of data included constant comparative methods within a grounded theory strategy. Findings indicate CITs search for personal fulfillment and perceive their role as making a difference in the profession of interpretation. Perspectives gained from this descriptive study contribute insight into role theory and specifically how CITs perceive their role within the interpretation profession, which allows professional organizations to encourage trainer identity formation and offer support for professional practice and industry standard.
Interpretive walks are an important tool for conservation organizations, which use them to educate, engage, and connect visitors with their sites. Interpretive studies have focused on program outcomes: cognitive, the forming of emotional and intellectual connections, and effects on environmental behaviors. However, less research exists on how the experience itself is perceived by visitors. Is it primarily a learning process? What role does the interpreter play, and how does the process of interpretation affect the visitor experience? What implications might this have for the techniques that interpreters deploy in the field? What does it mean for organizations seeking to build supportive stewardship communities?

The purpose of this qualitative study was to explore how the process of interpretation affects a short-term nature experience by examining it through the lens of both visitor and guide. The researcher accompanied 8 nature walks on Cape Cod, Massachusetts, USA, a tourist destination, and subsequently conducted semi-structured interviews with 6 guides and 14 visitors (2 guides led more than 1 walk). This provided a trifold perspective on each trip, enabling an examination of the trip as observed by the researcher, and perceived by both visitor and guide.

As expected, learning was an important part of the experience, as well as a visitor goal. However, visitor interviews revealed that a major aspect of a trip is social. Visitors go on guided walks not just to learn, but to interact with people. More than half of respondent narratives were devoted to social observations: about group dynamics, the sharing and exchange of knowledge, experience and personal history, social norms, and the guide’s social aptitude. Further, information transfer did not always originate with the guide, but resulted from visitor-to-visitor interaction. Visitors learned from each other by sharing and comparing past experiences. They speculated about their observations and generated questions for the guide; those answers then became the property of the entire group. In other words, in addition to receiving knowledge delivered by the guide, visitors were engaged in active, constructive social learning, and building and reinforcing common interests. At the same time, they were reinforcing a common identity as members of a particular social “tribe.” Because guides were juggling multiple responsibilities while simultaneously delivering program content, they were not aware of the extent of visitor-to-visitor interaction (much of which occurred beyond the interpreter’s awareness, down the line of hikers or behind the front ranks of the listening audience).

Interpretive walks are thus revealed as more than a moving lecture: they are a social forum for constructive learning. Visitors are not merely passive recipients of knowledge, but active participants in a social learning experience (socially shared cognition). This discovery has implications for the role of interpreters, their selection and training. It also offers an opportunity for organizations to use this social aspect as leverage for community-building, and development of a stewardship identity among visitors.
Wellington, New Zealand, is a compact city, making visits to multiple regionally and nationally-significant institutions well within the geographical scope of school visits. What is not well understood about such visits is the connections that students make across two or more institutions. This presentation explores the extent to which children’s learning about citizenship is enhanced when educational opportunities are co-ordinated across cultural institutions. Currently, there is little international literature that provides insight into the conceptual understanding (that is, beyond learners’ acquisition of facts and information) that is generated when citizenship education includes visits to more than one site. This research, therefore, aims to understand how learners make durable, conceptual connections about citizenship – across nationally-significant institutions and to their own lives.

This presentation reports on a 2015 pilot project, funded by the Wellington Regional Amenities Fund, which recognised that the costs of transport, and support for enhancing connectivity across multiple cultural institutions, are considerable barriers for schools in the Wellington region. The funding offered lower socio-economic schools heavily subsidised buses to Wellington, and resourcing and professional development for teachers. We share findings from 13 schools who accessed the funding and/or professional development and, in particular, the ways in which teachers sought to support their students’ sense of connection across two or more sites. We consider the implications for teachers and informal educators as they seek to jointly plan for rich pre, during and after visit learning experiences.
K’gari (Fraser Island), southern Queensland, is the largest sand island in the World, with complex, evolving dune systems and perched dune lakes, diverse vegetation types and significant faunal diversity (DNPSR, 2015). While K’gari (meaning paradise) gained World Heritage status for recognition of its outstanding natural universal values in 1992, cultural values are yet to be recognised in the listing. Each year over 350,000 people visit K’gari (DERM, 2008). Several researchers postulate that tourism on the island is not yet sustainable, that World Heritage values are compromised, and that impacts and issues include: lack of Butchulla cultural representation; high visitor numbers; dingo management policies and visitor behaviour; inadequate infrastructure; water pollution of perched lakes, streams and beaches by campers; the heavy reliance on tourism to fund the national park creating a conflict in priorities; attitudes and damaging activities of visitors in 4WDs; a lack of cultural and natural awareness and sensitivity; and inadequate information and training for visitors on appropriate behaviour, including during tour discourse (Brown et al, 2015; Wardell-Johnson, et. al., 2015; Cooper et. al., 2011; Carter et. al., 2015; Vivian and Schlacher, 2015; Sinclair, 2012). This puts enormous pressure on the values of K’gari and those responsible for its management.

Butchulla people have inhabited K’gari for at least 5,000 years and perhaps as far back as 50,000 years and significant cultural artefacts and sacred cultural sites are recognised (DNPSR, 2015). In October 2014 the Native Title claim over K’gari (Fraser Island) was determined in favour of Butchulla Traditional Owners (De Satge, 2014). Brown et al. (2015) found in a rigorous evaluation of K’gari tourist promotion material using content and image analysis, that there was a lack of representation of Butchulla indigenous culture and values. Prominent Butchulla artist Fiona Foley (2012) suggests we need to “rewrite Aboriginal people, Aboriginal nations and Aboriginal history back into the Australian narrative” through public art and other strategies.

My doctorate research will review and trial a range of interpretive strategies to increase equity in Indigenous visibility and presence in the K’gari landscape. This paper explores interpretive objectives and strategies employed by selected World Heritage areas listed for cultural and natural values. Research into effectiveness of cross-cultural communication, representation of the stories and viewpoints of Indigenous peoples, and the influence of interpretation on visitor attitudes and behaviour in culturally sensitive sites will be reviewed. This preliminary research refines the selection of appropriate multi-modal case-studies to inform future interpretation research on K’gari. Criteria includes interpretive goals, objectives, themes, stories, strategies, who is doing the telling and who is being engaged, and effectiveness of interpretation measured against stated objectives. Given the history of injustices against Indigenous people in Australia, particular emphasis will be placed on how past inequities and shared histories are presented and the vision for current and future relationships to place.

References


Attempts to capture and model qualities of the visitor experience are driven by recognition that intangible aspects of experience impact significantly on visitor learning and behavior. The value of such experience models and theory to multi-disciplinary project teams is constrained by the difficulty of translating the models into a shared language and synthesizing them in project outcomes. The paper proposes visual communication methods to synthesize theoretical and practical aspects of the visitor experience in project planning, design and evaluation.

Research has shown that intangible aspects of the visitor experience have a significant impact on learning and behavior change: social interaction plays a role in engagement and enjoyment; emotion is a strong driver in behavior change; personal motivation and prior experience impact on the way that visitors choose to interact with interpretive displays; active inquiry is closely linked to learning; and sensory aspects are central to memory and association. The development of models of experience that portray experience as a complex interaction between factors promises a more nuanced approach to planning and design for visitor experience. These include the Contextual Model of Learning (Falk and Dierking 1992), the Ideas, People, Objects, Physical (IPOP) model (Pekarik et al. 2014; Pekarik and Mogel 2010), Roppola’s (2012) conceptualisation of visitor experience as encompassing framing, channelling, resonating and broadening processes, and the author’s (Roberts 2013) think:feel:do conceptual framework of cognitive, affective and physical modes of visitor engagement in designed environments.

However, a lack of translation of these models into tools for interdisciplinary project teams has limited their impact on the project development process. Project teams for the planning, development and design of multi-form interpretive environment projects may comprise curators, interpretation planners, educators, content specialists, managers and designers, who do not share a language for articulating intangible aspects of experience. Further, the sequential engagement of team members demands that project documentation effectively communicate the project’s experiential aims and intent. A lack of methods for interrogating and capturing qualities of visitor experience may limit the capacity for such teams to develop a common understanding of the intended visitor experience and to harness the value of theoretical contributions to the field in planning and designing for visitor experience (Roberts 2015).

Visual methods of communication such as customer journey mapping have proven useful in multidisciplinary teams within healthcare and other service contexts. The paper proposes that conceptual, physical and temporal mapping can synthesize theoretical and practical aspects of visitor experience in a form that is legible for a wide range of project contributors. The paper presents examples of visual methods for planning, analyzing and evaluating qualities of the visitor experience in interpretive environments to aid communication between interpretation planners, designers, managers and content specialists in examining complex, layered aspects of visitor experiences.
Sustainable wildlife tours combine satisfactory experiences for visitors that enhance their image and knowledge of encountered species with opportunities to contribute to the survival of such species (Orams, Forestell & Spring, 2014). The role of visitors’ awareness of targeted phenomena in learning is a feature in models for environmental interpretation behaviour change (Forestell, 1992; Knapp, 2007). Further study of awareness might aid guides in their interaction with visitors and thereby better situate the goals of sustainable tour guiding.

Gurwitsch’s (1964) model of awareness identifies a “theme”, that which is concentrated on, and a thematic field, ‘a single structure of relevance surrounding the theme’ (Marton & Booth, 1997, p. 99), and a margin, information on the periphery as a person deems it to be irrelevant to the theme. These overlapping areas are formulated on the contention that you cannot assign meaning to something that has not been discerned, and something cannot be discerned until there is an awareness of some element of variation that enables one to discern it from the other things present (Marton & Pang, 2006).

PhD research on guide-visitor interaction (GVI) during guided wildlife tours found that GVI involves a complex relationship between visitors’ pre-existing knowledge and the information gained from the tour. The concepts of theme and margin may aid understanding of how what a guide may see as the focus of the tour may be perceived as irrelevant to the visitor. Furthermore each tour participant has the agency to share their perspective so that they can contribute to a degree of uniformity in the overall experience. Thematic interpretation is widely used in interpretation literature as a heuristic device to unify the ideas discussed by a guide in their commentary during a tour (Ham, 1992; Weiler & Black, 2015). The use of “theme” in the terminology describing awareness has to be dealt with for Gurwitsch’s model to be usefully incorporated into the interpretation literature.

The PhD researched the tours of Pacific Whale Foundation (PWF) and The Supporters of Tiritiri Matangi (SoTM). The PWF whale-watch tours in Maui, Hawaii focused on humpback whales (Megaptera novaeaeangeliae). SoTM tours included the story of the ecological restoration of Tiritiri Matangi Open Scientific Reserve, Auckland, New Zealand. Participant observation was combined with two stages of semi-structured interviews (on-site and off-site) with both visitors and guides from the same tour between December 2009 and May 2012. 62 tours were observed resulting in 120 interviews. The data of 10 tours were analysed for the study’s findings.

List of References


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Protecting the natural and cultural values of National Parks is widely recognised as a management principle but visitors need protection too. Visitors are not always fully aware of the natural hazards and risks they may encounter in national parks and other natural landscapes and waterways. Public land management agencies including national park management agencies have a duty of care towards visitors, and are proactive in using management interventions, including communication, to minimise visitor risks and potential injuries in natural areas.

Safety signs are a primary management intervention mechanism to keep visitors safe by influencing and promoting safe visitor behaviour. This can range from interpretive communication encouraging appropriate behaviour through to regulatory signage. Signs in national parks provide safety messages, warn of natural hazards, discourage risk-taking behaviour by visitors in natural areas and occasionally prohibit certain risky activities.

Queensland Parks and Wildlife Service (QPWS) takes visitor safety management seriously, and is committed to ensuring that their policies and practices on the use of safety signage are the best they can be. For this reason, the agency engaged a research team to undertake a study of safety signage in national parks. The project team reviewed the international literature on safety and warning signs; identified best practice principles for safety signs in parks; and evaluated risk management policies and manuals that guide QPWS’s development of safety signs against these best practice principles.

Sixteen best practice principles (BPP) for safety signs were identified by the study team, addressing a range of elements such as sign content/messaging, sign design and sign location/context. Collectively the BPPs ensure that on-site safety signs in natural areas are noticeable, readily encoded, easily comprehended and compliance-inducing. A further eight principles were identified to foster best practice use of other on-site and off-site communication media in order to consistently convey safety messages, thus enhancing the effectiveness of on-site safety signs.

The team then assessed three case studies at high-risk locations that had experienced critical visitor incidents. This analysis was informed by the BPPs and drew on findings from previous reports by QPWS and others, targeted interviews, and a critical assessment of on-the-ground signs.

QPWS was found to be professional, conscientious, and transparent in its approach to managing visitor safety and in some cases to be setting the benchmark for other Australian park management agencies in this area. Of particular relevance to this paper, QPWS has pioneered, at least in an Australian context, a new class of interpretive safety signs that shows promise in complementing regulatory safety signs and reducing the risk of dangerous visitor behaviour. These signs use best practice interpretation techniques such as telling stories about real people and narrating in first person / active voice to attract visitors’ attention and engage the emotions of sign readers, thus enhancing the chances of success in reducing risky behaviours and incidents.

A number of themes that need further exploring at other sites include the needs of particular high-risk target audiences such as young males; using multiple communication attempts to strengthen without deadening the impact; the merits of changeable and flexible signage to convey currency and relevance; and the use of new technologies.