

## TRANSFORMATIVE LEARNING AND COMPLEX PROBLEM-SOLVING AMONG HOSPITALITY AND TOURISM STUDENTS

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### ABSTRACT

The hospitality industry and even more so tourism (H&T), has become enmeshed in issues of increasing proportion, complexity and social, cultural, environmental and political importance. This highlights the importance of hospitality educators who are being asked to prepare graduates for roles in which they will need to ‘solve problems that don’t exist yet’ (McLeod, 2009: 33). Transformative learning has been defined as the “epistemology of how adults learn to think for themselves rather than act upon the assimilated beliefs, values, feelings and judgements of others” (Mezirow, 2003:1). The benefits of transformative learning are proposed as moving “the individual toward a more inclusive, differentiated, permeable (open to other points of view), and integrated meaning perspective...” (Mezirow, 1991:7). Triggering incidents catalyse transformative learning, which promotes critical reflection on past experiences, and influences the individuals’ construction of knowledge through the surfacing of unchallenged assumptions and deeply held beliefs. Until now few quantitative studies exist within H&T and even more so within transformative learning, that capture the influence of triggering incidents and their effects on academic performance. In this dual-phase research, the initial pilot survey establishes the contribution of transformative learning on how students construct solutions and contextualise complex problems. Data collected informed the design of the Triggering Incident Student Survey (TISS), where effects of triggering incidents are measured in their ability to foster individual critical reflection, measure changes in the construction of knowledge, and how these may benefit or detract from student learning. The contribution of this research is that it pioneers the measurement of significant elements of the transformative learning process and secondly, assists in capturing meaningful experiences that promote deep learning among H&T students.

### KEYWORDS

Transformative Learning, Complex Problem – solving, Education, Tourism, Hospitality.

### 1. INTRODUCTION

Transformative learning has been defined by the initial researcher on the topic in terms of ‘the epistemology of how adults learn to think for themselves rather than act upon the assimilated beliefs, values, feelings and judgements of others’ (Mezirow, 2003: 1). Among many possible benefits, it is widely thought that transformative learning fosters greater abilities in the area of complex problem solving (Coopey quoted in Bayraktaroglu and Kutanis, 2003: 151). A justification within hospitality and tourism education supporting this problem-solving ability is that educators are being asked to prepare graduates for roles in which they will need to ‘solve problems that don’t exist yet’ (McLeod, 2009: 33). Transformative learning as a means of instruction proposes an advanced academic and vocational awareness through dialogue, challenging implicit assumptions and the application of the individuals’ prior experience on the reduction of complexity. Martin (2000: 22) states that: “We participate in

creating problems” and that “the problem exists in the overlap between ourselves and the situation”. Both problem-solving and transformative learning are concerned with reframing perceptions. Yet, clear evidence of the interrelationship between transformative learning and complex problem solving is lacking (Mezirow & Taylor, 2009). Furthermore, while some transformative-learning interventions have been designed, none have been in the *hospitality and tourism* (H&T) sector.

## 2. AIMS AND OBJECTIVES

In this research, the aim is to investigate whether transformative learning can in fact equip H&T students to become adept in resolving the complex array of issues and problems with which they are presented over the course of a semester of study.

Thus, the objectives of this research are to:

1. Design and test an appropriate transformative-learning intervention for fostering complex problem solving at HTMi.
2. Assess students’ absorption of the principles and processes of transformative learning.
3. Investigate the linkage between absorption of transformative-learning principles and processes and abilities in solving complex problems.

## 3. METHODOLOGY

The proposed research supports a strong social constructivist approach, where we “build an understanding of the world out of our experiences of functioning in that world” (Newby, 2010: 651).

The hypothesis is that transformative learning increases the ability of participants within H&T education, to solve complex problems with greater ease, as they learn to reframe assumptions within that problem and identify the contributions of their assumptions to the problem at hand. Transformative learning is a form of deep learning where the progression through the stages of transformation can be measured quantitatively (Duffy and Rimmer, 2009). The research method is an experiment where the transformative learning intervention follows grounded theory due to the involvement of the facilitator throughout the students’ development. All participants at the institute will take part in two problem-solving phases (t1 & t2). Transformative learning interventions will be undertaken in the form of small workshops with participants (x1, 2, &3). The experiment is composed of five stages and encompasses the following:

1. Readiness for complex problem solving, a personal problem solving profile.
2. Initial test of problem solving, a complex problem solving profile.
3. Transformative learning intervention of three cycles.
4. Absorption of transformative learning.
5. Final test of problem solving.

Throughout stages one and two, measurements will entail the time to resolution, types of resolutions expressed on a continuum as either highly innovative or highly functional, four symbolic perspectives

of framing problems, the effect of surfacing assumptions on the outcome of the resolution, and the contribution of past academic and vocational experience in solving the problem. Each of the three transformative cycles proposed in stage three above, measure the participant's movement through four phases identified by Mezirow (in Mezirow and Taylor, 2009) as emotional dissonance, critical assessment of individual assumptions, social convergence and the revision and redesign of belief systems. Likert-type enquiry and reflective diaries will be employed in each of the three workshops to measure the above progression. To ensure a sufficient population size for this instrument, the data collection phase spans over two semesters. On average 180 students are enrolled per semester, permitting data to be gathered from up to 360 respondents. All students will participate in the data collection although non-participation may arise due to extenuating circumstances such as absenteeism and illness. Non-participating persons are measured against the success through which they engage with each of the above five stages, as combinations and variations of these may yield differing results concerning problem solving ability and depth of transformation achieved.

Currently a pilot experiment is underway to analyse preliminary data, refine the data-collection instrument based on this data, improve the application of theoretical frameworks and reduce implicit bias and influence of the researchers' values within the experiment.

#### **4. MAIN CONTRIBUTIONS**

Interim results in the pilot phase are proving valuable in advising and developing existing literature on transformative learning within H&T. Clear evidence of the interrelationship between transformative learning and complex problem solving as stated by Mezirow & Taylor (2009) is being evidenced and this within the H&T sector. In addition to fulfilling the main objectives above, a major contribution of the research lies in the ability to inform H&T educators of future integration of transformative learning into current curricula and possible benefits this may hold. Furthermore, rich data concerning personal ability to solve problems, individual decontextualisation and "sense-making" of complex issues is being collected, such as (1) the influence of prior academic and vocational experience and cultural elements on personal reflection and introspection, (2) typified problem-solving processes based on age, gender and level of study, (3) preferred solutions and the quality of these based on innovativeness and functionality, (4) the willingness to enter into dialogue about hidden assumptions, (5) rational versus intuitive thinking, (6) the origin and meaning of existing assumptions, and (7) social orientations and appreciations throughout the problem-solving process. The above preliminary findings will be available and presented during the conference proceedings and ready for publication thereafter.

#### **5. CONCLUSION**

The above sections have outlined the rational, aims and objectives, research methodology, instrument design and contribution to knowledge that this research strives to attain. The framework for the data collection instrument is designed upon current literature informing these perspectives, although further design strategies will be tested according to their validity, especially during the current pilot phase. The interrelationship between transformative learning and complex problem solving is one that is of vital importance for future hospitality managers and one that educational curricula often fail to appreciate. It is envisaged that the research shall shed light on this relationship and advice on possible integration of these disciplines into H&T education, particularly in the context of private providers.

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