

Experiential Learning Theory: Biases and Limitations

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Introduction

This paper began as a response to an earlier prompt in IDT 505 regarding learning theories. Articles related to learning theories, memory and other types of learning used within a musical context as an instructional designer were searched. In this process, a learning theory called experiential learning caught this author's attention. This appeared to be related to constructivist theory, as it also considers the inner world of the learner. While constructivism is concerned with how learners construct an understanding of the world, experiential learning theory (ELT), first discussed by Kolb, attempts to provide a mechanism for how experience can be transformed into knowledge, skills and attitudes (as referenced in Dennick, 2012). This can be seen in how nurses and doctors will "shadow" a colleague in the profession, which is often what musicians do when they "sit in" on a rehearsal, watch their teacher perform, or go to a concert. This brought back the idea of musical education and its intersection with instructional design. The next phase of study involved a concentrated research of ELT, professions which commonly use it, its biases, and methodology for change.

Context: What is ELT?

As the title implies, ELT is a learning theory based upon transforming life experiences into knowledge, skills and learning. First proposed by Kolb in the 1980s, it is called "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combinations of grasping and transforming the experience" (Kolb, 1984). Foundational authors who influenced Kolb in this learning theory include Carl Jung, Jean Piaget, John Dewey and Kurt Lewin. This learning theory is in stark contrast to others which rely more heavily upon

cognitive and mental processes and do not account for a holistic approach to personal experience.

Within this learning theory, Kolb traces four components that comprise the action of the theory. The two modes of “grasping experience” are concrete experience (CE) and abstract conceptualization (AC), while the two modes of “transforming experience” are reflective observation (RO) and active experimentation (AE). In a learning environment which ascribes to ELT, learner profiles are created through use of a questionnaire that ranks each of these factors on a numerical scale, which then allows a learner and the instructor to understand their best methods of engagement. (Mainemelis, et al., 2002) Thus, the system allows for a highly individualized approach to learning, in which the learner eventually cycles through each phase mentioned and returns to the beginning. They are able to engage actively with their strengths, and choose experiences and careers that will best align with this.

As in any learning theory, flaws exist in ELT. ELT does not consider personal motivation in the learning process (affecting results), nor does it account for the fact that learning styles may change throughout the life of a learner. What may work for a group of elementary school children may not apply at the collegiate level, or in retirement age. Additionally, because it is a highly individualized approach, ELT does not consider how individuals learn in larger social groups. Therefore, the limitations of ELT, and both implicit and explicit bias must be considered, as all individuals maintain some form of this. Additionally, ELT may work well in certain fields, and not in others, where quantitative data and cognitive process are valued more than individual experience and reflection. While ELT has the ability to be used in multiple fields, primary research studies focused on the professions of higher education, medicine and business.

Professions: Where is ELT commonly used?

Due to its nature, ELT has the potential to be used in a variety of circumstances and professions, and these many include formal or informal educational settings. Field work, such as internships, community service and study abroad programs are practical examples of settings in which ELT could be used. Certain industries lend themselves very well to ELT. A cursory glance at article databases such as ProQuest showcase ELT in multiple professions, including higher education, law, music education, medicine, and business. It is appropriate for these industries because fieldwork is typically a crucial factor in the metrics of success. An example of this in the field of medicine is the application of Kolb's 12 point questionnaire to a sample of plastic surgery students in three residency programs to determine learning styles. While results were mixed, 64% preferred a "hands-on" learning approach. This was a contrast from other types of instruction in surgical fields, many of which emphasized "book learning" rather than practical, experiential learning (Saldanha et al., 2019).

A second example, in the field of law and higher education, emphasizes that cross cultural experience and competency can best be achieved by systemizing experiential learning in law courses. Lynch (2015) argues that doing so will prepare law students to work in a multicultural world post graduate study, and that clinical courses and field work during study will later create better working relationships between lawyers and diverse client groups. Lynch suggests that student learning outcomes in law courses should align with these cross-cultural competencies to better prepare the cohort for real-world scenarios. Considering this, Lynch recommends reflection, field opportunities, live-client clinical courses, and simulations or role play as required metrics for successful multi-cultural lawyering (Lynch).

A last example, which leads back to this author's profession of music, is drawn from the field of music education as performed by general educators in Australia. The problem addressed is one of a lack of experience by student teachers in teaching music as one of required units in general education. Through the use of ELT, the students were taught the material, encouraged to then reflect upon the learning experience in an online journal entry, and asked questions regarding the learning process which were later coded and interpreted. At the start of the course, 64% said they did not feel confident about teaching a music unit, and by the end, 84% said that they felt confident they could teach a music unit. Reflection was a large part of the shift in attitude, along with the learning the required content material, online activities, designing a music course "from scratch", and practice-teaching the lessons. Therefore, ELT in both artistic and scientific fields is clearly a sound learning theory with multiple applications (Russell-Bowie, 2013).

Biases and Limitations in ELT: If it is so great, what is the problem?

As with any learning theory, there are flaws inherent in the system which include both limitations of the theory itself, as well as both implicit and explicit biases. Implicit bias is defined as bias of which an individual is usually unconscious, but may have learned due to background, social status, culture or ethnic influence. Implicit bias can contribute to unequal treatment based on characteristics such as race, ethnicity, nationality, gender, gender identity, sexual orientation, religion, socioeconomic status, age, or disability (1. Bias: Implicit and Explicit, n.d.). This may be true for an individual who directly rejects prejudice and racism but is unaware of their own biases in working with others. Implicit bias can be overcome by having positive interactions with the social group to whom one might be biased (Shah & Bohlen, 2023).

Since ELT is such an individualized approach to learning, implicit bias may be present in many areas. ELT may be colored by an individual's experience as represented by their privilege, or lack thereof, influence of colonial or tribal backgrounds, and learned impressions of racial, gender or sexual stereotypes of subgroups. The four modes of experience in ELT may cater to a specific population's strengths and unintentionally disenfranchise another. For example, a student may show apathy for a subject based upon their perceptions of its lack of diverse representation in scholarship and pedagogy, when in fact it may be a niche subject that only certain populations pursue. Examples of this might include the study of Western musicology before the 800 A.D. (typically pursued by White scholars) or modern era performance and composition of sitar music (typically pursued by Indian scholars and performers such as Ravi Shankar). Additionally, since ELT focuses on reflection as a primary means of learning, a student whose culture does not value or promote reflection may have implicit bias against this learning theory.

In comparison, explicit bias is defined as attitudes and prejudices of which one is aware. "Explicit forms of bias include preferences, beliefs, and attitudes of which people are generally consciously aware, personally endorse, and can identify and communicate. Discrimination, directly related to bias, is the unequal treatment of individuals and communities related to general policies, practices, and norms" (Vela et al., 2022). Explicit bias may appear in many ways; as referenced above, the discounting of scholarly work from marginalized groups is a common theme in higher education, though it appears this is changing. In the medical profession, clinical work performed primarily by white male figures shows explicit bias. In Lynch's article, explicit bias towards certain groups is addressed as well as negative biases or expectations

towards certain cultures, based upon lived experience. Her solution of addressing this using ELT to combat explicit bias, shows how ELT may be able to be an aid in overcoming explicit bias.

Addressing the limitations of ELT has its place as well. Along with the previous issues mentioned in the section of this paper subtitled Context: What is ELT?, experiential learning contains ethical challenges. Bradford (2018) addresses this systematically in the following ways and includes recommendations to ameliorate these issues, which are addressed in the Conclusions section.

- Inadequate Informed Student Choice – Students are not given a choice whether or not to participate in ELT if it is part of the course, which can lead to stratification in power groups within a class.
- Bias in What Is Covered – The instructor’s bias may lead students to conclusions that prejudice agreement with what is taught over critical thinking. This can be amalgamated with the instructor presenting strong counter-arguments or class debate.
- Lack of Adequate Debriefing – Often students will not have the time it takes to reflect and understand an issue in a 60-90 minute class by solely using ELT. As Kolb demonstrates, ELT needs other learning theories to work well.
- Personal Exposure in Class and Community – Students may perform a certain role (such as discussing a time when they were “the only _____”.) This can lead to overexposure and stigmatization.
- Issues of Deception – Role playing activities by nature contain deception and may rig outcomes in a way that frustrates and causes stress for students.

- **Role-Driven Behavior Being Personalized** – Students may be assigned a role that directly contradicts who they are and their values. It may also affect the way other students see them once the role play is over.
- **The Impact of Feedback** – Whether given by a peer or instructor, this may lead students to “shut down” if they are perceived as lacking.
- **The Degree of “Boundedness” of Activities** – Students with a less structured use of role play and ELT may struggle to understand how it impacts their learning, when the role play is over and how to establish healthy boundaries.

Methodology for Change: How do we address limitations and biases?

As ELT incorporates role playing and reflection, it is often used when training students for “real world” scenarios. Professions such as healthcare often require complex decision-making in diverse populations, which can result in choices that are made based upon the bias types discussed above. An example of this is a study by Patel, et al., (2023), in which bias examples were given – one being the tendency of doctors to prescribe less pain medication to Black patients vs. White patients. To assist in training medical students or professionals to examine and role play within these biases, a VR role playing solution that can be played upon a mobile device is proposed. Scenarios are given to the student or professional to play out. Examples included a Syrian patient with limited use of English, and a pregnant Black patient with a history of opioid use. The VR allows the student or professional to virtually treat the patient in a risk-free, gamified learning environment. Questions are posed to the learner regarding their impressions of the patient both pre and post treatment, allowing them to identify held biases. Choices are made by the learner as to how they converse with the patient (including Empathic, Neutral and Apathetic) and body language responses from the patient can be observed in the VR. This study

showed great increases in user confidence to approach real world scenarios, and appreciation for the process of identifying bias (Patel, D. B., et al., 2023).

However, the ELT aspect of this study itself does contain bias. Role playing in VR is set by an algorithm which to some degree assumes that behavior is predictable in humans and based upon a predictable set of responses. Any study of psychology or world history could negate this. Additionally, the role play characters in the study are themselves products of bias – why a pregnant (presumably unwed) Black mother who has a history of opioid abuse? Why not a rich, White CEO who is battling cirrhosis of the liver from alcohol abuse? Is the White man presumably less difficult to treat, therefore not a character to be included – and why is that? Is the perception that Black women are more difficult than White men, and that is why this character was chosen? Additionally, there is no metric for the character's current decisions – what if the Black mother is in a 12 step recovery program and four years sober? Should this not be a consideration for a doctor in this scenario? There are also biases in terms of who the user of the VR is – since they are interacting with minority characters (which presumably considered a new or challenging experience that needs training) the assumption follows that most are White and of privilege. However, students and medical professionals may come from a diverse variety of backgrounds, including Asian, Indian, Hispanic and Black. Therefore, further suggestions of a wider swathe of challenging scenarios would be needed to address the present biases.

A second study using ELT as its basis incorporated standup comedy routines to identify personal biases among medical students, using humor to increase student awareness and vulnerability (Chin, 2022). Students engaged in three different areas over several Zoom sessions and were asked to improvise on three different questions. In the first, (Icebreaker) they stated their name and a fun fact. The second (Rant and Rave) required the students to rant or rave about

a household object to get out of their comfort zone. The third (Personal Monologue) required the student to address perceptions about themselves, both their own and that of others, or relate a personal story about how perception mismatched reality in their identities. The goal of the study was for the students to become comfortable in sharing vulnerability, and through humor, recognize their own biases. The ELT-based standup routine was very successful in that all students came away with a better understanding of their own biases (Chin, 2022). The use of humor to address challenging subjects such as these must be applauded by an academic audience, especially as it may influence how medical students later use humor to cope with difficult professional decisions.

The limitations of this study, recognized by the authors themselves, is that while ELT can help to address personal biases, it does not help to change systematic inequities. The bias of ELT towards individual experiential learning implies students may not be able to recognize how their biases may change when engaged as a larger social group. If students are among peers with whom they share many commonalities, they may learn and behave in ways quite different than if they were in a diverse setting. This ELT study also does not account for refusal to express any negative biases in a standup or group setting – that is, we cannot know how honest students are about their own biases. Therefore, while some improvement may be made, the responses may be skewed in an effort for students to save face in front of their peers.

Conclusions

In an effort to showcase what methodology may be needed to lessen bias in ELT studies such as these, groupthink must be considered, as well as biases within the studies themselves, assumptions made about the control group, and avoidance of stereotyping in underserved populations. In terms of resolving ethical issues, Bradford suggests building supportive learning

environments and monitoring personal impact in experiential learning, using anonymous weekly “check in” surveys. Bradford additionally suggests reflection upon the part of the instructor as to why they are using ELT to achieve an academic goal. Does it fit with what is required, and does the instructor have the requisite skill set to handle what may go wrong in the process (Bradford, 2018)? As reflection is an important part of ELT, the instructor who asks their students to engage in it must also do so themselves. To conclude this paper, a reflection upon bias in our world today is given by the brilliant and acerbic Hunter S. Thompson:

“So much for Objective Journalism. Don't bother to look for it here--not under any byline of mine; or anyone else I can think of. With the possible exception of things like box scores, race results, and stock market tabulations, there is no such thing as Objective Journalism. The phrase itself is a pompous contradiction in terms” (A Quote from *Fear and Loathing on the Campaign Trail '72*, n.d.).

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