

## Cultural Relevance of American Learning Styles Theories in Instructional and Performance Technology

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### Introduction to Learning Style

This research paper addresses whether the concept of learning styles, including the definitions of learning styles and their applications in the fields of Western instructional and performance technology, is relevant within South Korean culture.

Hong and Suh (1995) found that, in 1979, learning styles were first defined as the stable, cognitive, affective, and physiological traits that convey learners' preferences for interacting with and responding to the learning environment. Since the late 1970s, learning style theory, rooted in personality and teaching style theories, has given rise to a substantial amount of instruments purporting to measure various individual learning style traits. The information gathered from learning style instruments has greatly influenced the field of instructional or curriculum design. According to Chen and Ford (2001), "...learning in matched conditions, in which instructional strategy is matched with students' learning styles, may in certain contexts be significantly more effective than learning in mismatched conditions" (p.7).

Learning style theories focus attention on the various needs of students in an instructional setting and have opened discussion on the diversity that exists within a racially homogenous population. However, current research suggests that in the wake of discovering how learning style diversity affects educational needs, attention has shifted from cultural diversity (Wan, 2001). De Vita (2001) reports that one's culture influences perceptual, organizational, processing, and communication styles. Since these processes are the core elements in learning style theory it follows that culture and learning style share a relationship that cannot be overlooked by researchers (Church, 2001).

### Kolb's Learning Style Inventory

Kolb's Learning Style Inventory (LSI) indicates a person's preferred method to learning (see Figure 1). Kolb (as cited in Marriott, 2002) described learning as a process by which each individual acquires knowledge by linking new experiences and information to theory and application through a preferred approach. Kolb suggested that a learner progresses through four cycles of learning:

1. In Concrete Experience (CE), a learner's feelings and prior experience influence learning.
2. In Reflective Observation (RO), watching and listening influence learning.
3. In Abstract Conceptualization (AC), thinking and analyzing in systematic ways influence learning.
4. In Active Experimentation (AE), doing and results from action influence learning.

Two dimensions underlie the learning process (Marriott, 2002). The first is the Abstract-Concrete dimension, or (AC-CE), and the second is the Active-Reflective, or (AE-RO) dimension. The AC-CE dimension pertains to how the learner perceives new information and experiences. The AE-RO dimension pertains to how the learner's perceptions are processed (Marriott, 2002). Kolb defined four specific learning styles dependent on where in the cycle a learner lies in each of these dimensions:

1. The Converger uses hypothetical-deductive reasoning to solve and focus on specific problems (Abstract Conceptualization and Active Experimentation).

2. The Diverger relies on brainstorming and the generation of many ideas and perspectives to approach problem solving (Concrete Experience and Reflective Observation).
3. The Assimilator uses inductive reasoning and creates theoretical models to solve problems (Reflective Observation and Active Conceptualization).
4. The Accommodator is able to adapt to changing conditions easily and solves problems by carrying out plans and experiments (Active Experimentation and Concrete Experience).

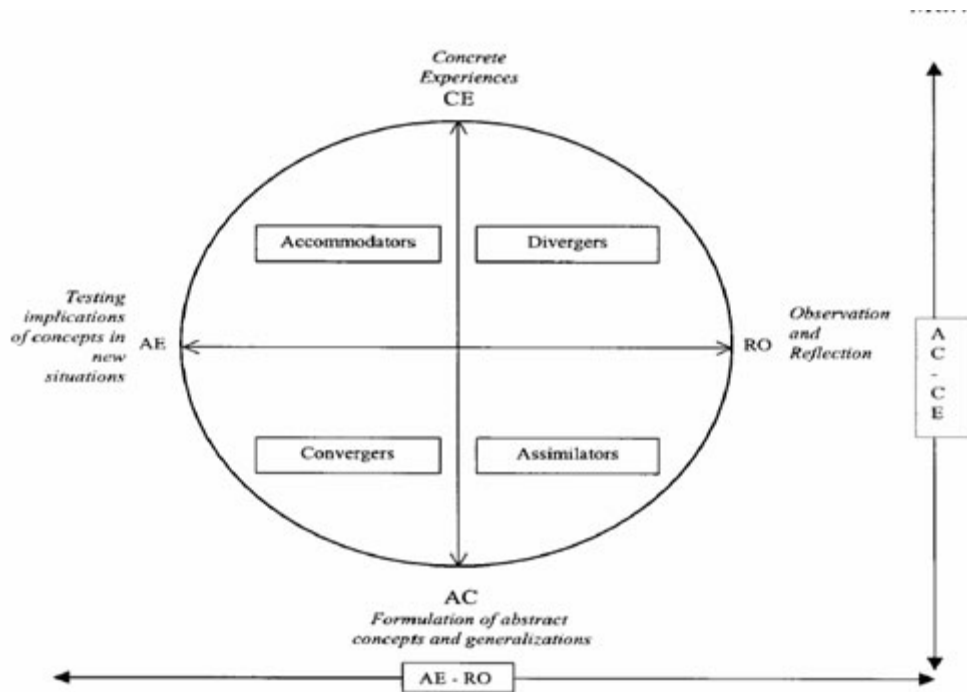


Fig. 1. Kolb's learning loop (continuous).

Source: Marriott, P. (2002). A longitudinal study of undergraduate accounting students' learning style preferences at two UK universities. *Accounting Education*, 11(1), 43-63.

In the research conducted, a Korean and an English translation of the Kolb Learning Styles Inventory were given to a population of South Korean students at Hanyang University in Seoul.

A preliminary synopsis of the research design and results are provided below. Updates will be provided in future articles.

### Research Question

Is the construct of learning styles relevant in South Korean culture?

### Purpose

- To present the construct of learning styles as it is viewed in American culture.
- To investigate whether American learning style is a culturally relevant and/or recognized construct in Korean culture.
- To gather data on the concurrent validity of a Korean translation of the LSI by correlating scores on the Korean instrument with scores on the English version taken by the same people.

- To gather data on the construct validity of the Korean LSI by comparing style types identified by the Korean instrument with the style traits and behavioral preferences predicted by Kolb's theory.

## Methods

- An English and Korean translation of the Kolb LSI was administered online to 31 native Korean, Hanyang University students.
- Respondents rank ordered 12 sets of four brief phrases (one for each style) according to "how well you think each one fits with how you would go about learning something." The ranks for the phrases associated with each dimension were summed and individuals' relative positions on the two bipolar dimensions determined their dominant type.
- A 100-item, 7-point Likert scale Style Types Questionnaire was administered to the same 31 native Korean, Hanyang University students.

## Major Results

- Style types identified from the English and Korean translation of the LSI were not related.
- Style types identified from the English and Korean translation of the LSI were not related to the American style traits and behavioral preferences predicted by Kolb's theory.

## Conclusions

Learning style instruments created in American culture cannot simply be translated and administered to another culture with the expectation of valid results.

## Recommendations

Look more closely at:

- How culture influences the development and use of learning style instruments.
- The validity and reliability of Western-European learning style inventories in culturally diverse populations (Guild, 1994).

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### **Related Readings**

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