

A summary from Nonverbal Patterns of Teachers from Five Countries: Results from the TIMSS-R Video Study by Zoller, 2007

The following summary is from Dr. Kendall Zoller's doctoral thesis from 2007 entitled, *Nonverbal Patterns of Teachers from Five Countries: Results from the TIMSS-R Video Study*. It opens with a copy of the abstract and continues with a list of findings.

Abstract

This paper identifies and defines the nonverbal communication patterns of a subset of teachers from the TIMSS-R 1999 (Third International Mathematics and Science Study). The countries included in this study are Japan, the Czech Republic, Australia, the Netherlands and the United States. The nonverbal patterns of 25 teachers, five from each country ($n=25$) are identified based on a framework from Grinder (1997). Similarities and differences among the teachers within their country and across countries are discussed. Establishing and applying the framework developed by Grinder to all five countries allows for the generalization both within countries and across multi-national applications. This overview suggests possible teacher training in nonverbal skills to increase student attention and enhance student achievement. Drawing on the theoretical foundations of the structural, psychological, social, and cognitive linguists, the Grinder framework is supported. A compare and contrast discussion of the nonverbal patterns across the five countries is included. The nonverbal patterns of teachers are further discussed in relation to student achievement and cognition.

Lastly, a discussion introduces Nonverbal Communicative Intelligence (NCI); NCI is the mental operations for processing incoming verbal, visual,

auditory, and kinesthetic (VAK) stimuli that interacts with the emotional, cognitive, and autonomic systems. NCI coordinates the input of VAK stimuli resulting in perceptions. Awareness of one's perceptions leads one to purposefully adapt, shape, and select communication to convey the intention of the message while simultaneously enhancing and sustaining the rapport and understanding among peoples. Specifically, the skills of NCI include the ability to be systematic in the use of gesture, voice, breathing and other nonverbal signals. A teacher skilled in NCI has an ability to notice and react to the student's nonverbal signals. They can forecast with some certainty the behavior of others based on the influence of their own nonverbal patterns.

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Findings

The following list of findings are drawn from the conclusion section of the dissertation. The findings are not listed in order of importance or significance.

1. An observable set of nonverbal patterns was used by teachers across the five countries
2. The patterns used are consistent with the pentimento as suggested by Grinder (2010)
3. The work of Fernando Poyatos published prior to Grinder's first publication defining the pentimento supports a majority of the pentimento patterns.
4. Several nonverbal patterns from the video analysis appeared to influence student attention. These included standing still, pausing, and third point
5. Although the patterns were observed across the five countries, their range, intensity, and frequency appeared to be culturally embedded. Zoller Refers to this as the RIFF. RIFF is the range, intensity and frequency of nonverbal patterns. Note, since the publication of this thesis, Zoller has added Flow to the RIFF framework. RIFF now includes Range, Intensity, Frequency, and Flow.
6. Teachers from Japan and the Netherlands also demonstrated longer pauses compared to teachers from Australia and the United States.
7. There is ample evidence that gender plays an important and integral role in classroom communication and the development of teacher-to-student rapport.
8. The most meaningful implications to emerge from this study are targeted at improving student learning by increasing the skill set of teachers to support the intentional and deliberate use of nonverbal patterns.
9. Reading the nonverbal patterns of students is a portal into understanding their thinking

10. The suggestion is the teachable moment, grounded in neurological processes that generate observable data in visible and auditory nonverbal utterances, can be recognized through development and refinement of a teacher's nonverbal communicative intelligence.
11. The second pathway to improve a teacher's skill set related to nonverbal communication is to develop the teacher's content and context knowledge in nonverbal communication intelligence.
12. Nonverbal Communicative Intelligence (NCI) is introduced in this thesis. It is defined as a set of mental operations used for processing incoming verbal, visual, auditory, and kinesthetic (VAK) stimuli that interacts with the emotional, cognitive, and autonomic systems. NCI coordinates incoming stimuli resulting in perceptions. Note, since publication of this thesis, Zoller (2015) modified NCI to simply Communicative Intelligence.
13. Culture is an important and essential component to understand meaning contained in the nuances of communication.
14. The implication of defining such patterns in the context of intelligence is to submit that teacher training and inservice professional development focusing on nonverbal communicative intelligence may contribute to teacher effectiveness to improve student thinking and achievement.