Student Nonverbal Communication in the Classroom

Brock E. Barry, P.E., Ph.D.

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“General George Patton practiced his “war face” in front of a mirror so that he would be perceived as unusually determined, powerful, and brave” (Leathers, 1992, p. 3).

Introduction
As educators we often look for confirmation that our students are grasping the concepts under discussion. This is frequently referred to metaphorically as a light bulb in or over a student’s head. However, by nature, not all individuals are animated in a way that allows educators to identify their nonverbal communication.

Many educators receive formal or informal training in the nonverbal communication that we, as instructors, intentionally or unintentionally exhibit in the classroom. However, rarely does that training include discussion of how to interpret the nonverbal communication of our students. In an environment where educators are consistently attempting to better understand and better communicate with our students, it should be critical that we develop the skills necessary to identify and interpret student nonverbal communication.

Research Question and Method
The author was motivated to execute this study as a means of improving his own nonverbal sensitivity and nonverbal interpretation acumen. The research question around which this study was developed was: “What is the content of the available literature specific to identifying and interpreting student nonverbal communication in a classroom setting?” Building from the research question, the method of investigation utilized in this study included a fairly comprehensive investigation of the published literature (including texts, journals, and magazines) through the application of various databases and discussions with academicians associated with the field of communication. Literature was reviewed in the general realm of communication, specific nonverbal communication publications, classroom instruction, body language, and where possible, the intersection of these individual topics.

Overview of Nonverbal Communication
Communication is a field of study that, rather ironically, uses terminology that is inconsistent and at times contradictory. The literature surveyed during this study utilized a range of syntax and meaning. Thus, setting the stage for subsequent discussion, this section offers a concise overview of nonverbal communication.

Miller (2005a) provides a rather simplistic view of nonverbal communication as communication without words. Zoric, Smid et al. (2007) state that “non-verbal (sic) communication refers to all aspects of message exchange without the use of words”(pg. 161) and goes on to say that “it includes all expressive signs, signals and cues (audio, visual, etc.)” (pg. 161). Nonverbal communication includes the tone, loudness, speed, and timing of the words used in communication, but it does not include words and their associated meanings. Thus, when communication occurs, in a face-to-face context, it can and likely
does include more than just words. In fact, of all the physical activity and parameters that are involved with communication, including the use of words, intonation, pace of speech, facial expressions, gaze, gestures, etc. (Neill & Caswell, 1993), the overwhelming majority is done in a nonverbal manner. Reportedly, 93% of all face-to-face communication is nonverbal (Leathers, 1992; Miller, 2005b).

One notable exception to the generalized definition of nonverbal communication is sign language. While not involving pure verbalization, sign language is a form of communication that incorporates nonverbal cues commonly associated with basic communication. Knapp & Hall (1992) and Zoric, Smid et al. (2007), astutely identify sign language as a true form of communication without verbalization; it is not, in fact, classified as nonverbal communication.

Nonverbal communication is learned well before a child begins the process of verbal communication (Miller, 1988). The role of nonverbal actions is to assist in the communication process in ways that simple verbalization cannot. Words, alone, have limitations (e.g., challenges of effective communication via email). Trehnolm & Jensen (2008) note that nonverbal actions modify and refine concurrent verbal messages and help to regulate the flow of interaction. Leathers (1992) also notes that nonverbal actions are more efficient and more accurate than verbalization. Nonverbal message are considered to be relatively genuine and free of deception (Leathers, 1992; Miller, 2005b). Nonverbal signals can also be used to express feelings that are too disturbing to state otherwise (Miller, 2005a).

There is a wide range of reported nonverbal communication taxonomies (Smith, 1979). For example, Knapp & Hall (1992) classify nonverbal communication as appearance, proxemics, body motion (gesture, posture, touching, facial expressions, eye behavior), and paralanguage. While Miller (2005a) states that nonverbal communication includes facial expressions, eye contact, touching, tone of voice, dress, posture, and spatial distance. Perhaps one of the most comprehensive and scientific categorization of nonverbal communication is offered by Zoric, Smid et al. (2007).

- Chronemics – Timing of verbalizations and pauses.
- Haptics – Contact and deliberate touch between individuals.
- Kinesics – All forms of body language and body movement, including facial expressions, eye movement, gesture, and posture.
- Oculesics – Intentional and unintentional eye contact in the act of communication.
- Olfactics – The influence of odor.
- Physical Appearance – Characteristics of the body, clothing, hairstyle, etc.
- Proxemics – Consideration of personal space and arrangement of physical items.
- Silence – The absence of verbal and nonverbal communication.
- Symbolism – Meaning associated with symbols.
- Vocalics – Vocal impacts on the act of speaking, to include tone of voice, timbre, volume, and rate of speech.

While it is useful to consider and discuss each category of nonverbal communication individually, it is important to realize that they rarely occur alone. Zoric, Smid et al. (2007) describe nonverbal conditions occurring in clusters (multiple displays at one time).

Nonverbal cues are exhibited both consciously and unconsciously (Miller, 2005a, 2005b; Zoric et al., 2007). Some nonverbal behaviors are learned (Zoric et al., 2007), such as a wink; while others are innate, such as a blush. As an educator, looking for a student’s nonverbal cues, it is important to realize that unconscious actions and reactions are often the manifestation of a statement that a student feels uncomfortable otherwise expressing.
A discussion of nonverbal cues must include recognition of the influence of culture and gender on both the sender and the recipient. These variables are embedded in both the bias used in interpretations made by an instructor in the classroom and in the outward projection of the student. That is, as an instructor, my perspective on the interpretation of observed body language could be biased by my own culture and gender (perceiving that others exhibit the same body language with the same implied meaning that I do). Further, as the processor of a student’s exhibited body language, an instructor will need to consider the cultural and gender-based influences on a student-by-student basis. The topics of culture and gender are addressed in the following two sections.

**Cultural Influences on Nonverbal Communication**

Hartley & Karinch (2007) describes culture as “nothing more than accepted social norms for a group” (pg. 38). Matsumoto (2006) notes that culture plays a significant role in molding our nonverbal behaviors. As instructors, it is imperative that we understand and recognize cultural influences.

In the process of making meaning of behavior, it is important to identify nonverbal cues that are considered universal, versus those that carry specific cultural meaning. In general, spontaneous or unconsciously exhibited facial expressions are nearly universal (Matsumoto, 2006; Pease & Pease, 2006). For example, the easily recognized smile is a common expression of pleasure among all cultures (Neill & Caswell, 1993; Pease & Pease, 2006).

While some nonverbal cues may have universal meaning, the ease with which they are exhibited is also a cultural variable. For instance, the facial expressions associated with disgust, sadness, fear, and anger are common between Americans and Japanese, but Japanese individuals believe that it is unacceptable to display such negative emotions in public (Neill & Caswell, 1993). Americans are more open in their expression of positive emotions than many other cultures (Riggio & Feldman, 2005).

The nonverbal process of looking directly at an individual, gazing, is also a cultural variable. While listening to another speaker, White Americans make eye contact 80% of the time. Further, while speaking, White Americans only make eye contact 50% of the time. Conversely, African-Americans make more eye contact while speaking and less eye contact while listening (Suinn, 2006). Across many cultures, a gaze is associated with dominance, power, or aggression (Matsumoto, 2006). In many Asian cultures it is considered rude to make even brief eye contact with a person of higher social status (Suinn, 2006). While in Arab cultures individuals tend to gaze more directly and for longer periods than other cultures (Matsumoto, 2006).

Interpersonal spatial boundary expectations also differ between cultures. For example, Latin Americans tend to interact and communicate in closer proximity than do Europeans (Matsumoto, 2006). Further, Italians interact in closer proximity than do both Germans and Americans (Matsumoto, 2006).

Physical gestures, with hands and arms, are another common difference between cultures that can lead to nonverbal miscommunication. Matsumoto (2006) identifies several gestures that are commonplace and socially acceptable in one culture, but are considered obscene in another culture. The “OK” sign, common in many English speaking countries, means zero or worthless in France, means money in Japan, and is a derogatory statement and/or obscenity in Mediterranean, Arab, and Latin American countries (Pease & Pease, 2006). From one country to another, two fingers in a V formation can mean victory, peace, two, five (roman numeral), or a obscenity (Neill & Caswell, 1993; Pease & Pease, 2006). The height at which individuals hold their hands while gesturing is also a cultural variable. Individuals with
British and Germanic background gesture with their hands held low in comparison to individuals with Mediterranean or Latin backgrounds (Hartley & Karinch, 2007).

Cultural norms influence behavior at multiple levels; including the nonverbal cues that individuals exhibit and the way that we interpret nonverbal cues made by others. Riggio & Feldman (2005) discuss the influence of culture on the encoding (sending out) and decoding (interpreting) of nonverbal behavior. As instructors, Suinn (2006) says that we must be aware that our own cultural backgrounds are what we use to make meaning of behavior in the classroom.

**Gender Influences on Nonverbal Communication**

The following paragraphs summarize the nonverbal communication differences between genders as reported in various literature sources. The intent of discussing these differences is not to suggest that one gender is stronger at communication than another. Rather, it is to raise awareness to perceived classroom conditions. In light of the prior section, it is also appropriate to note that gender characteristics presented herein are specific to Americans.

Women tend to use more animated facial expressions and are more animated with head, hand, and arm gestures during communication than men (Hall, 2006b). Women are more likely than men to engage in self touch and touch other individuals during communication (Hall, 2006b). Women also exhibited a higher level of what Hall (2006a) calls interpersonal sensitivity. Accordingly, Hall (2006b) suggests that women tend to more readily notice, are better at decoding, and are more influenced by nonverbal cues than are men.

In general, men tend to be more restless (foot and leg movement, shifting, fidgeting), assume more expansive stances (arms and legs further apart), and recline when seated more than women (Hall, 2006b). Men also establish and maintain a larger interpersonal space than women do (Hall, 2006b). Neill & Caswell (1993) state that men tend to be more assertive in their communication. Hall (2006b) notes that men’s verbalizations tend to be louder, lower pitched, and contain more speech disturbances (e.g., ums, repetitions, and incomplete sentences).

Neill & Caswell (1993) emphasize that the most significant difference between men and women’s nonverbal communication is frequency. That is, they suggest that the type of nonverbal communication utilized is similar between genders, but the frequency with which those cues are used does differ. Women tend to smile more frequently than men (Hall, 2006a, 2006b), gaze more often and for longer periods of time (Hall, 2006b). Nodding, as a specific form of nonverbal cue, is more commonly exhibited by women in classroom interactions (Helweg-Larsen, Cunningham, Carrico, & Pergram, 2004).

**Why Nonverbal Communication is Important in the Classroom**

In the context of classroom instruction, the relatively small percentage of communication that occurs verbally will primarily stimulate cognitive meanings (cognitive domain) for the student, while the more pervasive nonverbal communication (~93% of all communication) stimulates the students’ feelings and attitudes (affective domain) about the material (McCroskey, Richmond, & McCroskey, 2006). Thus, given the potential impact on student learning that nonverbal communication has, it would seem important that all instructors be mindful of their personal outward nonverbal projection, as well as observation of student nonverbal cues.

Communication, when done properly, is a two-way interactional process (Suinn, 2006). That statement remains valid in the classroom, where, as instructors, we strive to communicate clearly and effectively.
with our students. Radford (1990) declares that effective communication is critical in the classroom environment. Miller (1988) states that “knowledge is transmitted through effective communication and nurtured by skillfully sending and receiving message...” (pg. 23). However, even in a student-centered, active learning environment, a large portion of verbal and non-verbal communication is generated by the instructor and intended for processing by our students. Through the interpretation of our students' nonverbal cues, this seemingly one-way classroom communication can become a more interactive, two-way process. Students’ ability and comfort with processing instruction can be interpreted from their nonverbal cues, which, in turn allows the instructor to advance the discussion based on the type of observed cues.

Angelo & Cross (1993) state that “through close observation of students in the process of learning...teachers can learn much about how students learn and, more specifically, how students respond to particular teaching approaches” (p. 3). The nonverbal clues that our students provide in return are critically important, real-time feedback that influences our subsequent communication (Suinn, 2006) and allows us to alter our course of action if needed (Davis, 2009; Neill & Caswell, 1993). Webb, Diana et al. (1997) states that “from observation and interpretation of students’ body language and facial expressions, the perceptive teacher can decide whether there is a need to check for comprehension, provide more or a different kind of instruction, or assign more practice” (pg 89). Thus, faculty can use classroom observations of nonverbal cues “to refocus their teaching to help students make their learning more efficient and more effective” (Angelo & Cross, 1993, p. 3).

Angelo & Cross (1993) discuss the observations that instructors should perform in the classroom:

“As they are teaching, faculty monitor and react to student questions, comments, body language, and facial expressions in an almost automatic fashion. This “automatic” information gathering and impression formation is a subconscious and implicit process. Teachers depend heavily on their impression of student learning and make important judgments based on them...” (pp. 6-7).

Neill & Caswell (1993) point out that inexperienced instructors “...show an unfortunate and almost total lack of awareness of the extent or function of non-verbal pupil behaviors...” (pg. 55) and suggests that such classroom awareness only develops with experience. In a study by Webb, Diana et al. (1997) “expert” and “non-expert” teachers were evaluated for their ability to judge student comprehension based on visual, nonverbal behavior and “expert” or more experienced teachers were in fact more accurate.

To an inexperienced instructor, classrooms can appear to be an overwhelmingly busy environment. If active learning conditions are utilized, the classroom truly is busy. However, it is the experienced instructor that has developed the ability to dynamically mentaL-multi-task in the classroom; speaking, observing conditions, reacting, interacting, and facilitating active learning. That is a skill that cannot be readily taught, but rather must be learned through experience. Radford (1990) notes that “observation is a discrete teaching skill that needs to be learned” (pg. 37) and “teachers learn to observe in the classroom on their own with little direction or training” (pg. 37). As Webb, Diana et al. (1997) state, “Accordingly, expert teachers are able to attend to myriad and complex information that they can organize and interpret, and they appear to perceive and understand students, social information, and classroom events in a qualitatively different manner than less experience teachers” (pg. 89).

A failure to observe and recognize that a student is struggling with a concept can lead to bored and frustrated students. “Only when we can accurately perceive what is occurring can we reflect upon what the student is learning and upon what interests and feelings they bring with them to the learning
situation” (Radford, 1990, p. 38). Thus, there is a clear need for instructors to be sensitive to nonverbal cues as a means of real-time assessment. Angelo & Cross (1993) state that while other forms of classroom assessment may be more accurate, they simply are not timely enough.

The Minimum You Need to Know as an Instructor
As an instructor interested in improving one’s ability to identify and interpret the nonverbal cues of your students, there is some basic information that would be useful for that endeavor. There is currently very little available literature that focuses on that specific topic. This document cannot hope to present a comprehensive summary of nonverbal cues specific to the classroom that relate to all situations, but the following is a recommended group of common nonverbal cues that all instructors should develop a sensitivity to and an ability to interpret.

The following list of cues is generalized relative to culture, gender, type of academic institution, and course subject. It has been accumulated from a variety of sources and in most cases adapted specifically to classroom conditions. The previously identified taxonomy offered by Zoric, Smid et al. (2007) has been used to categorize and discuss each item.

Silence: Silence or merely the absence of communication, “is the most common non-verbal (sic) expression” (Gukas, Leinster, & Walker, 2010, p. 7). Silence is commonly interpreted as simple lack of understanding. However, silence on the part of the student could be interpreted as a “challenge” to the instructor (Suinn, 2006), a lack of understanding (Gukas et al., 2010), a lack of knowledge (Gukas et al., 2010), fear of failure (Davis, 2009; McCroskey et al., 2006), or a feeling of inferiority (Gukas et al., 2010). Student silence can also be a product of learning preference or cultural background (Gukas et al., 2010).

Oculesics: Oculesics is the act of intentionally or unintentionally making eye contact with an individual during communication. While a sustained gaze indicates interest (Neill & Caswell, 1993), instructors more commonly witness students avoiding eye contact. Knapp & Hall (1992) confirm the most common interpretation of avoiding eye contact as someone who does not know the answer to a question. Miller (2005b) also points out that students will avoid eye contact when they simply dislike or are disinterested in the subject matter. Students with low self-esteem or who are being evasive are also likely to avoid eye contact (Hartley & Karinch, 2007; Pease & Pease, 2006). Breed & Colaiuta (2006) researched and found a positive correlation between the amount of student eye contact with an instructor and student comprehension. Specifically, higher test scores were associated with increased time looking at the instructor during discussions and less time looking elsewhere about the room.

Kinesics: Kinesics encompasses all forms of body movements. As such, several of the primary kinesic indicators are addressed separately in the following paragraphs.

Eye movement: Observation of eye movement can provide instructors with an indication of a student’s mindset and thoughts. For example, images are stored in the visual cortex, which is located in the rear of the brain (Hartley & Karinch, 2007). Thus, when students attempt to recall an image, their eyes tend to drift upwards. Likewise, recall of a sound is indicated by the eyes drift to the left or right and in line with the ears (Hartley & Karinch, 2007). Cognitive thought and problem solving is performed in the frontal lobe and results in the eyes migrating down and to the left (Hartley & Karinch, 2007). Thoughts associated with intense feelings and emotions result in the eyes projecting down and to the right (Hartley & Karinch, 2007). Observation of eyes repeatedly migrating towards the clock could be interpreted as a student bored with the current discussion or a student concerned about events occurring in the near future (Miller,
2005b). Pease & Pease (2006), Thompson (1973) and Miller (2005b) also note that pupil dilation is a non-voluntary reaction to viewing something pleasing.

**Head Position:** An individual with a raised chin is forced to look down his or her nose. Such a head position is associated with imposed dominance. Conversely, a bowed head is considered non-threatening and submissive (Neill & Caswell, 1993). Sympathetic interest is indicated by slightly tilting the head to one side (Neill & Caswell, 1993) and agreement is indicated by nodding (Miller, 2005b). Radford (1990) notes that students have become “accomplished avoiders” by lowering their heads to avoid eye contact with an instructor and create an appearance that they are searching for a response to a question.

**Facial Expression:** A relaxed and/or smiling facial expressions is an indication of student satisfaction with their current environment (Gukas et al., 2010). Whereas, a frown and/or wrinkled brow is an indication of anger or confusion (Neill & Caswell, 1993). The involuntary reflex of yawning is an indication of boredom or fatigue (Miller, 2005b).

**Body Posture:** Student body posture, while seated and standing, is a clear-cut and accurate nonverbal cue. Neill & Caswell (1993) and Miller (Miller, 2005a, 2005b) state that an attentive and engaged student will sit predominately erect and lean forward slightly towards the speaker. A content person also tends to walk with an erect posture (Miller, 2005b). On the other hand, boredom or a discouraged state is indicated by slumping or slouching when seated (Miller, 2005a, 2005b). It should be noted that a non-erect posture could be an indication of fatigue or drowsiness. A student’s relaxed posture when addressing someone is an indication of a lack of respect for that person (Miller, 2005b). Respect is also indicated by body alignment with the instructor. A straight alignment while seated (legs in front) indicates a higher level of respect than legs turned to the side (Miller, 2005b). Defiance or dissent is demonstrated by placing hands on hips while standing (Hartley & Karinch, 2007) and by deliberately exhibiting a posture significantly different than the rest of the group when seated (Miller, 2005b; Thompson, 1973).

** Gestures and Hand Signals:** The use of gestures and hand signals help students express themselves and clarify verbal questions or responses. Steepling, which is either the process of interlocking one’s fingers or merely placing the fingertips of opposing hands together, is a demonstration of confidence (Miller, 2005b; Thompson, 1973), while, excessive preening is an indication of stress and anxiety (Neill & Caswell, 1993). In most classrooms attention is obtained by raising a hand (Miller, 2005b), but the “frantic hand waver” is excited to offer a possible solution (Knapp & Hall, 1992). Shrugging of the shoulders is a common expression of lacking sufficient knowledge (Miller, 2005b). Neill & Caswell (1993) state that arms folded across the chest is an indication of dominance, but Miller (2005b) interprets that gesture as a defensive cue or withdrawal from the discussion.

**Vocalics & Chronemics:** Vocalics includes tone of voice, timbre, volume, and rate of speech, while chronemics relates to timing and pauses. In a classroom environment, these nonverbal cues are most commonly exhibited when students attempt to verbally respond to a question. Miller (2005b) and Neill & Caswell (1993) describe the propensity of students to answer a question with a nonverbal question mark. That is, during delivery of a response, a student’s volume increases slightly and the rate of speech also increases. This results in the appearance of an unconfident answer. Miller (2005b) also states that a slow to moderately slow rate of speech is an indication of boredom, “normal” rate of speech is an indication of satisfaction, and a fast rate of speech is often an indication of anger.
Proxemics: Personal space and arrangement of physical items in a classroom has a surprisingly significant influence on student comfort within the learning environment. Rearrange the desks and chairs in your classroom (number of columns or rows) midway through an academic term and observe the verbal and nonverbal reaction of your students as they arrive for class. The use of space in a classroom (with flexible arrangement) is commonly at the discretion of the instructor. However, personal distance is controlled by both students and instructors. Breed & Colaiuta (2006) identified a positive correlation between student seating choices and both attentiveness and academic performance. Specifically, students that self-selected seating in the center and forward portions of a classroom tended to be more attentive and performed better academically. Filtering for cultural influences, the personal distance established by a student, between the student and instructor, is an indication of the student’s confidence and comfort (closer interaction is an indication of high confidence and comfort) (Neill & Caswell, 1993). Rocking, leg swinging, or tapping are indications that a student feels uncomfortable with the established personal distance (Thompson, 1973).

Haptics: Extrapolating the concept of personal space to the point of physical touching is a subject of significant debate. While studies have shown that deliberate and appropriate student/instructor touching in the classroom can be academically beneficial (Miller, 2005b; Neill & Caswell, 1993; Thompson, 1973), the modern academic environment suggests that the risks of misinterpretation outweigh the benefits. At the college-level a hearty handshake between student and instructor, for a job well done, appears to be the limit of appropriate physical touch.

Physical Appearance: Students project their outward view of the world through their dress, hairstyle, jewelry, etc. (Thompson, 1973). While physical appearance is not necessarily a real-time indication of a student’s cognitive state, it does often provide context in which we can better situate other nonverbal cues.

If you read through this list and each item seemed intuitive to you and you can readily identify and interpret these cues in your classroom, then it is likely that Webb, Diana et al. (1997) and Radford (1990) would classify you as an “experienced” instructor. If, however, you gleaned new information from this list, then congratulations! You have made an important step towards improving the nature of your classroom instruction.

Miller (2005b) states that “an observant teacher can...tell when students understand the material or if they are having trouble grasping major concepts” (pg. 30). Without question, it is rewarding to identify definitive nonverbal indications that students are comfortable with the course content. Gregersen (2005), however, wisely indicates that it is more critical that instructors identify anxious and confused nonverbal cues, as those are the students that need our assistance.

What Makes Nonverbal Communication Difficult to Observe and Interpret in the Classroom
It is significantly easier for instructors to consciously and unconsciously send nonverbal cues than it is for them to identify and interpret the nonverbal cues of our students (Trenholm & Jensen, 2008). By comparison, nonverbal messages are less tangible and can be more difficult to interpret than verbal messages (Thompson, 1973). In addition, as Knapp & Hall (1992) note, “people differ markedly in their skills in judging and using nonverbal cues” (pg. 476). It is entirely likely that one instructor may be more skilled or sensitive to vocalics, while another instructor is more sensitive to kenisic facial expressions. Much of that sensitivity to nonverbal cues comes from an instructor’s experience, as well as the instructor’s gender and cultural background.
As noted previously, the classroom is also a very dynamic environment. It can be difficult for an instructor to track even the most primary classroom activities, let alone pick up on nonverbal cues made by a single student. Often the signals that predict trouble are subtle and can be lost in the mass of nonverbal activity. Radford (1990) suggests that to truly attempt to observe and process everything that occurs in a classroom would result in an instructor being “paralyzed by continuous conscious analysis.” The previously mentioned mental multitasking required of an instructor requires a sense of comfort in the classroom environment and confidence in the subject matter.

Adding to the difficulty of identifying nonverbal cues is the awareness that students have about their own nonverbal projection. Without fully realizing it, students proactively seek to mask their nonverbal cues. This is particularly true of cues that would suggest lack of understanding. Unfortunately, in many academic environments, it is considered a weakness to reveal confusion in front of one’s peers. Men are significantly more likely to adopt a “poker face” in the classroom than their female counterparts (Hall, 2006a; Helweg-Larsen et al., 2004). To overcome such an atmosphere and encourage both verbal and nonverbal requests for assistance, instructors must proactively create a safe, nonjudgmental classroom environment.

The fact that nonverbal cues typically occur in clusters (Zoric et al., 2007) can clarify or confound our observations. For example, a student who sits far away from the instructor, projects his or her legs to side, slouches, and crosses his or her arms over the chest should be identified as unengaged in the learning process. However, a student that is seated near the front of the classroom, is seated erect, frequently yawns and glances at the clock, may be bored with the material or may actually enjoy the class, but be looking forward to his or her nap immediately after class. It can be difficult for instructors to not immediately assume that they are interpreting observations correctly. Rather, it is important to look for unifying threads and to place observations in context (Knapp & Hall, 1992). It is also important to realize that not all observed nonverbal cues are a reaction to the course material or our performance as instructors. The strained look on a student’s face maybe confusion, or it could also be a reaction to a bad lunch, a personal relationship issue, or the person seated next to them that is wearing an excessive amount of cologne/perfume. We must keep in mind that students have lives beyond the classroom walls and those lives influence their mindset throughout the day.

Miller (2005b) notes that “no formalized reliable means has been developed to identify and interpret all nonverbal behaviors” (pg. 74). Further he notes that student nonverbal cues are “autonomic, idiosyncratic, and ambiguous” when not considered in context. Thus, it is important not to jump to conclusions, over-sterotype, or make broad generalizations. Consideration must be given to culture, gender, and a student’s pattern of normal behavior (Hall, 2006a; Miller, 2005b).

**Content and Limitations of the Cognate Literature**

The study of nonverbal communication is still considered to be relatively “new.” Radford (1990) notes that while college-level course work has been offered in nonverbal communication since the 1970s, the majority of communication studies still focus on verbal and written communication. Thompson (1973) referred to nonverbal communication as one of the least studied human activities.

During a fairly extensive review of the literature, a significant volume of nonverbal communication material was identified. This content ranged from college-level texts, to handbooks focusing on nonverbal communication research, to guides intended for interrogators with an interest in reading body language. Some of that literature had very specific discussion of both cultural and gender
differences in nonverbal communication. There appears to be a rather limited volume of literature that focuses on the classroom. Of the classroom related literature that was identified and reviewed, the vast majority had a primary focus on the nonverbal cues generated by instructors and received by students. While I would not suggest that this is unimportant, the literature appears to largely overlook the need for two-way communication in an active learning environment. The one exception to this is the text by Thompson (1973) that broadly discusses both instructor and student verbal cues. Unfortunately, Thompson’s text was published in 1973 and has not been revised to capture more recent research on the topic of nonverbal communication. What little recent literature there is that mentions interpretation of student nonverbal cues is focused on classroom environments with verbally challenged students (e.g., English as a second language) (Gregersen, 2005). There is a clear awareness that instructors need to have an ability to identify and interpret student nonverbal cues (McCroskey et al., 2006; Miller, 2005a, 2005b; Radford, 1990; Smith, 1979; Trenholm & Jensen, 2008), but the literature appears to do little more than advocate for awareness, and provides very limited classroom specific direction.

The various pieces of the nonverbal student communication puzzle appear to be available, but each is currently unconnected. There is scholarly literature on the subjects of active learning environments, classroom communication, and interpretation of nonverbal cues. However, there appears to be a lack of literature that specifically discusses how instructors, in an active learning environment, can identify and interpret their students’ nonverbal cues to assist communication and facilitate learning.

Considerations Specific to the U.S. Military Academy
The merits of U.S. Military Academy instructors developing ability to identify and interpret nonverbal communication are no less important than at other academic institutions. However, context remains a particularly important filter to apply.

Clearly, much is asked of our cadets and time is at a premium. Studies have indicated that the average cadet receives an insufficient amount of sleep during the academic term (Kenney & Neverosky, 2004). This can translate into non-voluntary body language associated with tiredness that could otherwise be mistaken as boredom or disengagement.

Appropriately, the Academy revolves around a competitive mindset in nearly all aspects of cadet life (academics, military training, athletics, etc.). However, the likely unintended side effect of this condition is a classroom culture in which it is generally considered unacceptable to show a lack of understanding. Questions of clarification are a demonstration of comprehension, but questions that reveal misunderstanding are rarely offered. Under such conditions, students are also less likely to show nonverbal cues associated with confusion. In fact, many cadets have become very adept at assuming a classroom “poker face” that reveals little information at all. Most instructors at the Academy recognize this condition and take steps to create a safe, engaging learning environment that welcomes both expressions of understanding and confusion.

Finally, although physical appearance is not considered a particularly rich nonverbal indicator in the classroom, it still has importance in the Academy classroom. This may seem counterintuitive in an environment with a strict policy related to classroom uniform and grooming standards. However, within the limits of those policies, cadets quickly learn to develop their own outward personality. Subtle items, such as a man’s watch, can be a personality statement to a higher degree than it is at a traditional university. Subtle details in the level of adherence to the required uniform are also indicators of an
individual’s personality. Even the slight flexibility within the rules governing hair length and style is a personification of one’s outward projection.

Conclusion
Nonverbal communication is a universal and well-defined form of interaction. The benefits for an instructor to develop a strong sensitivity and ability to interpret student nonverbal communication should be self evident. “A good teacher is a good listener, not only to words being spoken, but also to silent messages that signal agreement/disagreement, attention, inattention, interest/boredom, and the desire of the student to be heard” (Miller, 2005b, p. 67). Both the instructor and the student stand to gain from improved classroom communication. Understanding nonverbal cues requires background knowledge and teaching experience. It is easy to be misled or misinterpret cues that are not filtered for context, culture, gender, and personal bias. The available literature focusing on nonverbal classroom communication is significantly partial toward projected cues of the instructor and provides surprisingly little content specific to decoding student generated cues.

References


Thompson, J. J. (1973). Beyond words; nonverbal communication in the classroom. New York,: Citation Press.


Annotated Bibliography (list them alphabetically)


Judith A. Hall appears to be one of the leading voices nonverbal gender differences. Very specific difference in sensitivity, interpretation, and demonstration of individual nonverbal cues are presented and supported with reference to various studies.

Manusov, Valerie and Patterson, Miles L., The SAGE Handbook of Nonverbal Communication


Chapter 11 is written by Judith A. Hall and goes into greater depth than the chapter she wrote for another text included in this literature review. Specific details regarding gender differences are discussed for an extensive number of nonverbal cues. By-gender differences are also summarized. This chapter provides strong supporting evidence in the form of various research programs on the subject. This chapter also provides a compelling discussion why recognition of gender differences is important to the study of nonverbal communication.

Chapter 12 of this text discusses the influence of culture on encoding and decoding nonverbal cues. Unlike several other references on cultural influence, this document provides a more technical review. A large number of research programs are cited. Much like the chapter on gender, this chapter provides strong reasoning behind the importance of understanding cultural differences.


Chapter 22 of this text focuses on nonverbal communication in the classroom. Background and connections between learning theory and communication are identified and discussed. A large number of research programs are recognized. Unfortunately, this chapter focuses almost entirely on nonverbal cues made by the instructor and does not provide coverage related to interpretation of student nonverbal cues.


This document focuses solely on nonverbal communication in the process of teaching. The author makes a strong case for why it is important for instructors to develop the ability to identify and interpret student nonverbal communication. This short document provides a brief discussion of various nonverbal cues and their meaning. The text of this document is interlaced with helpful and humorous illustrations, as well as a significant number of famous quotations related to nonverbal communication.


This document is a concise summary of the prior publication by the same author, written specifically for a journal. In addition to summarizing many of the key items from the separate publication, within this document the author makes additional justifications as to why an understanding of nonverbal cues is critical to successful two-way classroom communication.


Chapter 2 of this text provides an overview and working definition of nonverbal communication. In depth coverage of various forms of nonverbal communication are provided. Brief discussion is made of cultural and gender influences on nonverbal cues. A significant point made relative to gender differences is associated with the difference in frequency of cue usage.

Chapter 5 of this text was expected to focus specifically on the meaning behind students’ nonverbal communication, but provided limited depth of knowledge. Within this chapter the authors make a strong statement that instructors lack an awareness of student nonverbal communication. A limited number of specific nonverbal cues and their meaning are described.


This journal article traces the relatively recent development of nonverbal communication as a field of study and discusses how it is significantly less researched than other forms of communication. This article provides an overview of classroom communication and the role of...
nonverbal communication in the classroom. The author provides a general overview of common nonverbal student cues and their meaning.


This journal article presents an overview of several studies conducted to evaluate the ability of instructors, with varying levels of experience, to interpret student nonverbal cues. A discussion of the complex nature of the classroom environment is detailed.


This book chapter provides a detailed and scientific explanation of nonverbal communication taxonomy. Additional insights relative to clustering of nonverbal clues are also presented. The authors also provide a useful and broad definition of nonverbal communication. This document offers a technical connection to the physiological mechanisms of nonverbal communication.
This document includes a general overview of nonverbal communication and discussion of cultural and gender-based influences. A detailed discussion of common classroom nonverbal dynamics and challenges common to the identification and interpretation of those conditions are also identified. In addition, details are provided related to an on-going study of student nonverbal communication in the classroom. While the information contained within this document will be particularly useful to individuals new to teaching, all engineering educators are likely to find this information beneficial to their