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Twelve tips for effective body language for medical educators

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ABSTRACT

Background: A significant proportion of human communication is nonverbal. Although the fields of business and psychology have significant literature on effectively using body language in a variety of situations, there is limited literature on effective body language for medical educators.

Aim: To provide 12 tips to highlight effective body language strategies and techniques for medical educators.

Method: The tips provided are based on our experiences and reflections as clinician-educators and the available literature.

Results: The 12 tips presented offer specific strategies to engage learners, balance learner participation, and bring energy and passion to teaching.

Conclusions: Medical educators seeking to maximize their effectiveness would benefit from an understanding of how body language affects a learning environment and how body language techniques can be used to engage audiences, maintain attention, control challenging learners, and convey passion for a topic. Understanding and using body language effectively is an important instructional skill.

Introduction

Psychologist Albert Mehrabian first described the “7/38/55” rule in the 1970s, showing that 7% of communication comes from the words we say, 38% from the tone of our voice, and 55% from our body language (Mehrabian 1971). Although there have been criticisms to the precision of this work (Williams 1977; Hsee et al. 1992), it remains an important and well-recognized study highlighting the significance of nonverbal communication. Significant literature has been published on how body language can be used effectively in the patient–doctor relationship and its impact on various patient–doctor interactions (Roter et al. 2006; Mast 2007; Hills 2011; D’Agostino & Bylund 2011; D’Agostino & Bylund 2014; Khan et al. 2014; Lavelle et al. 2014; Little et al. 2015; Ragsdale et al. 2016). Such efforts have also included analysis of the body language of medical students in simulated patient encounters (Endres & Laidlaw 2009; Hall et al. 2009), the role of race in physicians’ nonverbal communications (Stepanikova et al. 2012; Elliott et al. 2016), and the utility of improvisational theater techniques and body positions to teach effective empathic communication (Watson 2011; Eisenberg et al. 2015). Business and psychology researchers have explored the use of body language in negotiations (Vlachoutsicos 2012) to decrease psychological stress and improve performance (Carney et al. 2010; Cuddy 2012; Carney et al. 2015), and to improve leadership (Carney et al. 2005; Arnette & Pettijohn 2012).

Despite the ample literature about the significance of body language in interpersonal interactions, there is very little discussion on the use of body language as a teaching tool for the medical educator. If we consider the basic premise of the “7/38/55 rule” (Mehrabian 1971), the effective use of body language has the power to make or undo

the medical educator. As such, developing a command of body language and a repertoire of techniques is essential. Here, we present 12 tips to use body language to effectively engage learners, balance different learners’ level of participation, and bring energy and passion to teaching.

Putting body language in context

Body language techniques can powerfully impact the learning experience when used correctly. When used incorrectly, or in an inappropriate social or cultural context, these techniques could hinder learning. Educators using these techniques should always adhere to audience-specific societal and cultural norms, which may vary greatly from country to country or from audience-to-audience in an increasingly globalized medical community. Audience factors should be considered when using these techniques, such as the learning climate, learner experience level, and the degree of familiarity between the educator and the learners. Additionally, the 12 tips presented here should be used to supplement, not replace, well-established active learning strategies (Ramani 2003; Graffam 2007; Abdool & Bradley 2013). No matter what the context, practicing these techniques is critical. Educators should consider these techniques as tools that may be of use in a wide-variety of teaching settings, and will have to tailor each to their own specific learning environment.

Engaging the learner

Whether teaching on ward-rounds to two learners, or delivering Grand Rounds to two hundred, learner engagement is essential to effectively capture and maintain the attention of the audience and facilitate retention of information.

Tip 1

Avoid “podium palsy”

Too often educators stay in front of the room, failing to move from behind the podium. Such “podium palsy” distances the educator from the learners and prevents one from utilizing the breadth of body language techniques available (Reese et al. 2011). Standing behind a podium at length is analogous to conducting an orchestra from the balcony – one’s ability to capture and modify the performance of the musicians is greatly diminished. Moving throughout the teaching environment keeps learners interested, makes it harder for them to be sidetracked, allows the educator to be aware of the tone of the room more effectively and appropriately engage different groups of learners (Richards 2006). However, be wary of pacing, which is a sign of nervousness or being overly enthusiastic, and is itself a distraction (Siddons 2008). The effective educator moves without it being obvious she is doing so, re-focusing the audiences’ attention as she engages different aspects of the room with her presence. For instance, while giving a lecture, the educator may leave the podium at various times to engage one side of the room or the other, or may even come down the center aisle, serving to re-invigorate the audiences’ focus on her.

Tip 2

Avoid talking to the drawing board

A “chalk-talk,” delivered at a chalk board or white board, can be a welcome departure from PowerPoint or projector presentations (Burke & James 2008). However, when using the board instructors often keep their back turned, losing the focus of the audience and preventing them from gauging the learners’ reaction and understanding. Even worse, educators often draw on the board while standing directly in front of it, preventing learners from seeing what is being written (Siddons 2008). These brief lapses can cause an audience to become distracted. To the extent possible, it is advisable to prepare as much as one can on the board ahead of time. For instance, if the talk is on renal physiology, the instructor would draw the nephron before the talk to reduce the interval they are not focused on the audience and to preserve valuable teaching time. When using the drawing board, the educator should adopt a position that allows writing without blocking the audience or losing eye contact.

Tip 3

Adopt an “open” stance

An open stance refers to the position of one’s arms, legs, and torso, and signifies openness to the audience (Figure 1(A)). Hands out and palms up shows one is open to questions and is nonthreatening. Having one’s arms or legs crossed, or touching one’s neck, is a closed, defensive stance (Figure 1(B)). An open stance is warmer and invites the learner to ask questions, and has been shown to be a more effective means of communication (McGinley et al. 1975). A closed stance can imply coldness, distance, or lack

of confidence, making it harder for the learner to engage with the educator.

Tip 4

Use a “power” stance when needed

Work by Cuddy and others have established that certain body positions can elicit a neuroendocrine response to increase one’s sense of confidence, control, and power (Carney et al. 2010; Cuddy 2012). These “power positions” can be used by medical educators when necessary. For example, if an educator needs to re-assert control over the room, or if there is a difficult audience member, an assertive power stance may be of use, such as standing up straight and placing ones hands on ones hips (Figure 2). Such techniques can help the educator to keep the learner group focused and on track. However, one should be aware of the audience context, as this stance may be less effective if talking with more “senior” colleagues. Care should be used to not overuse a power stance as this can be interpreted as overconfidence or abrasiveness.

Tip 5

Encourage thinking and problem solving

Effective body language can encourage learners to consider a question or dilemma posed by the educator in a variety of settings (Siddons 2008). Movement when lecturing can engage the audience; however, consider briefly pausing and standing still while facing the group with an open stance (as discussed in Tip 3) before posing a question.

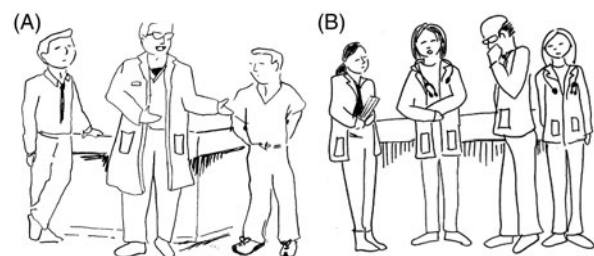


Figure 1. Open versus closed stances. An open stance refers to the position of one’s arms, legs, and torso, and signifies openness to the audience (panel A). Hands out and palms up shows one is open to questions and is nonthreatening. Having one’s arms or legs crossed, or touching one’s neck, is a closed, defensive stance (panel B). An open stance is warmer and invites the learner to ask questions, and is a more effective means of communication



Figure 2. A power position. Certain “power positions”, such as standing up straight and placing ones on ones hips, have been demonstrated to elicit a neuroendocrine response to increase one’s sense of confidence, control, and power.

This technique can capture attention and facilitate audience participation. Certain body positions can nonverbally tell the learners it is time for them to think and consider (Weinert et al. 2014). For instance, positioning one's hands into a "church steeple" in front of the body effectively tells the audience it is time to ponder the question posed (Figure 3(A)). Adopting a quizzical look on one's face augments this effect. If the group is seated at a table, positioning oneself in "the thinker" pose, with the hand under the chin, can also be used to nonverbally signal the learners to consider the question at hand (Figure 3(B)).

Tip 6

Emphasize a point

Body language can be used to emphasize a particular concept in a lecture or an important point delivered on rounds. Rubbing one's hands together signals that something positive or dramatic is about to occur (Wolfgang 1984). If one wears glasses, taking them off at a particular point can serve to focus the audience's attention to the novel movement. Similarly, if a suit or sports jacket is being worn, taking it off at a key point can signal to the audience that the educator is "really getting into the material." Gesticulations with one's hands and arms can also serve to emphasize a point; the sudden movement will engage the audience (Jafine 2011). Tapping or knocking upon the drawing board can be used; the auditory stimulation will emphasize the point being made. Be wary not to use too much emphasizing body language, or else the teaching can come across as overly dramatic or theatrical (Wolfgang 1984). However, well timed emphasizing body movements, along with appropriate voice tone and volume, can drive points across effectively.

Tip 7

Optimize questions with body language

Research has shown that waiting five to seven seconds after a question is asked before answering it will allow learners to reflect, generate an answer, and share, thus increasing audience participation (Rowe 1987). But often one or more learners in the group will jump in with an answer before others have had time to consider the question. If the learner immediately provides an answer and the educator quickly identifies the answer as correct, then the rest of the audience loses the impetus to continue considering the question and the opportunity for critical thinking is diminished. If the educator instead adopts a "poker face" after a question is asked, showing no facial indication of

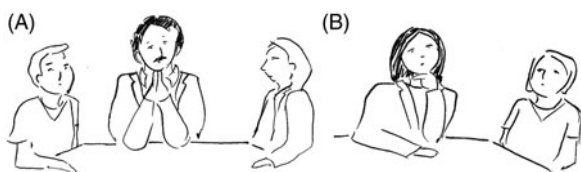


Figure 3. Use body language to optimize questions. Certain body positions can nonverbally tell the learners it is time for them to think and consider. Positioning one's hands into a "church steeple" in front of the body effectively tells the audience it is time to ponder the question posed (panel A). Positioning oneself in "the thinker" pose (panel B) can also be used to nonverbally signal the audience to consider the question at hand.

whether answers received are correct or incorrect, the other learners can consider the question longer, facilitating deeper thinking. When utilizing a poker face, the educator continues to look around the room and perhaps facilitates further discussion by posing questions such as, "Jane, what do you think of Jason's answer?" In so doing, the educator expands the discussion and enables all learners to develop their own thought process before the educator makes the learning point. The groups' critical thinking and engagement benefits as a result (Dongre & Scallen 2015). Such techniques can supplement other active learning strategies such as "think, pair, share" (Graffam 2007).

Balancing learner participation

In any group of learners, there will inevitably be variable levels of participation. This is affected by personality, interpersonal dynamics and relationships, comfort level with the content being taught, and various distractions. The effective medical educator can use body language techniques to balance different learners' level of participation and gain control over a group without having to say anything explicitly.

Tip 8

Motivate the quiet learner

Certain learners have lower levels of participation because they are shy, do not feel confident, are overconfident and thus inattentive, or distracted. Certain motivating body language techniques can draw these learners into the larger group (Dongre & Scallen 2015). By simply moving towards that learner and looking at them directly when asking a question (we term this "Motivate level 1"), they are implicitly being asked to answer it. Going a step further, an educator can look at them and, using their hand, offer a welcoming gesture and smile to the learner (Motivate level 2; Figure 4(A)). The eye contact and physical gesture make it harder for that learner to remain reserved, but should be done in a subtle way so that if the learner is

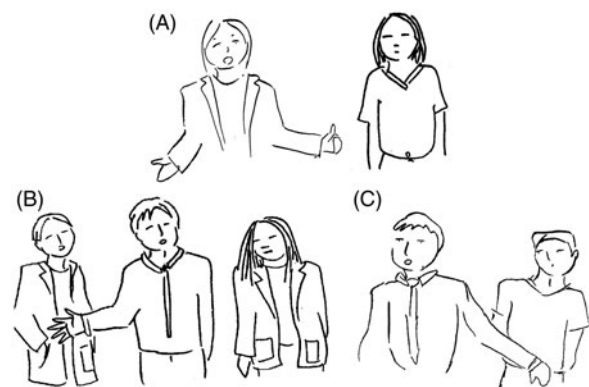


Figure 4. Use body language to control learner participation. Body language can be used to balance learner participation. For the quiet learner, a teacher can look at them and, using their hand, offer a welcoming gesture and smile to the learner (panel A). For the over-eager learner whose participation threatens to overwhelm a group discussion, when asking a question, the teacher avoids making eye contact with the dominant learner, and holds their hand out in a subtle stop position to them (panel B). Going further, the teacher goes to the dominant learner and subtly keeps their back turned to them when asking a question, or uses an arm to corral them off from the rest of the learners (panel C).

truly unwilling, they have not been explicitly called upon and thus can avoid direct embarrassment if an answer or comment is not readily available to them. Movement around the room (see Tip 1) can be useful to engage certain parts of the room that might be quiet (such as the back corners). Additionally, approaching an audience member and then turning to face the board together when asking a question creates a sense of engagement and partnership (Wolfgang 1984). For instance, when lecturing on a tough physiology problem, the use of this technique frees the learner from facing the instructor, which could be intimidating, and instead together they face the problem and can collaboratively work out a solution.

Tip 9

Quiet the dominant participant

Other learners may be loud, overbearing, or dominate a conversation or teaching environment, be it in a small group or large group setting. It can be very challenging for medical educators to directly tell these learners to be quiet or not share as much, as one does not want to embarrass them or shut them out of the conversation. Certain body language skills, which we call the Block level 1 and 2, can be used to manage this situation (Dongre & Scallen 2015). In Block level 1, when asking a question, the educator avoids making eye contact with the dominant learner, and holds their hand out in a very subtle stop position. This can effectively yet implicitly let them know that the educator wants to engage others first. Should this not work, the Block level 2 can be used. In this technique, the educator goes to the dominant learner and subtly keeps their back turned to them when asking a question, or uses an arm to corral them off from the rest of the learners (Figure 4(B,C)); if done deftly, the dominant learner often will not even be aware they have been “blocked” from the particular question. Note that in order to use these techniques, an educator must be familiar with Tip 1 “Avoid podium palsy.”

Bringing energy to teaching

Displaying energy, passion and enthusiasm is essential in engaging an audience. Even the most knowledgeable educator cannot maintain the interest of an audience without appropriately generating enthusiasm and interest in the topic.

Tip 10

Show your passion

Showing enthusiasm and passion for a topic can help make it interesting and pertinent for learners, and facilitate a safe learning environment (Pozzer-Ardenghi & Wolff-Michael 2010). Delivering teaching with passion keeps the audience engaged and makes it more impactful. Certain body movements can demonstrate one's eagerness for a particular topic and serve to draw in the learners. The simplest of these is smiling. Smiling has been shown to have an immediate effect on others' behavior and facilitate a positive learning environment (Sanders & Wiseman 1990). In addition, the effective use of voice and volume control can

convey passion and help to emphasize a key point; thus, avoiding monotone and using a variety of volumes can be helpful tools (Steihaug & Malterud 2003). Good eye contact with multiple learners at different times in the teaching session facilitates a sense of connection, establishes rapport and trust, and adds a sense of intensity. Movement within the room and avoiding “podium palsy” (Tip 1) creates good energy within a teaching environment.

Tip 11

Avoid inadvertently being a bore, standoffish, or distracting

Educators may subconsciously adopt poses that are less engaging with learners, distracting, or at worse are overtly standoffish (Gulec & Temel 2014). Teaching with one's hands in one's pockets is a low-energy position and fails to convey passion for the topic. Staying in one position during a talk similarly fails to engage the audience's attention. A monotone voice should likewise be avoided (Steihaug & Malterud 2003). Avoid poor posture positions such as slumped shoulders or head tilted down, looking at the floor; instead, standing up straight, with good eye contact, conveys energy, respect, and interest. Educators may distract the audience by subconsciously pacing, jingling pocket change, clicking a pen, or fidgeting. Crossing one's arms in a “closed” position subtly suggests distance between the educator and learners, while an “open” position invites discussion (Tip 3). Pointing directly at learners when asking a question can be a subtle sign of aggression and should be minimized; instead, consider an openhanded gesture (Pozzer-Ardenghi & Wolff-Michael 2010). Glancing at a watch or clock conveys a sense of being rushed or having somewhere else to be; additionally, learners will inevitably do the same, serving as a distraction. Staying on time is important, though time-checks should be done subtly or perhaps with a primed audience member discretely indicating how many minutes are left.

Tip 12

Be mindful of your facial expressions (or lack thereof)

Facial expressions can convey a wide variety of moods, emotions, and attitudes and can positively or negatively affect a learning environment (Elfenbein 2006). Smiling suggests happiness and encouragement; conversely frowning supports unhappiness or anger. Opening one's eyes widely, or covering the mouth with a hand, conveys a sense of surprise and can be used to highlight a controversial point or twist in a case presentation. Signs of anger, such as brows lowered and drawn together, a tense lower lid, or dilated nostrils, can be off-putting to learners. Likewise, signs of contempt for a learner – eye-rolling, raising one side of the mouth, or “half-smiling” – can leave the subject feeling inferior or angry, and should be strictly avoided. Conversely, lack of any facial expressions can be boring or off-putting and should likewise be avoided. Maintaining a positive, upbeat mood and corresponding facial expression is recommended (Pozzer-Ardenghi & Wolff-Michael 2010).

Conclusions

A majority of human communication is nonverbal. Medical educators seeking to maximize their teaching effectiveness would benefit from an understanding of how body language impacts the learning environment and how specific body language techniques can be used to engage the audience, maintain attention, control challenging learners, and convey passion for a topic. The specific tips and strategies reviewed above can be applied in a wide-array of teaching settings, from teaching on rounds, to small groups, to delivering a lecture to a large audience. Understanding and utilizing body language effectively is an important instructional skill that can be learned and developed.

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Disclosure statement

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.

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