CLARIFY COMMUNICATION TO ENHANCE LEARNING: ESTABLISH THE DUAL-FOCUS CLASSROOM

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What do racist remarks in a class discussion about affirmative action, uninformed opinions about a company's financial future during a case analysis, and random guesses to a management science problem have in common? Besides driving instructors crazy, they may seem to have little to do with one another. However, they all are similar in their reliance on faulty patterns of communication. As educators, we often tend to overlook the communications aspect of the remarks students make and instead focus exclusively on substance, that is, on discipline-specific content. Focusing exclusively on content, however, can be unnecessarily limiting. This article suggests that understanding problematic student responses and dealing with them is best achieved by shifting focus and going outside the discipline itself. Accordingly, we present a structural framework that can be used to examine the faulty communication patterns underlying diverse statements such as racist comments, unsupported opinions, and random guesses. Recommendations for a common pedagogical approach to all three problems are developed from this framework.

Prior to introducing this framework, we feel it necessary to clarify three points. First, this approach can be used to help analyze effective and accurate communication. However, because instructors rarely complain about effective communication, we have decided to focus our efforts on developing a

model that will be especially useful for understanding faulty patterns of communication. We are specifically interested in verbal communication that is not grounded in internally (i.e., feelings) or externally (i.e., information) verifiable data. Second, it is a central feature of this approach that it be shared with the students so that they are aware of the ways in which they may be asked to develop and present clearer analysis. Third, the adoption of the dual-focus classroom is supplemental and complementary to other pedagogical approaches in use.

Structural Framework for Analysis of Communication

Student responses can be analyzed by focusing on three characteristics of the structure of communication: the level of inference, the level of ownership, and the level of openness.

Inference. Argyris (1985) uses the term "ladder of inference" in describing a statement's grounding with respect to data. On the first rung (lowest level) are references to directly observable data, on the second are references to common culturally accepted meanings derived from the data, on the third are references to privately inferred meanings, and on the fourth (highest level) are the tacit assumptions generating these meanings. To converse with a low level of inference, an individual must support generalizations with specific observations and also make a clear distinction between what is observed and what is inferred. Conversely, statements at a high level of inference blur such distinctions, making generalizations with few and often disguised links to data. For example, the claim that "all people on welfare are lazy and ripping off the hard-working taxpayers" is made at a high level of inference, taking as fact something the speaker believes to be true perhaps after reading or hearing about a specific case of welfare fraud.

Ownership. The level of ownership refers to how the speaker acknowledges personal feelings and reasoning processes in his or her discourse (Sankowsky, 1987). For example, in discussing another individual's lack of punctuality, a person who says "People shouldn't be late" (or even "You shouldn't be late") is exhibiting low ownership of feelings. On the other hand, someone who remarks "Your lateness infuriates me" is showing relatively high ownership. Finally, a person who says "When I have to wait for you, I find myself anxious, irritable, and unable to occupy myself" is demonstrating particularly high ownership, disclosing facets of his or her feelings and reasoning processes. Generally speaking, moral, rhetorical, judgmental, or

philosophical statements are made at a low level of ownership, whereas statements that refer to the individual's inner life are made at a high level.

Similarly, an individual's reasoning processes, assumptions, and associations can be either concealed (low ownership) or made explicit for public testing (high ownership). Concealment can be the result of either deliberate withholding (Argyris, 1990) or simply a lack of awareness. Individuals often generate a chain of reasoning on the basis of tacit private associations (Sankowsky, 1993). In fact, without training and discipline, the transition from such private processing to a public forum of explicit logical linkages often is not made. The individual literally "jumps" to a conclusion, which is then stated at a high level of inference.

Openness. Openness refers to a willingness to consider other points of view as well as a specific reframing of one's own communication. The person who makes conclusive statements demonstrates a low level of openness, particularly if he or she rigidly sticks to his or her view. A single comment in itself does not generally reveal how open an individual may be. Subsequent patterns of such comments do in fact reveal this information. For example, the well-known psychological "game" in which a person apparently asking for suggestions rebuffs each of them with the refrain "Yes, but . . ." would exemplify low openness (Berne, 1964; Webber, 1989). Unwillingness to put oneself in another's shoes also would be so construed, as would defending one's position in the face of contradictory evidence and opinion. On the other hand, inquiring into another's experience, showing a willingness to rethink old information, and letting oneself be guided into new modes of communication indicate high openness. For example, if someone says "He made me do it" (a semantically ill-formed statement because it violates the concept of causation), then that person is communicating openly if, when challenged, he or she is willing to specifically and accurately reframe that statement as "I felt pressure from him and in response I acted the way I did." Flexibility of perception and the willingness to make perceptual transitions are the keys to determining an individual's level of openness.

These three characteristics can be used to analyze any communication. As noted in the preceding, our focus is primarily on faulty communication patterns. We suggest, however, that giving students feedback about when they exhibit appropriate levels of inference, ownership, and openness is helpful in clarifying for them the difference between what is effective and what is not.

The structural framework can be used to address the question "What do racist comments, uninformed opinions, and random guesses have in com-

mon?" Specifically, all three remarks can be characterized as having (a) a high level of inference, (b) a low level of ownership, and (c) a low level of openness. Individuals making these types of comments often are unaware of the specific data on which the comments are based, the nature of their internal processes, and/or the possibility of alternative perspectives. In addition, such remarks tend to be structurally self-perpetuating because respondents to these types of comments often act on the assumption that their meanings are unequivocal (Argyris, 1985, 1990). This assumption supports a reactive rather than an investigative stance, contributing to the cycle of comments made with high inference and low ownership and openness.

Groupist remarks are, by definition, generalizations offered without supporting data (Ornstein & Sankowsky, 1994). When such data are forthcoming, their support of the proposition at hand often is poorly spelled out. People making groupist comments choose to generalize rather than individualize their statements, thus exhibiting high inference and low openness and ownership of personal feelings/experience, even if they show some signs of emotion.

Groupist remarks surface not only in organizational behavior classes but also in quantitative courses (e.g., statistics, operations, economics). Often, those who feel mathematically disenfranchised defensively lampoon their more successful peers (and instructors), labeling them as "geeks," "freaks," and/or "nerds." Furthermore, they may remark that anyone who likes these subjects must be "weird" and have few social skills. Such remarks often conceal a set of underlying negative feelings that flow from the individual's frustrations and failures with the subject as well as some unproductive encounters with mathematically oriented people.

Uninformed opinions generally reveal the same low levels of ownership and openness along with a high level of inference. For example, a student made the following remark during a class discussion about affirmative action: "Affirmative action is a bad policy because only poor performers get hired." When queried about his view, the student showed no willingness to explore his reasoning or feelings. He was unwilling to consider that an affirmative action hire may in fact be a more qualified candidate and was similarly unwilling to acknowledge that even without affirmative action some people who are poor performers get hired. He could only repeat that he "thought it [affirmative action] was wrong." His unwillingness to examine the data and his feelings underlying this statement led to the "knee-jerk response" and the faulty communication that ensued.

Again, although it may be obvious that such remarks are likely to occur in a people management course (e.g., organizational behavior, human resources management), they also occur in other settings. In quantitative

courses, when students say "I can't do this because I'm just no good at math," they often are uninformed. They base this "conclusion" on limited data, very little ownership of feelings and assumptions, and almost no openness to other explanations for poor performance. Such students tend to panic at the first sign of difficulty, not realizing that their successful counterparts also may experience frustration and confusion. They then cover their panic with the assumption "I cannot do this" and make themselves incapable of progressing any further.

Although more difficult to characterize, students' perplexing guesses at technical problems also can be understood within this framework. These responses are made with high inference, low ownership, and low openness. Students tend to be unable to retrieve data either internally or externally, and their reasoning processes remain largely tacit (Resnick, 1983; Sankowsky, 1993). Such students also exhibit low openness, stubbornly retreating to familiar but counterproductive ways of focusing on the problem. They may then attempt to make "stabs" at the problem. In addition, these students often are anxious and fearful but rarely express these feelings in the classroom. A typical student response in this circumstance is "I don't know, I just thought it had to be like that."

Implementing the Dual-Focus Classroom

This structural framework of analysis suggests a dual learning orientation for the classroom. That is, rather than remain exclusively concerned with the *content* of the discipline under study, instructors may find it fruitful to help students use the structural framework to improve their patterns of communication. All too often, general communication and learning issues are regarded as peripheral or prerequisites to classroom learning, especially in a business curriculum. However, this type of learning can transcend pure content and help provide improved learning for students long after the course is finished. Thus, we suggest making explicit the communication issues discussed here and including them as relevant course material.

This approach is not just a call to emphasize process as well as content. The dual-focus orientation provides a specific framework that may be used to analyze all classroom communication including problematic responses. At the very least, it suggests a way of thinking and ultimately a repertoire to help instructors minimize any tendency to overreact to such comments. More important, the framework can, as advocated here, be shared with students. This provides the students with an additional learning opportunity to more sharply and accurately develop their communication with others. Another

benefit to this approach is that it offers a forum for consistency in which instructors' communication must adhere to the same standards as that set for students.[1]

How, specifically, can we establish the dual-focus classroom? In general, preparation, introduction, and intervention comprise the three basic elements to allow for enhanced classroom learning. Each of these is discussed in turn.

PREPARATION

The development of the dual-focus classroom begins with an instructor's advance preparation for the course. At this time, the instructor needs to make numerous pedagogical (some might say philosophical) decisions about the establishment of the dual-focus classroom. These decisions include (a) the degree to which the instructor wants to emphasize the dual-focus classroom, (b) how to introduce this approach, (c) the extent of student "choice" in participating in the dual-focus classroom, and (d) whether or not students will be evaluated on their understanding and use of the structural model provided and, if so, how this will be accomplished.

The degree of emphasis placed on using the structural framework to establish the dual-focus classroom can vary from minimal to extensive. Based on other pedagogy in use, the nature of the course, the type of students (e.g., graduate, undergraduate), and the norms of classroom activities within an institutional setting, an individual instructor may choose more or less emphasis on this approach. In our experience, even a limited focus during the first few weeks of the semester yields large dividends of comprehension and learning.

The introduction of the approach can vary along a continuum from dogmatic (i.e., the instructor simply imposes the approach on the class) to democratic (i.e., the instructor introduces the possibility and the students vote for acceptance/rejection). A "shared contract" approach (representing a middle ground between dogmatism and democracy) is illustrated in the next subsection. The decision about which approach to take is best made relative to the instructor's comfort with the dual focus, his or her preferred teaching style, and the students.

Student choice is another issue that must be decided based on instructor preferences and knowledge of the students. In classes where the dual focus may have a higher "face validity" (e.g., management communication, human resources management), it seems reasonable to imagine providing less choice to students about their "buy-in" to this approach. On the other hand, in classes where this approach will likely be novel (e.g., quantitative methods), it makes

a great deal of sense to provide students with the information they need to make a choice about their participation.

Finally, the instructor will have to struggle with the decision about evaluation. Again, in some classes, clarity of communication and thoughtfulness of analysis are an integral portion of the course work. In cases such as these, evaluation (particularly if there is a class participation component to the grading) is consistent. In courses where holding people responsible for their assertions is generally not a major focus, evaluation seems antithetical. As with all evaluation, a clearly planned evaluative schema that is shared with students is necessary.

All this preparation will be for naught if the instructor himself or herself is not prepared to adopt the role of learner. This means that although the instructor expects students to learn how to communicate more effectively, the dual-focus classroom is not fully established until the instructor is committed to adopting the same levels of openness, ownership, and inference required of his or her students. For the instructor to help students learn about their own levels of inference and ownership, the instructor needs to have explored how to apply these structures and models to his or her own thought and communication processes. Such a commitment to learning helps to establish a climate in which students are forthcoming with their thoughts and feelings.

INTRODUCTION

Once the instructor has made the preparatory decisions, this information (along with the structural framework) needs to be shared with the class. Ideally, this should take place during the first class meeting in which the class culture, structure, and process is set for the entire term. An example of the way in which one of the authors does this follows.

In introducing the course content (in this case, quantitative methods) and process, the instructor mentions that sometimes people make random guesses and justify their answers with the statement "I don't know, it just seemed right." Invariably, the class responds by laughing as they recognize their own behaviors. The instructor notes that this state of affairs, although amusing, does represent an impediment to learning—an assertion that the class willingly acknowledges. At this point, he suggests that there may be an alternative to responses such as these and that this alternative represents a new way of thinking and communicating. Students are generally intrigued and ask to hear more. The instructor then engages the class in a discussion about inference, openness, and ownership, all the while illustrating with the types of com-

ments often made in the course. As student interest increases, the instructor suggests that it is possible to have dual learning goals for the class—the goal of learning the specific content (as the students no doubt expected on enrollment for this course) and the goal of learning more effective communication. In this case, the instructor has decided in advance that students will be asked to participate but will not be coerced. Similarly, no evaluation of their use or buy-in to this approach is made.

INTERVENTION

The ultimate goal of establishing the dual-focus classroom is the conversion of statements from those with high levels of inference and low levels of openness and ownership to those with low levels of inference and high levels of openness and ownership. As a result, intervention must investigate underlying assumptions. In addition, it should be directed at clarifying specific meanings and internal thought processes exhibited by the person who made the comment(s) under review. Moreover, it should endeavor to separate the internal data (emotions/feelings) from the external data (facts and observable behaviors). Finally, it should strive for the creation of a new framework of thinking and communicating. Numerous tactics can be used to achieve these strategic learning objectives.

Questioning. The purpose of this tactic is to ask questions as a means for unearthing underlying assumptions, retrieving data, probing feelings, and clarifying the reasoning process. Some open-ended queries (e.g., "When you said that, what were you thinking of/aware of/focusing on?" "What, if anything, does this remind you of?" "What would happen if you/they did that?") provide a means for eliciting data, feelings, and reasoning processes. Other less open-ended questions also may be posed (e.g., "What is it that is confusing to you?" "When did you begin to feel uncomfortable?" "What prevents you from telling her?"). Questioning also may open the floor for alternative ways of perceiving the situation. Some questions (e.g., "Have you considered the following . . .?" "What do you think about that idea?") may provide the students in class with their own beginnings of a reframing of the situation.

Directing. Sometimes students need to be instructed about where to look and what to ask to clarify their internal reasoning processes, retrieve data, separate emotions, and open up to new viewpoints. Making directive statements can be helpful in these cases. For example, the suggestion to "Think of this situation as an example of . . ." points students toward consideration

of a new framework. "Notice your visceral response to that situation" directs them to attend to their emotions. "Look at the three separate symbols in this formula" focuses their attention so that their reasoning processes may become more effective. "Ask yourself, 'How many of these widgets do you need for each of these completed gadgets?' " helps focus students on the retrieval of specific data.

Metacommenting. A different purpose is served by metacommenting (i.e., commenting about comments). Such statements are designed to focus directly on and distinguish among levels of inference, ownership, and openness. Instructors can make statements such as "That remark did not link a general statement with specific data." Metacommenting also occurs when, for example, a statistics instructor explains how he or she focused on a presenting problem (e.g., "I looked at the two competing claims and literally translated them into symbolic statements about a proportion") and then asks students to note this translation as something they might internalize. Furthermore, if an instructor directs students to ask themselves certain questions at certain times (e.g., "How many of these for each of those?") and then comments on the relevance of the self-questioning, then he or she is meta-commenting.

Modeling. This tactic refers to an instructor's direct restatement of a student's remark so that it becomes lower in inference, higher in ownership, and higher in openness. For example, the instructor might encourage students to reference specific data instead of only indicating confusion. Similarly, the instructor may provide a specific "script" for students to use suggesting, for instance, that "If you say that you became angry instead of 'He made me mad,' then you may have a more receptive audience." This tactic is useful when the student is quite confused and needs help crafting more effective communication.

Informing. When instructors provide data or frameworks that students seem to lack, they are using the tactic of informing. This may happen through the inclusion of factual and/or personal information. An instructor sharing a life experience in the service of providing examples to illustrate a concept or theory would qualify as informing. Attempts to explain the unfolding of events through new theories and concepts also would constitute informing. In particular, articulating the framework presented here also would exemplify informing. Reminders to the students about the proper use of inference, ownership, and openness rely on this tactic as well.

Refocusing. This tactic may help clarify meaning and thought processes, separate emotion from data, and develop a new cognitive framework for effective communication through encouraging students to take a different perspective from that which comes most naturally to them. One way in which to accomplish this is via role-plays and role reversals in class discussions. Appreciating another group's feelings through a role reversal frequently enables students to refrain from knee-jerk groupist comments because they now perceive their would-be target as human, just like them. Similarly, role-plays can provide students an opportunity to develop more effective communication in a less psychologically threatening milieu. Refocusing also may be used to demonstrate basic similarities between apparently disparate situations and between complex problems and simpler ones. This can help students deal with their initial anxieties. In technical contexts especially, it also is helpful to point out the ways in which new concepts have been implicit in previous materials. For instance, equations such as $8 = x + 3$ appear for the first time in algebra, bewildering many students who perceive them as something new and different. And yet, when working problems in arithmetic, students had been implicitly dealing with equations as well—but of a different form (e.g., $x = 8 - 3$) that could be "solved" in one step.

Accepting. Accepting students' feelings means acknowledgment and appreciation of the pressures leading to groupist remarks, uninformed opinions, and random guesses. It means removing the judgment that such actions arise from "madness and badness" (Watzlawick, Weakland, & Fisch, 1974). It means communicating to students that feelings—even negative ones—are acceptable, while at the same time not condoning the remarks students initially may have made. Although such instructions may sound like counseling, they still are available to professors and may prove very helpful if the climate supports them (Bowen, Seltzer, & Wilson, 1987).

Sharing. Finally, the act of sharing refers to the instructor's revealing his or her own feelings, assumptions, data, and reasoning processes, thereby making the tacit explicit. This tactic affords the instructor a forum in which to model high ownership, high openness, and low inference with regard to internal data. For example, in terms of clarifying the reasoning process, an instructor in a quantitative methods class might remark "First I asked myself what the units were, then I looked to the right-hand side of the equation and noted the constraints, and then I calculated that I needed X because there was only Y to begin with." This sharing of the formal logical and reasoning process as well as the internal process of accessing information provides an

opportunity for students to see how the process of inference, ownership, and openness works.

In a discussion on stereotyping, an instructor mentioned to the class that he always had thought of doctors as mercenaries rather than as humanitarians. He illustrated the transition from low to high ownership and openness by sharing that his father had been repeatedly misdiagnosed for a chronic illness. The instructor had experienced this as a child, with a subsequent high level of inference concerning the medical profession that persisted until he was in midlife—before he was open enough to revisit the issues (Ornstein & Sankowsky, 1994).

These tactics can be used in combination. It may be useful to lead with questioning or directing. Depending on how entrenched and/or defensive a student becomes in his or her stance, sharing also may be used. Metacommenting is best employed when a pattern of responses can be recognized, although in some instances there is value in pointing out the structural properties of a remark—especially late in the semester. Modeling and informing should be used sparingly because they do much of the work for the student. If, however, the student is genuinely bewildered and seems to need a boost, then modeling is appropriate. Similarly, if the student needs "just the facts," then informing is appropriate.

EXAMPLES OF THE DUAL FOCUS IN USE

Examples of racist and other groupist comments, uninformed opinions, and random guesses that are fairly typical in our classes, as well as analysis of these remarks using the structural framework, are outlined in the following.

In a human resources course offered during the first term of the Clinton presidency, a discussion of "Don't ask, don't tell" (this was shorthand for the administration's intended policy of how to treat homosexuals in the military) was included as illustrative policy of recruitment, selection, and retention. During this discussion, one student ventured that "Gays shouldn't be allowed in the military because they all have AIDS and will infect everyone else." Focusing solely on data, the instructor asked whether all homosexuals have AIDS. Because the student recognized that the answer was no, the questioning then moved on to ownership of the emotional content of the statement. The student clarified that he felt threatened by homosexuality. On making this statement, he was willing to concede that "I am uncomfortable with homosexuality and feel threatened not only by these aspects of sexuality but also by the fact that being gay is associated with a deadly disease." The class agreed that this latter statement contained much lower inference, higher ownership, and higher openness.

In contrast to this experience, in which it was obvious to almost everyone (including the person who made the comment) that the remark was groupist, an instance in which this was not so transparent is provided. In this discussion (about AIDS policies in the workplace), a student mentioned that "Arthur Ashe was a 'totally innocent victim' of AIDS since he had been infected through tainted blood." In this case, another student took offense at this remark because he, an openly gay member of the class, felt it was targeted at him. Through a series of questions posed by the instructor, it became clear that the original speaker had "only meant to distinguish between transfusion-induced AIDS and sexually transmitted AIDS." This drew another round of protest from various class members whose thesis was that "a victim is a victim." Questioning of these parties revealed their assumption that the original speaker had meant to judge sexual behavior. To determine whether this was the speaker's intention, the instructor asked "What were you focusing on just before you made this comment?" This appeared to give the speaker pause. He thought for a bit and then revealed that he had been comparing Arthur Ashe to Magic Johnson. He further identified that he felt angry with Johnson, a great basketball player who acknowledged having contracted this as a result of his promiscuous sexual activity. Because he was a big fan of the game and now felt "cheated" that one of the best players of all time had to end his career (and the speaker's enjoyment) prematurely. As a result of surfacing all these issues, the speaker was able to acknowledge his own feelings and inferences as well as recognize how the initial statement he made could have unintended effects. In addition, the people who took offense at these remarks came to recognize that they took offense based on their assumptions about what the speaker really thought and felt. They too had learned to be more open and accurate in their communications.

Uninformed opinions find their way into many classes, but none as likely as in the discussion of perceptual biases. In one such discussion in an organizational behavior class, a student used as an example the "fact" that police are "always stopping people in red cars for speeding." Because there recently had been a news report that speeding tickets are issued to red cars more than those of any other color, the instructor (who previously owned a red car and received no speeding tickets while driving it) thought this comment provided a good opportunity to practice the structural framework of analysis. The student was questioned about the data on which she had made this assertion (she had not heard the latest news report). When questioned, she revealed that she had seen three red cars pulled over on the highway on a recent journey. She also indicated that she owned a red car and could not afford a speeding ticket. Because the student had trouble seeing the link

between her "facts" and the statement she actually made, the instructor shared her own experience of red car ownership and her lack of a speeding citation. She then modeled a statement that seemed more in line with the student's "data" (both internal and external): "Based on my recent experience, I am afraid that I will be pulled over for speeding because I drive a red car. Since I am currently broke, I fear the consequences of not being able to pay for the ticket and the possibility that my insurance costs will rise."

An example of a random guess is drawn from a class on linear programming. In this case, a student incorrectly guessed that the phrase "at least twice as much of Ore 3 had to be used as Ore 1" should be written as $X_3 \geq {}^2X_1$, where X_1 is the amount of Ore 1 used and X_3 is the amount of Ore 3 used. Instead of immediately correcting the response, questioning the student yielded a much deeper learning experience. In response to the general query "What led you to that conclusion?" the student shrugged and answered "It just seemed right." The next question focused on the student's awareness of a process of thinking. He could not reveal one. Using the refocusing approach, the instructor asked him how he felt when pressured to give an answer. He replied that he felt a sense of time urgency and that he must rush with a reply—right or wrong. After this, the instructor asked a data-based question: "If one used 10 pounds of Ore 1, how much of Ore 3 is needed?" The student immediately replied "20 pounds." The instructor then asked the student how he came to this answer. "I multiplied 10 by 2," he responded. The instructor then suggested that he connect the 10 with what it represented in general, that is, the amount of Ore 1. After doing so, the student developed the correct answer, $X_3 \geq 2X_1$. It is interesting that after identifying the correct answer, the student recalled his internal thinking process. He had visualized two cylinders—one of Ore 3 that was twice as high as the other (Ore 1). His private association was to place the two in juxtaposition with the Ore 3 to reflect the picture in his mind. All of this was tacit until he was questioned.

These examples only begin to scratch the surface of the learning possibilities attendant in the dual-focus classroom. It is the premise of this article that as instructors we can vastly improve the learning in our classrooms by focusing not solely on the content but also on the underlying structure of communication. We feel that there is great advantage in doing this because it not only provides a means for improved learning for students but also provides a means of handling disruptive and difficult comments such as groupist remarks, uninformed opinions, and random guesses. By establishing dual-focus classrooms, instructors can legitimately focus on faulty communication patterns and use this as yet another means to enhance learning.

Note

1. We recognize that we are asking the instructor and the student to undertake personal risk in terms of psychological examination and disclosure. We clearly believe that the potential reward—increasingly effective communication—compensates for this risk. We also recognize that the adoption of this approach holds both instructors and students publicly accountable for their comments. It is our belief that this is a highly desirable and, in fact, necessary part of education.

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