Toward Learner-Centered Teaching: An Inductive Approach

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Abstract
Through the past several years, the emphasis in education has shifted from a teacher-centered to a learner-centered approach. Traditional teaching has too often been based on a passive lecture model, dependent on an expert teacher who funnels knowledge into the somewhat retentive minds of students. More current learning theory suggests a different role for teachers—that of facilitators. Based on research about how people learn, this article advocates that teachers use more active, inductive instruction in the classroom and demonstrates a student-centered approach using classroom examples implemented in a required, college-level business communication course.

Keywords
inductive learning, constructivism, learning-centered, communication models, learning community

At the beginning of a semester, we met as a group of business communication instructors to coordinate issues related to the required, freshman-level business communication course. We had formed a rather loose community of practice, meeting a few times each semester to discuss course-related issues and share ideas. On this occasion, the conversation focused on the lack of engagement that several of us had experienced with many of our students. Through the discussion emerged a picture of somewhat lifeless students sitting passively in classrooms, with glazed eyes, some struggling to stay

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awake in dimmed classrooms as an instructor shared key concepts related to business communication using slides that accompanied the required textbook for the course. The following question was asked: “What can we do to change this picture?”

During the remainder of the meeting and over the next several months, we met and explored ideas to promote student learning and reinvigorate the sense of excitement in the classroom that some of us had lost. This article describes changes in teaching practices we as business communication instructors implemented at a medium-sized, Midwestern university over the course of several semesters. Our goal: to reenergize our own experience and our students’ experiences in the classroom, thereby facilitating deeper learning.

At the core of the changes tried, we worked to implement a constructivist approach toward learning:

> Constructivists approaches emphasize learners’ actively constructing their own knowledge rather than passively receiving information transmitted to them from teachers and textbooks. From a constructivist perspective, knowledge cannot simply be given to students: Students must construct their own meanings. (Stage, Muller, Kinzie, & Simmons, 1998, p. 35)

As Bain (2004) posits, “When we encounter new material, we try to comprehend it in terms of something we think we already know” (p. 26). This thinking pushed us into trying better to assess and to build on students’ existing paradigms and mental models, taking what they already knew and inductively moving them to construct new concepts and ideas. An inductive approach starts with observations and experiential data, from which students analyze and generalize and then find ways to apply the conclusions in solving real-world problems (Prince & Felder, 2006). An inductive approach does not mean that teachers never lecture; rather, teachers assess what students know and believe, help question and clarify those beliefs, and then work to facilitate the construction of new knowledge (Bransford, Brown, & Cocking, 1999).

The following examples detail how the community of practice that we formed around teaching business communication applied the principles of constructivism and used inductive approaches to learning to change instructional practices in an introductory business communication course.

**Transforming the Classroom Through an Inductive Approach**

One of the objectives of the business communication course is to help students understand the communication process, including ways to facilitate better communication. A common approach used by many of the instructors includes an introductory lecture at the beginning of the semester (complete with a detailed slide show), which outlines a basic model of communication, depicting how communication occurs and flows. Introducing a communication model is useful in that it depicts how different elements
of the process interact with and are even dependent on each other. As with most communication models, we discuss the idea of a sender, message, and receiver or audience and how communication flows and is sometimes interrupted with what is referred to as noise.

Traditionally the lecture proceeds, adding more sophisticated elements, such as a feedback loop to indicate the transactional nature of communication, encoding and decoding, contextual and channel variables, as well as differences in audience and types of noise. Although the presentation provides the foundation for much of what we then cover through the rest of the course, students seldom seemed to grasp the significance or the intricacies of the model, how different aspects of the model affected communication or miscommunication, and most important, how the model related to them personally.

This introductory lecture, foundational to the course, provided an opportunity to move away from the lecture-based presentation toward more student engagement. Guided by a constructionist and an inductive approach, we began to experiment to find better ways to help students learn the material. We did not happen upon the solution all at once, but different approaches evolved as we looked for better ways to engage students. Building on the notion that students are motivated to learn when they ask the questions or perceive a need to know something (Albanese & Mitchell, 1993), we tried an inductive approach we had come across termed a KWL (Szabo, 2006). Rather than going through the slides as before, which culminated with a sophisticated communication model, students received a copy of the model first, and on the back of the sheet were three columns with the letters K, W, L above the columns, as shown in Figure 1.

Learning theory suggests that the questions students pose are crucial to the process of learning and modifying their mental models. Using questions in the classroom helps learners construct knowledge, index information, and retrieve information (Bain, 2004). KWLs are a means to assess what a student knows and to promote questions regarding what they don’t know. The “K” stands for what a student KNOWS, the “W” for what a student WANTS to know or have questions they have, and the “L” provides an area to capture what a student LEARNS through the course of the activity. KWLs have been successfully used as discussion starters, especially in K12 settings (Carr & Ogle, 1987).

The KWL approach proved more engaging to students, providing opportunities for richer discussion on aspects of communication as depicted in the model. But we still felt that we could more fully engage students in learning. As we brainstormed ways to determine better what students knew and build on that, we realized that by the time students have reached college, they know a great deal about communication and have had considerable experience communicating, whether or not they formally recognize that knowledge. Although the KWL approach is built on what students already know and encourages students to ask questions, the it still imposes a rather deductive, top-down approach. It remains deductive in the sense that the model students start with is provided by the instructors or comes from a required text, reflecting a mental model of communication provided by instructors or textbook authors rather than discovering and building on
student models. Through continued discussion and sharing, we determined to find a way to build more directly on students’ own experiences in a truly inductive way.

The next semester we tried a new approach to introducing the communication process, one that worked equally well in both a 50-minute or a 75-minute session, depending on whether the class met two or three times a week, with typical class sizes between 30 and 35. Without imposing any preconceived model of communication on students,
we began by asking students individually to write in their own words a brief paragraph describing how communication occurs. Table 1 contains excerpts from students’ paragraphs describing communication.

After about 5 minutes of writing, we asked students to visually depict the process that they had verbally described. We told them not to worry about the artistic merit of what they drew—they did not have to be artists. Figures 2 and 3 show examples of the types of models students drew.

After students had written and illustrated their own version of the communication process, we divided the class into groups of four or five and asked students to create a single model of communication based on ideas from individuals in their groups, with a caveat that something from each individual model must be part of the group effort. Through this process, students clarified their own perceptions and understanding of the communication process while having to accommodate the ideas and views of others. They discovered that they did have some definite views about communication, and in the process of creating a collaborative model for the group, they had to further articulate and explain their own notion of what it means to communicate and, in many instances, had to integrate dimensions of another’s view into their own. They learned to accommodate differences in views and experience and in the process gained a richer understanding of the communication process. Figures 4 and 5 show examples of communication models student groups created.

### Table 1. Students’ Preliminary Descriptions of the Communication Process

<table>
<thead>
<tr>
<th>Student</th>
<th>Description of How Communication Works</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>“Communication is a process of sharing thoughts, emotions, and ideas with others. It can be through speech, printed words, or visuals. Sometimes it uses language, and other times it can be made up on the spot, like with nonverbal communication.”</td>
</tr>
<tr>
<td>2</td>
<td>“Communication uses verbal and nonverbal cues to convey some type of message to another person. This may be a hand gesture or a simple one-word response. How communication happens can vary in that it can be between two people face-to-face or with a group of people on a conference call.”</td>
</tr>
<tr>
<td>3</td>
<td>“How does communication happen? It is the transfer of information from one or many parties to another person or persons. It can take many forms and be intentional or sometimes subconscious. It’s conveying a thought or idea in a way that gets a response from another person.”</td>
</tr>
<tr>
<td>4</td>
<td>“Communication relies on comprehension and understanding of a message between two parties. This is how the system works in a perfect world, but in reality there are communication barriers that interfere with the message and the receiver, such barriers as language, noise, emotions (a bad day), or physical (pain or a brick wall).”</td>
</tr>
<tr>
<td>5</td>
<td>“Communication happens when two or more people discuss a subject and one person explains something and the other listens. It requires listening and being part of a discussion and asking questions if you don’t understand. Sometimes a person has no idea what another person is talking about because they don’t know some of the words or they’ve never had the experience themselves.”</td>
</tr>
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We then shared group models with the entire class, comparing and contrasting the different models. After all the group models had been discussed and as part of the model comparison, models from several business communication textbooks were also shown, further comparing differences and finding similarities (see, e.g., Bovee & Thill, 2012, pp. 10-16; Guffey & Loewy, 2013, pp. 7, 10-11; Lehman & Dufrene, 2013, pp. 3-5; Newman & Ober, 2013, pp. 5-7). Issues of not only medium and
message but also new aspects such as culture differences were identified. What resulted were rich, engaging conversations about communication, with students better able to articulate subtleties in communication processes and understanding how decisions they and others made affect the ability or inability to communicate effectively. Starting with the familiar—what they had experience in doing—students clarified what communication was and moved to a more comprehensive view of the topic, exploring subtleties and nuances that often were a part of their own experiences.

The group models also became a reference point for later discussions of related topics throughout the semester. For instance, one model focused on communicating in a speaking situation, including the aspect of nonverbal communication. This model then provided a segue into effective oral communication and learning models covered...
later in the semester. Most of the models contained focus on the receiver (sometimes called audience or consumer). This provided the genesis of a discussion on rhetorical principles of writings, discussing how the intended audience can affect what someone chooses to say and how they say it, including the communication medium best suited for a particular message. The discussion of audience and purpose also became central to units on various standard communication types (good news, bad news, and persuasive), as well as the preliminary work done in creating effective resumes and letters of application suited to a particular audience and purpose.

As a follow-up to communication model exercise, students were asked to write a short reflective paragraph about what they had learned, further reinforcing concepts covered and identifying changes that resulted in their own views and perceptions of communication. Table 2 provides a sampling of the reflections and the awareness gained.

Such observations clearly show that students’ own initial thoughts about communication changed or expanded as they worked to understand how others thought. In most
I basically see communication as the sending and receiving of messages between two people that must act as both the listener and speaker. The two main communication forms that I am familiar with are verbal and nonverbal. Our group model was different from mine because we also included one-way and two-way communication, which I haven’t given much thought to. To have better communication I think that I personally need to be more aware of the gender and cultural differences that may be present. Also, as shown in a couple of examples shown today, I need to be cautious of the fact that what I am trying to communicate may be interpreted differently than I intended it be—which just goes to show how important it is to provide feedback and make sure that everyone is on the same page.

When we drew our models of communication in class, I immediately thought of speaking back and forth. I then thought of how the communicator has to understand their listener, or receptor, in order to communicate efficiently. I drew stick figures talking to each other. However when my group got together and discussed our images, I saw that they all drew some sort of diagram representing the communication process. They had shown all parts of communication while I only showed a few. In our group model we represented the diagrams that they drew but added stick figures to also represent my model. When communicating with others I need to be aware of how I react to things.

My original idea of communication dealt with the formulation of ideas or thoughts that were to be exchanged between two or more people. I noted that communication breakdowns do occur but failed to fully explain them or account for them in my communication diagram. However, I was unaware of the possible different types of noise and that noise could be interpreted as anything that disrupts communication. My description also failed to include feedback and the true circular nature of communication, a concept my group tried to demonstrate.

I have begun to understand through our discussions in class just how complex and important communication is, in the business world and everywhere else. My group model was different than my individual model in several different ways. In my own model, I had only considered verbal communication. Our group model incorporated all the different kinds of communication there is, like verbal, nonverbal, and electronic.

One thing that I’ve learned about the communication process is how many different types of obstacles there are. For example, if you’re trying to communicate with someone not face-to-face there can be many factors that affect the quality of communication that you’re not aware of. It’s hard to always know what is going on mentally and emotionally with other people and that can often be the biggest distraction that impedes communication. In my model of communication I mainly focused on cultural differences and body language, but our group model included different aspects of communication such as teamwork, initial thought process, and common interests. For me, I need to focus on the communication differences among people in order to improve understanding.

I thought it was very interesting to compare my own model to others in my group and also my group model compared with the other groups. My model was fairly simple, and once we combined aspects from each member, we had a solid model. It focused on each person being the speaker and receiver, instead of just one person speaking and the other listening. Also, we incorporated obstacles into our model. I learned there will always be obstacles when there is communication.
instances, students indicated that their view of communication had been enhanced through the activity. These basic elements of communication became shared touch points to many communication issues covered through the semester, from oral and written assignments to employment communication to intercultural and global communication.

Conclusion

Through the rest of the semester and subsequent ones, we continued to look for more inductive, active approaches in class work and assignments. We worked to apply the principles underlying this one assignment to other topics as well. For instance, in talking about oral presentations, we had students brainstorm the characteristics of good speeches and bad speeches from their own experience. From their experiences, students helped to create a rubric used in evaluating the speeches the students gave in class. Additionally, the faculty group worked to implement other inductive approaches, such as inquiry and problem-based assignments. Cases and scenarios placed communication in the context of real-world issues, often building on prior student experience. These inductive approaches—typified by the introduction to communication activities described—were guided by tenants of effective instruction articulated by Biggs (1996) and other proponents of constructivism:

- Begin instruction with content and experiences familiar to students.
- Present material in a manner that requires students’ cognitive models shift gradually not abruptly.
- Provide instruction to fill gaps and help make connections for students.
- Allow students opportunities to work in small groups, teaching and learning from one another.

Building on these principles, the introductory lesson on the communication process underscores many key elements necessary to move toward a learner-centered classroom. First, the process asked students to articulate what they knew and thought about communication, and in the process, instructors assessed students’ understanding of the topic. Rather than imposing a single view on students, we allowed them to inductively discover what they knew and did not know. The approach required students to reflect metacognitively about communication, first in writing and then by visually depicting the process. Then, students interacted with peers, comparing and contrasting their own notion of communication while working collaboratively to reach a shared vision. Such collaboration has been found to be a significant catalyst to learning (Nevin, Thousand, & Villa, 2009; Shull, 2005; Yazici, 2005).

The process, however, did not diminish the role of the instructor and the content knowledge and expertise he or she possessed. Students saw discrepancies between their own models and those of others in the class, as well as models distributed by the instructor. Questions and discussion about the differences and similarities pushed
students to come to refine their understanding of communication processes, providing a shared reference point for further discussion and a foundation to build on during the semester. The approach reflects subtle shifts in attitudes toward students and toward learning, building on student understanding and experience rather than just imposing a single view on the class.

A single change such as the one described in introducing the communication process does not in itself make a learner-centered class environment. But the attitude and practices demonstrated show a significant shift in the role of the instructor from an all-wise source of information to a facilitator of learning—a shift critical to a learner-centered class (Weimer, 2002). As important as teacher-student interactions are, student-student and student-information relationships can be equally important. The shift in focus to active and reflective learning helps students create a learning community where both students and the instructor are empowered to question and to make meaning, and all are invigorated in this phenomenon we call learning.

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