

Being Ambiguous: Problem Solving through Teaching Ambiguity in IMC Classrooms

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Abstract

Millennial students enter college with what they claim are quality critical thinking skills, but many are confused by ambiguity. In IMC or Strategic Communications, ambiguity is part of the business. This paper looks at specific issues that developed in an Introduction to IMC classroom, including student backlash when first confronted with vague or “messy” problems, and provides suggestions for teaching ambiguity.

Introduction

In high school classes, the cornerstone of teaching is the 4 Cs: Critical thinking, Collaboration, Creative thinking and Communication, all the elements found in a journalism classroom (SPJ, 2015). But when millennial students move from high school to college, they often find themselves confronted with something not necessarily taught in their high school’s critical thinking situations: dealing with ambiguity. For the purposes of the monitored class involved and this paper, ambiguity means uncertainty or doubtfulness of meaning or intention. Anecdotal evidence from various professors (interviews and published articles) support the idea that students are often confused when presented with any inconsistent or vague information, and it begs the question of how much critical thinking students employ in high school settings.

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Why is it important for the students to understand ambiguity? Research shows both the journalism and Strategic Communications (Public Relations/Advertising) industries depend on strategic, critical thinking; but there have been complaints from both industries since 2000 that newly-hired employees do not have the flexibility and critical thinking skills necessary (Huber, 2003).

In part, this may be because of the No Child Left Behind legislation signed into law by President George W. Bush and the intensified standardized testing initiated under the President Barack Obama Administration, which anecdotal evidence suggests encourages secondary teachers to “teach the test” rather than teach critical and creative thinking skills (Howard, Tang & Austin, 2015).

Recently, two University of Idaho professors in the School of Journalism and Mass Media centered their teaching of an Introduction to IMC/Strategic Communications class (JAMM 204) on critical thinking, and were astounded by the student backlash when the idea of ambiguity was introduced. This came after students (primarily sophomores and juniors) claimed during the second week of class they are able to use critical thinking skills and they are “well accustomed” to the idea of dealing with ambiguity. However, when confronted with a situation with the smallest bit of vagueness, the students complained loudly, accusing the professors of wanting the students to be mind-readers rather than use their own critical thinking skills to work through the issue.

This paper reviews what happened and proposes suggestions for easing millennial students into using ambiguity as part of their critical thinking process. These suggestions include adding specific critical thinking sections to class discussions and using alternative thinking methods to help students better understand how to grapple with ambiguity in addressing problems.

Teaching Ambiguity

Robert M. Eisinger (2011) said while concrete, black-and-white situations are tidy and comforting in a classroom, he also described such situations as "... banal, boring, conventional, and unrealistic." While students are "drowning in data," Eisinger (2011) noted they need to figure out how to digest the facts they are consuming:

Facts are important, and should not be dismissed as irrelevant. But teaching only facts, especially in an age when they are so easily retrievable, without the complex contexts of the unknown, may leave our students more disengaged from and uninterested in the world around us. Teaching ambiguity may or may not make our students more civically engaged, or more likely to score higher on standardized tests.

But we live in ambiguous times. Today's and tomorrow's students should be prepared to engage in a world where societal problems do not necessarily have definitive solutions. Economic insecurity, wars in remote places and accelerated technological changes make us yearn for certainty. Perhaps our best response to the fluidity that surrounds us is to teach our students what ambiguity is, and how to appreciate it.

Grades K-12 and post-secondary institutions rarely teach ambiguity, Eisinger (2011) explained, which means students cannot truly understand and accept the abstract and ambiguous. Without this knowledge, he said, how can students learn to appreciate complexity in government, literature, the fine arts, and the sciences?

While higher education can rarely be faulted in the ability to teach analytical thinking skills, Huber (2003) said creative critical thinking receives “short shrift” in the college classroom, which can lead to issues with students learning to accept the higher levels of ambiguity or uncertainty in the work place, especially in the strategic communications field, which can prevent students from thinking completely through critical or confusing situations. “Teaching students to develop a tolerance for ambiguity is good for business in this country and around the world,” Huber (2003) explained, noting further that many new employees are “unfit” for business because they cannot tolerate ambiguity or “messy” problems.

In his review of teaching ambiguity using *The Seven Types of Ambiguity* (1930), University of Virginia professor Herbert F. Tucker (2003) explained there are two basic types of ambiguity: Irrational imaginative hedonism (dealing with the magic of language), and intellectual hunger of meaning. Although he focuses on ambiguity in poetry, he makes a striking comment for journalism, public relations, strategic communications and other communications forms when he said one cannot teach just one form of ambiguity: “... In the end – no matter where the interpretation draws the line and rests its case – for the option-haunted critical imagination *the other is always there*,” Tucker (2003) said.

Because the activity of learning occurs at an intersection of the teaching-learning-environment, James Forest (1997) said part of the issue is the learner’s perception. Citing the 1986 Cohen and March work “Leadership and Ambiguity,” Forest (1997) described the “garbage can process” where: ...problems, solutions, and participants move from one choice opportunity to another in such a way that the nature of the choice, the time it takes, and the problems it solves all depend on a relatively complicated intermeshing of the mix of choices available at any one time, the mix of problems that have access to the organization, the mix of solutions looking for the problem, and the outside demands of the decision makers.

Specifically relating this to the educational process, Forest (1997) said students often find the ambiguity and a solution in a “flashpoint” when they experience the cognitive development or learning moment by actually making the decision. Because learning is an individual experience, Forest (1997) explains, no two individuals have the exact same perception or learning moment at the same time. He adds there is also an additional element faculty must consider: the element of chance in which the flashpoint will occur as a learning moment in the classroom.

Just as the “garbage can process” does not do a particularly good job of resolving problems, Forest (1997) said neither does the idea of “learning moments,” which occur with random frequency and do an especially good job of improving student learning. That is why it is important to pay attention to Eisinger (2011) in his comments about teaching students to think about tensions as valuable and fluid. By stressing the value of thinking through tensions or “messy” problems, Eisinger said, it increases the opportunity for students’ creative juices to flow all while helping them to engage in and tackle complex problems.

Huber (2003) said one of the greatest problems immediately facing students on graduation is the fact they cannot process problem-solving adequately. She specifically cited the 1996 American Council on Education report, which stated students lack the critical skills of listening, communication, defining problems, leveraging the skills of others in teams, and functioning effectively in an ambiguous, complex, and rapidly changing environment. In other words, she said they cannot conduct critical thinking while facing an ambiguous situation, the sort of situations common to most businesses.

Teaching Tolerance for Ambiguity

Huber (2003) suggests the best framework for developing a tolerance for ambiguity involves students discovering how to operate effectively in a business situation while learning how to gather and analyze data, develop creative ideas and solutions, and find practical applications for the new discoveries.

The professors for the Introduction to IMC/Strategic Communications (JAMM 204) course adopted this philosophy, but began the discussion talking about how and why people think critically, the four cognitive stages of thinking described by Jean Piaget (Erneling, 2014), plus the addition of dialectical reasoning by Reigel (Peng & Nisbett, 2000). The professors agree with Huber that coaching is the preferred method to get millennial students to get outside their comfort zone while learning, but they must first begin to think about the process of thinking.

An early class lecture on critical thinking used Piaget's four stages of thinking as the groundwork and additional information about K.F. Reigel's dialectical thinking. The class then participated in a brief in-class exercise using Michalko's (2006) SCAMPER (Substitute something, Combine with something else, Adapt something to it, Modify or Magnify, Put it to some other use, Eliminate something, and Reverse or Re-arrange), a method of critical thinking in which participants use a system of questions to work through a problem. Michalko (2006) said the system prods imagination while asking questions such as "How can ...?", "What else ...?" and "How else ...?" In class, the students were successful in working through the problem, which used a breaking news story. Other types of critical thinking for problem-solving discussed in the class included brainstorming using post-it notes, mind-mapping or following random thoughts about a situation, and walking through something in their heads, considering the likely different scenarios.

During this discussion, the students all said they understand critical and creative thinking and vocally insisted they understand and can tolerate ambiguity, a key element discussed in the SCAMPER scenario. About half of the students by way of facial expression or other body language seemed to dismiss the professor's discussion on ambiguity because, as one student said, "We get that stuff. We know not everything is black and white."

A week later, the class was given their first press release assignment, a release from the university's firefighting school explaining 15 students and two professors were headed to fight a fire in central Washington state. The assignment was made during fire season when forest fires were burning in central Washington. Nestled in the information was a line about Denis Leary, actor and firefighting advocate/founder of the Leary Firefighters Foundation charity, joining the UI firefighting team.

The class was cautioned to research the elements, which were jumbled, not in order of news or importance. Part of the assignment was to see if the students would find the news value from the clutter. After grading, the professors found about a quarter of the class said they did not understand who the client was for the assignment and slightly more than half of the class missed the news value. During the next class session, all of the students claimed the information was too ambiguous.

In a class discussion about the assignment, the criticism from the students was harsh, with one student angrily asserting the professors wanted him to become a "mind reader" in order to understand the information. The professors quickly turned the discussion back to ambiguity in critical thinking. Since most of the class had previously expressed an interest in sports, one professor used a sports analogy regarding performance-enhancing drugs and their use by an athlete in sport:

The professor asked the students if it was acceptable for an average player to begin using performance-enhancing drugs to increase his/her performance. The class harshly responded, "No." The professor probed further by asking the class why taking performance enhancing drugs was unacceptable. The majority of the answers argued the athlete would be cheating and violating a rule. Some students stated that the athlete could also get in trouble by violating the performance-enhancing drug policy, which specifically states that such drugs are not permitted.

The professor then led the class through a scenario in which teammates and competitors began to notice that they were being outperformed by an athlete's newly found enhanced ability due to performance-enhancing drugs; yet, both groups knew they had been more skilled than this athlete previously. As a result of the athlete's enhanced ability, he or she began to see more monetary value and accolades as a result of increased performance.

Further, the athletes who were not taking performance-enhancing drugs began to desire some of the newfound glory being experienced by the athlete using performance-enhancing drugs. In addition, some of the athlete's teammates began to worry that they may be cut from the team because of the increased level of the athlete's ability that correlated with the use of performance-enhancing drugs.

The professor explained to the students that the athlete using performance-enhancing drugs had put pressure on the rest of the athletes to use because they had to choose if they wanted to try and out-perform this athlete to possibly make more money, or just keep their job. At the conclusion of the discussion, the professor asked the students again if they could make an acceptable case as to why an athlete would choose to use performance-enhancing drugs.

Seizing upon the doubt now expressed by the class, the professors walked the class through the idea of ambiguity again – once again showing them that many issues are not black and white, but multiple shades of gray they must wade through to find answers. The use of different processes for critically thinking through problems provides helpful tools in student learning.

The most important feature of bringing ambiguity into a lesson is that the professor(s) never tells the answer or hints to a solution the class may agree upon. It is crucial that the professor avoid providing the answer or causing the students to contemplate that there is only one acceptable answer (Stoll, 2001). The teacher must wait for the answer to come from the student(s). This requires a great deal of patience on the part of the professor.

The notion behind challenging the students with ambiguity is to create openness for differing points of view. The teaching behaviors needed include being patient as the professors wait for the response(s), providing an aura of acceptance for what a student says, reinforcing with affirmative verbal and nonverbal behaviors such as head nodding, exhibiting a relaxed manner, and using a conversational style (Stoll, 2001).

Stoll also suggests that the climate must foster a willingness to speak up and to risk voicing solutions, a climate with a feeling of security among the students in which they become less and less afraid of responding. It must be remembered that all problems and issues dealing with ambiguity have more than one appropriate answer. Often to create ambiguity, discussions must be left open-ended. This provides incentive for further reflection outside of the classroom.

It is also important to remember that when pushing ambiguity on the class, the professors have to listen, be open, and argue, but without falling into temperamental debate. Stoll (2001) states that the role of the professors is to question, probe, and suggest alternative perspectives.

In addition, Stoll claims that this procedure leads and assists the students to experience cognitive dissonance, forcing the student to wrestle with the problem/issue—to reflect, to analyze, to evaluate, to provide reasons, to search for alternatives, etc. Nonetheless, not all professors are able to use this approach. Some may find it difficult not to be the focus of the process. Others may be unable to move away from an information-centered approach.

The second press release, which was optional and for practice/extra credit, dealt with a local art gallery joining forces with the university art gallery to increase art awareness and sales for both groups. The potential for ambiguity was the fact there were two separate art galleries. Which one was more important? The 60 percent of the class who chose to do the assignment showed marked progress in accepting ambiguity.

Although some students made the university the client when it was fairly clear the real client was the independent art gallery -- the primary person interviewed was the owner of the independent gallery -- the students seemed to accept the idea of duality and ambiguity, although they did verbally note they did not like it. In this sense, the students are not climbing ladders of knowledge, but as Howard, Tang and Austin (2015) said, "riding waves" of knowledge, building confidence as they increase their own critical thinking and creativity.

The next assignment asked students to produce an advertisement that concerned the recruitment of high school students to the university. The students needed to use the tagline, "Life is calling" in their advertisements, and they were allowed to use video, print or radio. For instance, the assignment could be a TV commercial uploaded to YouTube, a magazine ad made with Photoshop, In Design or a free imaging program like Gimp, or a radio ad made with Garageband. The notion behind this assignment was to get students thinking about why they chose to attend the university.

In addition, since being enrolled in the current university, the students were asked to explain what they like about their experience? How are they going to sell their positive experiences to potential attendees? What medium will be most effective in this advertisement? They were not provided specifics. Rather, they had to choose which platform would be the best vehicle for the advertisement, and what experiences would be the most effective for recruiting high school students to the university.

One potential for ambiguity stemmed from the notion the students could be conflicted as to why they selected the university or some potential conflict around the educational process and what it means to them as individuals, making it difficult for them to promote the school because of their own biases or feelings. This assignment grew from declining University enrollment over the past several years. Students were asked to consider these specifics when producing their advertisements: The University wants people to know that it offers a great education at a great price. There are convenient locations around the state. Several majors are available. Students can earn a diploma in less than four years.

In addition to the previous assignments, the professors challenged students with ambiguity through the analysis of a company's social strategy. Students were required to research and analyze a company or brand's use of social media. In 5 to 7 double-spaced pages, students drafted a polished report that demonstrated their ability to understand the use of social media for the following purposes: Raising awareness, influencing desire, encouraging trial, facilitating purchase, creating loyalty, spreading information, and enhancing a brand. To accomplish this assignment, students needed to analyze the brand or business's use of social media by examining their presence on the following social media platforms: Blogs, Facebook, Twitter, Instagram, Pinterest, YouTube, Tumblr and Snap Chat. The professors explained that the best papers would be factual and analytical, and that they should include the following sections:

1. **Introduction:** Introduce the company and what it is that they do and why social media is important to their business.

2. **Overall summary of social media use and purpose:** Briefly summarize the company's history with social media and current use of social media along with the overall strategic focus.

3. **Use of each listed tool (6):** List how each tool is used; provide examples; infer the primary purpose.

4. **Assessment and recommendations:** Assess overall social media use. Make at least three recommendations based upon their assessment and research.

5. **References:** Demonstrate they used appropriate materials on which to base their paper.

Here, the ambiguity came in the form of understanding the company's mission statement and social strategy. Though there were more guidelines for this assignment, some students still struggled in certain areas: specifically, in the assessment and recommendation segment.

The notion of a social media strategy, and how a company utilizes it, was not novel concepts. However, providing the next steps describing how a company could improve, took more nudging from the professors than was originally planned.

The positive -- this discussion happened during the drafting process of the project. Specifically, the professors advised students to do competitor analyses of social media use, and to make inferences concerning their research findings. Once the students began researching competitors, the assessment and recommendation segment became easier to comprehend. At the conclusion of the assignment, the professors revisited some of the struggles the students encountered. From the discussion, the professors explained that understanding how to research, and what to research, are vital elements to problem solving. The professors concluded the discussion by stating that if students can understand the research process, dealing with ambiguity becomes less daunting.

In their final assignment, the students were challenged to create social media postings for the School of Journalism and Mass Media's annual Oppenheimer Ethics Symposium, held every February. The students were given a memorandum from the symposium director explaining the topic -- race in the 2016 presidential election -- and providing information about the speaker, Pulitzer Prize winning columnist Leonard Pitts, Jr.

The students were encouraged to provide either three tweets or two posts for Facebook, Instagram, SnapChat, or Vine. Students were told to create the posts, capture the images in screen shots, and provide the screen shot as the assignment. Students who created videos were asked to embed the videos or provide the proper link.

As an additional incentive, for quality work, extra credit points were awarded to students who crafted especially good posts that would be used by the symposium (the symposium director selected five outstanding posts from a blind showing of the student's work). In this final assignment, there seemed to be less confusion and the students were better able to deal with any ambiguity, which was primarily a bit of confusion in that they were asked to craft the social media in November although the work might not be used until February and why Pitts might be a draw to an audience outside the School of Journalism and Mass Media.

More students asked the professors questions and many came to their own correct conclusions concerning the ambiguous or "messy" parts of making decisions in the assignment. Overall, the projects were far more creative than similar assignments for other classes in the past and the students seemed to have more fun creating the social media.

Throughout the semester, the students "rode waves" of practical application knowledge rather than build on a traditional educational pedagogy or the more modern "learning moments." Coaching students through ambiguous issues was a unique step by the professors and although the students expressed a specific dislike for the issue, the majority was ultimately able to deal with issues that are more complex.

Suggestions for Teaching Ambiguity

Was the process successful? That is still being determined as the student's progress through the rest of the courses in their respective majors. Early responses from the students were mixed.

The course evaluations complained about the amount of ambiguity in the course, but within the first six weeks of the next semester, many students seemed to be doing much better in analyzing data and making independent decisions. It will take another year to see if the process actually worked with the class. Reviewing the student's thinking processes in the capstone classes will be followed with interest by the authors.

What the authors discovered is repeatedly addressing the ideas of conflict, aided by the work of Piaget, Reigel and others, helps students learn about ambiguity in strategic communications. Professors should find ways to consistently weave information about thinking, specifically critical/creative thinking, into lectures and assignments. Starting with the idea of how people learn to think and walking students through the growth process, while not particularly interesting to some students, gives a class the groundwork so they can understand thinking is a continual growth process.

The works do not need to mirror findings of Piaget and Reigel per se, but should address the idea that thinking grows with the individual, encouraging students to become life-long learners. Challenging the students to get past the concrete level and into either formal operations or, even better, dialectical thinking is a challenge many competitive millennial students eventually embrace.

Although some must get past the idea their critical thinking abilities are somewhat lacking at the beginning of a class, the one experience shows millennial students can and do grasp the concepts very quickly. Another suggestion is for professors to use alternative thinking games or tricks to provoke additional critical thinking.

Michael Michalko's "Thinkertoys" (2006) provides 37 different critical thinking exercises ranging from original spin through a variety of linear concepts (including SCAMPER, diagramming and future scenarios), intuitive devices (including relaxation, visualization, and drawings) to advanced brainstorming and raw creativity. Other devices include the website for the Foundation for Critical Thinking (criticalthinking.org) and numerous other books on the subject. Teaching students to use many of these methods can help open their minds to problem-solving methods that work for them as individuals and team projects creating the flashpointForest (1997) described.

Finally, it is suggested professors at least try this method. As is the problem of ambiguity itself, this is not easy and it can become quite messy, especially if students are resistant. However, the reward of seeing students grow in the thought process, the acceptance that things are not always black and white, is a tremendous reward.

Vital to the overall process is that the professor(s) never tells the answer or hints to a solution they may agree upon, allow the students the opportunity to wade through the process on their own. Also, as stated earlier, professors must be patient and wait for the responses while providing a safe haven for people to express wrong or inaccurate/off-base answers, all while reinforcing with affirmative verbal and nonverbal behaviors such as head nodding, exhibiting a relaxed manner, and using a conversational style.

In this safe haven, students must know it is all right for them to speak their minds and the overall climate must foster willingness for students to risk suggesting solutions with a feeling of security so they feel less and less afraid to respond, even in a large class. Faculty must stress there is often more than one answer, and the faculty must be open to hearing and exploring alternative solutions provided by students.

It is vitally important that professors listen, be open, and argue, but always in a respectful manner. This process does take patience and a willingness to find new ways to repeatedly explain the process. But, if the goal is to prepare students for the workforce, this is ultimately a rewarding process for professors and students.

Conclusions:

In the Introduction to IMC/Strategic Communications class, the two professors were shocked at not only the lack of students' abilities to deal with ambiguity, but also at the anger students displayed when challenged to analyze "messy" problems. Dealing with ambiguity is critical in the IMC/Strategic Communications profession and it is essential students learn how to deal with the process before becoming professionals. This means it is incumbent on professors to give students the tools necessary so students can learn to adapt with changing situations as they grow in their careers.

During the course of their careers, students will be expected to ride seven or eight different waves of knowledge (Howard, Tang & Austin, 2015). By coaching a tolerance for ambiguity early in the strategic communications programs, they can begin building those waves and incorporating the Knowledge, while also improving critical and creative thinking skills that embrace a tolerance for ambiguity through their senior capstone projects. This will make them more marketable to the business world because of their ability to problem solve even the messiest of problems while also being able to at least understand gathering and analyzing data while developing creative ideas and solutions, all while accepting at least a tolerance for ambiguity.

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