

Globalization And The Cultural Impact On Technical Communication

Tiffany E. Price

East Carolina University, USA

Mary-Lynn Chambers

Elizabeth City State University, USA

Abstract

Technical communication in a multi-cultural online classroom requires an important awareness when the instructor assumes a Western approach to the instructional experience. This paper explores how an intercultural classroom is changing, and how instructors are called to meet the needs of the ever-evolving technical communication field while preparing students of all national origins for the global work place. Through addressing the current advancements that are occurring in the technical communication field, suggestions are provided for adequate textbook selections that will ensure all students are capable of learning regardless of national origin, race, or preferred language, and recommendations are offered regarding instructor pedagogical adjustments that will further enable learning in an intercultural classroom. In the 21st century, many advancements are occurring in the technical communication field, and students of all national origins, race, and language preferences need to be able to connect with an instructor from the West who is wanting to prepare the students for the technical communication work field, post-graduation.

Keywords: Intercultural classroom; technical communication; pedagogy; culture

Introduction

Technology has thrown open the academic doors to new learning strategies that will positively impact the global communication experience. More specifically, the technical communications classroom celebrates the role of technology and the best practices involved in communicating effectively through culturally sensitive design and implementation. Our global mandate presupposes the instructional acceptance of an intercultural focus that includes both the writers as well as the readers of the documents. However, instructors who teach in a technical communications program need

to embrace the potential multi-cultural representation in their class as well as the varied cultures potentially part of the cliental in the global workplace. Once the potential for a multi-cultural dynamic is understood, it is vital that the online instructor consider the necessary adjustments to be made to their technical communications (TC) pedagogy in order to confidently secure a productive multi-cultural learning environment for the students.

An intercultural classroom is one comprised of students who differ according to race, national origin, and language preference. Targeting all students in this multi-cultural classroom involves the assurance that every student, no matter their race, national origin, or language preference, is capable of learning about technical communication at a level that will prepare them for the future of TC in the global workplace. Communicating or teaching on a level where all students in the classroom can understand and glean from the teaching can be seen as adequately meeting the needs of an intercultural classroom in this direct context, especially when considering necessary pedagogical adjustments that have to be a part of a culturally sensitive technical communication classroom. Thus, with a multi-cultural lens in place, there needs to be an active critical examination that takes place resulting in the implementation of measures that should balance an instructor's approach to instruction resulting in the appropriate preparation of the students for the technical communication workplace. While examining the importance for national and international students to be prepared for the future of technical communication, instructors in a technical communication program should consider the varied communication styles that are culturally based, acknowledge the advancements that are happening within technical communication, and make pedagogical adjustments to meet the needs of an intercultural technical communication classroom.

I.

Multi-Cultural Technical Communication Classroom

The formation of identity is pertinent when considering the communication styles of varied ethnicities who are potentially part of a technical communications class. Davis (2000), in his book on identity, explains that identity is "situate[ed] amid competing cultural discourses and social practices, each of which tends to assert claims to priority" (p. 2). For the ethnic student, their cultural discourse is developed outside of the classroom in their own community. This formative development has a continual impact on the way in which a student assimilates information and then disseminates that information. This is true for the student, but it is also true for the recipient of information who is outside the classroom and in the global workplace.

In order for the educator to develop a rhetorical learning environment for all students, their knowledge base must include the subject matter as well as the most effective way to communicate the information to their students. A rhetorically compelling pedagogy for a multi-ethnic classroom, means educators need to discover the ethnic make-up of their students, then they must determine the best way to teach the varied ethnicities that are represented. It is important for teachers at every level to embrace their need for explicit knowledge concerning the multi-cultural classroom in general, to understand the impact the culture has on the students' identities, and to incorporate the communication/learning styles that are specifically connected with each ethnicity (Gay, 2002).

The communication styles associated with each ethnicity are intrinsically tied to their method of learning; thus, the reference to learning styles and communication styles is often used interchangeably, and that will be the case within this article. A particular learning style is a commonly shared student characteristic, rather than associated with the student's intellectual ability. The student's learning/communication style reflects how a student engages in the process of learning. The definition of learning styles provided by More (1987) is "the characteristic or usual strategies of acquiring knowledge, skills and understanding by an individual" (n.p.). A student can approach learning either from a global or an analytical perspective, verbal or nonverbal, and field independent or field dependent. These three categories help describe the manner in which a student codes, organizes, and process information (More, 1987). The category that will receive central focus in this article is the category that relates to the dependency of the student during the learning process. Many of our minority students who have been raised in a setting that prioritizes their cultural heritage and language/dialect will often be identified as field dependent learners. This type of learner needs cues and structure that come from an external source like their environment. They make the learning process contingent on their experiences, and they prefer casual learning environments because they are more socially oriented. Finally, this group of students depends heavily on external stimuli to motivate them rather than on text-based communication that does not result in improved agency (Wooldridge & Haines-Bartolf, 2006; Mestre, 2008). The first step in developing a culturally sensitive pedagogy is to examine the learning styles typically associated with certain ethnicities. Although there are many potential people groups that make up a multi-cultural classroom, this article will demonstrate the multi-cultural approach through the examination of varied ethnicities in the United States. The same principles can be applied to any people group upon examination, but within this research we will consider more closely the European American, Asian American, African

American, Native American, and Hispanic American students, and the typical way in which they learn in a classroom setting.

European American Learners

The history of America is introduced in grade school. Then in middle school, the students gain further insight into our history that began with European immigrants in search of adventure, land, wealth, and eventual independence. This strong Eurocentric base quickly established the European American approach to learning and communication within academia. That foundation has remained firmly in place with Standard English as the accepted academic language, and the Eurocentric model for learning as the default model for most American classrooms, including the technical communication class. Within this developed model, European Americans value a learning style that prioritizes individual development, self-reliance, and gender equality (Wolfe, Yang, Wong, and Atkinson, 2001). Furthermore, these students are linear learners who are able to isolate facts as needed (Mestre, 2008), value precise communication, and are inclined toward inferred meaning. Also, Eurocentric learners embrace an individualistic approach to education, and they emphasize tasks over relationships (Park and Kim, 2008). These qualities are also the qualities of a field independent learner who is an independent, analytical, task oriented, linear learner (Wooldridge & Haimes-Bartolf, 2006).

Asian American Learners

Although there are many people groups who fall into the category of Asian American, for this study the Chinese American is the student being considered. The traditional values exemplified in Asian behavior, as seen in the mid-twentieth century, indicate their propensity to adopt a more Eurocentric approach to life and learning. Therefore, Asian Americans are typically identified as analytical learners (Zhenhui, 2001). Also, they use an indirect communication style that involves implicit communication of information where the receiver infers the meaning of an indirect message from mutually shared information (Searle, 1969). This people group typically has higher emotional self-control, and they are more conservative in expressing their emotions. Also, they derive their information from the context in which it is given (Park & Kim, 2008). Park and Kim (2008) credit Confucianism for the Asian's focus on context because Confucianism prioritizes relational harmony within communication rather than the outcomes. Respectability and collectivism are two more qualities of the Asian community. Respectability or "face" has to do with the image they portray and collectivism indicates the value of the group placed over the individual (Park & Kim, 2008). Kim, Atkinson, and Yang's (1999) research

indicates that Asian Americans also value collectivism, along with conformity to norms, emotional self-control, family recognition through achievement, and humility. These are important general earmarks of the people within the Asian community, and these qualities have made it easy for this population to assimilate into European American society, which promotes an overall independent approach to learning.

African American Learners

When considering the learning and communication styles of particular people groups in America, there are distinguishing factors with each example, including African American students who communicate through the use of the vernacular. Specifically, the communication distinctives tied to this type of student's formative use of the vernacular has social as well as educational implications; and more specifically, it has a direct impact on their learning style in the classroom (Chambers, 2016). One of the communication distinctives of African American Vernacular English is the reliance on nonverbal cues. Lustig and Koester (1999) acknowledge that nonverbal communication complements or substitutes for verbal messages; thus, these nonverbal cues are needed as part of the perceptual stimulation for African American students (Gay, 2000), both in a social setting and within the learning environment. Nonverbal cues heighten the visual senses, and tonal semantics, another characteristic of African American vernacular communication, perceptually stimulate the vernacular speaking learners. Also, the call-response dynamic associated with vernacular speaking African Americans naturally fits into the social approach to learning that is a desired communication strategy with this people group. Thus, African American students are people oriented, global, field dependent learners who are proficient in verbal and non-verbal communication. These students also prefer oral modalities for learning and communicating, and rely on situation context for interpreting meaning (Burgess, 1996; Griggs & Dunn, 1996). Therefore, these people oriented students are looking for teacher interaction to assist the learning process rather than approaching their work independently. Also, their organizational consideration is global rather than analytical, which is confirmed in their field dependent approach to learning.

Native American Learners

There are around 175 different Native American languages spoken in the United States today. Around eleven percent of these languages are being taught in the traditional manner through parents or grandparents in the home setting. This bilingual group of students who are formally taught or informally exposed to the native language spoken in the home, identify their

native tongue as their first language and Standard English as their second language (Krauss, 1996). It is this people group who are typically field dependent learners based on their culturally based learning.

Within the Native American community, impressions are formed through careful scrutiny of faces. This scrutiny naturally leads to the imitation of behavior (Swisher and Deyhle, 1987). This observational approach is carried into the classroom, where increased cognitive ability in the Native American students occurs through visual processing, especially when imagery is included. It is because there is a visual aspect connected with the traditional verbal story telling that enables the process to be rhetorically effective for the bilingual Native American student. In a Native American home, skills are acquired within the family setting, which forms an intimate group, rather than an independent, self-initiated learning setting. During this learning time, humility is an important character quality, so talking about oneself during the learning process is often considered boastful. Traditional Native American family units do not employ the Socratic Method of questioning everything; rather, supervised participation is the primary approach to acquiring skills through the learning process. This process incorporates both verbal and non-verbal components; however, the non-verbal plays a more significant role in the student's cognitive development (More, 1984). Kaulbach (1984) determined through research that "Indian . . . children are most successful in processing visual information and have the most difficulty performing well on tasks saturated with verbal content" (p. 30). This formative development is seen specifically in the student's tendency to watch an activity being performed and then copying the process; it is a watch-then-do approach. Finally, it is important to recognize that the Native American student is a global learner. Therefore, instruction for bilingual Native American students in a technical communication class needs to include a holistic approach with visuals that allows for observation, collaboration, and reflection (Hilberg and Tharp, 2002), all of which are elements within the field dependent learning style.

Hispanic American Learners

Inside the American borders, a population of over two million has been identified as bilingual Hispanics (Garcia, 2010). Students who fall into this category have Spanish spoken in the home and English spoken in the classroom. This people group is the fastest growing minority group in the United States (Fry and Gonzales, 2008); therefore, it is important that we consider the bilingual Hispanic student's learning/communication style because there is a potential that we will have this people group represented in our technical communication classroom. This people group has a strong society connection (Gonyea, 2010), with a specific focus on family

commitment that results in other-directedness. Also, within the Latino culture, there is an emphasis on the cooperation in the attainment of goals (Griggs and Dunn, 1995). Bilingual Hispanic Americans desire cooperative learning opportunities that are suited for field dependent students. Field dependent learners see the big picture and need personal relevance connected to the assignments. Based on the concept of cooperation, it is evident that Hispanic Americans prefer group work (Mestre, 2008), and they are contextual learners (Rivera, 2011) who need practical situations that have societal connections (Gonyea, 2010) offered during the learning process. Furthermore, this group of students' strongest perceptual strength is kinesthetic, and they do require a higher degree of structure (Griggs and Dunn, 1996). Thus, it is apparent that the bilingual Hispanic technical communication student might be categorized as a field dependent learner.

The Eurocentric approach to the technical communication class will be an approach that is traditionally accepted and enacted by professors because most professors are field independent learners. However, as our educational and occupational world becomes more global, it is vital that the instructor consider the implications that culture has on the process and product. Many higher education courses have the potential to be a multi-cultural class where the instructor should design an effective pedagogy that will rhetorically inform the students who are part of the class. Furthermore, these instructors need to keep in mind that once the technical communication student graduates, the skills gained through his or her education will be used in a global economy that is highly multi-cultural; and within these cultures, there will be clients who will approach the dissemination of information from a field independent perspective and others from a field dependent perspective. When the instructor models an approach to communication that takes in all learning styles, then the student is better equipped to incorporate those same models into their process and product within the hiring company.

Technical Communication Advancements

Technical communication is constantly expanding in this 21st century, globalized world. Through these expansions, it is important to determine how the advancements can affect a multi-cultural technical communication classroom. The instructor should investigate all aspects that will help him or her to meet the needs of all students in an effort to adequately prepare them for the work world. Albers (2005) writes, "...in recent years technical communicators have been widening their scope and expanding into areas such as interface and interaction design, information architecture, information design, and usability. In tandem with this expansion, the fundamental methods of delivering information have changed, primarily through the use of single sourcing, XML, and multiple methods of

delivery, all of which have increased the need for both collaboration and project management” (p. 267). These advancements will be examined in the technical communication class, but the cultural implications on design and usability must also be considered.

When developing a cultural pedagogy, it is also helpful for the instructor to consider the parameters of the expanding technical communication world, to identify the difference between teaching tools and teaching technology, and to attempt to incorporate changes and advancements happening with technical communication in the classroom in an effort to keep the teaching styles and material current and culturally sensitive. Although writing and editing have a resounding presence in technical communication, and will continue to play an important role in teaching technical communication, panelists at the STC conference “...all agreed that technical communicators need to move away from simply writing and into the areas represented by the four spokes [information architecture, information design, management, and human factors]” (Albers, 2005, p. 269). The human factor presupposes that within humanity there are varied cultures with varied communication styles, and the field dependent communicator needs that movement away from a text based approach to a multi-modal approach that incorporates group interaction and co-operative processing (Chambers, 2016). However, this can be challenging for the technical communication instructor who is faced with continued advancements regarding the tools utilized in the courses, as well as the narrow path that results from the incorporation of specific tools that are geared toward specific jobs. Instead, instructors need to avoid focusing on one tool to perform a task or one method of communicating that task. In order to model the importance of varied techniques and the incorporation of various tools, the instructor should provide a global perspective that demonstrates the value of using various tool features (Albers, 2005).

When looking at the advancements that are taking place in technical communication, speakers at the 50th Annual STC conference “...were implying that the technical communicator of five years ago would not survive five years from now - that the whole profession would go away” (Giammona, 2004). As advancements occur in the TC world, alongside cultural advances that occur in the TC classroom, it is important for instructors to consider both of these advances when adjusting pedagogies to accurately prepare all students for the future of technical communication. Through the consideration of Giammona’s (2004) research, it is essential that instructors prepare a multi-cultural classroom for the work place that utilizes technical communication, while determining the advancements that technical communication experiences as a whole. The TC classroom needs to prepare the students for a global workplace that has expanded to other

cultures where the larger world perspective is progressive in their strategic development of tools as well as gaining a growing awareness regarding the best tools for the effective communication (Breuninger and Hackos, 1997).

The answer to adequately preparing for the future advancements of technical communication is revealed when we investigate the changes that are taking place in technical communication, plan for a future intrinsically tied to these changes, understand that all technologies are interconnected, and realize that multi-cultural writing and rhetorical issues are important (Albers, 2005).

In order to prepare students in a multi-cultural technical communication classroom for the 21st century workplace, instructors are required to identify how technology is advancing, determine the difference between teaching tools and teaching technology, and strive to incorporate the changes of technical communication in the classroom. This analysis of technical communication advancements will help create a well-rounded technical communications program for national and international students to learn, grow, and eventually apply those learned skills in the workplace.

Technical Communication Teaching Tools

One of the methods in which an instructor within a technical communication program can help prepare an intercultural classroom comprised of students that differ in race, national origin, or language preference to adequately find a foothold in the technical communication work world is by analyzing the teaching tools that are used in the classroom. The first tool in the instructor's arsenal is the textbook. Wen-Cheng et al. (2001) write, "The textbook selection process often gravitates to one of two extremes. In the process of evaluating textbooks, some educators ask so many questions that they are never able to complete the process. Others choose a reading textbook with little or no evaluation, yet it becomes the centerpiece of the curriculum until another haphazardly chosen reader replaces it" (p. 91). Barker and Matveeva (2006) call for instructors to consider the textbooks that are being used in the technical communication classroom so that they represent students from a diverse background, when looking through the lens of awareness, information, and practice. These three elements suggest a strategic approach that will help the instructor analyze and later assess textbooks, while considering the current information on the latest tools, and multi-cultural sensitivity with the images used, as well as strategies incorporated within the text that will engage both the field independent and the field dependent learners (Barker & Matveeva, 2006).

The idea of awareness, or self-awareness, should be analyzed in textbook use, especially when considering the diverse population of a classroom, how to effectively train all students in the classroom for the

technical communication workplace, and how activities in the textbook can advance self-awareness through the attempt to break the mold of ethnocentrism. Once awareness has been addressed, it is important to determine the informational methods that are explored in the textbook and their appropriateness when addressing a multi-cultural technical communication classroom. Barker and Matveeva (2006) offered some insight regarding their approach to a culturally sensitive technical communication class. These authors explained that “in addition to assessing the presence of theoretical discussions, we also looked for examples (documents, letters, or websites) showing students the cultural characteristics that illustrated the theory in the informational elements” (p. 194). The practice element is a pillar that should be present in the textbook when considering how to incorporate cultural differences when writing and communicating, even on a technical level. If students of a multi-cultural classroom need to understand what it means to communicate effectively with those from other cultures in the global workplace, then the instructor needs to evaluate the components of the textbook used for the TC program based on material and the methods used to present the material.

In addition to analyzing awareness, information, and practice when considering what the most appropriate textbook(s) to use for a technical communication course/program is, it is also important to understand that, “...teachers must learn how to integrate and organize content of a textbook to make learning an interactive and meaningful experience...” (Wen-Cheng et al., 2011, p. 91). Barker and Matveeva (2006) further explore the need for instructional context, and the variety that should accompany this context when reiterated in a textbook that is best suited for a multi-cultural technical communication classroom. When considering the instructional context there should be a balance of textbook material and teaching elements, Barker and Matveeva (2006) take into account Burke’s five elements that are key in determining the correct textbook to use: purpose, scene, agent, act, and agency. Purpose will examine the course goals, and whether or not the textbook meets the requirements of the course goals. Scene takes a look at the classroom in which the material will be taught, the cultural makeup of that classroom, and if the textbook suits the needs of the classroom. Agent addresses the informational needs of the instructor. Act places emphasis on the certain teaching techniques of the technical communication instructor through awareness, information, and practice. Lastly, agency is simply taking the textbook under consideration after evaluating the first four elements of the listed procedure.

The correct textbook used in a multi-cultural technical communication course can be essential when an instructor intends to prepare students for the technical communication workplace. Awareness,

information, and practice are the three main things to analyze when selecting the right textbook for any class of any race or national origin, but the textbook material needs to be adequately applied to the technical communication program that is bound to have a multi-cultural representation. However, considering the purpose, scene, agent, act, and agency is also essential when determining the best textbook to use in technical communication courses. (Barker and Matveeva, 2006).

Not only is the textbook an important component in the instructional process, but for the dependent learner, there also needs to be creative instructional strategies incorporated into the instructional time so that the students might learn through their best approach to assimilating the information. Also, varied instructional strategies demonstrate that the dissemination of material must be more than text based in the global workplace.

The European and Asian American students might be comfortable with a textual approach to the examination of instructional material, but even these students will appreciate a variety in teaching modes. Yet, it is the dependent learners in your multi-cultural classroom who will need to have the varied strategies enacted so that they learn more effectively as well as have modeled a best practices approach to technical communication. Not only do the students need to learn about the tools available to them, but the incorporation of those tools into the instructional process will demonstrate the usefulness of managing a field dependent approach to learning and producing. For example, if the technical communication instructor interviews a project coordinator in a global workplace where technical communication strategies are implemented, then the viewing of that video in the online course shell will provide the African American students with the nonverbal cues and tonal semantics that are helpful for their learning strategy. The Native American students will appreciate a demonstration of the incorporated strategies, allowing them to carefully watch the taped demonstration, thus providing a guide for their own incorporation of the same strategies. Once the class has viewed the video, open an online chat room that will provide an avenue for group interaction concerning the process, allowing the Hispanic students to engage in peer interaction, thus learning while discussing. If you don't want to move this online, then bring in the expert from the work place, and have him or her provide practical examples of how the classroom based learning will play out in the global workplace. This type of demonstration will allow the African American students to engage in a call-response type of communication that gives immediate feedback and confirms that they are tracking with the process being presented. The Hispanic students will appreciate the social interaction that is allowed to take place during the demonstration and in the discussion

that follows. Furthermore, the Native American students will appreciate the ability to watch and learn while examining the expert who is providing the demonstration. The reality is, this type of engaged instruction will not only benefit the dependent learners who are part of your class, but it will be enjoyed by the independent learners who are adept at independent, text based work, but are always open to new methods of instruction.

If we, as technical communication instructors, want all our students to engage in the learning process, then we must move beyond the textbook, and discover learning strategies that not only instruct, but also model a culturally sensitive approach to technical communication.

Technical Communication Instructor Response

There is a growing awareness over the last decade regarding the need for teaching intercultural communication in the technical communication class (Barker & Matveeva, 2006). This need has been widely researched due to the fact that there is a deficit, gap, or problem with the current trends experienced in the intercultural classroom, providing evidence that there is a need for instructors within the technical communication realm to consider their pedagogical approach to reaching all students, no matter the national origin, when it comes to successfully teaching technical communication.

One way in which instructors can first examine the intercultural classroom while making necessary alterations to pedagogies is to assign projects, games and activities that will help break the mold that the students' cultural experience or background naturally creates. These activities help students break out of their ethnocentrism, which is the tendency for students to assume that their cultural standards are the only valid standards (Barker & Matveeva, 2006). This theory is supported by Hunsinger (2006) and is evidenced when he writes, "...[I] interrogate what I take to be the predominant approach to researching and teaching intercultural technical communication . . . the *heuristic* approach" (p. 32). The heuristic approach is designed to examine ethnographic data in an effort to identify the important dimensions of culture, and then rate these dimensions so that instructors may be able to find the dimensions helpful for effectively communicating in a cross-cultural environment (Hunsinger, 2006).

Furthermore, through the use of writing assignments, instructors can grasp the social norms of each student represented in their multi-cultural classroom, attempting to balance the way in which they progress forward in teaching technical communication as a means of adequately preparing the students for the work world. Research has demonstrated that writing is located in the social world, and is fundamentally structured by the shape of that environment. Technical communication is situated in a complex interlocking system of ideas, purposes, interpersonal interactions, cultural

norms, and textual forms (Paretti, 2008). Furthermore, the role of language plays an important part in the pedagogical alterations that are necessary when an instructor is teaching technical communication to a multi-cultural class. Yeo (2001) experienced some challenges teaching Technical Communication Skills (TCS), and he had to learn how to overcome those hardships when faced with a multi-cultural classroom. This instructor goes on to explain, “This problem was seen as an opportunity for me to integrate previous skills taught in TCS into the writing module...Hence, I used the writing module as a platform to explore the communicative behavior of students” (Yeo, 2001, p. 93). Yeo further writes that he used note-taking techniques to help students prepare for writing assignments, and then implemented class discussion and presentations in an effort to encourage students from different cultural backgrounds to learn from the language and communication skills of their fellow classmates (2001). This approach is beneficial to the minority groups who are field dependent learners. The demonstration of techniques, the inclusion of discussion and presentations further helps field dependent learners engage with the material, thus promoting a culturally sensitive technical communication class.

Ultimately, when considering the different approaches taken by instructors as an adequate measure in reaching all students within an intercultural technical communication classroom, there are several methods that can be utilized that will help instructors appropriately adjust their pedagogies. Activities to break students out of their ethnocentrism, a heuristic approach to identifying dimensions of culture, writing as a form of delineating cultural norms, demonstrations from the workplace, and class discussions/presentations in an effort to have students learn from one another are a few suggestions that can be implemented in an intercultural technical communications classroom as a means of reaching all students in that learning environment.

Conclusion

Technical communication as a whole is an ever growing, changing and advancing arena. Students studying technical communication need to be prepared for the expectations of the TC global workplace. This begins when the instructor embraces the importance of addressing the learning styles of all their students, then demonstrating the varied methods that will help to communicate through varied approaches. Several authors delve into technical communication and the implications of the career field, as a whole, when applied to the global work world, and their writings need to be highlighted in the technical communication class. However, there are certain elements to examine within these publications when looking to advance an intercultural classroom in an effort to adequately prepare students of all

national origins for a future career in technical communication. Advancements that are happening in technical communication need to be investigated when teaching a class how to be current in their profession, while still preparing for an evolving arena. Textbook use will help incorporate awareness, information, and practice into an intercultural classroom; however, these textbooks should be analyzed from a cultural as well as an informational perspective in order to determine the best option that will benefit the students post-graduation. Furthermore, the instructional strategies need to perform a dual purpose: providing culturally sensitive instruction and providing modeling for future technical communication production. Finally, adjustments to instructor pedagogies should be considered when dealing with a multi-cultural technical communication classroom, as well as determining what methods of learning would best suit the needs of all students in the classroom as they consider their future profession in a global marketplace.

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