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INCLUSIVE AUDIENCE ANALYSIS AND CREATING MANAGEABLE CONTENT

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Chapter Takeaways

- Describes a heuristic that instructors can use to teach inclusive audience analysis for creating reusable content.
- Integrates a case-based approach to technical communication instruction that introduces specific theoretical considerations for rhetorically effective writing for content management systems (CMSs).
- Provides sample scenarios that can be used to help students practice writing for a variety of audiences using a CMS.

This chapter sets out to answer the following pedagogical question: how can instructors help students account for a range of multiple audiences, stakeholders, contexts, and purposes when teaching students to write content? In other words, how do we teach students to conduct audience analysis for writing and reusing content in a content management system? This chapter advocates for the practice of inclusive audience analysis as a means of teaching effective and ethical practices for creating content for use in a CMS. To help instructors encourage inclusive audience analysis with their students, we introduce a process and method, which we call a heuristic, that instructors can use to help students think about, write, and deliver audience-focused CMS writing that can be applied in a variety of scenarios and enables students to approach this learning systematically. The heuristic is comprised of six steps that can be integrated into a case-based approach to technical communication instruction when the instructor wants to give students practice with rhetorically effective writing for a CMS. The heuristic consists of the following steps:

1. Analyze the active interfaces maintained by the CMS and complete a content audit.
2. Understand the affordances, constraints, and conventions of the CMS.
3. Determine the needs and motivations of audiences and stakeholders.
4. Determine how the active interfaces work to meet the needs and motivations of audiences and stakeholders.
5. Create content based on audience and stakeholder needs and values within this system.
6. Use content creation to compensate for shortcomings in the system.

This chapter also offers a case-based example that illustrates the use of this heuristic in practice, which instructors can use as a generative example to help design their own formative projects and assessments for each step in the heuristic. Finally, the chapter concludes with two sample scenarios that can be used as cases to help students practice inclusive and rhetorically effective writing for a variety of audiences using a CMS.

As instructors and technical communication professionals, we are committed to making the interactions between content, technologies (including CMSs), and stakeholders apparent. We believe that when these connections are ignored or de-emphasized, it creates further opportunities for technical communication to cause unintended harm to communities as well as unanticipated breakdowns in communication. As such, this chapter emphasizes the rhetorical impact of CMS technologies on audiences and stakeholders and advocates that this relationship be taken into account when instructors teach effective writing for use in a CMS.

Writing, Audience, and Content Management

Over the last 15 years, CMSs have dramatically changed and complicated the ways we have to think about our pedagogical approaches to teaching audience analysis and understanding in technical communication. This is especially true when content may need to be used in a set of contexts for various audiences, stakeholders, and users. Technical and professional communication is always audience- or user-focused; this is something we emphasize to students as a characteristic that distinguishes technical communication from other kinds of writing (see *Technical Communication Today* by Richard Johnson-Sheehan, the current recommended text for the Society for Technical Communication certification, among others). This priority has led to an increase in scholarship on specific practices related to content management, including concepts and theories, that focus on human-centered design (Rose et al., 2018), user experience (Sun, 2012; Gonzales, 2018), and content strategy (Batova & Andersen, 2016; Clark, 2016; Gonzales, Potts, Hart-Davidson, & McLeod, 2016).

Traditionally, we teach audience analysis as human-centric; it is a process that involves determining the wants, needs, and motivations of human readers and users engaging with the content that a technical writer produces. This analysis then feeds recursively into the creation of content, all aspects of which should work towards meeting the needs of the intended audience. Students learn to research, create content, modify tone, and, of course, to design documents with these audiences and users in mind. Such rhetorically-aware teaching practices are laudable and help students account for a range of audiences, stakeholders, contexts, and purposes when they write content. CMSs require additions to these practices by demanding that technical communicators consider a series of content types/genres and delivery methods, rather than a single scenario in which readers will interact with a document. Some of the content may be separated from the original document for which it was written; it may also be expected to transfer effectively across a variety of audiences and stakeholders rather than applying consistently to a single set of primary, secondary, and tertiary audiences. In the spirit of social justice, it is important that technical communication instructors provide students with the rhetorical tools that can be used in these situations to account for inclusivity when many audiences and stakeholders are at play.

Drawing on Hart-Davidson, Bernhardt, McLeod, Rife, and Grabill (2007) we understand

the practical work of content management (CM) [as] a form of reasoning, *phronesis*, that permits us to explore CM as a means to guide decision making about the creation of knowledge, the arrangement of information, the selection of tools, and the design of work practices associated with the making of texts.

(p. 10)

In other words, we understand content management as both a contextual and rhetorical practice. As a result of viewing CMSs as rhetorical, we have to account for audience and users and their relationship to the content they need. Likewise, Clark (2008) defines a CMS in the following terms:

a system that approaches the problem of content management by using markup, metadata, and tools to break documents into component parts, to a level of granularity (e.g., paragraph-level, sentence-level, word-level) set by organizationally defined information models, and labeling each part with metadata that describe its meaning and relationships to other content. The same content can then be automatically assembled in different genres, with different presentations, and in different media.

(p. 39)

This definition resists the idea of a CMS as a specific digital program, instead affording CMSs a range of applications across a particular rhetorical environment. We would extend this definition to include the stipulation that content should always be written to meet specific audience or user needs. In this way, a CMS is first and foremost a technology used to solve the problem of communication across both audiences and contexts.

These definitions help us to understand the interconnected work of writers, who often appear isolated in CMS contexts, as reaching through and beyond content management tools to meet the needs of the contexts and audiences for which they write. Batova and Andersen (2017) argue that those teaching technical communication classes should expand our view of the rhetorical situation when working with a CMS because a CMS “requires technical communicators to examine audience, purpose, and context from a very different perspective” (p. 192). They likewise suggest “that students receive adequate instruction in writing structured content and analyzing rhetorical situations that move well beyond the writer–audience–subject relationship” (p. 192). This emphasis on an expanded view of the rhetorical situation places analytical skills at the center of writing usable and effective content. One way to consider inclusive audience analysis in these contexts is through the articulation of content that users need, because this articulation reframes the discussion about audience in relationship to the content and prioritizes the audience over the information or content.

As technical communication instructors, we are committed to social justice theoretical frameworks in our approach to technical communication research and pedagogy. An emphasis on audiences, users, and stakeholders is essential to this approach. To this end, we believe that new instructors of technical communication need to be increasingly vigilant in teaching students to be cognizant of the audiences and stakeholders who might be affected by technical communication and technical documents. Although it might be easier and more efficient to view both technical communication and the technologies to which it is tied as neutral and objective, we must recognize “that technologies and sciences are culturally-rich and thus informed by ideological agendas and uses” (Haas & Eble, 2018, p. 5). The recognition and analysis of the ideological agendas and uses of various technologies is at the core of our technical communication pedagogy because we want students to have the knowledge and skills to create content that is inclusive and ethical across contexts. We understand that what instructors choose to teach and how instructors choose to teach are “always already influenced by theories about teaching, learning, and communicating about science and technology. Thus, all teaching is ideological and political, even if we pretend it is not” (Haas & Eble, 2018, p. 7). Knowing this, we believe it is the responsibility of technical communication instructors to provide spaces for critique of, and reflection on, writing technologies. Such spaces help to make the implicit power structures of writing

technologies and technical communication scenarios apparent, challenging the all-too-common obfuscation of the real-world effects that technical communication has on stakeholders.

This practice is especially important in writing scenarios where stakeholders are physically and ideologically distanced from the content produced by technical writers, as is the case when content is managed and distributed by a CMS. Furthermore, the use of a CMS naturally influences the means of distribution, and therefore the rhetorical impact, of the content to which it pertains. Teaching that encourages students to be inclusive in writing manageable content must pair theoretical approaches that foreground the social and ethical implications of content management technologies with opportunities for students to create content that meets the needs of their users within specific contexts.

Providing students with the analytical tools to build awareness and knowledge about creating manageable content is especially important when writing content with and for CMSs because technology and content are so inherently dependent on one another. This interdependence provides further opportunity to ignore the needs of stakeholders in favor of the needs of the CMS. To conduct effective audience analysis when writing with and/or for a CMS, students must consider the needs of both the end users and the CMS itself as relevant audiences. In this way, the audience for the content they create is both human and machine. Students must learn to explore the system itself, as well as users' expectations of that system and their motivations for engaging with it to create manageable content within its parameters.

CMS Ecologies Heuristic

In teaching students both content management and writing manageable content, we use the term “ecologies” to refer to the network of actors and interactions influenced by a CMS, including but not limited to the CMS itself. These ecologies include writers and readers/users, motivations, and technologies, as well as information. While somewhat metaphorical, we find this term useful as a way of emphasizing the balance of agency and naturally dynamic content at play in these networks. The term “ecologies” also draws on Memetic Rhetorical Theory (Davis, 2018), which we consider a productive tool for thinking about how information and content adapts to new environments. According to this theory, information must adapt to an ecology by fitting in with the various memeplexes (that is, groups of ideologies, technologies, actors, etc.) that make up that ecology.

We advocate the use of a heuristic or series of questions to help students think about, write, and deliver usable content in CMS ecologies to their users and audiences. In this heuristic, we imagine students as content developers writing in scenarios in which a CMS has already been established and is working well to

meet the needs of the authors, audiences, and stakeholders. It is modeled after Ridolfo and DeVoss's (2009) concept of *rhetorical velocity*, which they define as a "strategic approach to composing for rhetorical delivery," that "refers to the understanding and rapidity at which information is crafted, delivered, distributed, recomposed, redelivered, redistributed" (para. 1). This heuristic asks students to (1) consider how to be inclusive of their primary audiences and various stakeholders for the content they develop, and (2) account for potential contexts where their content needs to be used or accessed. Ridolfo and DeVoss (2009) define *rhetorical velocity* in the context of inventive thinking for composing as "the strategic theorizing for how a text might be recomposed (and why it might be recomposed) by third parties, and how this recomposing may be useful or not to the short- or long-term goals of the rhetorician" (para. 1). Although the concept of reuse—and in this quote, "recomposing"—is common in CMS literature, we resist this term due to the inherent privilege it bestows on the first chronological iteration of a particular piece of content. Instead, in our heuristic, we encourage students to think about strategically composing for multiple audiences and iterations of the content (which may occur either synchronously or asynchronously) from the onset in order to be more inclusive. Our heuristic incorporates rhetorical velocity in that it asks students to be strategic and cognizant of the ways the content will be managed and distributed from the invention stage of the process onward.

Like the memetic rhetorical theory it is based on, this heuristic is memetic in nature, meaning that it relies on the adaptability and suitability of content to the technological and rhetorical environments in which it will be used. Together, these technological and rhetorical environments form ecologies to which new content may successfully adapt or ultimately fail. Audience analysis and contextual analysis feed recursively into one another in such a system, where students must think of content production as intrinsically linked with content delivery as a rhetorical act. Because content divorced from audience/delivery loses its significance, students who think of content objects as decontextualized entities run the risk of unethical treatment of certain users or excluding important users to create catch-all content. In this addition, a modular approach to content management can disregard users and thus an important part of accounting for the rhetorical situation.

The following heuristic consists of a series of steps an instructor can use to help guide students through a process that asks them to think about how content will successfully adapt in specific technological ecologies.

Step 1: Analyze the Active Interfaces Maintained by the CMS and Complete a Content Audit

Creating content for an existing CMS means stepping into an environment that has established boundaries and expectations. The content that students

create must be compatible with these rules and expectations to be usable for their intended audiences and users. Therefore, to begin the process of creating content for use in a CMS, students need to gain a thorough understanding of the uses and capabilities of the CMS they are working with. Instructors should frame discussions of the existing environment of a CMS as a way of understanding the connections among form, function, content, and audience by characterizing the CMS environment as an ongoing conversation between writers and their audiences facilitated by mediational and technological tools.

The first step in developing this understanding is for students to become familiar with the content already distributed through the CMS—its characteristics, conventions, topics, and purposes. We refer to the means and media of distribution within the CMS as the *interface*, which, in this context, we define as the way in which the audience/end users receive the CMS.

Step 2: Understand the Affordances, Constraints, and Conventions of the CMS

The next step is for students to analyze how the affordances of the CMS facilitate communication using these characteristics. After all, content and form are intrinsically linked in rhetorical practice; it is not enough for students to understand what is communicated; they also must understand how that communication occurs, both from the perception of audiences who engage with the interface and from the perception of writers who input the content into the CMS.

Together, Steps 1 and 2 of this heuristic encourage students to become familiar with the rhetorical environment to which their content will need to adapt.

Step 3: Determine the Needs and Motivations of Audiences and Stakeholders

Like all technical communication, the creation of content for use in a CMS should always be focused on the needs of a particular target audience, or target audiences, as well as potential stakeholders. Therefore, students must spend time working to understand the needs and motivations of the eventual readers and users of the content they create. These needs are likely specific to the relationship between the readers and the institution publishing the material, so students should start by identifying that relationship. Next, students should break users and stakeholders into specific groups based on their needs and motivations when engaging with published content. This will likely require significant research, both within the organization and using demographic resources relevant to the kind of content the CMS manages. These specific groups

might be based on user roles or might be based on other characteristics, but the focus should be on being as inclusive as possible.

Step 4: Determine How the Active Interfaces Work to Meet the Needs and Motivations of Audiences and Stakeholders

To reinforce the rhetorical connection between content and delivery, students must understand why the interface features that they have identified have been successful in meeting the needs of the audiences and stakeholders for the CMS (this is, of course, assuming that the CMS is well designed and has been successful in this respect). Students need to cultivate an understanding of why various interfaces are used for this purpose, by this organization, etc., based on the needs of the intended audiences. This understanding may be evident, or may require further research. In short, they must answer the question: what is it that makes the genres, social media sites, web platforms where the information might appear work for this audience? The answers to this question should yield a series of aligned interface features and audience needs. These combinations of interface features and audience needs are the memplexes that define the CMS ecology.

Step 5: Create Content Based on Audience and Stakeholder Needs and Values within This System

As in all technical communication contexts, content creation in CMS ecologies should meet a specific need relating to communication between the writer and the audience or user. This need may be consistent with past communications or may be related to new events or goals. Regardless, new content must be consistent enough with existing content to fit a recognizable pattern of expectations for user engagement; that is, the audience must understand how they are expected to engage with new content based on their previous experiences with the interface media.

When creating new content for use in a CMS, students should reflect on the needs and values of both stakeholders and various audiences while also optimizing that content for delivery using the affordances of media available in the CMS. And students should account for the rhetorical velocity and spread of content into different channels. Content created with any CMS in mind should draw on/complement the strengths of that system, supplementing them when necessary to increase accessibility for potential stakeholders.

This combination of factors that influence the distribution of CMS content means that students must draw on the existing strengths of the system to create modular content that might be used in a variety of media to achieve a variety of purposes in respect to various audiences. These content pieces should be

small—fractions of individual posts or documents—and they should be designed to utilize the various affordances of the CMS media.

Step 6: Use Content Creation to Compensate for Shortcomings in the System

This heuristic assumes in part that the CMS and its interface with which the students are working have the potential to adequately meet the needs of the target audience most of the time. However, there will inevitably be situations for which the CMS is not optimized. The students must have a thorough understanding of the needs and expectations of the audiences and stakeholders to recognize these situations when they arise and make adjustments to the content they create to help compensate for any shortcomings.

Case Scenario

Instructor Alex Garden has been teaching an introductory course in technical and professional writing for many years but has grown increasingly uncomfortable with the number of single-author assignments that students complete. The emphasis on stand-alone documents and genres does not account for the changing ways technology has influenced the writing and composing process. She knows that in most modern workplaces and contexts, technical writers work collaboratively on documents, often composing brief sections of content and pulling small pieces of existing content together to be used in a variety of media. She decides that students need practical experience with this kind of writing as well as a theoretical understanding of how such writing relies on a series of other components. She imagines a series of projects or even a course where students work with a hypothetical client, like their university department, who needs to communicate similar information with a variety of audiences and stakeholders through a number of media outlets on a regular basis. The university is especially interested in communicating some of its inclusive practices when it comes to supporting students, so inclusive audience analysis will be important to such a course or unit.

To begin the project, Alex Garden asks students to examine the media outlets that their department uses and compare these with similar departments in peer institutions in their region of the country. They find that their department, like others of its kind, is well represented on social media sites including Facebook, Instagram, and Twitter. It also has an extensive university department website, operated through *WordPress*, and a number of videos, pamphlets, fliers, and informational brochures are delivered through this CMS throughout the year. Alex Garden then asks students to think about and answer the following questions: why does the university need so many media outlets? Why

do these outlets, in particular, make sense? To whom does each form of media appeal, and why? What kinds of content are found within these digital spaces?

Step 1: Analyze the Active Interfaces Maintained by the CMS and Complete a Content Audit

Alex Garden's class completed its thorough review of existing media for the department. Now, in order to write manageable content to be used across these media consistent with their affordances and the expectations of users, the students need to understand how these media are currently being used and how they have been used in the past. They begin by completing content audits of the department website, major social media accounts, and the printed informational documents available in the departmental office.

Step 2: Understand the Affordances, Constraints, and Conventions of the CMS

Students in the class now need to analyze the affordances, constraints, and conventions of the social media used within the CMS to see how these align with the content that has historically been produced. What specific types of content can be delivered using Twitter, Facebook, and Instagram? Is there a limit on the number of characters? Can photos or images be shared? Which platforms use hashtags or tagging so that the content can be shared? Answers to these questions will give students insight into the types of content shared and distributed through these social media channels. This analysis provides students with opportunities to understand the velocity and spread of specific content throughout the ecology.

Step 3: Determine the Needs and Motivations of Audiences and Stakeholders

Alex Garden's class now knows that its department communicates about policies, upcoming events, campus news, and academic achievements through the department website, major social media accounts, and a combination of fliers, pamphlets, and brochures. It also understands the affordances, constraints, and conventions of these media. Now, Alex Garden needs to get students thinking about the audiences who will eventually use (and even distribute) their content. She begins by asking students to brainstorm who might use each medium, and why. The students note that they often use the department website themselves to look at degree requirements and course offerings; a few note that they follow one of the social media accounts, and some mention that their parents follow the department on Facebook. The class then notes faculty and

staff, administrators, potential students, alumni, and funding sources as potential audiences. Alex Garden asks students to interview a range of users they know who are a part of these audiences and determine their motivations for engaging with these media. Together, the class makes a chart of potential audiences, their motivations, and their needs in order to articulate the primary audiences for the content they create.

Step 4: Determine How the Active Interfaces Work to Meet the Needs and Motivations of Audiences and Stakeholders

The students have already identified the affordances, constraints, and conventions of the CMS and CMS interface media; they know the kind of content that is typically included in this ecology, and what the needs and expectations of the audiences and stakeholders are. This fourth step is an act of synthesis, identifying how and why all of these features are able to co-adapt to create successful systems. Alex Garden helps students with this difficult process by asking them to draw parallels among the needs and expectations of the various audiences and the features that help meet these needs and expectations. The students are likely to find this process intuitive, but they may struggle with articulating the reasons why these connections work. However, we find this articulation focus helpful because once students understand why the systems work, they are better able to make necessary adaptations without disrupting the system's success.

Step 5: Create Content Based on Audience and Stakeholder Needs and Values within This System

Alex Garden's class is ready to start creating content. She decides to have students start with designing content about a new minor that can be distributed through a variety of media within the CMS. The students agree that one thing the audiences and stakeholders will need from this content is a list of courses required to complete this minor. They consider that such a list—one that contains all the required courses—will be most helpful for audiences thinking about the minor as a long-term, coherent unit, so they create a textual list that gives the titles of each course in the order in which the courses should be taken. They also think that course descriptions will be useful, but recognize that the length of these descriptions will vary depending on the medium of distribution and other content in that document, so they create one-sentence, two-sentence, and paragraph-length descriptions. One student points out that many of the CMS media are multimodal, so they also create course descriptions in the form of video clips and 35- to 45-second video files. All these different iterations use similar keywords and phrasing, but these content pieces can now be used

in a variety of contexts within the CMS, depending on the needs and expectations of the audience.

Step 6: Use Content Creation to Compensate for Shortcomings in the System

Alex Garden's class has been creating outstanding content, but several students have begun to notice a problem: their university and department has been explicit about prioritizing diversity and inclusion in campus initiatives, but most of the media associated with the CMS is steeped in discursive practices that privilege access for individuals who have the social and financial freedom to spend a great deal of time on campus. Even the social media pages tend to rely on networks of personal interactions formed in this way, meaning that many students and their families are left out of departmental communications. From their earlier research, the students know that Twitter places more emphasis on hashtag topic organization, and less on externally established networks to help users connect. For this reason, they believe that directing interactions to Twitter will help the department content they are distributing to become more accessible to more people. They begin to include specific references to relevant hashtags on content distributed via other media, hoping to drive conversations onto this platform.

Conclusion

We conclude this chapter with two brief scenarios that instructors can use in courses to have students practice creating manageable content that is inclusive of their audiences. Using the heuristic described in this chapter, students can engage with their local universities or communities in authentic ways. Teaching students to create manageable, inclusive content depends on having CMSs and authentic contexts where students can practice and then analyze how their content is received by their audiences.

Scenario 1

Your class has been asked by a local fitness center near the hospital for help in promoting physical activity with an adult population that have historically had health issues. You are tasked with persuading people who are not at all active to increase their physical activity. The idea is to promote physical activity in a wide variety of forms, but losing weight should not be the primary benefit or be mentioned in any of the marketing materials. The content created needs to be created and designed to be used in the following contexts: fliers, brochures, postcards, website, Facebook, Twitter, Instagram, etc. Have students use the heuristic introduced above to generate content for this fitness center.

Scenario 2

Your class has been contacted by a local professional organization known for its role in facilitating conversations about science and technology in society. Throughout its existence, the organization has struggled to attract new members; recently, this phenomenon threatened the continued existence of the organization. Your class has been tasked with creating content items to advertise the organization and increase membership and participation. These content objects will be shared across a variety of digital and nondigital platforms and are intended to reach a variety of audiences, including current local university students in fields related to science and technology in society, recent graduates/graduating students in these fields from universities around the country, international recent graduates in STEM and humanities fields, local professionals interested in networking in their field, and STEM-focused corporations interested in ethical business practices and promotion of their products. Have students use the heuristic to help this organization meet its goals.

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