

2018

Validating the Consequences of Social Justice Pedagogy: Explicit Values in Course-Based Grading Contracts

Cruz Medina

Santa Clara University, cnmedina@scu.edu

Follow this and additional works at: <https://scholarcommons.scu.edu/engl>

Part of the [English Language and Literature Commons](#)

Recommended Citation

Medina, C., & Walker, K. (2018). VALIDATING THE CONSEQUENCES OF A SOCIAL JUSTICE PEDAGOGY: Explicit Values in Course-Based Grading Contracts. In HAAS A. & EBLE M. (Eds.), *Key Theoretical Frameworks: Teaching Technical Communication in the Twenty-First Century* (pp. 46-67). Louisville, Colorado: University Press of Colorado.

<https://upcolorado.com/utah-state-university-press/item/3425-key-theoretical-frameworks>

This Book Chapter is brought to you for free and open access by the College of Arts & Sciences at Scholar Commons. It has been accepted for inclusion in English by an authorized administrator of Scholar Commons. For more information, please contact rsroggin@scu.edu.

2

VALIDATING THE CONSEQUENCES OF A SOCIAL JUSTICE PEDAGOGY

Explicit Values in Course-Based Grading Contracts

Cruz Medina and Kenneth Walker

In 2012, in Tucson, Arizona, conservative Superintendent of Education Tom Horne used House Bill (HB) 2281 to outlaw Tucson High School's Mexican American Studies (TUSD/MAS) program. Despite demonstrated increases in graduation rates and state test scores (Cabrera, Milem, and Marx 2012), the social justice program was dismantled and books from the curriculum were banned, including Paulo Freire's (1970) *Pedagogy of the Oppressed*. As teacher-scholars concerned with critical consciousness¹ and the application of social justice theories to the classroom, we found these events highly disturbing and demonstrative of what Angela Haas and Michelle Eble refer to in the Introduction of this collection as "the mess of injustice in our own backyards" (11). In the TUSD/MAS program, we saw how a model of social justice pedagogy at a programmatic level can have a positive impact on underrepresented student populations. For us, this model provoked questions about implementing social justice practices into our own technical communication assignments, courses, and program. However, TUSD/MAS was also a cautionary tale: even the most successful social justice pedagogies, curricula, and programs can come under perennial critique by those who feel threatened by teaching critical engagement with the unequal distribution of privilege.

The story of the TUSD/MAS program tells us that resistance to social justice pedagogies should be sites of scholarly inquiry as much as they are sites of political struggle. In technical communication, social justice represents a set of theories, methods, and practices that illuminate and respond to social and institutional inequality in courses, vertical curricula, and degree programs. In seeking our own pedagogical praxis based in critical consciousness, we recognized a need for this framework to interrogate institutional power relations throughout these sites, but particularly at the

overlapping sites of student-teacher interactions, instructor evaluations, and course assessment. As Marcos Del Hierro explains in chapter 7 of this collection, classroom cultures and course-based assessments need to be interrogated because “[s]tudents with power and privilege dominate classroom discussions, expect to make the highest grades, and feel no obligation to interrogate their power and privilege” (175). In order to avoid re-inscribing systems of exclusion and oppression, evaluation and assessment should both work to critique the exercise of privilege and be inclusive of non-white students with varying levels of privilege.

Given these concerns, grading contracts seemed an intriguing place to start enacting social justice course-based assessments because of their purported ability to respond well to culturally diverse student populations and open potentials for student agency. Critical pedagogues like Ira Shor (2009) and Jerry Farber (1990), for example, integrated grading contracts into their curricular practices because it allows them to partially de-center power and enter into more authentic dialogues with students about course material and the social implications of the curriculum. Despite the general scarcity of the use of grading contracts in technical communication pedagogy (Wolvin and Wolvin 1975), grading contracts open up certain social justice affordances that contribute to what Haas and Eble call the “turn toward a collective disciplinary redressing of social injustice” (3). But we also saw a need to frame grading contracts critically, so that they might carefully attend to unequal distributions of power and access and perhaps obviate the perennial critique of social justice efficacy that allows educators to open up course-based assessments to a negotiation beyond the instructor’s perception of success.

To meet this need, we offer consequential validity as a broadly applicable framework and grading contracts as a broadly applicable tool for integrating social justice values into the course-based assessment designs of technical communication (TC) pedagogy. Consequential validity is an inquiry framework that uses explicit values to interrogate the potential and current effects of our pedagogy for all students, but in this case, particularly for systemically marginalized students. At first glance, an inquiry into the intersections between classroom assessment and social justice may seem suspect. After all, the current culture of assessment is complicit in fostering inequality through its bias for normative student subjectivities, discourses, competencies, and performances that historically have served to oppress non-normative students of all kinds. Grading contracts have this potential as well. But it is the deliberative processes encouraged by the framework of consequential validity that we believe has ability to travel, mobilize, and build powerful frameworks

for course-based assessments, especially for students of color (Gallagher 2012; Inoue 2009; 2012). Social justice “[advocates] for those in our society who are economically, socially, politically, and/or culturally underresourced” (Agboka 2013, 28), and consequential validity at the site of grading contracts provides a needed contribution for critical teacher-scholars in technical communication who seek ways to assert more socially just evaluations of their interactions with students.

In practice what this means is that grading contracts can potentially serve as a site to facilitate a conversation about the values students and teachers should be held to *and* how we might use the teacher/student dynamic to faithfully represent these values throughout the course of a semester. Much like Frost’s apparent feminist pedagogy (see chapter 1), explicitly foregrounding social justice through consequential validity is another way to question the rhetorics of objectivity and neutrality common in technical communication classrooms. With this framework, instructors of technical communication can use grading contracts to ask questions like: how is the student constructed in this grading system? What kinds of agencies, competencies, and performances are valued, and do these concepts align with the values of social justice to advocate for the socially, politically, and/or culturally under-resourced? In other words, designing grading contracts with the frameworks of consequential validity makes explicit the values that are generally implicit in other methods of grading, and by foregrounding the values of social justice, grading contracts have the potential to destabilize the exercise of privilege in the technical communication classroom.

In what follows, we outline the affordances of associating technical communication course assignments and student/teacher/institutional power dynamics within the framework of consequential validity for social justice pedagogy at the site of grading contracts. Next, we provide two models for developing and using consequential validity as a framework for transforming grading contracts into de-centered negotiations of privilege in technical communication curricula. The first model examines student responses to grading contracts and course readings by a scholar of color to highlight the ways in which students can resist these assessment-based social justice tools. The second model shows how community-based projects with grading contracts can expose students to under-resourced organizations that deepen and complicate student understandings of social justice issues beyond the classroom. Finally, through a personal reflection on student/teacher rhetorical situations, we speak to the limits of consequential validity in grading contracts and outline a few avenues for future research.

**SOCIAL JUSTICE PEDAGOGY, CONSEQUENTIAL VALIDITY,
AND EXPLICIT VALUES IN GRADING CONTRACTS**

In the past fifteen years, technical communication has undergone a “cultural turn” in terms of the scholarship developed since Bernadette Longo’s (1998) call for cultural studies inquiry (Scott and Longo 2006; Scott, Longo, and Wills 2006). Scott (2004) advocated for integrating critical practices into curriculum and pedagogy in ways that parallel the efforts of critical pedagogues negotiating the praxis of social justice education. Our own integration of grading contracts stems from critical reflection on pedagogical and curricular efforts to both highlight and effect change with regard to the unfair playing field for non-white students who might enter our classrooms with less preparation, cultural capital, or institutionally authorized knowledge (Yosso 2006). Thus, our own approaches to technical communication pedagogy begin by asking what kinds of student performances do we value, and what are the potential consequences on systemically under-privileged students?

A part of the cultural turn was the advocacy for radically contextualized knowledge production that demystified notions of a universal audience and acknowledged those voices who do not echo the bourgeois white, male voice privileged by both the academy and industry (Herndl 2004, 3–8). The social justice turn in technical communication has extended this advocacy in part by acknowledging that technical communication has been shown to contribute to the erasure of people of color (Johnson, Pimentel, and Pimentel 2008). To reconcile omissions in the field, Haas (2012) posited a critical race approach sensitive to the representational and relational dynamics of cultural histories and material bodies. Agboka (2013) recently argued that social justice can be accomplished in technical communication through participatory localization that considers the user of texts in under-resourced cultures, communities, and other contexts (28–29). Yet, in conducting this work, it is important to highlight the racial component of cross-cultural communication that illuminates the unequal balance of power relations between document composer and audience. Turning our attention to the power relations between students and teachers, particularly through the institutionally sanctioned mode of grading, should account for unearned privileges such as race and class. In advocating for social justice at the site of grading, we attend to the construction of students by curricular tools and assessments by asking what student performances, literacies, and competencies can we value that might advocate for under-privileged students?

Scholars of technical communication recognized fairly early on the value of engaging assessment on their own terms (Allen 1993; Beard, Rymer, and Williams 1989; Coppola 1999). A recent special issue of *Technical Communication Quarterly* shows how the assessment of multimodal practices can successfully shape the conversation about effectiveness of teaching with new media (Ball 2012; Barton and Heiman 2012; Manion and Selfe 2012; Morain and Swarts 2012). Han Yu (2008, 2012) has made similar agentive claims for assessment and the increasingly overlapping areas of workplace writing and intercultural competence. And while cultural, racial, and social justice theories have had a broad influence on technical communication scholarship and pedagogy (Haas 2012; Scott, Longo, and Wills 2006; Williams and Pimentel 2012), the field needs more scholarship that examines how these bodies of literature might also shape practices in course-based assessments. The time seems right, then, to begin to inquire into the ways in which social justice theories might have an influence on our course-based assessments that may also afford interrogations into programmatic and institutional relations of power.

One line for this inquiry might begin with Gallagher's (2012) suggestion to make assessment a critical rhetorical practice by rearticulating outcomes with consequences. In Gallagher's view, outcomes reproduce institutional and ideological logics that divert attention away from important contextual variables like resources, working conditions, and the race and class inflected notion of student preparation. Outcomes can privilege efficient measurements for institutional purposes, often at the expense of critical inquiry for pedagogical purposes (46). To counter these practices, Gallagher suggests that inquiring into consequences and consequential validity can foster a sense of potentiality in our assessments that attends to both the intended and unintended results of our interactions with students. This position, he suggests, can also help negotiate the inherent tension between programmatic coherence on the one hand and singularity and potentiality on the other (56).

Traditionally understood, validity is assessment's evaluation of truth. Validity asks us to inquire: did our tools capture what we set out for them to capture? In this way validity defines the degree to which theory and evidence adequately and appropriately support the kinds of inferences and actions that assessments warrant (Messick 1989, 5–11). But as Inoue (2009) notes, validity inquiries do not represent universal theories, values, or rationales that warrant acontextual decisions; rather, validity theories are embedded with the values and expectations of a particular group: assessments do not give us "Truth" but rather "the best one can

hope for is that assessment faithfully represents one's values" (109). This means validity is deeply rhetorical and hegemonic (109). So if our notions of validity are fundamentally about a representation of one's values, and as critical teacher-scholars we acknowledge a set of values rooted in social justice, then our assessments will have to somehow acknowledge the uneven distribution of knowledge, power, and access to resources found among student populations.

Because social justice asks that pedagogues endeavor to transform education so that it is liberatory rather than oppressive, curriculum, technology, and assessment all offer opportunities to address inequality, particularly when they are coherently integrated. Grading contracts represent agreements about classroom assessment that, when used effectively, put into action well-known commonplaces about motivation in student writing: students should be self-directed; students should have a sense of improvement; and students should write often with a clearly defined purpose. Contracts allow students to choose their own grade up-front, thereby agreeing to produce a corresponding amount of work, which the instructor grades based on meeting requirements such as page limits rather than its quality (albeit with the assumption that quality is a function of quantity). While grading contracts date decades back (Poppen and Thompson 1971; Taylor 1971; Yarber 1974), they have rarely been discussed with regard to countering institutional and social inequality. In writing studies broadly, scholarship has been dedicated to the adoption of grading contracts as a tool for dismantling, or at the very least de-centering, the hierarchical and intercultural relationships between students and professors within the rhetorical situation of the classroom (Farber 1990; Inoue 2009, 2012; Moreno-Lopez 2005; Shor 2009; Spidell and Thelin 2006). Less critically, Danielewicz and Elbow propose the use of grading contracts to reduce the time-consuming grading process, while improving learning and teaching. Approaching grading contracts from a technical perspective, Danielewicz and Elbow provide a useful definition of contract:

the term "contract" aptly describes the type of written document that spells out as explicitly as possible the rights and obligations of all the parties—a document that tries to eliminate ambiguity rather than relying on "good faith" and "what's implicitly understood." (Danielewicz and Elbow 2009, 247)

Their definition elides the glaring contradiction between the legally-binding corporate connotations of "contract," and the humanitarian ethos of a social justice approach. Yet, they push back against the dehumanizing effect of contracts by explaining that they allow "us to

present ourselves and our teaching authority more openly, humanly, and directly than most syllabi do” (253). The negative legal and capitalistic connotations of a contract also concern scholars such as Farber, Shor, Spidell, and Thelin who recognize contracts as agreements that reconstitute the asymmetrical relationship between student and teacher, and between individual students and the class as a whole. Whatever the terminology, however, the effectiveness of grading contracts should be evaluated up against the consequences for students, and in our case in particular, the intended and unintended consequences for instructors and students of color.

Contract grading has been shown to illuminate the privilege of students who resist this mode of assessment because of disrupted social power. For example, Spidell and Thelin (2006) equate student resistance to grading contracts as a form of elitism marked by “adherence to the status quo and little or no tolerance for those viewed as subservient or undeserving of the chance to better themselves. . . .” (44). Grading contracts can be challenging for both students and educators because institutionalized inequality is supported by systems of power that anesthetize students to their potential to transform their relationship with education and privilege. Yet Inoue’s (2012) findings suggest ways in which grading contracts could undermine the expectations of privileged students accustomed to benefiting from institutionalized systems of power that uphold inequality (78–93). So rather than viewing student resistance to grading contracts negatively, critical pedagogy asserts that student resistance is a site to begin an inquiry into the ways in which students have internalized the dominant cultural narratives of grades, technologies, and instructors and, more particularly in our case, instructors of color. In applying concepts of consequential validity to the assessment site of grading contracts, our hope is that they work to both disrupt traditional exercises of privilege and advocate for the marginalized.

CONSEQUENTIAL VALIDITY INQUIRY MODELS FOR GRADING CONTRACTS IN TECHNICAL COMMUNICATION PEDAGOGY

Consequential validity as a framework is not about mainstreaming shared values, which is problematic, especially for systemically lesser privileged. Instead, it is about making course values explicit. In this case, consequential validity can make social justice values explicit in the course grading system so as teachers we can explicitly value equitable labor and processes, not privilege. Here our goal is to provide two models for developing and using grading contracts in technical

communication pedagogy. Both models use consequential validity inquiries by attending to the ways in which student agencies, competencies, and performances are valued, and by aligning these performances with the values of social justice. In other words, despite the differences in these models, they both use grading contracts as course-level evaluation systems that open up conversations about explicit values and refocus our attention on potentiality of student-teacher interactions rather than the limited measures of what is observable or not at any one given time. But explicit values also open the space for student resistance—a key site for the interrogation of power relations.

MODEL 1: CONSEQUENTIAL VALIDITY AND GRADING CONTRACTS IN A DIGITAL WRITING COURSE

Medina's experience began in Jerry Farber's *Teaching Literature* graduate seminar in 2003, where Farber employed grading contracts as outlined in his anthologized "Learning How to Teach: A Progress Report" (Corbett, Myers, and Tate 1999). Medina willingly fulfilled the requirements for an "A" that included more presentations and facilitations to the class, for which Farber handwrote feedback. Responding to Medina's presentation titled "I am a bad teacher" based on the year he taught third grade in Puntarenas, Costa Rica, Farber explained in his note that he had the "it" for teaching that could not be taught. Although Medina entered his class with decidedly less pedigree and experience than the other pre-teachers, Farber's feedback gave the confidence to Medina to further his professional development and eventual academic career.

As a Latino, Medina proved he did have "it" for teaching: awards, remarkable student reviews, and repeatedly teaching in a summer bridge program for underrepresented student populations. While pursuing his dissertation on Latin@ (Latino/a) student writing, Medina taught two digital writing courses wherein he used grading contracts to make his social justice pedagogical values more explicit, to teach students to recognize the difference between *deserving* and *earning* a grade, and to level the privileged access often associated with digital technologies. The levels of competencies with digital writing vary broadly, so consequential validity asks that educators attend to these varying competencies while creating space for student agency where less prepared students feel as confident about their ability to earn their chosen grade as more privileged students. Less prepared students excel alongside more prepared students because the course values the performance of the assignments rather than the hegemonic standards of the

Table 2.1. Grading Contract (Medina)

<p>In order to earn an A, you must satisfactorily complete the following:</p>	<ul style="list-style-type: none"> • Present Public Argument at English Department Event • Volunteer with a one page write-up about the event/organization • Upload Public Argument slideshow/video to YouTube and get 20 comments • Present your research/public argument to the class with power point presentation • Blog that documents your research • 20 Tweets about class assignments, campus or community resources • 7–8 page Research Paper (6 Academic, 2 Popular Sources) • Research Proposal and Annotated Bibliography (6 Academic, 2 Popular Sources) • Read your research paper on webcam, upload to YouTube and send me the link • 4–5 page Rhetorical Analysis Paper, Reflective Essay, email textbook author, online discussion posts and the online library tutorials
<p>In order to earn a B, you must satisfactorily complete the following:</p>	<ul style="list-style-type: none"> • Upload Public Argument slideshow/video to YouTube and get 10 comments (or) write a one page rhetorical analysis of a publication and query letter that you plan to submit either a magazine article/short story with proof of submission • Present your research/public argument to the class with power point presentation • At least 10 Tweets about class assignments or resources • 4 page Rhetorical Analysis Paper, 6–7 page Research Paper (4 Academic, 2 Popular Sources) • Research Proposal and Annotated Bibliography (4 Academic, 2 Popular Sources) • Reflective Essay, email textbook author, online discussion posts and the online library tutorials
<p>In order to earn a C, you must satisfactorily complete the following:</p>	<ul style="list-style-type: none"> • 3–4 page Rhetorical Analysis Paper, 6 page Research Paper (2 Academic, 4 Popular Sources) • Research Proposal with Annotated Bibliography (2 Academic, 4 Popular Sources) • Reflective Essay • At least 5 productive Tweets, e-mail WPL author, online discussion posts and library tutorials
<p>In order to earn a D grade, any of the above C requirements will not have been completed, or unsatisfactorily completed, not accomplishing the goals of the assignments or meeting the level of college writing.</p>	
<p>F grades will be earned by those students who fail to satisfactorily complete more than one of the assignments in the C requirement.²</p>	

institution that dictate quality in technology and writing. Access to technology continues to affect non-white populations at higher rates (Banks 2006; Monroe 2004), so courses that de-emphasize subjective concerns of quality in turn emphasize the agency of students previously limited by resources of time and technology rather than effort.

Medina designed the grading contract to attend to social justice pedagogy that emphasizes student agency and under-resourced students; however, the semester with the research assignment contract was the first that he experienced numerous formal complaints, lower than normal teacher-course evaluations, in addition to the resistance experienced across institutional and non-institutional student evaluations as he also experienced with the semester-long contract. The student agency as resistance directly commented on the use of the grading contract, and below we offer a sample of this student resistance from both inter and extra institutional sources such as teacher-course evaluations, written student responses, and comments on the popular website *Rate My Professor (RMP)* (Ritter 2008). Through an examination of student responses to grading contracts, we hope to demonstrate how they might be used as a site for consequential inquiry of a social justice pedagogy that attends to student agencies, competencies, and performances. If grading contracts are sites for blurring lines of authority, flattening hierarchies, encouraging experimentation, and rewarding excellence, then they have potential to frame student-teacher interactions as aligning with the values of social justice. These events inspired a necessary pause for reflective interrogation of this pedagogical practice that was designed to address student agency and unsettle cultural capital and privilege in the classroom.

STUDENT REVIEWS

The following table includes *RMP* posts for Medina that evaluate grading contracts from the perspective of students.

In responses on TCEs and *RMP*, students negotiated the ambiguity of how the course was assessed with their perception of the workload. A student who responded positively in the written TCEs still commented, "I think he grades fairly. The only con to the class was how much work was required in order to get an A in the class." The theme of workload resurfaced within a relatively positive evaluation of instructor effectiveness: "He grades you for effectiveness and does not pick you apart [*sic*]. He is very good because he grades you for all the effort you give and recognizes it," although the same student noted "some of the technology oriented stuff was tedious and unnecessary." A student majoring in

education responded positively with: “Experienced a new way of learning and grading styles.” Even within positive feedback, there are misgivings about the workload: “It was good. I felt that there was a little too much unnecessary work required but overall it was a good class and I learned a lot.” In a voice similar to what we found on *RMP*, a student responds that the class overall was “Okay, too much b.s. work.” Many of these responses on *RMP* and TCEs reflect the unsettling of rigid hegemonic beliefs that students hold about education and which social justice pedagogy can elicit; however, “[t]his unsettling state may have produced the student confusion and resentment” noted in the evaluations (Spidell and Thelin 2006, 54). Because students can feel unsettled by the requirements of grading contracts, to integrate consequential validity means to pose the requirements of projects as problems that they can grapple with and negotiate as a part of the process of understanding the goals and consequences of individual components of a project.

Clearly, students have been enculturated to view grades as a power exercise and so student resistance to grading contracts comes as no surprise—why would students ever think that an evaluation system termed “contract” and “grading” would ever be a site for them to exercise their agency? But here the dominant cultural narratives around grades stand in relation to dominant cultural narratives of technological mastery, and the dominant raced and gendered narratives often associated with instructors of color—the “cool,” “hip,” and “nice and funny guy” who uses “pop cultural references.” So the bad reviews Medina received are a space to begin interrogating dominant views of race as they stand in relation to dominant views of grades as an exercise of power and of technology as a tool to master. As a visibly raced instructor, Medina is described by microaggressions, or discursive exchanges that belittle people of color, that weaken his credibility by positioning him as inferior (Yosso 2006). Many attributes describing Medina’s personality are used to set up a critique for the explicit values he asserts in his class—particularly the readings from authors of color and the thorough integration of technology in all assignments. In technical communication, Angela Haas argues that writers of color provide a necessary voice “to consider more deeply how race affects the ways in which technologies and documents are designed and used, how national and political values can inspire users to transform the work of technologies beyond their designed intent, and how non-Western cultures use and produce with Western and non-Western technologies differently than Westerners do” (281). The inclusion of such texts could have led some respondents to remark on the non-normative nature of his class, as with the comment

Table 2.2. *Rate My Professor* Comments
 (<http://www.ratemyprofessors.com/ShowRatings.jsp?tid=1235167>)

Post-Semester-Long Grading Contract

Poster 1

He conducts class on a “choose your own grade” basis, in which the syllabus lays out a list of assignments for each letter grade, and the students decide what they want to literally “earn.” He is quirky and eccentric, all the better for making lessons memorable. However, he tends to be too friendly, even with the disrespectful asshats in class.

Poster 2

Literally is the chilliest teacher at [University X]. You choose the grade you want and deserve and he ends up giving it to you if you prove it to him.

Post-Research Assignment Grading Contract

Poster 1

He’s a nice guy, but his class can be frustrating. All my friends [. . .] that are in [this course] have less homework and their essays don’t have to be as long as his. While pick your own grade sounds good, the requirement for an A are quite extensive. Certainly different than the average English class.

Poster 2

Fun guy really nice however the papers require 8 sources 6 of which are [sic] acedemic. Too much work for [this course]. This is like a upper division research class.

Poster 3

For pick your own grade I picked A. Here’s what I had to do. 1) 7–8 pages 2) 8 academic sources 3) read out loud and record onto youtube 4) Annotated BIB 5) citations 6) Presentation 7) 8 minimal blogs this is for ONE paper! Find another teacher its [a] ridiculous amount of work for that.

Poster 4

Nice and funny guy, but he goes over the top with the essays he assigns. 7–8 pages, 6 academic and 2 popular source annotated bib. Digital story for Public Assignment. This is too much work for [this class]. DO NOT TAKE HIS CLASS.

Poster 5

The best English teacher at [University X] and the coolest professor you’ll ever meet. He uses pop culture references when explaining rhetorical analysis. The workload is very reasonable and he basically let us choose our grade for one of the essay’s. He is an easy grader and is always there if you need help. I actually enjoyed going to class!!

that expressed that his course is “certainly different from the average.” However, the inclusion of scholars who address issues such as race in technical communication help make visible the assumption that writers and audiences are accurately represented by a white, middle-class voice (Medina 2014).

Because the association between an instructor of color, grading as an exercise of power, and technological mastery cannot be separated, student resistance is most clearly found in resistance to the contract

itself—at least initially viewed as “a huge joke”—and to the “tedious and unnecessary” workload or the “way too much b.s. work” comments in relation to the course’s technological orientation. However, the privilege of students can also be detected in the below average ratings for “Usefulness of outside assignments” and “Usefulness of course materials,” which does not simply critique the numerous exercises students could perform; rather, the dismissive nature of the course material hints at how students value texts by writers of color who discussed policy such as affirmative action and bilingual education. Students resist what Haas and Scott advocate in terms of integrating critical issues at the core of the curriculum and critically examining the documents and technologies that assume and ascribe certain levels of privilege to the construction of students as the intended audiences (Haas 2012; Scott 2004). Even still, to obviate concerns over usefulness, consequential validity in the use of grading contracts requires the necessary negotiation or Freirian dialogue that avoids re-instantiating oppressive curricula through critical pedagogy.

Medina’s tale is emblematic and latent for technical communication in terms of race and pedagogies using digital technologies. Gesturing to grading contracts in and of themselves is not emancipatory and justified. Instead, those values have to be found in the process orientation toward the goals, outcomes, and the kinds of reflective potentialities we frame for our students. Potentially what the grading contract affords is an explicit conversation about the values associated with the goals of a social justice-inflected pedagogy. What is socially just will be found in the process of producing quality writing in relationship to the kinds of assignments typical of technical communication curricula.

MODEL 2: CONSEQUENTIAL VALIDITY AND GRADING CONTRACTS IN TECHNICAL COMMUNICATION SERVICE LEARNING REDESIGN PROJECTS

Designing grading contracts through the frameworks of consequential validity provides one way to integrate critical evaluations into service learning pedagogy in order to preempt co-optation by hyperpragmatic forces (Matthews and Zimmerman 1999; Sapp and Crabtree 2002; Scott 2004; Turnley 2007; Youngblood and Mackiewicz 2013). Walker’s experience began in an introductory technical communication course that integrated social justice and a service learning project, particularly at the site grading contracts. For Walker, the fundamental question for using consequential validity in the design of the grading contract was

what kinds of agencies, competencies, and performances do I value, and how can these align with the values of social justice to advocate for the socially, politically, and/or culturally under-resourced? With this framing, Walker's grading contract was designed to align social justice values with course assessments of complex and collaborative projects.

The key elements of Walker's redesign project are that it challenges students to establish a relationship with a community partner who identifies with social justice values (developing this relationship either on their own or through the instructor's contacts) and to negotiate a technical redesign project that is needed by the community partner and is manageable for a collaborative student project in under two months.³ Walker designed the grading contract for this assignment as a substantial portion of the entire course grade (30% in this case). Once student teams secure a community partner and are given the grading contract, they are tasked with discussing their commitment to the project and choosing their own grade. As you can see from table 2.3, this approach allows the instructor to foreground the values upon which grades will be negotiated—equitable collaboration, team initiative, just relationships, attention to process, embodied experience, and usability. Thus, a few of the standard commonplaces of privilege, such as individual effort and cultural capital, are recontextualized within a framework that values relations, processes, and collaboration in addition to labor. The discussion of course grade creates the space to negotiate workload as a function of the consequences that they choose or contract. In this assignment design, social justice values are embedded into the community-based projects and into the evaluation process based on consequential validity—students must work equitably, fairly, and collaboratively among themselves and with community partners in order to achieve the highest grades.⁴

The projects that students in Walker's class produced are emblematic of the kinds of community-based social justice projects that have the potential to encourage and/or complicate student understandings of social justice issues beyond the classroom and in community relationships. For example, one team worked with the Arizona Superior Court to develop, design, and user-test a screencast to assist those seeking to file for a divorce without an attorney. Because racial and ethnic minority women make up the largest percentage of this group, the student team had to maintain a relationship with the court to carefully consider how their information design and delivery could best serve this under-resourced group. Not only did the team work equitably together to produce a quality product, but the reflective evaluation component of the

grading contract allowed the student team to consider how the process of the project led all of us to consider more carefully the kinds of structural changes necessary to serve this population. While the goals and outcomes of the project were successful and encouraging, the reflective potentials of the project complicated any simple notions of effective social justice pedagogy. Instead, we all reflected on how even successful socially-justice community projects revealed further systemic inequalities that these kinds of projects are unable to address.

Other projects in the course showed that the majority of student teams were able to use the grading contract as a reference point for working collaboratively and equitably on projects with either explicit or implicit possibilities for social justice work. For example, another project developed a proto website for the Yavapai Health Clinic, thus allowing this team to consider, along with the community partner, how information design and delivery might both reflect indigenous knowledge and promote access to health services. Other projects had more implicit ties to social justice possibilities. One group redesigned the brochure for a local farm seeking to advertise to Co-op shoppers. They reflected that access to low-cost and high-quality local food is a pressing issue for social justice that their technical documentation helped facilitate. Another group worked with a local nonprofit to redesign a homeowner's guide on how to install a DIY storm water storage system at home. This team reflected that storm water storage has the potential to connect a scarce resource to resource-scarce populations. Beyond the range of these more tangible outcomes, Walker and his students found the grading contract usefully made the values embedded in the process of social justice pedagogy more explicit and therefore it was more clear which groups were more or less successful in both the process and products of a socially just-infused redesign project.

Used in these ways, grading contracts make the values of social justice explicit within the processes of service-learning projects, and this has potential to destabilize some of the privileges students have when entering the course. Using the grading contract to collaboratively reflect on the process and to provide the community partner an opportunity to reflect and assess the teams' redesign work results in much more than a grade. At best, the consequences lead to deep reflection on the role of technical communication in community-based social justice projects and the processes used to successfully complete them. Still, an important consideration when working with traditionally marginalized populations is to avoid promising too much, so that failed student collaborations become little more than another stage in the continuum of

Table 2.3. Grading Contract (Walker): Collaborative Service-Learning Redesign Project

<p>In order to earn an A, you must satisfactorily complete the following:</p>	<ul style="list-style-type: none"> • Using the instructor's list, or on your own, make contact through an email of inquiry with one community partner who identifies with social justice values, and set up a meeting to negotiate an appropriate project scope. • Electronic introduction of instructor to the community partner, which includes discussion of the project's scope. Use of partner's feedback required for contracting group's grade. • Collaboratively develop a redesign project proposal that includes a partner description, a needs analysis, a discussion of possible document designs, a justification for the selected design, and an appendix with a storyboard/design template and style guide. • Collaboratively design, user test, and integrate technical documentation into a community partner's workplace. • Prepare a team presentation that introduces your community partner, reports on your redesign project and the results of your usability testing, identifies the social justice element of your work with the community partner, and draws conclusions for students who might conduct similar projects in the future. • Work equally and collaboratively as a team to fairly distribute the workload, and appropriately use each individual's skills to design the best documentation. • Collaboratively compose an email, with your instructor cc'ed, thanking your community partner, offering a reflective evaluation on your partnership and the product you designed and, using these negotiating points, make a case for why your group deserves the grade you decide on.
<p>In order to earn a B, you must satisfactorily complete the following:</p>	<ul style="list-style-type: none"> • Using the instructors list, or on your own, make contact through an email of inquiry with one community partner who identifies with social justice values and set up a meeting to negotiate an appropriate project scope. • Send an email introducing your instructor to the community partner so that we may negotiate the scope of your redesign project and use your partner's feedback when negotiating your group's grade. • Collaboratively develop a redesign project proposal that includes a partner description, a needs analysis, a discussion of possible document designs, a justification for the selected design and an appendix with a storyboard/design template (NO STYLE GUIDE). • Collaboratively design, user test, and integrate technical documentation into a community partner's workplace (FEWER REQUIREMENTS FOR USER TEST). • Work collaboratively as a team to distribute the workload, and appropriately use each individual's skills to design the best documentation and establish a professional relationship with a community organization (NOT NECESSARILY EQUALLY OR FAIRLY). • Prepare a team presentation with visuals that introduces your community partner, reports on your redesign project and the results of your usability testing, identifies the social justice element of your work with the community partner, and draws conclusions for students who might conduct similar projects with similar partners in the future. • Collaboratively compose an email, with your instructor cc'ed, thanking your community partner, offering a reflective evaluation on your partnership and the product you designed and, using these negotiating points, make a case for why your group deserves the grade you decide on.

continued on next page

Table 2.3—continued

In order to earn a C, you must satisfactorily complete the following:

- Using the instructors list or through simulation, make contact through an email of inquiry with one community partner who identifies with social justice values and set up a meeting to negotiate an appropriate scope for the redesign project (POTENTIAL FOR SIMULATION).
- Send an email introducing your instructor to the community partner so that we may negotiate the scope of your redesign project and use your partner's feedback when negotiating your group's grade.
- Collaboratively develop a redesign project proposal that includes a partner description, a needs analysis, a discussion of possible document designs, and a justification for the selected design (NO STYLE GUIDE; NO DRAFTS OR TEMPLATES).
- Collaboratively design, user test, and simulate the integration of technical documentation into a community partner's workplace (FEWER REQUIREMENTS FOR USER TEST).
- Work collaboratively as a team to distribute the workload, and appropriately use each individual's skills to design the best documentation (NOT NECESSARILY EQUALLY OR FAIRLY; NO RELATIONSHIP).
- Prepare a group presentation with visuals that introduces your community partner, reports on your redesign project and identifies the social justice element of your work, and draws conclusions for students who might conduct similar projects in the future (LIGHTER REQUIREMENTS).
- Collaboratively compose an email, with your instructor cc'ed, thanking your community partner, offering a reflective evaluation on the product you designed and, using these negotiating points, make a case for why your group deserves the grade you decide on.

In order to earn a D, you must satisfactorily complete the following:

- Through simulation make contact through an email of inquiry with one community partner who identifies with social justice values (ONLY SIMULATION).
- Send an email introducing your instructor to the community partner so that we may negotiate the scope of your redesign project (NO PARTNER RELATIONSHIP).
- Collaboratively develop a redesign project proposal that includes a partner description, a needs analysis, a discussion of possible document designs, a justification for the selected design (NO STYLE GUIDE; NO DRAFTS OR TEMPLATES).
- Collaboratively design and implement technical documentation into a community partner's workplace (NOT NECESSARILY SUCCESSFUL; NO USER TESTING).
- Work collaboratively as a team to distribute the workload, and appropriately use each individual's skills to design the best documentation (NOT NECESSARILY EQUALLY OR FAIRLY; NO RELATIONSHIP; NO PRESENTATION).
- Collaboratively compose an email, with your instructor cc'ed, thanking your community partner, offering a reflective evaluation on the product you designed and, using these negotiating points, make a case for why your group deserves the grade you decide on.

F grades will be earned by those students who fail to satisfactorily complete more than one of the assignments in the D requirement.

hegemonic institutions shirking responsibilities with these groups. It is in the ability of the instructor and the students to be flexible with the contingencies of each project and to be in constant contact with the team and the community partner that holds the most promise for realizing just consequences in these projects.

CONCLUSION: THE POTENTIALS AND LIMITS OF CONSEQUENCES IN SOCIAL JUSTICE PEDAGOGY

In this chapter we have sought to further the influence of cultural, racial, and social justice theories in technical communication by providing models that contribute to critical practices in course-based assessments. Grading contracts have rarely been discussed with regard to countering institutional and social inequality. By acknowledging the fundamentally rhetorical nature of validity, and by integrating social justice values into our course-based assessments, these models begin the work of acknowledging and correcting for the uneven distribution of knowledge, power, and access to resources found among student populations. The intended and unintended consequences of our pedagogies for systemically marginalized students matter. Using explicit social justice values in our course evaluation systems is one way technical communication instructors can better attend to these consequences for these students. At the programmatic-level, future research might study how consequential validity can help negotiate the inherent tension between programmatic coherence and student potentiality (Gallagher 2012). At the classroom-level, consequential validity leaves us with questions that appear during the process of teaching and aspiring to a critical consciousness: how do educators respond to the racialized social dynamics in our technical communication classrooms that allow entitled white students to continue to perform their privilege, partly by challenging the decisions of an instructor of color, as they might with female, queer, working-class, or disabled instructors? How might these instructors critically rearticulate privilege to support a more just and more equitable distribution of knowledge, power, and access?

It is problematic to assume that a single class can provoke critical consciousness for all students about the many issues impacted by institutional inequality. In chapter 7 of this collection, Marcos Del Hierro conversely problematizes the guiding principle that education serves to civilize poor populations who have been described as “barbarians” in Open Admissions institutions (Horner 1996). Del Hierro warns that the enduring assumption that “the educational process converts young

people from wild and misbehaved children into educated and refined citizens has dangerous consequences for non-white students” (174). Our attention to grading contracts underscores a pedagogical change that actively undermines the privilege that normalizes assumptions about underrepresented and under-resourced students and communities. We can neither be afraid nor actively avoid pushback from students when assignments and practices highlight the equitable distribution of labor in groups and for individual students.

Scholarly attention to grading contracts no doubt persists because instructors remain skeptical of the validity of a traditional grading system. The field of technical communication should recognize this exigency because of the growing body of scholarship highlighting why social justice matters with regard to students, educators, businesses, nonprofit organizations, and the environment. Grading contracts offer a system that possesses the potential to make grades more transparent to students; however, grading contracts potentially carry with them misgivings about workload and resentment because of what some students expect because of accrued cultural capital. To still advocate for grading contracts as tools that effect change, we should note that *RMP* posts should be seen as a call to forefront issues of workload, which can be an outcome of valuing labor above privilege. Likewise, the conflicted perspectives on the difficulty of a class as a result of social justice curricula reflect the very same conflict that instructors experience when deciding what and how to challenge students to become critical of the intended outcomes of their writing. While it is certainly true that the race of students can impact the efficacy of grading contracts (Inoue 2012), Medina’s experiences as an instructor of color in predominantly white classrooms suggests the reverse: the race of the instructor can also impact the efficacy of grading contracts and lead to messy consequences for the instructor.

As our opening example of Tucson High School’s Mexican American Studies Program suggests, if critical educators mean to overturn the contents of privilege’s invisible knapsack (McIntosh 1989), then we must be prepared for the mess of sorting it out. Consequential validity provides a framework for making course values explicit, but the decisions and approaches to integrate social justice into classroom curriculum remain rhetorical in that institutional context. Student population, instructor positionality, and departmental support should all be factored into the decision-making that can affect how an instructor is viewed by their students, future students, colleagues, and future hiring committees. Our hope is that by attending to notions of consequential validity, critical pedagogues can disrupt the exercise of privilege and advocate for the

marginalized through the course-based assessment tool of grading contracts. But grading contracts alone do not do this. Consequential validity alone does not do this. It is only in the process of attending to consequential validity in grading contracts that we *might* discover workable social justice pedagogies and evaluations in technical communication.

Notes

1. We view Freire's critical pedagogy as possessing a social justice ethos; however, we do not necessarily correlate a direct one-to-one relationship between critical pedagogy and methodology for the theories and practices of social justice because of the farther-reaching possibilities of social justice work that cannot be reduced to critical pedagogy.
2. Students cannot receive a passing grade in first-year composition unless they have submitted drafts and final versions for all major assignments and the final exam. Incompletes are awarded in cases of extreme emergency if and only if 70 percent of the course work has been completed at the semester's end.
3. The literature on grading contracts suggests that instructors use grading contracts for major assignments and/or for the class as a whole.
4. A key part of explicitly valuing community relationships is that the instructor must have dependable relationships with select organizations to ensure that students have the best possible opportunity to succeed. Instructors should always have contingency plans for community partners who do not meet the expectations of their role in the project.

References

- Agboka, G. Y. 2013. "Participatory Localization: A Social Justice Approach to Navigating Unenfranchised/Disenfranchised Cultural Sites." *Technical Communication Quarterly* 22 (1): 28–49. <https://doi.org/10.1080/10572252.2013.730966>.
- Allen, Jo. 1993. "The Role(s) of Assessment in Technical Communication: A Review of the Literature." *Technical Communication Quarterly* 2 (4): 365–388. <https://doi.org/10.1080/10572259309364548>.
- Ball, Cheryl E. 2012. "Assessing Scholarly Multimedia: A Rhetorical Genre Studies Approach." *Technical Communication Quarterly* 21 (1): 61–77. <https://doi.org/10.1080/10572252.2012.626390>.
- Banks, Adam J. 2006. *Race, Rhetoric, and Technology: Searching for Higher Ground*. Mahwah, NJ: Lawrence Erlbaum.
- Barton, Matthew D., and James R. Heiman. 2012. "Process, Product, and Potential: The Archaeological Assessment of Collaborative, Wiki-Based Student Projects in the Technical Communication Classroom." *Technical Communication Quarterly* 21 (1): 46–60. <https://doi.org/10.1080/10572252.2012.626391>.
- Beard, J. D., J. Rymer, and D. L. Williams. 1989. "An Assessment System for Collaborative-Writing Groups: Theory and Empirical Evaluation." *Journal of Business and Technical Communication* 3 (2): 29–51. <https://doi.org/10.1177/105065198900300203>.
- Cabrera, Nolan L., Jeffrey Milem, and Ronald W. Marx. 2012. "An Empirical Analysis of the Effects of Mexican American Studies Participation on Student Achievement within Tucson Unified School District." UA College of Education, June 20, 2012. Accessed August 27, 2014. https://works.bepress.com/nolan_l_cabrera/17/.

- Coppola, Nancy W. 1999. "Setting the Discourse Community: Tasks and Assessment for the New Technical Communication Service Course." *Technical Communication Quarterly* 8 (3): 249–267. <https://doi.org/10.1080/10572259909364666>.
- Corbett, Edward P. J., Nancy Myers, and Gary Tate. 1999. *The Writing Teacher's Sourcebook*. New York: Oxford University Press.
- Danielewicz, Jane, and Peter Elbow. 2009. "A Unilateral Grading Contract to Improve Learning and Teaching." *College Composition and Communication* 61 (2): 244–68.
- Farber, Jerry. 1990. "Learning How to Teach: A Progress Report." *College English* 52 (2): 135–141. <https://doi.org/10.2307/377440>.
- Freire, Paulo. 1970. *Pedagogy of the Oppressed*. New York: Continuum.
- Gallagher, Chris W. 2012. "The Trouble with Outcomes: Pragmatic Inquiry and Educational Aims." *College English* 75 (1): 42–60.
- Haas, Angela M. 2012. "Race, Rhetoric, and Technology: A Case Study of Decolonial Technical Communication Theory, Methodology, and Pedagogy." *Journal of Business and Technical Communication* 26 (3): 277–310. <https://doi.org/10.1177/1050651912439539>.
- Herndl, Carl G. 2004. "Introduction to the Special Issue: The Legacy of Critique and the Promise of Practice." *Journal of Business and Technical Communication* 18 (1): 3–8. <https://doi.org/10.1177/1050651903258143>.
- Horner, Bruce. 1996. "Discoursing Basic Writing." *College Composition and Communication* 47 (2): 199–222. <https://doi.org/10.2307/358793>.
- Inoue, Asao. B. 2009. "The Technology of Writing Assessment and Racial Validity." In *Handbook of Research on Assessment Technologies, Methods, and Applications in Higher Education*, ed. C. Schreiner, 97–120. Hershey, PA: Information Science Reference. <https://doi.org/10.4018/978-1-60566-667-9.ch006>.
- Inoue, Asao. B. 2012. "Grading Contracts: Assessing Their Effectiveness on Different Racial Formations." In *Race and Writing Assessment*, ed. A. B. Inoue and M. Poe, 78–93. New York: P. Lang.
- Johnson, Jennifer Ramirez, Octavio Pimentel, and Charise Pimentel. 2008. "Writing New Mexico White." *Journal of Business and Technical Communication* 22 (2): 211–236. <https://doi.org/10.1177/1050651907311928>.
- Longo, B. 1998. "An Approach for Applying Cultural Study Theory to Technical Writing Research." *Technical Communication Quarterly* 7 (1): 53–73. <https://doi.org/10.1080/10572259809364617>.
- Manion, Christopher E., and Richard "Dickie" Selfe. 2012. "Sharing an Assessment Ecology: Digital Media, Wikis, and the Social Work of Knowledge." *Technical Communication Quarterly* 21 (1): 25–45. <https://doi.org/10.1080/10572252.2012.626756>.
- Matthews, Catherine E., and Beverly B. Zimmerman. 1999. "Integrating Service Learning and Technical Communication: Benefits and Challenges." *Technical Communication Quarterly* 8 (4): 383–404. <https://doi.org/10.1080/10572259909364676>.
- McIntosh, Peggy. 1989. "White Privilege: Unpacking the Invisible Knapsack." *Peace and Freedom* 49 (4): 10–12.
- Medina, Cruz. 2014. "Tweeting Collaborative Identity: Race, ICTs and Performing Latinidad." In *Communicating Race, Ethnicity, and Identity in Technical Communication*, ed. Miriam Williamson and Octavio Pimentel, 63–86. Amityville: Baywood Publishing.
- Messick, Samuel. 1989. "Meaning and Values in Test Validation: The Science and Ethics of Assessment." *Educational Researcher* 18 (2): 5–11. <https://doi.org/10.3102/0013189X018002005>.
- Monroe, Barbara Jean. 2004. *Crossing the Digital Divide: Race, Writing, and Technology in the Classroom*. New York: Teachers College Press.
- Morain, Matt, and Jason Swarts. 2012. "YouTutorial: A Framework for Assessing Instructional Online Video." *Technical Communication Quarterly* 21 (1): 6–24. <https://doi.org/10.1080/10572252.2012.626690>.

- Moreno-Lopez, Isabel. 2005. "Sharing Power with Students: The Critical Language Classroom." *Radical Pedagogy* 7 (2). http://www.radicalpedagogy.org/radicalpedagogy/Sharing_Power_with_Students_The_Critical_Language_Classroom.html.
- Poppen, William A., and Charles L. Thompson. 1971. "The Effect of Grade Contracts on Student Performance." *Journal of Educational Research* 64 (9): 420–423. <https://doi.org/10.1080/00220671.1971.10884209>.
- Ritter, Kelly. 2008. "E-Valuating Learning: Rate My Professors and Public Rhetorics of Pedagogy." *Rhetoric Review* 27 (3): 259–280. <https://doi.org/10.1080/07350190802126177>.
- Sapp, David Alan, and Robbin D. Crabtree. 2002. "A Laboratory in Citizenship: Service Learning in the Technical Communication Classroom." *Technical Communication Quarterly* 11 (4): 411–432. https://doi.org/10.1207/s15427625tcq1104_3.
- Scott, J. Blake. 2004. "Rearticulating Civic Engagement through Cultural Studies and Service-Learning." *Technical Communication Quarterly* 13 (3): 289–306. https://doi.org/10.1207/s15427625tcq1303_4.
- Scott, J. Blake, and Bernadette Longo. 2006. "Guest Editors' Introduction: Making the Cultural Turn." *Technical Communication Quarterly* 15 (1): 3–7. https://doi.org/10.1207/s15427625tcq1501_2.
- Scott, J. Blake, Bernadette Longo, and Katherine V. Wills. 2006. *Critical Power Tools: Technical Communication and Cultural Studies*. Albany: State University of New York Press.
- Shor, Ira. 2009. "Critical Pedagogy Is Too Big to Fail." (CUNY) *Journal of Basic Writing* 28 (2): 6–27.
- Spidell, Cathy, and William H. Thelin. 2006. "Not Ready to Let Go: A Study of Resistance to Grading Contracts." *Composition Studies* 34 (1): 35–69.
- Taylor, Hugh. 1971. "Student Reaction to the Grade Contract." *Journal of Educational Research* 64 (7): 311–314. <https://doi.org/10.1080/00220671.1971.10884172>.
- Turnley, Melinda. 2007. "Integrating Critical Approaches to Technology and Service-Learning Projects." *Technical Communication Quarterly* 16 (1): 103–123. <https://doi.org/10.1080/10572250709336579>.
- Williams, Miriam F., and Octavio Pimentel. 2012. "Introduction: Race, Ethnicity, and Technical Communication." *Journal of Business and Technical Communication* 26 (3): 271–276. <https://doi.org/10.1177/1050651912439535>.
- Wolvin, A. D., and D. R. Wolvin 1975. "Contract Grading in Technical Speech Communication." *Speech Teacher* 24: 139–142.
- Yarber, William L. 1974. "Retention of Knowledge: Grade Contract Method Compared to the Traditional Grading Method." *Journal of Experimental Education* 43 (1): 92–96. <https://doi.org/10.1080/00220973.1974.10806310>.
- Yosso, Tara J. 2006. *Critical Race Counterstories along the Chicana/Chicano Educational Pipeline*. New York: Routledge.
- Youngblood, Susan A., and Jo Mackiewicz. 2013. "Lessons in Service Learning: Developing the Service Learning Opportunities in Technical Communication (SLOT-C) Database." *Technical Communication Quarterly* 22 (3): 260–283. <https://doi.org/10.1080/10572252.2013.775542>.
- Yu, Han. 2008. "Contextualize Technical Writing Assessment to Better Prepare Students for Workplace Writing: Student-Centered Assessment Instruments." *Journal of Technical Writing and Communication* 38 (3): 265–284. <https://doi.org/10.2190/TW.38.3.e>.
- Yu, Han. 2012. "Intercultural Competence in Technical Communication: A Working Definition and Review of Assessment Methods." *Technical Communication Quarterly* 21 (2): 168–186. <https://doi.org/10.1080/10572252.2012.643443>.