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Towards an Assumption Responsive Information Literacy Curriculum: Lessons from Student Qualitative Data

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In our experience, information literacy is grounded in the assumption that students arrive at higher education lacking the requisite skills, knowledge, and experience to find, use, and evaluate information. The term *information overload* can create the perception and assumption that students are information illiterate while equally charged terms, such as *digital natives*, *millennials*, *generation X*, and *generation Y*, unconsciously influence our perceptions of who students are and what they know.[1] Librarians face changing student

1.2 Student Epistemologies and Beliefs

populations, rapidly evolving digital technologies, and a constantly changing information landscape. When we began teaching credit courses on digital information literacy, we sought to confront our assumptions about students and their learning. By integrating multiple responsive teaching tools, we were able to create a two-way exchange of information that informed us of student assumptions; allowed us to respond to their questions, concerns, and opinions; and ultimately disrupted many of the categories into which students are unfairly lumped.

Constructivism and Critical Reflection

The constructivist approach to learning values student experiences where students actively participate in their learning.[2] Constructivism is an active process of engaging and interrogating knowledge. Students learn how to build on prior experience, construct meaning, and make sense of their experiences in direct contrast to the banking approach of filling the student with knowledge.[3] In our teaching, students are active participants in their learning rather than empty vessels to be filled. We also believe that "learning is the construction of meaning from experience."[4] Traditional information literacy instruction is rooted in behaviorism where learning is observable and objective.[5] Grades and learning outcomes are examples of how behaviorism manifests in current educational practice. Behaviorism values demonstrable skills; what students can do and prove reinforces the banking approach to education. Students' experiences, emotions, cultures, and environment are often secondary or completely ignored in a strictly sequential process model. Our teaching philosophy goes beyond viewing information as an observable fact that is neutral and requires mastering; we emphasize helping students develop a consciousness about information and its social development in the world.[6] The problem, as we see it, is that librarians who adhere to a simple process model risk valorizing specific skills that can detract from viewing information as socially constructed, interconnected, and complex, demanding critical reflection and thinking.

Critical reflection and critical thinking are integral parts of student engagement and integrating a constructivist and critical approach to teaching. We crafted a definition of critical reflection using adult educator Stephen D. Brookfield's terminology and philosophy where being "critical" means actively investigating and revealing dominant beliefs, power structures, and practice. In this process, assumptions are uncovered by being checked and "hunted" in order

to develop different perspectives.[7] Librarians and students who do not integrate this form of critical reflection into their practice risk falling back on ideologies and structures that dictate how the world operates instead of critically thinking and questioning. We practice "critical information literacy," which integrates traditional information literacy skills with a critical eye towards social and cultural boundaries. We challenge students to dig deeper into the social construction of information and engage with the larger and more complex contexts. Examining knowledge construction involves looking at the "why" behind beliefs we take for granted and acknowledging that information is not neutral or value free. One example is that for students to effectively evaluate all information, we must take them beyond the traditional "academic information literacy" of learning and idolization of scholarly sources.[8]

Educators can make assumptions about student learning, experiences, and knowledge because it is easy, but this outlook can also impede student learning as a process of inquiry.[9] In our experience, teaching information literacy is more effective in context and comprises more than just a series of tasks.[10] Librarians can prepare lesson plans without *always* knowing student competencies and knowledge. To address this issue, we resolved to uncover student assumptions in a face-to-face credit course on digital information literacy.

Library Credit Courses at National Louis University

National Louis University (NLU) was founded in Chicago in 1886 to train kindergarten teachers. Today, around 8,500 students are enrolled online and at campuses in Illinois, Wisconsin, Florida, and Poland and at field sites, usually businesses or other schools. NLU has three distinct colleges: the National College of Education (NCE), the founding college, and two newer ones, College of Arts and Sciences and the College of Management and Business that are now combining into a single college. NLU has mainly served nontraditional working adults and has focused on recruitment of minority and underserved populations as part of our social justice mission. Many courses are accelerated (three weeks to a full semester) with some undergraduate programs completed in a year and doctoral programs in three years. Library instruction has been challenging for a distributed campus model and accelerated programs where in-class sessions are

generally short and follow-ups conducted by phone or e-mail. Librarians are faculty at NLU and for years taught an undergraduate credit course on using library resources as adjuncts for the College of Arts and Sciences. In 2008, recognizing that NLU students needed to learn digital skills, library faculty proposed and created a course called Digital Information Literacy.

LIBR 200: Digital Information Literacy is a two-quarter hour credit course that was initially offered as a three-week fully online general education elective.[11] This course introduced students to a critical consideration of information in digital formats. In 2009, ten sections were taught, four as part of an accelerated undergraduate business management program. Enrollment in these courses was small and did not exceed ten students in a single class. This was our first experience developing and teaching an extremely short credit class where time constraints made even skill building a challenge. Our experience with teaching digital information literacy online was helpful, but in 2010 we were asked to create a blended but mainly face-to-face version for a pilot program that spurred us to test assumptions and reflect on our pedagogy and educational practice.

In the fall of 2010, NLU started a daytime college program for traditional-aged students, a departure from its historical service to adult learners with evening and weekend classes. The daytime program was an attempt to recruit younger students from diverse populations for weekday classes in Chicago at our downtown campus. Undergraduate programs involved were elementary education, business management, and human services. LIBR 200 was taught as a face-to-face class in 2010, initially meeting twice a week over four weeks. The following year, we extended the class over ten weeks, meeting once a week for one and a half hours. After the first year, readings, discussion boards, and assignments were all placed online in a learning management system: WebCT, BlackBoard, and, today, Desire2Learn. In 2010 and 2011, four sections of LIBR 200 were taught in the fall with two sections in Fall 2012. One section was taught in Spring 2011 and Winter 2012. In addition, nine sections of LIBR 200 were taught entirely online as a five-week undergraduate elective course from Fall 2012 to Summer 2013.

Librarian Assumptions

The daytime program was an opportunity for librarians to participate more deeply in the student learning experience. The mixed population of returning

adults and traditional-aged students was the catalyst for our wanting to learn more about students' prior search experience and their use of technology in order to quickly identify baseline information-seeking skills. Recognizing that critical thinking requires students to grapple with complex issues of authority, knowledge production, and privileged academic sources, we sought to further understand students' preexisting assumptions and experiences that impacted their information-seeking process. We view information literacy education as more than developing search skills and as more effective in context rather than a series of tasks.[12] Our desire to update the online class was another catalyst for reexamining our curriculum and practice.

The face-to-face class was an opportunity for us to work in person with students over an extended time frame. We had prior experience teaching students who had little experience with technology (computers, word processing programs), and in the fully online courses, students had to have some level of experience or comfort learning with technology. This new in-person/blended version was taught in a computer lab, and one of the first things we wanted to know for certain was if students could work online at home or only at the campus computer labs. Concern about students' experience with technology and Internet access was one of the catalysts for our decision to obtain hard data and avoid making assumptions. Other assumptions we did *not* want to make included students' search experience (knowledge of effective searching on the Internet and subscription databases); students' ability to evaluate information; students' familiarity with citing and academic honesty concepts; and students' critical thinking about searching for information. We had experience working with academically underprepared students and expected (assumed) that most students would not be proficient with searching, citing, and evaluating information. This course presented us with an opportunity to interrogate our assumptions and integrate active learning assignments in response.

Qualitative Data Collection Tools

Data was collected from 12 face-to-face classes taught from Fall 2010 to Fall 2012 that enrolled 163 students. We did not collect demographic information from students (age, ethnic identity, employment, income, etc.). The majority of students were Latino and African American and in their first year of college classes; some had taken community college courses. This information was con-

firmed by student advisors, who worked closely with all faculty to monitor student progress.

We used a variety of tools in the class to uncover assumptions and to help us "hunt" for them in the student learning process. The following tools collected qualitative data that provided depth and context to our assumptions and to student learning: pre-class survey, critical incident questionnaire, and end-of-course evaluations.

Pre-Class Survey Results

The first step in understanding student assumptions was implementing a survey to determine their access to and current use of technology. We considered the survey a pretest as it was administered early during the first day of class. Initially titled "Technology Survey," this instrument served as a form for students' self-reported use of technology, where they initially searched for information, and how they evaluated sources for credibility. The responses informed us on the students' experiences and assumptions and provided initial data on their search habits, favored resources, and evaluation criteria. This pre-class survey was most useful in determining how many students had access to the Internet outside of the classroom and prior experience searching online for information.

In response to the first question, "Where is the first place that you go to look for information?," the majority of responses were "Google," "Internet," or "library." This feedback confirmed one of our assumptions: Students' first stop for information is the Internet. We discovered through class discussions that some students had used a public library in their community for group study and reading purposes. We did see some thoughtful responses to this question related to the topic being the determining factor: "It depends on what type of topic I'm trying to find information on" and "the topic determines where I look" reflect a deeper level of critical thinking.

We asked several technology questions such as "Do you have a computer at home with Internet access?" and "Do you own a cell phone, iPhone, or other mobile device?" The percentage of students who did not own a computer at home with Internet access was around ten percent. This data confirmed our assumption that not every student would be able to work on assignments outside of class time. Using this information, we allotted more in-class time to assignments over the years and noted that many of the online discussion boards and quizzes were completed

by students the day of class during school hours. Most students reported owning some type of portable device, usually a cell phone. As sometimes the cell phone was their only access to the Internet off-campus, we made sure that our course shells and activities were mobile friendly. After several years of asking this question about cell phones, we expanded the language to "What type of digital tools do you have or have used?" in an effort to be inclusive of apps and other programs students may have encountered. Examples of responses included websites, apps, iPhone, iPad, digital cameras, Flickr, Google Drive, etc. Overall, students self-reported a high level of comfort with technology, especially in regards to social media websites and messaging applications (Facebook reigned supreme).

Our assumption that students entered the classroom unfamiliar with the concepts of citation and information evaluation was proven false. On the question of "How do you acknowledge someone else's ideas or exact words?," we found the majority of responses were "citing," "quoting," "paraphrasing," "in a bibliography," "footnote," and "by giving them credit." However, performance on later class assignments showed that students were not knowledgeable of the specifics of academic citation styles such as APA or MLA. In response to the question, "What information do you consider as reliable and credible?," most students provided examples of various academics sources: books, journals, websites, evidence, encyclopedias, textbooks, specific websites, "from professionals," "have credentials," "from experts." Other students offered more general statements on the nature of credible information such as that which is "supported by statistics" and "theories that have proof." Several students acknowledged the difficulty of determining credibility: "The kind of information that I consider reliable and credible is the information that is written by professionals but then again it's always hard knowing because there is so much information that may or may not be true on google." In addition, the anonymity of the survey allowed for honesty as some students answered "I don't know" and "I am not sure," which led to further in-class discussion.

The question "What types of websites do you use for school assignments/ projects?" revealed many students had been exposed to academic sources and directed to use them:

- "I choose carefully from the sites given to me. I stay away from blogs, and .coms and prefer .edu's, and .govs."
- "The Internet sites that have a .edu or .org ending also newspaper articles from reputable places. In addition, scholarly articles from college databases."

The comments about scholarly sources being credible and using material from professionals and experts revealed many students had some classroom experience with these concepts and used criteria to evaluate sources. We also saw the typical anti-*Wikipedia* ideology in comments: "not wikipedia" and "wiki is evil." Our takeaway from the survey is that many students were exposed to or had experience searching, citing, and evaluating information; their expertise, skills, and actual knowledge, though, would be demonstrated through classroom assignments and discussions. Our assumption that students were used to searching the Internet but did not differentiate between websites and databases was confirmed in search assignments. This data also revealed that students had prior search experience and exposure to some types of academic sources (books, encyclopedias, not scholarly journals) and "exhibit information literacy competencies in their own way."[13] We knew that we could not jump to advanced lesson plans on searching and evaluating sources based on this self-reported qualitative data, but it did challenge our assumptions that every student came to this course with no experience.

Critical Incident Questionnaire

The critical incident questionnaire (CIQ) is a tool designed by Brookfield to anonymously identify issues, concerns, and problems from students.[14] CIQs are comprised of five open-ended questions that ask learners about the most engaging and distancing moments, the most affirming and confusing actions, and the most surprising moments in the classroom.

Anonymous in nature, CIQs can help uncover unspoken thoughts and reveal assumptions by both students and instructors. In our course we used the CIQ to "take the temperature" of the class around the third or fourth week. The CIQs provided a rich source of information that informed our assumptions about student learning and revealed the emotional highs and lows of student learning. In addition, the CIQ questions encouraged reflective learning as students noted their own emotional responses to course content and discussions.

We asked five questions on our CIQ:

1. At what moment in class did you feel most engaged with what was happening?
2. At what moment were you most distanced from what was happening?

3. What action that anyone (teacher or student) took did you find most affirming or helpful?

4. What action that anyone took did you find most puzzling or confusing?

5. What about this class surprised you the most? (This could be about your own reactions to what went on, something that someone did, or anything else that occurs).

The first question, "At what moment in class did you feel most engaged with what was happening?," illuminated student learning styles. Numerous comments supported the value of group discussions and activities; we received more positive than negative comments:

- "Discussions: The time when we got to discuss our opinions. It lets me know our teachers care about how we feel and what we think."
- "When we do activities as a class."
- "During the in class debate"
- "When we all get into groups and take the time to put what we have learn [*sic*] from the lecture"
- "Also, I enjoy the discussions that we had because it is a great way to learn from others."

Seemingly contradictory comments, such as "I feel more engaged when we have discussions" and "I get more distracted after a discussion," both showed evidence of engagement with content. These comments comprised a majority of responses, confirming our assumptions on the value of active engagement and discussions. The third question, "What action that anyone (teacher or student) took did you find most affirming or helpful?," provided positive feedback on active learning assignments: "visual aids," "videos," and "group discussions and projects." A few students reported a preference for individual work: "I felt most engaged when we are pretty much on our own and we are working on our projects." This comment confirmed that some students may want to work individually, not in groups. We had a variety of assignments where students worked both in groups and individually (their final project was a solo venture); the CIQ confirmed that students had different learning styles and preferences.

Comments on what was most surprising included negative comments about other students' behaviors ("it's annoying how many people still, continuously come to class late") and positive comments on the value of group discussions ("how everyone had the chance to say what they thought about a topic and we didn't have to hear the teacher lecture the whole time"). These

comments helped verify the impact of specific behaviors and dynamics observed in class by librarians. Also confirmed were our assumptions that students were building on searching, citing, and evaluating information skills in the class, based on the initial survey data:

- "There are a lot of things out there that I never knew about."
- "How there were certain databases that provide different information from search engines."
- "I thought it was going to be a class on how to use the Internet, but it has actually been helpful. For example, I had never heard of Google books."
- "Overall I have been surprised by all the new information that I have to learn. It has helped me a lot and this class has been informative."
- "It surprises me that even with everyone in the class depending on the technology for everything, their responses were of 'waiting' to do research the old-fashioned manual way."

Students demonstrated through these comments that our assumptions concerning the need and value of this class were substantiated.

End-of-Course Course Evaluations

We conducted our own end-of-course evaluations on the final day to obtain feedback as official university evaluations were almost never completed by students. Data from two key questions, "How could this course be improved?" and "What did you learn in this course? What was new?," confirmed the value of creating active lesson plans, using guiding questions to frame content, and challenging students to dig deeper were effective tools. We also received useful feedback on how to construct meaningful activities.

We received multiple comments from students who wanted to spend more in-class time on assignments: "more practice," "more activities," "I think it can improve by getting more group involvement," "it can have more social activities that help the student participate and share their thoughts," "more involvement, less lecture," "could improve on more activities where students talk more and are forced to participate," "be nice if you made more group activities that way people can get to know each other a little more," and "I think that we could have worked in groups more and made it a little bit more fun." In the first year, lectures were a group activity followed by in-class discussion; in subsequent years, lectures

were moved to online homework, leaving more time for discussion and other activities in class. The "flipped" classroom model operates under an assumption that students will actually review videos, lectures, and other materials prior to class; in our experience, many students did not, so group activities often ended up incorporating lectures for context and support.

The comments on common knowledge helped verify classroom interactions when students made oral comments that demonstrated critical thinking and learning when discussing knowledge that is shared by all. Our lesson plan on plagiarism, "Why We Cite," critically explored the reasons and benefits of citing to expand upon learning citing skills. Comments such as these demonstrated critical thinking that was not superficial:

- "I learned that common knowledge is a bit vague because it mainly depends on who you are and where you come from."
- "I learned how to analyze a source in a new way that proved to be useful and efficient. Before taking this course I had no real way of knowing if a source was actually credible, or just looked credible."
- "I really like how the teacher made us think critically and how he would challenge the students on their responses."

One student did not know the fictitious story of George Washington and the cherry tree during an exercise on identifying common knowledge, providing a powerful teaching moment for the class that not all knowledge is shared or conventional in nature.

Curriculum Revisions

The data collected helped us to revise assignments that focused on the student experience, provide reflective evaluation, and exercise critical thinking that emphasized connections to process-oriented lessons. We integrated a constructivist approach to teaching by having students "engage concepts… through a process of inquiry, reflection and application."[15] Through reflection journals and classroom discussions, students were encouraged to explore their initial assumptions and examine the process of knowledge construction while still acquiring skills necessary to locate information.

The major revisions to LIBR 200 (face-to-face and online) were

- lectures were moved to homework;
- an increase in class time to write evaluations and practice citing;

- the number of reflection journal entries were reduced to two in 2012 and then incorporated into the final project in online classes starting in 2013;
- writing specialists were integrated into curriculum development and teaching (helped with writing annotations in 2011 and 2012); and
- an increase in discussion time, group activities, videos, and graphical materials (added after 2010).

We focused on evaluating information and allocating more in-class time to this activity where students applied critical thinking strategies as a means to developing information literacy skills.[16] One reason for this change was many students had inadequate reading and writing skills; this became more evident as the term progressed and convinced us that integrating writing specialists into the course was essential. Our assumption that an information literacy class could be taught without this essential piece and that students were developing writing competencies in other classes was proved incorrect.

Many students had difficulties writing and communicating in English. We invited writing specialists into the class to help with students and learned that this issue required considerably more time and attention. In 2011, the University Library was combined with all tutoring services into a unit called Library and Learning Support; in the future LIBR 200 will be revised by a team of librarians and learning support specialists to more effectively address student writing and citing needs.

LIBR 200 was revised every year; some revisions were minor (updated tutorials, new articles) and others were more substantive. Reflection journals were a part of every learning module in 2010 in the face-to-face classes. In 2011 and 2012, we reduced the number of modules from five to three: the impact of technology, academic integrity, and evaluating information. This change was for several reasons: We wanted students to spend more time on assignments; we thought the CIQs provided an additional reflection tool; and we increased points for the final project.

In 2013, we piloted moving the reflection journal to the final project in the online classes. We assumed students would reflect critically on each assignment; this did not happen, particularly in the online classes. We believe this change will also facilitate assessment of student learning. One student in our 2013 online class provided a reflection that demonstrates our objective to foster critical thinking and focuses on the purpose of citing:

> Citing and academic honesty is not merely a requirement, it is a demonstration of ethics and scholarly professionalism. When works are cited it is not a sign of personal weakness in a subject, it is evidence of solid research. It shows how scholars build on other works to better express their views and validate their ideas. Not only is citing about academic honesty and enforcing policies, it protects the work of original authors, and greatly aids in the educational process by inspiring study and academic growth.

We also incorporated more hands-on activities in response to student comments and framed learning modules with guiding questions. Asking "why" helps students examine their assumptions and focuses on critically analyzing information as part of the evaluation process.[17] Posing questions is a strategy that facilitates moving away from assumptions.[18] Lectures were moved to homework with a follow-up class discussion and additional hands-on activities to respond to comments from the CIQs and course evaluations. More class time was devoted to writing annotations and evaluations when students struggled the most with these activities. When students reported that group discussions, videos, and other visual media were engaging, we increased their role and use in the class.

The data also verified our strategy of not assuming students could demonstrate what they reported on the pre-class survey. The best example is being familiar with citing. Many students did not know APA style (we expected this), and many reported citing as a means to provide attribution on the surveys. The number of assignments turned in with incomplete citations was another factor; many students submitted partial APA citations for their final project. The comments on CIQs, course evaluations, and in-class on common knowledge supported our assumption that academic honesty policies and citing had to be critically presented and explored in class. By discussing and examining the definition of common knowledge, we were able to open the door to exploring knowledge construction and privilege (who defines knowledge?).

Conclusion

Our assumption responsive curriculum is one potential model to bridge the gap between the "how" and "why" of information literacy instruction in any class-

room setting. Librarians used guided lesson plans to provide a structure and framework for students, many who arrived with little preparation for college-level coursework and were balancing jobs, family, and school. The qualitative data we received informed our assumptions, lesson plans, and engagement strategies; this experience was transformative in the sense that we understood our students' habits and thoughts better and were able to verify or expand active learning lessons. Many students did demonstrate critical thinking skills that went beyond viewing information as simple containers and clearly learned new perspectives on search tools and strategies as evident in the course evaluations.

We learned more about how students think, feel, and experience the research process. Assumptions are easy to make and not difficult to uncover; we all make them, and the tools discussed in this chapter are effective for making them visible. We learned that an assumption responsive curriculum is part of an overall strategy to facilitate student learning. Developing this type of curriculum requires multiple strategies. First, detailed interaction and assessment with students. The CIQs greatly facilitated learning students' thoughts and feelings in addition to providing useful feedback. Second, assumption checking must be ongoing and embedded in practice and teaching; librarians must consistently reflect on their practice and lesson plans. All NLU librarians and adjuncts teaching credit courses are required to write a teaching reflection for every course to share issues, problems, successes, strategies, and assumptions with colleagues. Third, critical reflection and thinking are integral to the process and must be practiced by librarians and students. In the words of Brookfield, "A critically reflective stance towards our practice is healthily ironic, a necessary hedge against an overconfident belief that we have captured the one universal truth about good practice."[19] Exploring student assumptions also helped us to check our own assumptions about individual students search habits and experience. We learned how to more effectively provide a highly responsive curriculum and class environment where students practiced critical reflection and demonstrated critical thinking.

Notes

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3.   Stephen D. Brookfield, *Becoming a Critically Reflective Teacher* (San Francisco: Jossey-Bass, 1995); Sharan B. Merriam, Rosemary S. Caffarella, and Lisa M. Baumgartner, eds., *Learning in Adulthood* (San Francisco: Jossey-Bass, 2007); Penny Bealle, "Using Constructivism to Engage Students in an Online Credit IL Course," in *Best Practices for Credit-Bearing Information Literacy Courses,* ed. Christopher V. Hollister (Chicago: American Library Association, 2010); Ibid., 242–55; Kenneth R. Howe and Jason Berv, "Constructing Constructivism, Epistemological, and Pedagogical," in *Constructivism in Education: Opinions and Second Opinions on Controversial Issues, ed. D.C. Phillips* (Chicago: University of Chicago Press, 2000), 19–40; Paulo Freire, Pedagogy of the Oppressed, trans. Myra Bergman Ramos (New York: Continuum, 2003).

4.   Sharan B. Merriam and Lara L. Bierama, *Adult Learning: Linking Theory and Practice* (San Francisco: Jossey-Bass, 2014), 36.

5.   Ibid.

6.   Freire, *Pedagogy of the Oppressed.*

7.   Stephen D. Brookfield, *Teaching for Critical Thinking* (San Francisco: Jossey-Bass, 2012), 11.

8.   James Elmborg, "Critical Information Literacy: Implications for Instructional Practice," *Journal of Academic Librarianship,* 32 (2006): 192–99.

9.   Carolyn B. Gamtso and Susanne F. Paterson, "Guiding Students from Consuming Information to Creating Knowledge," *Communications in Information Literacy* 5 (2011): 118.

10.   Thomas, Crow, and Franklin, *Information Literacy and Information Skills Instruction.*

11.   Details on the development of credit courses in digital information literacy are chronicled in this paper: Marisa Walstrum, Larissa Garcia, and Rob Morrison, "From Embedded to Integrated: Digital Information Literacy and New Teaching Models for Academic Librarians" (paper, Association of College and Research Libraries National Conference, Philadelphia, Pennsylvania, April 1, 2011), http://www.ala.org/acrl/sites/ala.org.acrl/files/content/conferences/confsandpreconfs/national/2011/papers/from_embedded.pdf.

12.   Thomas, Crow, and Franklin, *Information Literacy and Information Skills Instruction.*

13.   Green, "Information Illiteracy: Examining Our Assumptions," 316.

14.   Stephen D. Brookfield, "Critical Incident Questionnaire," accessed July 15, 2013, http://www.stephenbrookfield.com/Dr._Stephen_D._Brookfield/Critical_Incident_Questionnaire.html.

15.   Bealle, "Using Constructivism," 242.

16.   Ibid., 243.

17.   Gamtso and Paterson, "Guiding Students," 117–26.

18.   Bealle, "Using Constructivism," 246.

19.   Stephen D. Brookfield, "The Concept of Critically Reflective Practice," in *Handbook of Adult and Continuing Education,* ed. Arthur L. Wilson and Elisabeth R. Hayes (San Francisco: Jossey-Bass, 2000), 46.