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Voices from the Field

Discovering Constructivism: How A Project-Oriented Activity-Based Media
Production Course Effectively Employed Constructivist Teaching Principles

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Abstract

The author uses his experience leading a project-oriented special-topics course as a case study in constructivist teaching methods. Citing relevant literature from the education field, this paper considers why students chosen to work for course credit on a promotional video for a university program considered the project their greatest academic learning experience. The author points out that communication media education has long championed activity and project-based learning and argues that educators could benefit from a deeper understanding of how and why such methods are effective.

Keywords: constructivism, project-based learning, media literacy, video production, higher education

“This is the most I’ve ever learned in a class.” As a university professor, I can think of nothing more satisfying than hearing these words, which I did recently from a student in a special-topics long-form video production course I led. Better still, another student chimed in, “Yeah, me too.” We all experience frustration from time to time, even days when we question whether we have made the right career choice, so moments of validation, especially in the form of unsolicited positive feedback from students, are important. The words made my day, but they also prompted me to question: How did this happen? What did I do to deserve it? Why this course? In my eight years teaching at the college level, I had prepared many lectures, given countless reading and writing assignments, and graded hundreds if not thousands of papers, exams, and individual projects, but this course had none of these.

My school’s director created the course in response to a request from university administrators that we produce a video piece highlighting an innovative program on campus. I offered to take it on and handpicked five students to work with me on the project for course credit. I fully expected to act as director-producer of the piece, with the students as crew, but this arrangement lasted little more than a week or two. The students took ownership of the project, using me as a resource and guide, and their learning experience took on a life of its own. I did

coordination and administrative work, answered a lot of questions, demonstrated some techniques, acted as an advisor during shoots, and even took the students on a field trip to consult with professionals, but I did little that would fit a stereotypical description of “teaching.” Naturally, project-oriented courses are common in media education, and I taught several previously, but what set this experience apart was its accomplishment of commonly accepted learning outcomes despite a complete lack of traditional class structure. Concepts such as *student-centered learning*, *engagement*, and *constructivism* were familiar to me, but I considered them elements to be worked into otherwise traditional lessons. In this case, a more complete adoption of constructivist principles resulted in a more complete learning experience for the students. My purpose in this article is to use constructivist education literature to explore how this happened.

Insight From the Education Field and Social Constructivism

As I reflected more on the idea that a non-traditional course could be a student’s greatest academic learning experience, I realized that the same was true for me. During my master’s program, I took a graphic design class that the instructor freely admitted on the first day he was unqualified to teach. He was being humble but truthful. He was a gifted teacher who could

help students learn just about anything, but he had no professional experience and only minimal coursework in graphic design. What made his course particularly effective was the atmosphere he created, the energy he brought to the discovery process, and above all else the collaborative, experiential approach he championed. The education field identifies this approach with the term *social constructivism*, based on the constructivist paradigm, which holds that knowledge is not an external phenomenon to be acquired by the learner but is instead constructed by the individual through interpretation and synthesis of ideas (Kutz and Roskelly 1991). Adding the “social” component suggests that knowledge is constructed through interaction with others (Palincsar 1998) and is a learning experience educational researchers have shown to be particularly effective (Stinson 1985). “Let’s learn it together,” my teacher said, and we did. In many courses, learning occurs gradually, through reading, writing, reflection, and discussion, but in this course it seemed much faster. I left each class period feeling almost overwhelmed at the sensation of learning at such a rapid pace.

The long-form video production course for which I received student praise was different from the graphic design class in that I was well equipped with professional experience to teach it, but there were striking similarities: no lecture, no tests, no required readings—just student-centered activities for which the instructor served as facilitator, leader, mentor, motivator and sounding board. Alison King (1993) describes the teacher in this scenario as the *guide on the side*, as opposed to the *sage on the stage*. The traditionalist might ask, what is the *content* students are supposedly learning if you are not *teaching* anything? Such a question assumes that teaching has only one definition: a one-way transmission in which the instructor conveys information, testing occasionally to make sure it’s getting into students’ heads. In some fields, it is rare to teach any other way, and students often react with surprise when professors attempt to use different methods (Gordon 2009). However, the course I taught is a natural fit with principles emphasized by the media literacy education movement, with its emphasis on accessing, analyzing, evaluating, and communicating media messages (Hobbs 2010). My students fulfilled all of the course criteria as they related to media literacy, as outlined in table 1.

A frequent criticism of constructivist methods is that teachers are too hands-off, leaving students to teach themselves. Gordon (2009) identified this not as

a drawback of constructivism but as a misuse of the approach or misunderstanding of how to do it properly:

Teacher candidates in our program spoke about professors who, after the first class meeting, divided the students into small groups and devoted the rest of the semester to having each group present to the class one or more chapters from the textbook. These teacher candidates reported that ‘they had learned nothing in this class...’ While the constructivist notion that students should be encouraged to create their own interpretations of the text is a sound idea, this is not the same as leaving students to their own devices... (740)

Ideally, teaching is a priority for professors and as such is analogous to drivers education: It is difficult to imagine the courage it takes to sit in the passenger seat of a car and ride along with a novice driver, even entering major highways during the first few lessons. There is no lecture during such an encounter, but it would be foolish to suggest the instructor isn’t “teaching.” Athletic coaches are another good comparison: They offer advice, guidance, and inspiration, but ultimately watch the results of their efforts from the sidelines. Lisa Lattuca (2006) made a similar point specifically in the area of mass communication education:

Constructivist pedagogy doesn’t relieve the teacher of the responsibility to teach; it expands the definition of teaching. Teaching is not delivering content. It is the act of designing experiences that enable learning. (356)

For many university professors, the prospect of teaching activity-based classes is just as scary as riding with a first-time driving student. It is messy, especially when the activities involve the use of computer or electronic technology, as they almost always do in media production. A lesson plan can fail or require a major last-minute revamp if things go wrong. The beauty of lecturing, besides the obvious benefit that more students can take a given course, is that the information is prepared before the students arrive. The professor’s role during class is to convey information verbally and, if all goes as planned, enhance the student’s understanding of already completed assigned readings. Baviskar, Hartle, and Whitney (2009) point out that a lecture can be constructivist if it includes certain essential elements, beginning with eliciting prior knowledge. However, merely discussing what students are supposed to have read before class hardly satisfies this component, given that many students do

Table 1. Media literacy elements embedded in a long-form video production course

Guidelines				
Plan, shoot, and edit a 10-15 minute video piece of professional quality, securing client approval of finished product by the end of the semester				
Tasks	Access	Analyze	Evaluate	Produce
Find examples of similar programs to use as guide for stylistic and production elements	✓	✓	✓	
Meet with university administrators to plan production. Explain relevant concepts to clients, making clear the type of product we could provide		✓	✓	✓
Interview at least two faculty members, at least two officials in charge of featured program, at least four students, and at least two top-level university administrators (Prepare for interviews by researching topic, using relevant media sources)	✓	✓	✓	✓
Use network-quality lighting techniques for all interviews (requires studying what these techniques are and how they are applied in other productions)	✓	✓	✓	✓
Shoot extensive video of university program in action				✓
Log all video and interviews comprehensively to facilitate planning the edited product		✓	✓	✓
Complete the edit in Final Cut Pro with input from all students in the course, acquiring all necessary graphical elements, background, music, and referencing professional examples as a guide when appropriate	✓	✓	✓	✓
Secure client approval of finished product, completing any necessary revisions in a timely manner		✓	✓	✓
Outcomes				
<ul style="list-style-type: none"> • Finished product surpassed the quality of anything the instructor had done in professional career • Administrators use the video extensively for fundraising and promotional purposes • Students in the course have professional quality product to include on demo reels • Students point to the course as among their greatest academic learning experiences 				

not complete assigned readings. Jones (2007) argues that the lecture remains an effective teaching method but emphasizes the importance of student engagement, suggesting the implementation of in-class games and other activities to enhance learning. Jones also suggests that in light of the instant availability of information from a variety of technological sources, a lecturer can take on the role of a guide through the maze of available information rather than act as a monolithic source. Jones says such an approach should emphasize student reflection on information, just as constructivists suggest.

Elements of Constructivist Teaching

Baviskar, Hartle, and Whitney (2009) outline how constructivist approaches can be effective in any number of teaching styles, including lectures, but that even activity-based courses must meet certain criteria

in order to qualify as constructivist by design. The researchers set out to clarify precisely what constitutes effective constructivist teaching, distilling years of education literature into four essential elements and, in turn, informing my understanding of what went right in my long-form video production course. These are: eliciting prior knowledge, creating cognitive dissonance, applying prior knowledge with feedback, and reflecting upon learning.

Eliciting prior knowledge. Skills classes by their very nature elicit prior knowledge constantly as advancement requires the student to build on existing skills. There is no opportunity to regurgitate information on a test and immediately forget it, when the next assignment (or the next course of study) requires the same knowledge and skills. However, constructivist educators say it is also important to elicit prior knowledge in a more explicit way, often through a discussion in class

or reflection paper. I did this with my long-form video production students early in the semester by leading discussions of what kind of product we wanted to create and how we might go about creating it. We spent time online as a group finding examples such as *PBS Frontline* and Ken Burns documentaries, discussing lighting techniques, editing style, the presence or lack of voiceover—all of which called upon the students' video production experience from the previous semester as well as knowledge they had gained in other ways. This process continued during shooting and editing, as the students formulated their own ideas of how to produce a "good" video piece. By the end of the project, they shared a much deeper understanding of what they had learned previously, what they were doing at the time, and what more was possible.

Creating cognitive dissonance. I did this unintentionally but effectively in the course by encouraging my students to consider approaches and techniques other than the ones I had taught the previous semester. My introductory level video news class emphasized the production of TV news packages to the exclusion of more artistic or documentary-style production techniques. I had also stressed ethical considerations that would have precluded us from giving the clients editorial input in favor of maintaining journalistic independence. This made for a deep discussion, because the students demonstrated a nuanced understanding of ethics and an appreciation for the differences between pure journalism and promotional video produced for-hire. They attended our initial meeting with the directors of the program we featured and observed differences from traditional news reporting in how we responded to client specifications and laid out our plan for delivering a finished product. I suspect this experience enhanced the students' understanding of what not to do in a real news job, and also prepared them for other types of professional video work. I told the students early on that this would be a different kind of production experience and that we should seek out representative examples of this type of video to emulate, rather than merely stick to the conventions of what they had previously learned. I could tell this was a stretch for some of the students, especially those who had excelled in print journalism classes yet expressed little interest in documentary production, much less strategic communication. Constructivists argue that cognitive dissonance promotes new learning because it forces students to look beyond what they have learned previously and

expand their mindsets. Even technical glitches serve to create this kind of educationally beneficial dissonance, such as when we had to improvise different lighting techniques for an interview after a bulb blew out during a setup. Hypothetically, I could have provided the students with a list of every possible lighting configuration at the beginning of the semester, but it probably would not have been as effective. Instead, we worked collaboratively during the production process, faced dissonance together, and the learning experience was more effective. I have no doubt this was part of why the course was successful.

Applying prior knowledge with feedback. This is inherent in an activity-based skills course where the instructor operates collaboratively with the students. For instance, my students conducted interviews for the video piece, at the end of which I sometimes suggested questions they had not asked, or requested that interviewees elaborate on answers my students had not fully explored. Frequently, I observed nods of recognition from the students who had conducted the interviews, acknowledging that my input was useful. In a few cases, they indicated disagreement with me or pointed out that I had failed to pay attention—which I appreciated. I also had ample informal opportunities to give feedback as we disassembled light stands and packed up camera equipment, as well as during our walks to and from shooting locations and in subsequent meetings in my office. Of course, the students were engaged and taking ownership in the project, so it was not always incumbent on me to initiate feedback sessions. They asked independently.

Reflecting on learning. In my experience, the best way to reflect on learning in media production is to finish the job. By this, I mean the mere act of writing a story and/or editing a video piece speaks volumes about what the producer did well in conducting interviews or shooting footage. It is also an effective way to analyze and evaluate messages, both those presented by interview subjects and those being crafted by the producers. Often, the lesson of editing is negative, insofar as the producer discovers that failure to ask a certain question has resulted in a lack of good information, shaky camera work, bad lighting, or lack of adequate B-roll to cover the audio track. I often say the best way to get good at shooting or interviewing is to edit and vice versa. In the case of my long-form video production course, this stage in the process was arguably the most socially constructivist of the whole experience. They logged video footage on their own

but then came together and spent hours comparing notes on what each student's logs contained and how to fit it all together. Before editing started in earnest, one of the students asked me to suggest an outline for the finished product. I now believe it was a mistake on my part, but I provided one and assumed the group would follow my lead. Thankfully, they did not. I have many years' professional experience as a video producer but can honestly say their finished product is better than anything I would have come up with. University administrators requested a few minor revisions, furthering the students' experience of reflection on the finished product, but overall there was high praise for the quality of their work.

Engagement as Motivation for Learning

The best class I ever attended, and the best I ever taught, built on previously attained knowledge without coercing anyone to read a textbook or issuing other threats. Student engagement, motivation and empowerment were accompanied by working even harder than I required them to. Students sought outside information on their own and, in a few cases, added work to their agendas that I specifically stated was not required. The same was true in the graphic design class I took years ago, which raises another similarity I have yet to mention: In both courses, the instructor began the semester with a hope and expectation that everyone would get "As" and that there was no need to worry about grades as long as the students demonstrated effort and caring. Some might argue that such an approach is less rigorous, but I wanted my students to explore the subject freely, discover whatever aspect motivated them most, and proceed to do good work simply because they wanted to, without the threat of reprimand if their discovery process happened to conflict with what I had in mind. Still, Gordon (2009) warns:

Constructivist teaching has sometimes been used to justify the misguided notion that knowledge is only relative and that students do not need to be held to rigorous academic standards. When constructivist teaching is portrayed in such a tentative way, it opens itself to the charge that it is a kind of 'anything goes' relativist model of teaching. (741)

Gordon does not dismiss constructivist methods. He defends them, arguing that the much maligned aspects of constructivism actually constitute poor applications of it.

Transferring Ownership of Learning

I joke that my long-form video production students "kicked me off the project" about two-thirds of the way through the semester, but there is more than a little truth to this statement. When I showed up for the first of their many editing sessions, they thanked me for unlocking the room and asked a few questions about how they should approach certain aspects of the process, but it soon became apparent they did not want me around anymore. I spent about 45 minutes doing other things in my office, returned to the edit suite and was greeted with words to the effect of "What are you doing here?" I asked if they needed anything, barely got an answer because they were so focused on the task at hand, and resolved only to attend future editing sessions if they specifically requested that I do so. They rarely did. This was only the second semester of video production coursework for these students, and they were already in command of a professional-quality long-form piece, expecting little or no additional instruction from me. I am hard-pressed to imagine a more traditional course in which students took this much ownership of the content or work product. It is worth noting that they ignored several of my suggestions for how to approach the project—most likely neither out of defiance nor disrespect—but more likely due to their self-directed learning. For me, this was the ultimate case of social-constructivism at work and the main reason why I now favor this approach to teaching many of my courses. I had some viable ideas for how the project should have been completed, but they were my ideas. If I had insisted that the students do things exactly as I specified, the learning experience would have been little more than how to follow directions. Instead, their authentic learning experiences centered on how to take responsibility for an entire production; how to critically analyze content in order to convey its meaning most effectively; how to figure things out for oneself or know what to ask; how to view one's work critically and make improvements; how to work as part of a team; how to set one's own schedule; and how to meet deadlines. In other words, the course taught students who taught themselves how to be competent, responsible, professional media producers—precisely what my university hired me to teach. To date, university administrators have shown the video to state and local officials, as well as at academic conferences and to officials from other universities considering participation in similar programs. The public response to the student-produced video was overwhelmingly positive.

Theory versus Skills-Based Courses

One possible criticism of my argument is that the teaching of a skills-based course is a natural fit for constructivist-oriented activities and projects. Hanson and Sinclair (2008) found that constructivist approaches, at least as implemented by those they studied, were no more effective than traditional methods at teaching theoretical knowledge. The researchers also found such methods were more effective at teaching profession-specific skills and knowledge creation capacity. The finding of profession-specific skills echoes the central argument of this article, but knowledge creation capacity goes a step further. I argue that the benefits of this long-form video production course mentioned above—especially those pertaining to critical analysis—are equally valuable learning opportunities for history, law, ethics, or any other theoretical topic. Students who are engaged and take ownership in a project are likely to form their own independent critical thoughts on the subject, which, incidentally, might make them more receptive to lectures and readings as well. If constructivist approaches enhance what Olsen (1999) labels higher-order thinking skills, then such approaches are beneficial in more than just skills-based courses. I should point out that the students who said my course was their greatest learning experience were not just reflecting on their improved video production skills. They were also talking about the immense knowledge they had gained on the subject of the piece they produced, as well as other knowledge they gained from interacting with the people they interviewed. It is well known that media literacy advocates who embrace constructivist principles (Thoman and Jolls 2005) describe a “two-for-the-price-of-one” impact of media education where students simultaneously gain knowledge of another subject while studying media (Considine 2011). Despite disagreements in the field on how best to implement media literacy into curricula (Hobbs 1998), I can say with confidence that my students gained subject-matter knowledge through this course, in addition to media production skills.

Rethinking Educational Philosophy

While it is true that constructivist teaching methods are controversial in some circles (Meyer 2009), it is also true that for years media literacy educators have included in their teaching significant project and activity-based components. I am by no means the first professor to lead a successful student-driven project, nor am I the first to suggest that

students learn more by doing than by sitting passively in a classroom. A key element of my argument, however, is that even in courses inherently activity or project-based, it is worthwhile to consider ways of implementing constructivist methods more effectively. I have observed significant improvement in my more instructor-centered classes since teaching the long-form video production course (and since reviewing literature for this article) as I have implemented these constructivist-based approaches to a greater extent. In one course, I began the semester in a computer-lab classroom, gave reading and writing assignments, and noticed the students appeared bored and disengaged. Then, I gave an on-location news reporting assignment and saw dramatic improvement. I was so struck by the differences I observed that I discontinued any use of the classroom the rest of the semester and met the class in various locations where students could experience real-world scenarios relevant to course content, similar to participatory learning environments described by Reilly (2011). I restructured that course not, as some might suggest, to make it more “fun,” but simply to harness the aspects of the learning experience that were most effective (Bonner 2010). I am not suggesting that every teacher take an all-or-nothing activity-based approach, but my recent experiences offer media literacy educators worthwhile insight. In skills courses, I used to operate on the assumption that I had to spend the first several weeks of class “getting the students up to speed” before I could “turn them loose” to work on a project. Now, whenever possible, I have students start projects the first or second week of class.

Overcoming Challenges

Needless to say, students have different personalities and learning preferences. Some are as adventurous as I am and seem to enjoy the challenge of taking on a project before they are “ready.” My job would be easy if all students fell into this category, but of course they do not. Some students express misgivings about how they will be graded on work they do not yet know how to do, which is why I place great emphasis on attendance, participation, and effort in my grading. Some students appear afraid of the whole process, and a few react with anger, as if I am doing something unfair or cruel. Many in higher education have observed the transactional attitude some students hold toward their professors: the assumption that students or their parents are paying for the education and, therefore, should receive something in return. For

some students, that something is little more than an “A” grade; others expect the professor to deliver a lecture that is entertaining or, at the very least, explicitly spelling out precisely what will be on the test. In my teaching I do a lot of preparation ahead of time and am constantly busy during class periods, but it might not appear that way to a student who expects a lecture (see Jones 2007). I am a firm believer in collaborating with my students rather than merely telling them what to do. Not only does this simulate a professional-world relationship in media, such as that of reporter and editor, but it also meets an important criterion of a learner-centered educational model (Bosch et al 2008).

Over time, I have developed an understanding of the problems students will encounter early in the process of learning video production skills and I avoid many of these with clear guidance and, often, written instructions. It has been more difficult for me to anticipate frustration (both the students’ and my own) in order to maintain a calm, constructive atmosphere for learning. I am at my worst when I get caught off guard, and the same appears true with students. Therefore, my job as both teacher and learner is to exhibit the qualities of an effective leader, instilling in my students the confidence that a given task is achievable and that, even when the unexpected arises, we will get through it together. This places a great burden on my course content competence level, especially in production classes requiring computer-based video editing software and inevitably extensive technical troubleshooting. There is an implication in some constructivist literature that learner-centeredness deemphasizes the importance of instructor input (Baines and Stanley 2000). However, the graphic design class I consider the best I took is an example of an effective course in which the instructor provided ample input, but the gaps in instructor knowledge also became the fuel for collaborative learning. My experience has been somewhat different, however. No doubt there are gaps in my knowledge, and no doubt they have resulted in teachable moments, but generally I have found my subject-matter knowledge and experience central to my teaching. This is why I began the long-form video production course assuming I would take a hands-on approach. Kirschner, Sweller, and Clark (2006) also found that teacher guidance produced better results in terms of student achievement than what they termed “minimally guided” approaches, and I believe my experience confirms this idea: I contributed, but I also became increasingly dispensable as the semester

went on. I served as a guide and collaborator until the students felt comfortable working independently.

Teaching Technique or Philosophy of Knowledge?

Some education scholars grapple with whether constructivist teaching is linked to constructivist epistemology. This is important to consider as a purist approach to constructivism might hold that all knowledge is individual, and as a result there are no right or wrong answers, which is of particular concern in a course where the purpose is to prepare students to meet professional standards (Gregory 2005), or when assessments are constructed to test memorized facts rather than critical thought. Kotzee (2010) outlined problems that arise in pedagogy when constructivism is a firmly held epistemology, arguing that it sends “mixed messages about truth” (179), muddying the waters as to whether right answers even exist. He argued that the classroom is not a good place for such a philosophy but, notably, does not refute the benefits of constructivism as a teaching method. To me, this is a good way to think of it. Purists might disagree, but my experience is that constructivist pedagogy—employed as Baviskar, Hartle, and Whitney (2009) describe—is an effective approach, regardless of the teacher’s epistemology. It is not necessary to disbelieve the existence of correct answers in order to harness the benefits of constructivism.

Few would dispute that learning requires motivation and engagement and that working as part of a team in a creative pursuit helps to foster these. I am convinced that constructivist-based teaching methods such as those I employed unintentionally in my special-topics video production course have enormous educational power, even in courses that are not overtly skill-based. We all learn from our experiences, so it makes sense to view a course as an experience rather than a mere transfer of information. I am also convinced that constructivist literature from the field of education provides useful insights into how best to implement these approaches to media literacy through video production.

References

- Baines, Lawrence A. and Gregory Stanley. 2000. “We Want to See the Teacher,” *Phi Delta Kappan*, 82(4): 327-30.
- Baviskar, Sandhya N., R. Todd Hartle, and Tiffany Whitney. 2009. “Essential Criteria to Characterize Constructivist Teaching: Derived from a Review of the Literature and Applied to Five Constructivist-teaching Method Articles.”

- International Journal of Science Education*, 31(4): 541-50.
- Bonner, Judy. 2010. "Taking a Stand as a Student-centered Research University: Active and Collaborative Learning Meets Scholarship of Teaching at the University of Alabama," *Journal of General Education*, 59(4): 183-92.
- Bosch, William C., Jessica L. Hester, Virginia M. MacEntee, James A. MacKenzie, T. Mark Morey, James T. Nichols, Patricia A. Pacitti, Barbara A. Shaffer, Paul B. Tomascak, Suzanne P. Weber, and Rosalie Young. 2008. "Beyond Lip-Service: An Operational Definition of 'Learning-Centered College'," *Innovative Higher Education*, 33(2): 83-98.
- Considine, David M. 2011. "Exploring Media and Meaning," *Library Media Collection*, 29 (4): 14-16.
- Gordon, Mordechai. 2009. "The Misuses and Effective Uses of Constructivist Teaching," *Teachers & Teaching*, 15 (6): 737-46.
- Gregory, Maughn R. 2002. "Constructivism, Standards, and the Classroom Community of Inquiry," *Educational Theory*, 52 (4): 397-408.
- Hanson, James M., and Kenneth E. Sinclair. 2008. "Social Constructivist Teaching Methods in Australian Universities—Reported Uptake and Perceived Learning Effects: A Survey of Lecturers," *Higher Education Research & Development*, 27(3): 169-86.
- Hobbs, Renee. 2010. "Digital and Media Literacy: A Plan of Action," The Aspen Institute Communications and Society Program, Washington, D.C.: The Aspen Institute.
- Hobbs, Renee. 1998. "The Seven Great Debates in the Media Literacy Movement," *Journal of Communication*, 48: 16-32.
- Jones, Steve E. 2007. "Reflections on the Lecture: Outmoded Medium or Instrument of Inspiration?" *Journal of Further & Higher Education*, 31(4): 397-406.
- King, Alison. 1993. "From Sage on the Stage to Guide on the Side," *College Teaching*, 41(1): 30-35.
- Kirschner, Paul A., John Sweller, and Richard E. Clark. 2006. "Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-based, Experiential, and Inquiry-based Teaching," *Educational Psychologist*, 41(2): 75-86.
- Kutz, Eleanor, and Hephzibah Roskelly. 1991. *An Unquiet Pedagogy: Transforming Practice in the English Classroom*. Portsmouth, NH: Boynton/Cook Publishers.
- Lattuca, Lisa. 2006. "The Constructivist Pedagogy We're Looking For," *Journalism & Mass Communication Educator*, 60(4): 354-358.
- Meyer, Derek L. 2009. "The Poverty of Constructivism," *Educational Philosophy & Theory*, 41(3): 332-41.
- Olsen, Dwayne G. 1999. "Constructivist Principles of Learning and Teaching Methods," *Education*, 120 (2): 347-55.
- Palincsar, A. Sullivan. 1998. "Social Constructivist Perspectives on Teaching and Learning," *Annual Review of Psychology*, 49(1): 345.
- Reilly, Erin. 2011. "Participatory Learning Environments and Collective Meaning Making Practice," *Journal of Media Literacy Education*, 3(1): 6-7.
- Stinson, Susan W. 1985. "Curriculum and the Morality of Aesthetics." *Journal of Curriculum Theorizing*, 63(1): 66–83.
- Thoman, Elizabeth, and Tessa Jolls. 2005. "Literacy for the 21st Century: An Overview and Orientation Guide to Media Literacy Education." Center for Media Literacy. <http://www.medialit.org>.