

A Classroom Activity for Teaching Kohlberg's Theory of Moral Development

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Abstract

In two studies, we demonstrate an engaging classroom activity that facilitates student learning about Kohlberg's theory of moral development by using digital resources to foster active, experiential learning. In addition to hearing a standard lecture about moral development, students watched a video of a morally provocative incident, then worked in small groups to classify user comments posted in response to the video according to Kohlberg's six stages. Students in both studies found the activity enjoyable and useful. Moreover, students' scores on a moral development quiz improved after completing the activity (Study 1), and students who completed the activity in addition to receiving a lecture performed better on the quiz than students who received lecture alone (Study 2).

Keywords: moral development, Kohlberg, experiential learning, multi-media, critical thinking

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Kohlberg's theory of moral development (Kohlberg, 1968, 1976; Kohlberg & Hersh, 1977) is commonly taught in introductory psychology, developmental psychology, and other courses. Students typically receive a lecture that explains how children and adolescents progress through six stages of moral development organized in three levels (Kohlberg & Hersh, 1977). Many textbooks (11 of the 14 introductory psychology texts on the authors' own bookshelves) reference the classic Heinz Dilemma to illustrate the kinds of moral judgments people make at each stage of development. In the Heinz Dilemma, Kohlberg presented participants with a morally ambiguous and emotionally provocative scenario to elicit moral judgments and children's explanations for those judgments (Kohlberg, 1973, 1976, 1981). Kohlberg used other vignettes, but the Heinz Dilemma has been particularly common in the teaching of moral development. It has been useful for turning abstract descriptions of the types of moral judgments people make at each stage of development into concrete examples for students. In addition, it provides students with exposure to some of the primary research materials that were employed to develop the theory. However, it may be challenging for students to connect to this relatively outdated example in a meaningful way. Moreover, students may better learn about moral reasoning from contexts that are recent, relevant to their everyday lives, and truly occurred rather than those invented for the purpose of researching moral development. Such contexts may help them recognize the extent to which people regularly make moral judgments about the behavior of others in day-to-day life.

The activity described in this paper is an active, experiential, Team-Based Learning (TBL; Michaelsen, 2004) style tool (though it was tested in classrooms that did not fully implement TBL) intended to help students dissect Kohlberg's stages of moral reasoning. It

involves having students watch a video of a morally provocative incident that was taken on a camera phone and publicly posted to YouTube (additional details below). Students then work in small groups to classify real user comments posted in response to the video, and later share their group's decisions in a larger classroom-wide discussion. We argue that this activity is valuable because it helps instructors combat two related problems in higher education: 1) low student engagement with course material, leading to 2) poor learning outcomes (Kuzma & Haney, 2001). The active, experiential, group discussion-based nature of the activity facilitates student engagement and thus promotes student learning outcomes (Freeman et al., 2014). The experiential learning element, in particular, has the added benefit of fostering broader educational goals such as critical thinking and information literacy (Halpern, 2014; Hobbs & Jensen, 2013).

Active Learning, Experiential Learning, and Team-Based Learning (TBL)

Classes that engage active learning (i.e., learning which requires all students to participate and complete some set of actions; Felder & Brent, 2009) facilitate student exam performance and reduce failure rates compared to classes that employ traditional teaching methods such as lecturing (Freeman et al., 2014; Goffe & Kauper, 2013; Smith, Vinson, Smith, Lewin & Stetzer, 2014). One effective strategy for promoting active learning is with TBL-style techniques (Koles, Stolfi, Borges, Nelson, & Parmelee, 2010; Michaelsen, 2004; Michaelsen & Sweet, 2011). With TBL-style techniques, students work in small groups to generate solutions to applied problems. It is effective because it requires students to explain concepts to each other, thus encouraging them to connect with classmates (who they may later feel more comfortable reaching out to if they have a question about the course or are struggling with course material), and engage with course material (Sawyer & Obeid, 2017). TBL produces significant benefits to

student learning, and has been successfully implemented in introductory psychology (Travis, Hudson, Henricks-Lepp, Street, & Weidenbenner, 2016). The activity described herein was designed using a TBL-style approach in that students are required to work in small groups to generate solutions to applied examples, then share their team's solutions with the class, and provide justification for their answers (Michaelsen, 2004). It was not, however, tested in classrooms where TBL was fully implemented (i.e., where students are in semester-long, permanent groups).

In addition to utilizing a group discussion-based, active learning approach, this activity engenders experiential learning, which engages learners' motivation, emotions, and critical thinking (Fisher, Silvestri-Hunter, Nolan, & Buckner, 2017), and treats learners as agents in the learning process (Kolb & Kolb, 2005). Actively constructing knowledge through experiential learning enhances memory of course content (Kolb, 1984) and has the added benefit of training students to be critical consumers of media (Hobbs & Jensen, 2013; Kuhn & Dean, 2004).

The emotionally-provocative video that is a cornerstone of the activity provides learners direct contact with a rich primary source, allowing them to voyeuristically "experience" an event as they explore concepts relevant to moral development. The use of a multimedia example, like this one, fosters experiential learning for at least three reasons. First, it transports the student to an event that would otherwise be too rare, dangerous, or unethical to experience in the classroom (e.g., alleged police brutality). Watching a crowd-sourced video grounds abstract concepts in a real-world example, and facilitates experiential learning just like films can do in the classroom (Kuzma & Haney, 2004).

Second, the nature of the activity serves to create a multimodal (i.e. text-based and audio-visual) memory, which is encoded in multiple, linked ways. Multimodal encoding results in

greater accessibility, and assists with later recall (Berry, Schmied, & Schrock, 2008). It provides a scaffold on which students can further process the associated course content (Berry & Chew, 2008). Using pictures and animations in conjunction with audio narration can powerfully enhance student understanding (Mayer & Moreno, 2002).

Finally, the emotionally-arousing nature of the video may also facilitate encoding of the material into memory (Berry et al., 2008). For example, embedding emotionally provocative images in textbook-like passages has been shown to physiologically arouse readers (elevate galvanic skin response and heart rate), and enhance learning and memory for the relevant content (Berry et al.; Sawyer & Obeid, 2017).

In sum, using crowd-sourced recordings of real-life events such as the video and comments in this activity can facilitate experiential learning which cultivates student engagement, fosters multimodal memory, and capitalizes on the memory-enhancing function of emotional arousal, all in the service of enhancing student learning outcomes.

The Current Research

In the current research, we supplement a lecture including Kohlberg's original Heinz dilemma (Kohlberg, 1973, 1981) with a multi-media morally ambiguous scenario: a cell phone video of an alleged police brutality incident that occurred at the UCLA library (see procedure). Students worked in small groups and applied Kohlberg's stage theory to classify user comments posted in response to the video. They then shared their classifications (and justifications for them) in a larger class discussion.

Study 1

The goal of Study 1 was to determine whether students found a group discussion-based in-class activity designed to demonstrate the application of moral development concepts

engaging and useful. We hypothesized that students would find the activity interesting and valuable. We also predicted that students would score higher on a quiz testing knowledge of concepts relevant to the theory of moral development after completing the activity.

Method

Participants. One hundred and four students (63 women, 36 men, 5 unknown; $M_{age} = 19.55$, $SD_{age} = 3.01$, range: 18-35)¹ from one large section of Introduction to Psychology taught at an associate's and bachelor's degree granting urban, public institution in the New York City area participated in this research during one of their regular class meetings. Nearly 28% percent of students ($n = 29$) identified as white, 24% ($n = 25$) as Hispanic or Latino, 25% ($n = 26$) as Black/African American, 9% ($n = 9$) as Middle Eastern, 9% ($n = 9$) as Asian, 1% ($n = 1$) as Pacific Islander or Native Hawaiian, and 5% ($n = 5$) were missing ethnicity data. Only 14% of students ($n = 14$) said that they had "definitely" or "probably" studied Kohlberg's stage of moral development before, 52% ($n = 52$) were uncertain and 32% ($n = 32$) reported that they had definitely not heard of Kohlberg's stages of moral reasoning before the start of the class.

Procedure. Students first completed a brief quiz assessing concepts relevant to Kohlberg's theory of moral development.² They were then presented with a lecture about the theory, and engaged in an activity in which they watched a video of a morally provocative incident that had been captured on a cell-phone by an observer and posted to YouTube. The video, "UCLA Student Tasered by Police in Library" (jedifreac, 2006) depicted a UCLA college student who was tasered by campus security in the campus library. This particular video was

¹Demographic data were collected in a prior session, and demographics are missing for five students.

²Students who read the assigned chapter prior to attending class when the activity was administered would have had additional exposure to Kohlberg's theory prior to taking the pre-activity quiz. We are unable to account for any effect of advance reading on quiz performance.

selected because the issue of racial profiling was a morally-relevant hot button topic at the time the activity was created (in 2007), and the target of the tasing was a student of Middle Eastern descent (a group commonly targeted by this form of discrimination). This video thus provided a circumscribed example of a timely moral dilemma at the time it was developed, and is still relevant today. Prior to watching the video, the instructor gave students a short description of the incident for context, and to alert them that they were about to watch something potentially upsetting. After watching the video, students received a handout containing six user comments that had been posted in response to the video. Students worked in temporary small groups of convenience (i.e., with ~3-5 others who were sitting nearby) to discuss each comment, and ascribe one of Kohlberg's stages of moral reasoning to the author's statement. After working on this task in small groups for approximately 10-15 minutes, the class reconvened as a whole, and had a larger discussion about the decisions the smaller groups had made in which the smaller groups provided a rationale for each of their choices. The entire activity took approximately 25-30 min. Following the activity, students completed the same quiz assessing concepts relevant to Kohlberg's theory that they had completed prior to receiving the lecture or engaging in the activity. Finally, students completed a subjective evaluation of the activity to assess how fun and useful it was.

Materials. All study materials can be found on our Open Science Framework (OSF) project page: <https://osf.io/aqg5j/>.

Video and comments. The incident depicted in the video made news headlines around the country not long after it occurred in 2006. In developing the activity, the lead author reviewed the video of the incident (jedifreac, 2006) and numerous YouTube user comments that had been posted in response to the video, and selected six comments based on their content and relevance

to Kohlberg's theory of moral development. She slightly edited comments for the sake of brevity and with the intention to keep them centered on one circumscribed stage of Kohlberg's theory. However, she preserved the commenters' original grammar and spelling. Complete text of the original comments can be obtained from our OSF page.

Performance evaluation. A 10-item multiple-choice quiz assessed students' understanding of Kohlberg's theory of moral development both before any material on Kohlberg's theory was presented to students, after they had received the lecture and completed the activity. We developed a bank of multiple-choice items and conferred with the course instructor to select the specific items for the quiz. Items required students to recall general facts about the theory, and to apply the theory to hypothetical examples.

Subjective evaluation. We administered two subscales of the Intrinsic Motivation Inventory (IMI; Deci, Eghrari, Patrick, & Leone, 1994) to assess interest/enjoyment in the activity with seven items (e.g., *This activity was fun to do*; $\alpha = .88$), and value/usefulness of the activity with seven items (e.g., *I think this activity is useful for [learning about moral development]*; $\alpha = .82$; bracketed part of item was modified for the current task, per the IMI instructions). Students rated items using a 1 (*not at all true*) to 7 (*very true*) scale. The two subscales were correlated, $r(91) = .73$ $p < .001$.

Results

As predicted, students evaluated the activity significantly above the scale midpoint (4.0) in terms of interest/enjoyment ($M = 4.57$, $SD = 1.38$), $t(92) = 4.01$, $p < .001$, $d = .42$; and value/usefulness ($M = 5.28$, $SD = 1.06$), $t(92) = 11.58$, $p < .001$, $d = 1.20$. Moreover, students' performance on the quiz significantly increased from pre- ($M = 4.52$, $SD = 2.00$) to post-activity ($M = 6.06$, $SD = 1.76$), $t(84) = 7.91$, $p < .001$, $d = .86$. Post-task quiz performance was not

significantly correlated with subjective evaluations of the activity for either interest/enjoyment, $r(86) = -.02, p = .87$; or value/usefulness, $r(86) = .05, p = .68$. There were no main or interactive effects of gender or ethnicity (when comparing white to non-white participants) on the performance or subjective outcomes.

Brief Discussion

In Study 1 we demonstrated that students found this activity fun and engaging, and also exhibited an improvement in their performance on a quiz measuring their understanding of concepts relevant to moral development. A major limitation of Study 1 is that there was no control condition. All students received both the lecture and engaged in the activity, so we are unable to conclude that the activity itself uniquely contributed to students' learning experience. Thus, the purpose of Study 2 was to put the activity to a more rigorous test of its ability to enhance student learning outcomes. In addition, we aimed to replicate the effect showing that students found the activity useful and enjoyable.

Study 2

The goal of Study 2 was to experimentally test whether adding the activity to a more traditional lecture about moral development would enhance students' mastery of concepts relevant to Kohlberg's theory of moral development. Thus, we switched from the within-subject design of Study 1 to between-subjects design by eliminating the pre-lecture/activity quiz, and adding a control group. We also chose to collect the data on a different campus, with a different instructor to ensure our findings were not unique to the instructor. Students either received only a lecture about Kohlberg's theory of moral development, or the same lecture plus the activity described in Study 1. Students then completed a quiz assessing concepts relevant to moral development, and subjectively evaluated the activity. We hypothesized that students in the

lecture plus activity condition would outperform students in the lecture-only condition on the quiz. We also expected to find that students would again find the activity fun and useful.

Method

Participants. Eighty-six students from two sections of Introduction to Psychology ($N_s = 47$ and 39) taught at an urban, public, bachelor's degree granting, mostly commuter college participated in this research during a normal class meeting. We did not collect demographic data, so we do not have information about student gender, age, or ethnicity. However, the classes contained male and female students, ranging from First-Year to Senior, and likely reflected the ethnic diversity of the college at large (34% White, 22.5% Hispanic/Latino, 22.4% Black/African American, 19% Asian, 0.2% American Indian/Alaskan Native, 0.2% Native Hawaiian/Pacific Islander, and 1.7% Multi-race).

Procedure. The instructor presented students in both sections of Introduction to Psychology with a lecture about Kohlberg's theory of moral development. The same instructor taught both sections, so the lecture content was the same across the two classes. Students in one section ($n = 39$) also engaged in the activity described in Study 1 immediately after the instructor completed the lecture. Following the activity, students completed a brief in-class quiz assessing concepts relevant to Kohlberg's theory. Immediately after class ended, we emailed students a link to complete a subjective evaluation of the activity via web-survey.

Students in the lecture-only section ($n = 47$) completed the quiz immediately after the lecture. They did not complete the subjective evaluation of the activity, as there was no activity to evaluate.

Materials. Please see our OSF project page for all materials: <https://osf.io/aqg5j/>.

Video and comments. The video and comments were identical to those in Study 1.

Performance evaluation. An 8-item multiple-choice quiz assessed students' understanding of Kohlberg's theory of moral development. Similar to Study 1, the authors conferred with the course instructor about the selected quiz items, resulting in a slight difference between quiz items in Studies 1 and 2. Six of the items in this quiz were identical to those in the Study 1 quiz, four items from the Study 1 quiz were eliminated, and two new items were added.³

Subjective evaluation. The same two subscales of the IMI (Deci et al., 1994) assessed interest/enjoyment ($\alpha = .90$), and value/usefulness ($\alpha = .93$) as in Study 1. The two subscales were once again correlated, $r(30) = .75, p < .001$. The IMI was administered online, and 31 of 39 possible students (79.5%) completed the survey.

Results

As predicted, students who received the lecture and participated in the group activity performed significantly better on the quiz ($M = 5.72, SD = 1.52$) than students who received the lecture alone ($M = 5.09, SD = 1.40$); $t(84) = 2.01, p = .048, d = .43$.

In addition, students who took part in the activity evaluated it significantly above the scale midpoint (4.0) in terms of interest/enjoyment ($M = 5.05, SD = 1.30$), $t(30) = 4.47, p < .001, d = .80$; and value/usefulness ($M = 5.41, SD = 1.16$), $t(30) = 6.77, p < .001, d = .97$.

Quiz performance was not significantly correlated with subjective evaluations of the activity for either interest/enjoyment, $r(30) = .06, p = .75$; or value/usefulness, $r(30) = .17, p = .37$.⁴

Brief Discussion

³If the six items that were administered in both Studies 1 and 2 are evaluated as the dependent variable, the results of both studies remain unchanged.

⁴Because we did not collect demographic data for this sample, we are unable to test gender or ethnicity as moderators in this study.

In Study 2 we corroborated the finding from Study 1 that students found this classroom activity interesting and enjoyable and thought it was an effective tool for learning about moral development. Moreover, we demonstrated that the activity was effective at enhancing student learning outcomes. Students who completed the activity in addition to receiving a lecture about the theory of moral development performed better on a quiz assessing understanding of moral development concepts than students who received a lecture alone. Study 2 was conducted at a different institution and with a different instructor, suggesting that the benefit to learning produced by the activity is not simply a byproduct of the instructor who is teaching the course.

General Discussion

In two studies using two different designs (within and between subjects), across two campuses, and with two different instructors, we demonstrated that students who engaged in the activity described in this paper tended to find it enjoyable and also reported the activity to be useful and valuable for learning about Kohlberg's theory of moral development. This suggests that the activity does, indeed, promote student engagement with the course material. Not only did students view this activity positively in both studies, in Study 2 we experimentally demonstrated that it was objectively useful for improving understanding of Kohlberg's theory of moral development. Students who engaged in the activity were better able to apply moral development concepts in a performance evaluation compared to students who received a lecture alone. These results suggest that students benefited from assessing timely, real-world examples of different stages of moral reasoning.

Although the activity was designed using a TBL-style approach wherein students problem-solved together in small groups, the studies were not conducted in classrooms where TBL-style methods were fully implemented. Thus, instead of permanent long-term teams, the

groups in this research were temporary groups of convenience, brought together just for the purpose of completing this activity. The ongoing relationships among team members is an important feature of TBL, but the effectiveness of this activity cannot simply be attributed to the power of the relationships among team members because these temporary groups were not likely to experience the full benefits of being part of a permanent, semester-long team with the same students.

It is noteworthy that student performance on the quiz was not significantly associated with ratings of the activity's usefulness or enjoyableness in either study. Although the majority of students found the activity useful (88.2% in Study 1; 87.1% in Study 2), and enjoyable (59.1% in Study 1; 77.4% in Study 2), and most students' understanding of Kohlberg's theory improved as a result of completing the activity (71.8% improved from pre- to post-activity performance in Study 1; 76.9% in the Study 2 activity condition versus 63.8% in the Study 2 control condition passed the quiz with a grade of 60% or better), the activity seems to be beneficial for student learning regardless of their subjective feelings about it.

A strength of this activity is that it has the capacity to generate many useful lines of classroom discussion. Although the user comments were selected with the intention that they would relatively clearly map onto particular stages of moral development, and several of the small groups typically come up with the same moral reasoning classification for individual comments, there are often some groups that come up with different classifications. In these circumstances, it is possible to have a valuable discussion about the meaning and interpretation of each of Kohlberg's stages. It also generates discussion that relates to several other topics covered in most psychology courses, especially introductory psychology. For example, instructors can discuss the subjectivity of making these types of assessments, the challenges of

training people to code for research purposes, and implications for validity and reliability. In addition, students can be encouraged to reflect on how individual experiences and common psychological biases can alter a perceiver's interpretation of a commenter's meaning or intention.

It is important to consider that the students in Study 2 who received the activity spent more time engaged with the topic of moral development than students who received only a lecture about moral development. It would be useful to test whether having students spend a comparable amount of time as required by the activity engaging in non-active, non-experiential learning (e.g., additional lecture) would produce similar benefits to student learning as the activity appears to. This could clarify the utility of actively deliberating on real-world examples of moral development as opposed to simply spending more time with material. Alternatively, showing multimedia examples of emotionally charged, morally ambiguous scenarios without having students reflect on and actively identify examples of different stages could demonstrate whether active student engagement is driving the effectiveness of the activity.

It is also worth noting that the samples were drawn from two ethnically diverse campuses. Although we perceive this to be a strength of the research (because it suggests that the activity is not only useful for certain ethnic demographics), it could be argued that the diversity of the students' life experience may make them more attuned to the moral issue raised in the video (racial profiling and police brutality). This could be responsible for their positive subjective evaluations of the activity. However, this could also make the students in our sample view the issue as less morally ambiguous, which could undermine the effectiveness of the activity because of strongly held moral positions (a point we discuss in more detail momentarily). Yet, the activity effectively improved student learning for this diverse sample. It would be useful to

replicate this work with additional samples and investigate whether the moral issue addressed in the video is personally relevant to the participants, and if that has any bearing on the activity's effectiveness.

This simple to administer activity has been implemented with small groups in large and small in-person classes.⁵ It would be interesting to explore how this might be adapted for other types of class settings, such as online courses, and to determine whether the group discussion component is necessary for the activity to be effective. For example, would having students work individually to classify user comments, then engage in a group (in-class or online) discussion produce the same benefit to learning as we have demonstrated in the current research? Exploring these questions would allow us to tease apart whether the active, experiential learning, the group discussion, or some combination of both are driving the effectiveness of the task.

With the proliferation of emotionally charged, morally ambiguous, multimedia material currently available online, and the ability for people to publicly comment on it, this activity represents a framework from which additional versions of the same activity could be developed. In fact, in testing the ability of this activity to facilitate student learning, we attempted to create another version of the activity using a video of Eric Garner's death (an African American man put into a chokehold by police while they were arresting him on suspicion of selling single cigarettes). The Garner version of the activity was not as effective as the UCLA taser version. Although students found the Garner activity enjoyable and useful, and those who engaged in it showed a larger increase in performance on a moral development quiz than students who received a lecture alone, the difference in performance between groups was not large enough to reach significance. We speculate that this version may have been less successful for at least two

⁵ The activity was developed in 2007 by the lead author, and has been implemented regularly in her Introductory Psychology courses ranging in size from 40 to 160 students.

reasons. First, the story was familiar to students because of its recency, and because it took place in New York City, where our students live (in fact, the activity was tested on a campus on Staten Island, where Garner was killed). In addition, students may have had a great deal of exposure to this incident, and may have previously formulated strong moral judgments of their own about the incident, which could have detracted from the effectiveness of this video activity. The ineffectiveness of the Garner version of the activity highlights an important point. It seems that consideration must be given to how an intended morally ambiguous scenario might dovetail with students' pre-existing moral judgments, and thus may or may not be universally perceived as morally ambiguous. However, even if students' strong moral opinions on a given issue prevents them from seeing the issue's multiple sides before engaging in the activity, the post-activity discussion could be eye-opening for students' ability to recognize that what seems indisputable to some may be perceived as ambiguous by others.

Nonetheless, the current research offers one example of how crowd-sourced, publicly available multimedia resources can be utilized to effectively engage students' attention and promote learning outcomes. Novel types of active, experiential activities could also be developed using this general model as a framework. For example, instructors could have students view a publicly posted video of an emotionally charged, morally ambiguous scenario, and work in small groups to find their own examples of user comments that reflect each stage of moral development. They could share their examples with the class, and provide justification for why the comment is a good example of the particular stage they believe it to represent. We have generated a short list of potential video clips that present emotionally morally relevant situations on which users have commented and include those in Appendix A. Although these have not been empirically tested for their ability to improve student's conceptual understanding of Kohlberg's

theory, they could be used in the same way as the UCLA taser incident video, and at the very least generate useful classroom discussion about the theory and relevant concepts. These and other forms of active, experiential learning are likely to benefit students because they will facilitate engagement with course material, and ultimately have a positive impact on student learning (Freeman et al., 2014).

References

- Berry, J. W., & Chew, S. L. (2008). Improving learning through interventions of student-generated questions and concept maps. *Teaching of Psychology, 35*, 305-312.
<http://dx.doi.org/10.1080/00986280802373841>
- Berry, C., Schmied, L. A., & Schrock, J. C. (2008). The role of emotion in teaching and learning history: A scholarship of teaching exploration. *The History Teacher, 41*, 437-452.
- Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of Personality, 62*, 119-142.
<http://dx.doi.org/10.1111/j.1467-6494.1994.tb00797.x>
- Felder, R. M., & Brent, R. (2009). Active learning: An introduction. *ASQ Higher Education Brief, 2*, 1-5.
- Fisher, P.H., Silvestri-Hunter, A., Nolan, S.A., Buckner, J.P. (2017). Critical Thinking in Psychology Classrooms: Beyond: "I Know It When I See It." In R. Obeid, A. Schwartz, C. Shane-Simpson, & P. J. Brooks (Eds.) *How We Teach Now: The GSTA Guide to Student-Centered Teaching*. Retrieved from
<http://teachpsych.org/ebooks/howweteachnow>
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences, 111*, 8410-8415. <http://dx.doi.org/10.1073/pnas.1319030111>
- Goffe, W. L., & Kauper, D. (2014). A survey of principles instructors: Why lecture prevails. *The Journal of Economic Education, 45*, 360-375.
<http://dx.doi.org/10.1080/00220485.2014.946547>

- Halpern, D. F. (2014). *Critical thinking across the curriculum: A brief edition of thought & knowledge*. NJ: Routledge.
- Hobbs, R., & Jensen, A. (2013). The past, present, and future of media literacy education. *Journal of Media Literacy Education, 1*, 1.
- jedifreac. (2006, November 15). *UCLA Student Tasered by Police in Library*. [Video file]. Retrieved from <https://www.youtube.com/watch?v=5g7zIjX9u2E>
- Kohlberg, L. (1968). The child as a moral philosopher. *Psychology Today, 2*, 25–30.
- Kohlberg, L. (1973). *Collected papers on moral development and moral education*. Harvard University, Center for Moral Education.
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. *Moral development and behavior: Theory, research, and social issues, 31-53*.
- Kohlberg, L. (1981). *Essays on Moral Development, Vol. 1: The Philosophy of Moral Development*. San Francisco, CA: Harper & Row.
- Kohlberg, L., & Hersh, R. H. (1977). Moral development: A review of the theory. *Theory into practice, 16*, 53-59. <http://dx.doi.org/10.1080/00405847709542675>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education, 4*, 193-212. <http://dx.doi.org/10.5465/AMLE.2005.17268566>
- Koles, P. G., Stolfi, A., Borges, N. J., Nelson, S., & Parmelee, D. X. (2010). The impact of team-based learning on medical students' academic performance. *Academic Medicine, 85*, 1739-1745.

- Kuhn, D., & Dean, Jr, D. (2004). Metacognition: A bridge between cognitive psychology and educational practice. *Theory Into Practice, 43*, 268-273.
http://dx.doi.org/10.1207/s15430421tip4304_4
- Kuzma, L. M., & Haney, P. J. (2001). And... Action! Using film to learn about foreign policy. *International Studies Perspectives, 2*, 33-50. <http://dx.doi.org/10.1111/1528-3577.00036>
- Mayer, R. E. & Moreno, R. (2002). Aids to computer-based multimedia learning. *Learning and Instruction, 12*, 107-119. [http://dx.doi.org/10.1016/S0959-4752\(01\)00018-4](http://dx.doi.org/10.1016/S0959-4752(01)00018-4)
- Michaelsen, L. K. (2004). Getting started with team-based learning. In L. K. Michaelsen, A. B. Knight & L. D. Fink (Eds.), *Team-based learning: A transformative use of small groups in college teaching* (pp. 27–50). Sterling, VA: Stylus.
- Michaelsen, L. K., & Sweet, M. (2011). Team-based learning. *New directions for teaching and learning, 2011(128)*, 41-51. <http://dx.doi.org/10.1002/tl.467>
- Sawyer, J., & Obeid, R. (2017). Cooperative and Collaborative Learning: Getting the Best of Both Words. In R. Obeid, A. Schwartz, C. Shane-Simpson, & P. J. Brooks (Eds.) *How We Teach Now: The GSTA Guide to Student-Centered Teaching*. Retrieved from the Society for the Teaching of Psychology web site: <http://teachpsych.org/ebooks/>
- Smith, M. K., Vinson, E. L., Smith, J. A., Lewin, J. D., & Stetzer, M. R. (2014). A campus-wide study of STEM courses: new perspectives on teaching practices and perceptions. *CBE-Life Sciences Education, 13*, 624-635. <http://dx.doi.org/10.1187/cbe.14-06-0108>
- Travis, L. L., Hudson, N. W., Henricks-Lepp, G. M., Street, W. S., & Weidenbenner, J. (2016). Team-based learning improves course outcomes in introductory psychology. *Teaching of Psychology, 43*, 99-107. <http://dx.doi.org/10.1177/0098628316636274>

Appendix A

Potential videos to use for moral development activities and discussions

Incident	Location	Date	Link
Eric Garner arrest*	Staten Island, NY	July 2014	https://youtu.be/LfXqYwyzQpM
Philando Castile shooting	St. Paul, MN	Jul 2016	https://youtu.be/K_J3sYIgvUE
Dominique Lewis shooting**	Flint, MI	Jul 2014	https://youtu.be/r4vK98dyzys
Sandra Bland arrest	Prairie View, TX	Jul 2010	https://youtu.be/QwxHCVgyOjs
Occupy Wall Street protest	New York, NY	Oct 2011	https://youtu.be/xRCtAHuRao0
Man refuses police video footage	San Francisco, CA	Mar 2017	https://youtu.be/nmOrWi0GQmo
Student arrest at Kerry forum	Gainesville FL	Sep 2007	https://youtu.be/6bVa6jn4rpE
Protesters against traffic	Compilation	NA	https://youtu.be/c9hfjxtGOrE

Note: *used for an attempted replication as explained in the general discussion; **action starts after 10min mark