

LEARNING TO LEAD BY EXCHANGING PEER-AUTHORED, REAL-TO-LIFE CASE STUDIES: Getting Past Controversies Using Metacognition

Abstract

Case studies continue to be a signature teaching tool for developing leadership educators in a classroom setting. However, many of these cases tend to be generic and may limit student learning. In order to maximize the learning potential of case studies, we advocate for the use of peer-authored, real-to-life case studies written from a first-hand experience as a training tool for graduate and doctoral-level leadership students. Students author a case based on a real-to-life issue, share with a classmate, and analyze collaboratively. This form of training allows leadership students to examine a case through multiple lenses while processing with a peer who may still be dealing with the leadership issue in real time. The culminating process allows students to examine the issue with direct feedback from another who lived the experience, completing a true 360-degree examination of a real-to-life controversy. This process supports deep reflection, leadership competencies, and metacognition of a dilemma. The assignment outlined in this application manuscript can be completed face-to-face or online and can be modified to work with any leadership learner group or program.

Keywords: Leadership Education, Case Studies, Training, Theory to Application

Introduction

The use of case studies, in a classroom setting, continues to be a useful practice in leadership education (Jenkins, 2012). A case study provides the reader with a scenario to navigate, think through, plan a strategy for, and then develop a

resolution moving forward. This Application Manuscript outlines a new teaching practice using student-authored case studies as a course assignment for advanced leadership students (e.g. Masters or Doctoral-level). The assignment is intended to create a scaffolded learning experience for students by asking them to author and then exchange their case studies with a peer. This

process allows for metacognition as students reflect on process, apply theory to practice, and explore multiple options to resolve various real-to-life dilemmas.

The process begins with students authoring a case study based on a complex dilemma they experienced or are experiencing. The student-authored case studies are then exchanged between students. Recipients are asked to analyze the case by applying leadership theory, offering commentary, support, and citations. They present their analyzed cases to their partner – the case's author. This sharing is symbiotic in nature as partners delve deeply into each other's issues and contemplate whether their suggestions resolve the central issue. The process allows for in-depth discussion and reflection. The dialogue is typically rich with suggestions, alternative solutions, and connections to leadership strategies. This process not only allows for metacognition but simulates an effective problem-solving process for leaders that includes reflection.

Avolio and Hannah (2010) specify metacognitive ability as a leader's capacity to engage in the process of second order thinking. These abilities align with cognitive capabilities such as creative thinking and reasoning, reflective judgement, decision making, and problem solving are considered fundamental metacognitive skills. These are desired leadership abilities which can be cultivated via a case study examination.

The peer-authored case study assignment is fully outlined in this Application Manuscript along with pre/post test data related to the inclusion of this process as part of a graduate or doctoral-level university course. While this assignment may be modified to work with undergraduates, the tenor of the piece is firmly imbedded in the experiential knowledge of a student who has endured leadership hardships, leadership challenges, or real-to-life controversies found in years of life and career experience.

Case Studies as a Tool for Leadership Development

Although lectures are still the most widely used teaching technique used in university settings, they often lead to a decline in attention and retention of knowledge, encouraging students to operate as passive spectators within the classroom environment (Jenkins, 2012; Williams & McClure, 2010). Additionally, reliance on a single teaching method overlooks students with diverse learning needs. Case study examinations provide an effective method for leadership educators to enhance student learning compared to traditional lecture formats (Boyd, 2009), with the proper recognition that leadership can be taught and learned (Buschlen & Dvorak, 2011).

The general use of case studies in classroom instruction helps students better integrate knowledge, as students make connections between content and something in their lives (Williams & McClure, 2010). Case studies allow educators to incorporate materials and expertise across a program curriculum. Wrenn and Wrenn (2009) call attention to the importance of students in professional programs being able to apply what they have learned in the classroom as they prepare to become professional practitioners in their chosen field. This leadership assignment considers past experiences, those leadership quagmires the student struggled through in their life and career. In some cases, the student may still be experiencing the dilemma at the time of the class.

The broader application of case studies may be applied across disciplines. They can be real or hypothetical scenarios. The case study method described in this brief enables students to learn by engaging them in a hands-on assignment. Furthermore, encouraging students to identify fundamental principles while applying them to real-to-life scenarios ensures the depth of learning that often accompanies this method. The use of such cases, grounded in theoretical principles, aid to bridge the gap between theory and application

(Pearl, 2000 as cited in Kunselman & Johnson, 2004).

Case Studies as Experiential and Active Learning

The use of case studies is a signature teaching tool in leadership education (Jenkins, 2012). The use of case studies consistently falls in the “top 10” of utilized leadership educational tools (Jenkins, 2012). While an effective teaching tool to enhance student learning, many of the analyzed cases represent situations that are uncommon to the reader or may not connect to their field of choice. Cases may speak to a fictional site, fictional people, or fictional acts and most are authorless. This manuscript seeks to enhance case study usage by promoting the pragmatic approach of students authoring cases based on their own experiences and then sharing those cases with peers during class. Using self-authored cases enhances the real-to-life connections to the outlined issues thus creating a symbiotic, leadership learning act. Using relevant scenarios takes problem-solving to a new level. Since students are invested in the case, they tend to take the resolution more seriously and apply practical and realistic solutions for unravelling the central problems.

The use of case studies is one form of experiential learning. Kolb's (1984) influential theory about experiential learning posits that learning is best facilitated by a process that extends the student's beliefs and ideas about a subject, so that they can be examined, tested and fused with new, more refined ideas (Kolb & Kolb, 2005). Within this process, reflection plays a major role in the student's transformation of experience into knowledge and further lends itself to critical thinking and more informed learners (Woerkom, 2010). Buschlen and Guthrie (2014) argued the need to use real-to-life case studies to elicit more buy-in and deeper reflection from students. The ability to help a peer examine an experienced leadership challenge adds realism, reflection, and teamwork to an assignment versus a case from a text that is completely outside of a student's reality or experience base.

Case studies also present an opportunity for students to participate in active learning. The integration of practice and theory in the classroom can be strengthened with the use of an active learning environment (Wrenn & Wrenn, 2004). Students not only learn from the professor, but also from each other as participants in the problem-solving process (Wolfer & Baker, 2000). Young, Spain and Brennecke (2022) suggest that students benefit from working in small groups to brainstorm, share ideas, and internalize concepts more quickly. Moreover, students who actively engage in any given subject matter are more likely to be aware of issues related to that subject (Pearl, 2000).

Outcomes of active learning include the ability for students to engage in critical thinking, problem solving, improve communication skills, foster leadership skills, increase multicultural competency and increase self-esteem and a new appreciation of the issue at hand (Lumb & Blowers, 1998, p. 104). In support of these outcomes and the learning process, Lumb and Blowers (1998) suggest the issue under investigation should not have a simple solution, nor should it create needless conflict. Wrenn and Wrenn (2004) assert that an active learning environment should stimulate students' interest in the subject and foster their participation. Wolfer and Baker (2000) contend that group cohesion is also an important dynamic of active learning, as it contributes to the level of cooperation and communication between group members and hence the attainment of said goals.

In comparison to other forms of active learning such as small-group activities, role playing, and simulation, the case study method prompts students to engage in higher-order thinking through analysis, evaluation, conceptualization, and application (Kunseleman & Johnson, 2004). Their research suggests that not only do students benefit by being actively involved in their learning, but instructors also benefit by amending their approach to teaching.

Metacognitive Approach to Leadership Development

The term metacognition, coined by developmental psychologist John Flavell (1979) refers to a regulatory structure incorporating knowledge, experiences, goals, and strategies. Such skills are central to education and important competencies for effective leadership (Marshall-Mies et al., 2000). In recent years, the learning process improved with the use of student-centered teaching strategies such as case-based learning (CBL) as students benefit from active discussions of real-life scenarios in support of integrated learning (Rand et al., 2021).

Metacognition is used by human beings on a daily basis without conscious awareness. However, in line with the idea that leaders benefit from experience (Avolio & Hannah, 2008); Black et al. (2016) assert that metacognition plays an important role in leadership development, and leaders who exhibit higher levels of metacognitive ability tend to serve as better leaders. Furthermore, leaders with stronger metacognitive ability gain from developmental experiences and are thus better prepared for more in-depth information processing and meaning making.

Sanja and Premachandran (2016) identified several skills relevant to the development of metacognitive practices of future leaders. Some include the ability to distinguish between important and unnecessary information, associate new information with existing knowledge and brainstorm multiple strategies and decide which to employ. Each of these skills can be intentionally developed through use of the peer-authored case study method.

Academic Context

The program that houses this particular leadership course offers undergraduate courses, master's degrees, education specialist degrees, and a doctorate in Educational Leadership. The program attracts professionals from PK-12, higher

education, training & development, nonprofits, and other relatable fields. The assignment resides in a 700-level course, titled: Leadership Theory and Practice. The course serves as both a required course for some departmental graduate programs and serves as an elective for others. Doctoral and master students populate the course. Instructors are provided a master course syllabus, inclusive of both a contemporary practical text and a historic philosophical text along with other miscellaneous readings and ancillaries.

As of present day, there are 11 student learning outcomes for this course. The key outcomes which best align with this assignment are as follows: By the end of the course, students will:

- 1) create a professional identity which includes one's strengths and limitations, as it relates to practicing leadership.
- 2) analyze leadership in the context of contemporary issues and social challenges and the responsibility of leaders to address community needs.
- 3) synthesize current research and trends in the field of leadership and its impact on organizational improvement.

The course has been taught face to face, hybrid, and online. The case study assignment outlined in this paper was implemented in all course modalities. The assignment timing is fully outlined below. Briefly, to familiarize them with case studies, students are asked to resolve a generic case study prior to the start of class. The case is emailed or posted in an online learning platform. Little to no instruction is given, except "resolve this case and apply a leadership theory, model, style, or approach." This first paper submission is credit/no credit. Later in the semester, students are asked to author a case, then exchange that case with a peer for resolution.

Peer-Authored Case Studies: The Assignment

The details below outline the peer authorship process, case resolution, and how the process is assessed as both an assignment and as a programmatic assessment tool. First, the purpose of this tool is explained, followed by a practical examination of how the assignment is implemented. The final section outlines the data collected in the pre/post-test implementation of this in-class assessment and offers some recommendations for future use.

While our experience with this assignment takes place in graduate classrooms, it can be modified for undergraduate courses as well. If modified for undergraduate spaces, we suggest more direct involvement by a faculty member to ensure the undergraduate case study authorship process meets the criteria outlined in this manuscript.

Peer-authored Controversies

As stated earlier, case studies are widely used in leadership education, but some cases outline a potentially fictional topic, the case is authorless, therefore students may only partially invest in the process. To combat this issue, we advocate for peers to author cases and then share those cases during a class. This adds many tangible benefits: 1) realism, 2) support for a peer who is struggling with a real issue, 3) examining the issues from multiple lenses while applying a leadership theory, 4) conceptualizing a real-to-life issue through a unique reality, if the author is struggling with how to proceed, and 5) a 360-degree examination of the resolution as the case study author can discuss proposed ideas with the peer who examined their case. In other words, a symbiotic relationship occurs where the learning moves in both directions and the issues become realistic, fluid, and shared. The author can level the proposed ideas with what really happened and the case study examiner can then amend, alter, and view the problem from a

different perspective. The case author may say “I never thought of that” and/or share with their partner, “I tried that approach, it failed and here is why” to create a dynamic, two-way learning experience filled with reflection and metacognition. The following sections outline the process of authorship as used in the course.

Writing an Effective Case

A good case study is like a puzzle, including the necessary who, what, when, where, and why found within a leadership dilemma or challenge. It is complete with twists and turns and clearly articulates the real-life problem. For this assignment, students share a complex, leadership-based case study modeled after an actual lived professional experience. The final case provides a realistic leadership challenge. The case should have a story-like quality that allows for a logical progression for the peer reviewer. The purpose of this project is to conjure new ideas for both the peer working through the case and for the author. Peers should formulate their case study narrative to be no more than three pages and it should explain the following information:

- Key sentences that clearly outline the issue and demonstrate what it is you want your peer to focus on (without being too direct – “Bill should do X and Y, right?”).
- The provided case study text needs to outline the context, environment, political lens, articulate the issue, etc.
- Who are the stakeholders or key players (any background info needed regarding the characters that would inform the case)?
- As an author, think about your peer - how much information will they need to work through this issue?
- What leadership (or lack of leadership) obstacles are being faced, presented, outlined?
- What characteristics or personal issues does your peer need to know about within this situation?

- Include 3-5 starting questions at the end of the case, for your peer, as they consider this complex leadership situation (e.g. How should the leader behave or respond? Is the behavior appropriate for the situation? Can this issue be resolved and will normalcy return? In retrospect, could the leader have implemented strategies to improve his/her effectiveness?)

Potential Case Study Headings for Student Papers:

- Introduction (Overview)
- Brief Summary of Case
- Key Issues (The Narrative)
- Necessary Background (Contextual Issues)
- Starting Questions for Reader (Focusing on Leadership Issues)

Exchanging Peer-Authored Cases

This section outlines the exchange process and includes some teaching suggestions for the faculty member. As most graduate or doctoral-level courses are smaller, it is suggested that all peer-authored case studies are reviewed by the faculty member first to ensure quality, scope, and appropriate depth, ensuring that the authored case aligns with course objectives. This should take place within the first one-third of the course. With the authorship and faculty review of the case being the first steps. Partner only presentations/discussions should occur two to three weeks later. If this is managed in a brick-and-mortar setting, student teams can simply move to a space in the classroom for their face-to-face interaction. If managed online, it is suggested that breakout rooms are created for each dyad.

Next, to ensure realism of the case, it is suggested that student teams are created based on a shared academic or professional background, when possible. Partnering of students should be based on logical, thematic connections of their cases. In other words, while the particular leadership issues may be universal, someone with knowledge of the medical field, military, or other field-based

experiences might be a better fit versus a random assignment. Intentionality in the matching process will ensure that both parties are versed in the discipline and can speak to the posed problems of the case. If there are two students in the course who work in healthcare, match them up. If there are PK-12 educators, make a team and so on. The goal is to create leadership realism which is assisted by connecting people from similar industries who may share common experiences, vocabulary, and knowledge.

Again, while the leadership issues outlined in the peer-authored cases may be universal, this intentionality allows for an immediate connection to the case, hence more buy in. If there is an odd number of students, we advise a group of three with all sharing their case studies.

Case Analysis Assignment

Next, students exchange case studies and contemplate their resolution via an in-depth case analysis. Students will create a paper for the assignment and present their analysis to their peer – case author. The steps recommended steps for analysis include:

- Identify central leadership problems & secondary issues
- Determine stakeholders
- Resources – competencies, ethical standards, policy guidelines, professional requirements
- Discuss possible courses of action
- Evaluate consequences of each action
- Select appropriate action
- Design a plan for implementing desired course of action
- Review decisions

After individually analyzing the case, students share with one another their analysis, proposed resolutions, and plan for resolving the central problem. This interaction is an ongoing, dynamic process where peers level and adjust their ideas

based on the responses shared during this interaction.

With the process of how to examine a case study outlined above, the following steps showcase what the peer teams should work on for this classroom-based simulation. Student teams should also consider:

- Meeting to discuss questions which may arise after reading each other's case.
- After the meeting and after reading/thinking through the case, students should thoroughly apply a leadership theory relevant to the case they are reading.
- That chosen leadership theory should inform each step of the process and becomes the prism by which the case will be examined and explained.
- With the theory guiding the process, the student should determine multiple paths for resolution.
- Students author an 8–10-page paper, complete with references explaining the pathway to resolution (a potential format is below).
- Create a presentation plan to discuss proposed resolution with the peer who authored the case. Presentations should be 10-15 minutes per team member.

As a partner in this process, it is suggested to be creative and allow for adequate amounts of academic freedom in the resolution of the case. The goal is not to solve this issue for every connected system, just the one explained in the case. It is vital to focus attention on this specific peer-authored case and this specific system by creating a path forward.

Potential Headings for Paper and Presentation

The following proposed outline is based on a motivated sequence of problem, solution, and

future consequences. Both students create an outline for the paper and the presentation, but this may be modified based on faculty discretion.

- Attention Step: Draw your partner into the topic and include a mention of the theoretical lens
- Provide a BIG picture introduction or preview of what is to come
- Summary of the case (1/2 page maximum). This was authored by your peer, they know the case and are more concerned with resolutions and steps forward
- Perceived identification of the issue(s) - apply the theory to identify issues
- Realistic solution(s) - apply theory to identify solutions
- Future consequences (make a choice and showcase what the future may look like if your suggestions are OR are not implemented – pick only one. Typically, a future with negative consequences outlines a more powerful image.)
- Conclusion/Summary

Assessing Leadership Learning

This section outlines how this case study assignment was used to provide programmatic assessment data related to this leadership course. In this particular 700-level graduate leadership course, in Week 0 – the week before the course begins, a generic case study is provided to students with the following instructions:

In Week 1, you will be asked to examine a leadership controversy found in a case study. Leadership is a fluid process with many twists and turns, it is also a human process filled with many flaws and learning opportunities. The best way to understand your own prowess as a leader is to dig deeply into a problem. This assignment will ask that you examine a case study and then seek resolution of the case in 750 words or less. You are asked to apply a single, formal leadership theory (of your choice) to guide your resolution. The

choice of theory should cleanly “fit” with the issue presented in the case. While many theories adapt to fit many problems, your choice of the theory should fit the situation. This first assignment is designed as a formative assessment so your instructor can begin to understand your knowledge level of leading through controversies and your ability to apply a leadership theory to an issue. To that end, there are no “right” or “wrong” answers, and this will simply be a way for you to share your thoughts on how leaders' function within a controversy. Final papers should outline the following areas while integrating your chosen theory into each step:

- Identify 2-3 central problems
- Outline stakeholders
- Outline impacted resources
- Discuss 2-3 possible outcomes/resolutions
- Evaluate outcomes
- Select appropriate action

This first assignment is credit/no credit and no rubric is provided. The subsequent assignment, which includes the authorship of a case, the exchanging of those cases, and the discussion of the outcomes between peers, happens later in the course. The proposed case study exchange takes place in the last ten percent of the course. The first case study analysis and the final peer-authored case study assignment are then matched for assessment purposes to examine growth. These artifacts are reviewed by a faculty team using a pre-determined rubric designed to measure growth from submission A to submission B. Our three-year assessment (see Table 1.) outlined substantial learning between submission A and B. As students were exposed to formal leadership theories and instructed fully on the process of case study resolutions - the quality of assignments improved. What also became evident was the symbiotic leadership learning that took place within in the teams. The learning moved beyond the academic application of theory to a deeper level of understanding of how leadership works as the partners level information, reflect, and dissect real-to-life controversies using shared

metacognition. The following section outlines the data to date.

Three-Year Assignment Outcomes

To measure effectiveness of this case study assignment, a growth and proficiency assessment model was used to identify student learning. This form of assessment is a purposeful deviation from traditional use of a standardized quantification of learning which fails to accurately capture “what” students learn, by focusing only on “how much” was gained (Howson & Buckley, 2020). Assessing students’ comprehension of leadership concepts at the start of course allows for a snapshot of baseline leadership knowledge. Measuring leadership concept comprehension again at the end of the course, using a similar assessment activity, measures acquired knowledge gained throughout the course, and supports the notion that reliable assessment measures must lead to increased student understanding (Heady, 2000). Similarly, the incorporation of a summative assessment at the end of the course ensures student proficiency in understanding and applying leadership concepts is met upon completion. Furthermore, by assessing students’ comprehension of course material at the start of class, writing to the course objectives serves as a metacognitive activity for students as an introduction to concepts (Marshall-Mies et al., 2020).

To implement a growth and proficiency model, students authored a case study posing a vexing organizational problem centered around a leadership dilemma. The case studies were then distributed to another student with the case studies focusing on addressing the problems through the concepts of key leadership theories as the aforementioned assignment details. Table 1 outlines the pre/post test results of this case study assignment. More importantly, students leave this assignment and leadership course with a much deeper understanding of how challenging leadership can be in real world scenarios. They also understand that not all leadership issues need

to be dealt with alone. Understanding and admitting that a leadership challenge is too much for any one person is an advancement toward efficacious leadership.

Leadership case study growth and proficiency scores, over a three-year period, indicated advancement in student learning (Table 1). Rubric scores range from 4.0, expert, to 1.0, unsatisfactory. An established proficiency score of 3.0, proficient/competent, ensures student mastery of the content. Students participating in the leadership case study achieved a proficiency score over 3.0 in aggregate each of the three years measured. A growth score of 0.5 establishes the equivalent of a 12.5% increase in student comprehension from the start of the course to the end of the course. Student aggregate growth ranged between 0.85 and 1.46 across the three years representing a 21.25% and 36.5% increase in comprehension respectively. Students across five graduate program cohorts were included in this analysis. Student headcount by cohort ranges from 12 to 23 for a total n=87 students represented in this pre-score, post-score, growth analysis.

Table 1
Pre/Post Student Growth and Proficiency Scores

Academic year	Pre-Score	Post-Score	Growth
2018-2019	2.21	3.36	+1.15
2019-2020	2.38	3.23	+0.85
2020-2021	2.31	3.77	+1.46

The single rubric (Appendix A) used for measuring leadership comprehension, at both the start of the course and near the end of the course, was developed as part of the larger programmatic assessment plan for the graduate degree where the course serves as a core requirement. Development of the rubric incorporated both a content validation procedure where faculty teaching the course reviewed verbiage and terminology for accuracy and testing for interrater reliability. Interrater reliability testing was measured using assignments from a single student, scored by five faculty independently,

with final scores shared and debated to develop a shared understanding of leadership comprehension.

Implications Leadership Educators

The proposed assignment outlined in this manuscript represents another leadership educational tool that can be modified for all leadership learning levels. Research supports the notion that active learning does positively impact students' ability to retain and understand new material (Hyun et al., 2017). Active teaching strategies boost attendance, improve engagement, and students' adoption of expert attitudes toward the topic (Deslauriers et al., 2019). Problem-based learning, such as case studies, promotes a heutagogy-based learning model where students develop more desirable learning habits (Yeung et al., 2003). Peer-authored case studies are one example of student-led teaching and learning which leads to more cutting-edge, active learning that gives students direct control over their education (Marvell, Simm & Harper, 2013). Leadership educators who implement this model will see, in real time, the benefits of synergistic leadership learning.

Limitations

While this method offers a new take on a current leadership education tool, there are some limitations to discuss. First, this process takes time in planning and in class for both student and educator. This may imply that another assignment or a lecture is replaced with instructions related to this assignment. There are several steps included to make this all happen. From aligning students with a peer who can help (matching them based on issue or context) to examining the cases before they are shared, this all takes time, but also adds a true sense of realism to applying a leadership theory. Second, this assignment is a critical analysis of a case study and the problem often remains unsolved. This process tends to showcase the sticky nature of leadership. Seldom is leadership "easy" or "simple," thus, the

limitation remains that this assignment is a simulation.

Conclusion

The use of peer-authored case studies in leadership education does ground the concept of taking theory to practice by allowing students to confront real-world issues while assisting a peer in that course. Relying on the fresh eyes of a partner, who invests by guiding their peer through a challenge allows both students to apply leadership theory to real-to-life controversy. This synergy creates a symbiotic leadership learning event, steeped in metacognition, that transcends the classroom setting and better prepares students for the real-world leadership struggles that await.

References

- Avolio, B., & Hannah, S. (2008). Development readiness. *Consulting Psychology Journal*, 60(4), 331–347. <https://doi.org/10.1037/1065-9293.60.4.331>
- Black, H., Soto, L., & Spurlin, S. (2016). Thinking about thinking about leadership: Metacognitive ability and leader developmental readiness. *New Directions for Student Leadership*, 2016(149), 85–95. <https://doi.org/10.1002/yl.20164>
- Boyd, B. L. (2009). Using a case study to develop the transformational teaching theory. *Journal of Leadership Education*, 7(3), 50-59
- Buschlen, E. L., & Dvorak, R. G. (2011). The social change model as pedagogy: Examining undergraduate leadership growth. *Journal of Leadership Education*, 10(2), 38-56
- Buschlen, E. L., & Guthrie, K. L. (2014). Seamless leadership learning in curricular and co-curricular facets of university life: A pragmatic approach to praxis. *Journal of Leadership Studies*, 7(4), 65-71
- Deslauriers, L., McCarty, L. S., Miller, K., Callaghan, K., & Kestin, G. (2019). Measuring actual learning versus feeling of learning in response to being actively engaged in the classroom. *Proceedings of the National Academy of Sciences*, 116(39), 19251–19257. <https://doi.org/10.1073/pnas.1821936116>
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *The American Psychologist*, 34(10), 906–911. <https://doi.org/10.1037/0003-066X.34.10.906>
- Heady, J. E. (2000). Assessment, a way of thinking about learning now and in the future: The dynamic and ongoing nature of measuring and improving student learning. *Journal of College Science Teaching*, 29(6), 415–42.
- Howson, C., & Buckley, A. (2020). Quantifying learning: Measuring student outcomes in higher education in England. *Politics and Governance*, 8(2), 6–14. <https://doi.org/10.17645/pag.v8i2.2564>
- Hyun, J., Ediger, R., & Lee, D. (2017). Students' satisfaction on their learning process in active learning and traditional classrooms. *International Journal of Teaching and Learning in Higher Education*, 29(1), 108-118.
- Jenkins, D. M. (2012). Exploring Signature Pedagogies in Undergraduate Leadership Education. *Journal of Leadership Education*, 11(1), 1-29.
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning and Education*, 4(2), 193-212.
- Kunselman, J. C., & Johnson K. A. (2004). Using the case method to facilitate learning. *College Teaching*, 52(3), 87-92. <https://doi.org/10.3200/CTCH.52.3.87-92>
- Lumb, R. C., & Blowers, A. (1998). Teaching criminal justice through the social inquiry method. *Journal of Criminal Justice Education*, 9(1), 103-118, 177, 179.
- Marshall-Mies, J. C., Fleishman, E. A., Martin, J. A., Zaccaro, S. J., Baughman, W. A., & McGee, M. L., (2000). Development and evaluation of cognitive and metacognitive measures for predicting leadership potential. *The Leadership Quarterly*, 11(1), 135–153. [https://doi.org/10.1016/S1048-9843\(99\)00046-6](https://doi.org/10.1016/S1048-9843(99)00046-6)

- Marvell, A., Simm, D., Schaaf, R., & Harper, R. (2013). Students as scholars: evaluating student-led learning and teaching during fieldwork. *Journal of Geography in Higher Education*, 37(4), 547–566. <https://doi.org/10.1080/03098265.2013.811638>
- Pearl. (2000). A task force to reduce prison overcrowding: Implications for criminal justice policy, planning and research methods courses. *Journal of Criminal Justice Education*, 11(1), 111–121. <https://doi.org/10.1080/10511250000084791>
- Rand, A. F., Zein, M. H., & Al Kawas, S. (2021). Introducing integrated case-based learning to clinical nutrition training and evaluating students' learning performance. *Journal of Taibah University Medical Sciences*, 16(4), 558–564. <https://doi.org/10.1016/j.jtumed.2021.03.005>
- Sanja, J. & Premachandran, P. (2016). A Study on the Metacognitive Awareness of Secondary School Students. *Universal Journal of Educational Research*, 4(1), 165–172. <https://doi.org/10.13189/ujer.2016.040121>
- Williams, J., & McClure, M. (2010). The effects of teaching methods in leadership knowledge retention: An experimental design of lecture, experiential and pedagogy. *Journal of Leadership Education*, 9(2), 86-100.
- Wrenn, J., & Wrenn, B. (2004). Enhancing learning by integrating theory and practice. *International Journal of teaching and Learning in Higher Education*, 21(2), 258-265
- Woerkon M. V. (2010). Critical reflection as a rationalistic ideal. *Adult Education Quarterly*, 60(4), 339-356. <https://doi.org/10.1177/074173609358446>
- Wolfer, L. & Baker, T. E. (2000) Teaching organized crime patterns: An active learning approach, *Journal of Criminal Justice Education*, 11:1, 79-96. <https://doi.org/10.1080/10511250000084771>
- Yeung, E., Au-Yeung, S., Chiu, T., Mok, N., & Lai, P. (2003). Problem design in problem-based learning: evaluating students' learning and self-directed learning practice. *Innovations in Education and Teaching International: Book Reviews*, 40(3), 237–244. <https://doi.org/10.1080/1470329032000103762>
- Young, L., Spain, E., & Brennecke, L. (2022). Using a case study to teach leaders how to enact positive organizational change. *Journal of Educational Leadership*, 21(1), 184-194. DOI: 10.12806/V21/I1/A2

Appendix A: Leading Through Controversies Pre/Post Test Rubric

	Expert 4 Points	Proficient/Competent 3 Points	Novice/Beginning 2 Points	Unsatisfactory 1 Point
Design	The leader incorporates an optimal framework and outlines how the chosen framework supports outcomes for the lesson and is appropriate for the case study.	The leader incorporates portions of a framework and their explanation includes how the chosen framework attempts to connect the lesson to the case study.	The leader incorporates a framework that lacks effectiveness and their explanation partially includes how the chosen framework the case study.	The leader attempt is void of an acceptable effort to incorporate a framework into this assignment.
Theory Application	The leader incorporates a fitting theory to address multiple leadership lenses. The explanation includes how the theory merges with each aspect of the case study.	The leader incorporates theory that loosely connects to the case/issue. Their explanation includes how the theory merges with some of the aspects of the case study.	The leader incorporates a theory that does not address all of the issues in the case study.	The leader attempt is void of an acceptable theory to address the case study issues.
Assess	The leader designs an optimal assessment strategy to evaluate the effectiveness of new knowledge introduction, practices that deepen an understanding of the knowledge, and generation and case study resolution.	The leader designs an assessment technique that partially evaluates the effectiveness of new knowledge introduction, practices that deepen an understanding of the knowledge, and generation and case study resolution.	The leader discusses an assessment strategy that is not in alignment with the effectiveness of new knowledge introduction, practices that deepen an understanding of the knowledge, and generation and case study resolution.	The leader attempt is void of an acceptable effort to incorporate an assessment strategy that is appropriate for case study resolution.