

Contextualizing Organizational Frames: Teaching Leadership to Faculty in Agricultural and Natural Resources

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Abstract

Possessing leadership skills has been determined to be an essential requirement within the workplace. A multi-level leadership program was designed to help provide undergraduates with more exposure to leadership principles. The program team was created through the collaboration of multiple universities found within the southeastern United States. Through a 14-week online training program followed by a field experience, participants were exposed to Bolman and Deal's organizational frames. Participants then created case studies grounded in this leadership framework and based on the data that was collected during their field experiences. This study quantitatively analyzed the consistency with which each of the frames were used. From the 16 published case studies on the multi-institutional project's website, assessment questions were analyzed based on which frame/frames were being referenced. Findings from this study identified a similar use of each of the frames throughout all the case studies. Further research should be conducted to better understand each participant's comprehension of the organizational frames prior to the development of their case studies.

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Introduction and Problem Statement

When considering employability, leadership currently ranks fourth, according to the National Association of Colleges and Employers' (2018) list of key attributes employers seek in students. With employers and colleges recognizing the importance of this attribute, the need for it to be taught throughout higher education arises. In a study that examined a southern land grant educational institution, it was found that the leadership development of their students was inadequate (Stokes, 2022). In fact, teachers and administrators stated that they felt that students' leadership development was more of an implied goal rather than a key responsibility (Stokes, 2022). Upon reviewing literature, Parrella et al. (2023) found that agricultural students need to master more than just discipline-specific skills, they need employability skills. The reality is that when employers are hiring, they look for both technical, knowledge-based skills and soft skills concerned with social abilities such as leadership (Crawford et al., 2011). Thus, professions in agricultural leadership education are growing, which requires programs to develop agricultural leadership educators (Velez et al., 2014).

In response to the need to develop leadership skills, a multi-institutional project developed a faculty-oriented leadership education program. Through this program faculty members would create and have access to multiple case studies that they could incorporate into technical curriculum to teach leadership principles. The case studies were derived from real life events and focused on the lived experiences of communities, schools, and individuals who had experienced natural disasters in an agricultural context. The result of this project was unique perspectives attempting to apply leadership principles into a teaching tool that could be taught by any faculty at the undergraduate level. The aim of this study was to provide a preliminary assessment of how these faculty members incorporated the four frames of leadership into their case studies.

Theoretical and Conceptual Framework

The use of Bolman and Deal's (2017) organizational frames played a critical role in the creation of the leadership education program for faculty. The selection of the theory was intentional as it would be both learned by faculty and then used to develop the case studies. The intent of Bolman and Deal (2017) in the creation of this theory was to consolidate a universal view of leadership into four frames of leadership: structural, human resource, political, and symbolic. The four frames could be used to provide a holistic view of an organization and face complexities that go beyond just the leader and their followers.

The structural frame is focused "architecture" in place that supports an organization's pursuit of its strategic goals (Bolman & Deal, 2017; p. 51). One key aspect of the organizational structure is the manner in which expectations are communicated for the allocation of work and the coordination of efforts. This frame puts emphasis on what the individual does and his/her specific responsibilities. This frame assumes that organizations work to reach established goals, that specialized labor is more efficient, that control and coordination help different units work

together, that the best work is done through rational thought, that effective structure is best fit to the current situation of the organization, and that when performance is faltering via structure, it should be fixed with restructuring.

Meanwhile, the human resource frame assumes that the organization exists to meet human needs (Bolman & Deal, 2017). The idea is that both the organization and the humans who exist within that organization have needs. When those needs are met by both, then the organization succeeds and is productive. Motivation is also considered within this frame, especially in terms of what inspires people to work. This frame is influenced both by Maslow's (1954) hierarchy of needs and MacGregor's theory of X and Y (1960).

The political frame focuses on how decisions are made and how resources are allocated (Bolman & Deal, 2017). This frame identifies leadership roles and communication that exist within the organization. This frame assumes that organizations are groups of different individuals that each have different values, beliefs, and perceptions, that most important decisions are about dividing up scarce resources, that resources can create conflict, and that goals and decisions are a result of negotiation amongst individuals and interest groups. It is through this frame that Bolman and Deal (2017) highlight the impact of power, coalitions, authorities, decision making, partisans, morality, and conflicts in organizations.

The final frame is the symbolic frame, which is based on how individuals within an organization use symbols and how those symbols give meaning or importance within the organization (Bolman & Deal, 2017). It assumes that importance is not defined by what happens but by what it means and that any action can be interpreted differently by different people. The idea is that when faced with situations that cause uncertainty, symbols can help people find answers that can lead to long term resolve, and the culture that exists within the organization helps to tie members of the organization together.

Bolman and Deal (2017) pushed leaders to embrace a holistic multi-frame approach when they look at their organizations. Instead of limiting themselves to one theory or angle of leadership, the organizational frames provide important insight into many realities found within their organizations. Gallos (1993) supported this with their finding that multi-frame thinking was an effective method of teaching leadership. In 2020, Sowcik and Stein created a best practices option for how to use the frames in rapidly changing situations. Similarly, the faculty leadership program in this study used a multi-frame approach when teaching faculty participants within the context of agriculture and natural resource disasters. The organizational frames were then used as the framework for each of the participants' case studies that were evaluated.

Purpose

The purpose of this study was to quantitatively analyze how frequently faculty participants used each of Bolman and Deal's (2017) organizational frames as assessment questions in the case studies they created.

Methods

Overall, the study was conducted by performing a quantitative analysis of published case studies designed by the faculty participants of the leadership program and examining the assessment questions each case study posed.

Multi-level Experiential Leadership Program

The leadership program was built upon 40 faculty who were selected from colleges of agriculture throughout the southeastern United States. Faculty came from a range of disciplines within agriculture. Participants were first required to complete a 14-week online academy. The online academy consisted of seven modules which focused on the impacts of agricultural disasters, using leadership as a lens, Bolman and Deal's structural and human resource frames, Bolman and Deal's symbolic and political frames, contextualizing leadership, creating case studies, and teaching with case studies.

Upon completion of the online academy, participants were divided into three generalized groups. Over multiple years, each group was sent to the site of a different natural disaster. Faculty participants were exposed to experiences and perspectives reflective of the impacts of a natural disaster event by local industry representatives. This included anything that was real or relevant to how these representatives responded to the crisis. At the conclusion of the field experience, principles of the organizational frames were reviewed, and applications were made to ensure that participants left with a strong understanding of the frames.

Using the data and experiences collected on site, the participants had four months to create a discipline-specific case study that could be used to educate undergraduate students on basic leadership principles using Bolman and Deal's (2017) organizational framework. Case studies were chosen as the method of education because they offered faculty an opportunity for professional development by learning how to use a new instructional technique. Once all parts were finalized, the case studies were submitted to the project design team who reviewed all elements providing feedback and guidance on the use of the frames. At that time, the cases were sent to fellow peers, participants, and graduate students for a final revision process. Once reviewed, all material was digitized and published online.

Frequency of Frames Analysis

This study employed a quantitative research design based on data published from the multi-institutional project's leadership program. The 16 case studies currently published on the larger program's website were reviewed to identify how faculty used each of Bolman and Deal's (2017) four frames. Of the 16 cases, two were eliminated from the review as they were written by the leadership program's facilitators. Assessment questions from the published case studies were reviewed by two investigators. Questions were sorted into each of Bolman and Deal's (2017) organizational frames based on each case study author's labeling. Any discrepancies were discussed by the lead investigator and two reviewers. One case study was found without labeling or clear intent of each frame in the assessment questions, while another used a project

for assessment rather than questions. Therefore, they were eliminated from the study, and a total of 12 case studies which included a total of 201 questions were reviewed. Each case study was assigned a numeric label from one to 12 in order to maintain confidentiality.

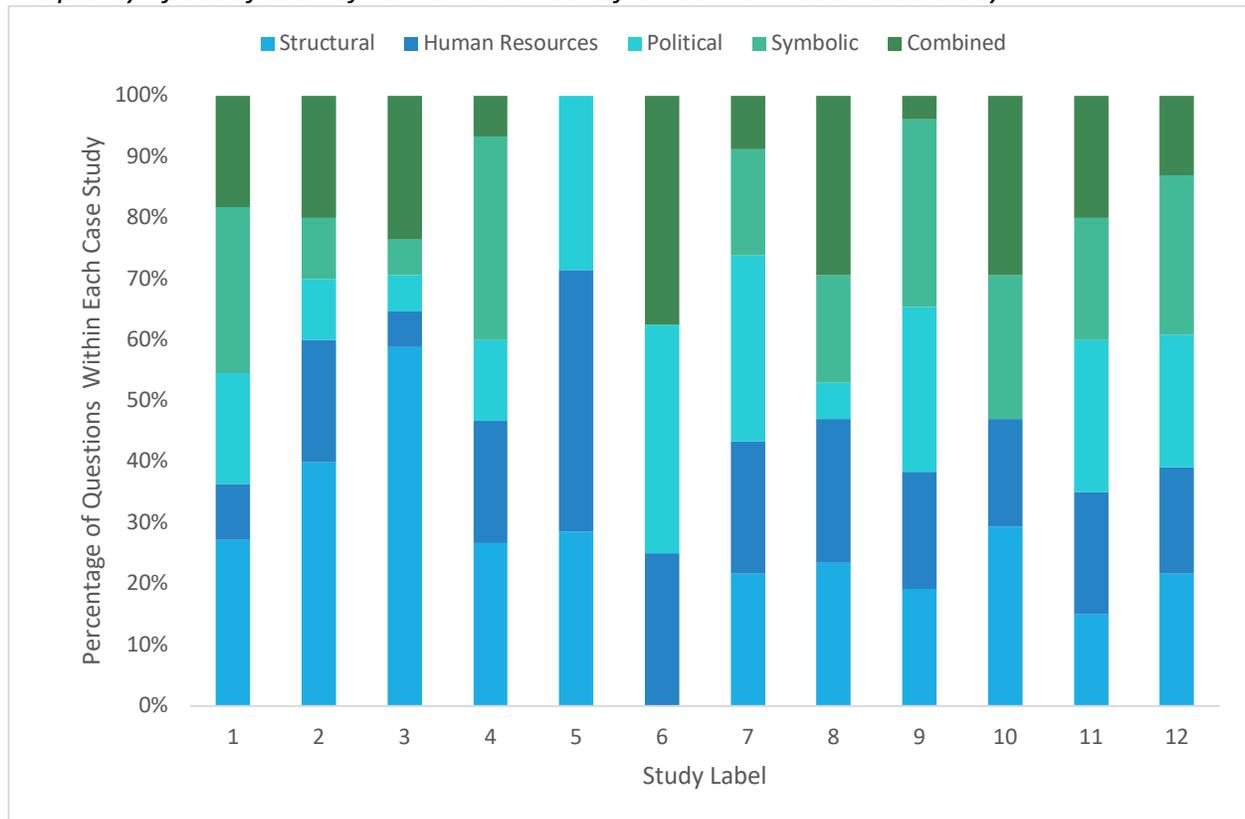
For the purpose of this study, R was used to analyze descriptive and inferential statistics. The descriptive statistics calculated included frequency counts, percentages, and means. These were used to describe the number of times the different organizational frames were used both within and across the case studies. In order to test for homogeneity of variance across the groups, the test for normality of data was first carried out using histograms. The histograms showed that the data were not normally distributed, thus a non-parametric Levene's test was carried out.

Findings

Analysis on assessment questions in the case studies indicated that the four frames as identified by Bolman and Deal (2017) were used often, as well as questions which combined the frames. Specifically, as seen in Figure 1, the case study analysis reveals that both structural (27.3%) and symbolic frames (27.3%) were used the most in Study 1 while structural frame related questions (40%) took precedence in Study 2. Study 3 adopted majorly structural frame questions (58.8%), whereas symbolic questions (33.3%) were mainly used for Study 4. Although, the human resource frame (42.9%) was dominant in Study 5, political (37.5%) and combined frames (37.5%) were prioritized in Study 6. Furthermore, about a third of the questions used in Studies 7 and 8 were embedded within political and combined frames, respectively. It was noted that 30.8% of the questions adopted in Study 9 fell under the symbolic frame while structural (29.4%) and combined (29.4%) questions were used in Study 10. It is interesting to know that for Study 11, there was equal distribution amongst the human resource (20%), symbolic (20%), combined frames (20%). However, political frame's use was prevalent (25%). Though Study 12 had the structural (21.7%) and political (21.7%) frames as notable frames, the symbolic frame (26.1 %) was dominant.

Figure 1

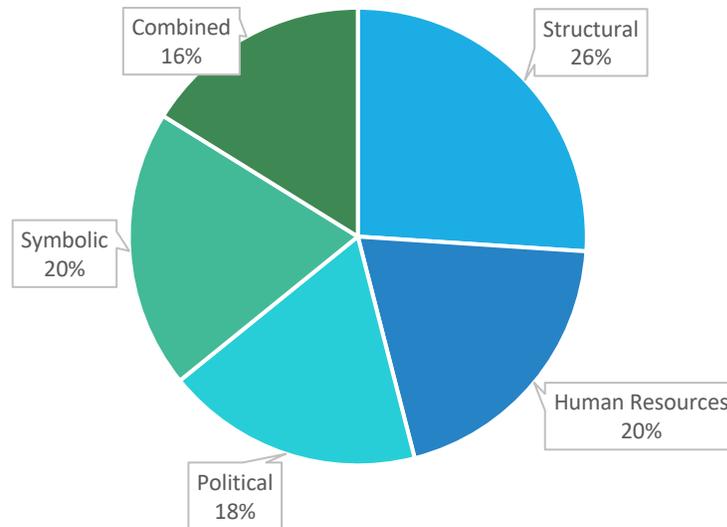
Frequency of use of each of Bolman and Deal's frames within each case study



It was discovered that across all case studies, as seen in Figure 2, the mean number of structural questions used in all the studies was 4.33 ($SD = 2.27$) while human resource related questions was 3.3 ($SD = 1.61$). On average, the researchers employed political frame questions approximately three times ($SD = 2.41$) while symbolic and combined frames had on average of 3.25 ($SD = 2.25$) and 2.67 ($SD = 1.61$) questions, respectively. The Levene's Test for homogeneity of variance ($F = 0.8123$; $p = 0.5227$) reveals that there was no significant variation among the frames employed across the studies.

Figure 2

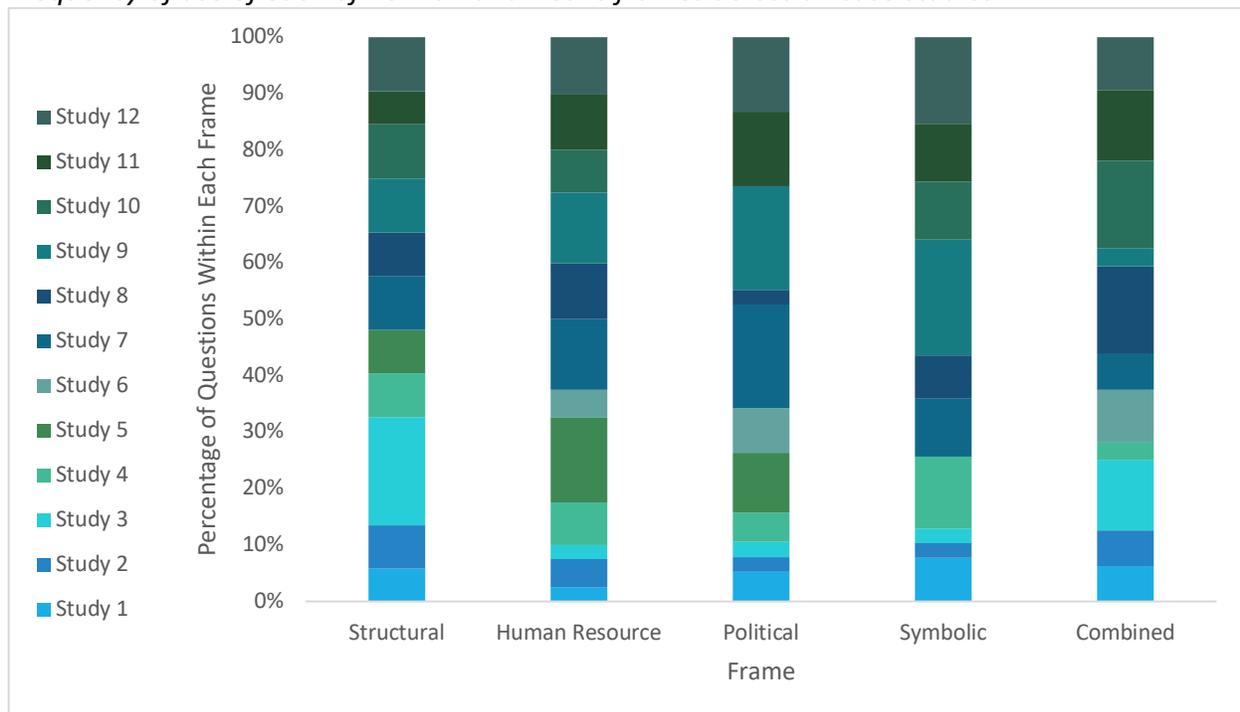
Distribution of average frequency of each of Bolman and Deal's four frames in assessment questions across all studies



The frames were also compared across the case studies, as seen in Figure 3. This figure shows the distribution of questions from each study within each frame. For example, of the 26% of questions that were structural, it was discovered that this frame was widely used in Study 3 (19.2%) and was equally used in Study 7 (9.6%), 9 (9.6%), 10 (9.6%), and 12 (9.6%). The human resource frame was more dominant in Study 5 (15%), followed by Study 7 (12.5%) and 9 (12.5%). However, it is evident that this frame was used across all the studies with no exemption. Meanwhile, the political frame was majorly used in Study 7 (18.4%) and 9 (18.4%) and were followed by Study 11 (13.2%) and 12 (13.2%) respectively. Amongst all the studies, Study 9 employed the highest level of symbolic frame questions (20.5%), followed by Study 12 (15.4%) and Study 4 (12.8%). While combined frame questions were mostly used for Study 8 and 10 (15.6%), this frame was also used in Study 3 (12.5%) and 10 (12.5%).

Figure 3

Frequency of use of each of Bolman and Deal's frames across all case studies



Conclusions, Discussion, and Recommendations

It is evident that throughout the 12 case studies there is an equal distribution of questions from each of the organizational frames (Bolman & Deal, 2017). The creators of the case studies were able to use an almost equal amount of assessment questions from each of the frames as to maximize student learning in these cases. The frame that had the lowest amount of assessment questions was the political frame. Possible explanations of this are potential lack of relevance based on participant specialties and location selected, lack of participant understanding of this frame, or personal preference of case study developers. The fact that this was the frame that was least used poses an interesting point because one of the key elements of the frame is the allocation of resources. Due to the destructive nature of these storms, the resources that were once available to an organization may be impacted. Thus, questions designed around this frame would be very fitting for these case studies. Alternatively, the human resource frame was used across all 12 case studies. This finding could highlight the critical role human resources play in leadership during a crisis and how motivation, goal setting, and engagement can change during times of crisis. Consistency can be found in the lack of preference for any frame, similar to Probst's (2011) findings. Probst found that participation in leadership development programs had no effect on frame preference.

Additionally, it is interesting that throughout all the case studies, apart from case study 6, all used at least three of the four frames. Even though case study 6 did not use all four frames, the

study still incorporated assessment questions from two of the four frames. These findings support Roddy's (2010) dissertation work which also found that most headmasters use more than one frame. Durocher (1995) found that almost half (45.3%) of his participants reported using more than two of the frames. These findings do contrast the work of Bensimon (1989), who found that most higher education presidents prefer the use of one frame as a guiding leadership development model. These findings have multiple potential meanings. The first is that participants of the field experience may have a sufficient knowledge of the frames and found application of each frame within the sites that they toured. The second is that those same participants may not have a strong understanding of the frames and instead of going into depth on the one or two that best fit their data from the natural disaster, they chose to ask broader questions that incorporated basic principles of each frame. Additionally, the feedback provided to the participants by the team experts could have encouraged the use of frames differently, which is a potential limitation. Either way, there is a need for further research to identify participants' mastery of the organizational frames after their field experiences and prior to the development of their case studies.

The complexity of a holistic approach to leadership can pose a challenge for participant understanding (Kellerman, 2014). Therefore, it is recommended that future research focus on how to best educate participants of the multi-level experiential leadership program on Bolman and Deal's (2017) organizational frames. The impact of participant comprehension of the frames is key to identifying why all frames are being used evenly and will help identify if participants are not going more into depth due to a lack of knowledge of how to incorporate the frames within their case studies. The researchers recommend the implementation of a qualitative study that examines participant experiences during the onboarding, training, field experience, and case study development stages of the program. Additional research that should be considered is collecting data on the impacts of these case studies on students' leadership development.

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References

Bolman, L. G., & Deal, T. E. (2017). *Reframing organizations: Artistry, choice, and leadership* (6th ed). John Wiley & Sons.

- Bensimon, E. M. (1989). The meaning of "good presidential leadership": A frame analysis. *The Review of Higher Education*, 12(2), 107–123. <https://doi.org/10.1353/rhe.1989.0024>
- Crawford, P., Lang, S., Fink, W., Dalton, R., & Fielitz, L. (2011). *Comparative analysis of soft skills: Perceptions of employers, alum, faculty and students*. Michigan State University. <https://www.aplu.org/wp-content/uploads/comparative-analysis-of-soft-skills-what-is-important-for-new-graduates.pdf>
- Durocher, E. A. (1995). Leadership orientations of school administrators: A survey of nationally recognized school leaders (Publication No. 9620148) [Doctoral dissertation, Columbia University]. ProQuest Dissertations & Theses Global. <https://www.proquest.com/docview/304190984/A8AD3E7790AC421DPQ/1?accountid=10920>
- Gallos, J. V. (1993). Teaching about reframing with films and videos. *Journal of Management Education*, 17(1), 127–132. <https://doi.org/10.1177/105256299301700115>
- Kellerman, B. (2014). *Hard times: Leadership in America*. Stanford University Press.
- Maslow, A. H. (1954). *Motivation and personality*. HarperCollins.
- National Association of Colleges and Employers. (2018). *Job outlook 2018*. National Association of Colleges and Employers.
- Parrella, J. A., Esquivel, C., Leggette, H. R., & Murphrey, T. P. (2023). Preparing agricultural leaders: An assessment of agricultural students' perceived importance and development of employability skills. *The Journal of Agricultural Education and Extension*, 1-23. <https://doi.org/10.1080/1389224X.2023.2179086>
- Probst, M. B. (2011). *An analysis of leadership frame preference of academic administration: Using the Bolman and Deal four frame model* (Publication No. 3450562) [Doctoral dissertation, Capella University]. ProQuest Dissertations & Theses Global. <https://www.proquest.com/docview/864832430/B044E400A08A454CPQ/1?accountid=10920>
- Roddy, T. P. (2010). *Frame analysis of the self-perceived leadership orientations of headmasters of the independent schools association of the southwest, southern association of independent schools, and the association of independent schools of greater Washington member schools* (Publication No. 3430581) [Doctoral dissertation, University of New Orleans]. ProQuest Dissertations & Theses Global. <https://www.proquest.com/docview/808582369?pq-origsite=gscholar&fromopenview=true>

Sowcik, M., & Stein, M. (2020). Navigating the unprecedented: Leading remotely unexpectedly. *EDIS*, 2020, AEC691/WC354. <https://doi.org/10.32473/edis-wc354-2020>

Stokes, T. (2022). *Understanding How University Organizational Structure Impacts Leadership Development for College Students* (Publication No. 28969732) [Doctoral dissertation, University of Florida]. ProQuest Dissertations & Theses Global. <https://www.proquest.com/docview/2672286840?pq-origsite=gscholar&fromopenview=true>

Velez, J., Moore, L., Bruce, J., & Stephens, C. (2014). Agricultural leadership education: Past history, present reality, and future directions. *Journal of Leadership Studies*, 7(4), 65–70. <https://doi.org/10.1002/jls.21312>

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