ORGANIZATIONAL DESIGN BARRIERS OF USING SCENARIO PLANNING FOR PROGRAM DEVELOPMENT IN HIGHER EDUCATION

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ABSTRACT

In this article we share our learning experiences on the organizational design barriers we perceived to have encountered with scenario planning in higher education for program development. Our perceived barriers discussed include misalignment of culture and change intervention; constructing organizational reality and meaning making; knowledge creation and transfer of knowledge; and short term versus long term outcomes. Our retrospective analysis contributes to the understanding of the complexity of change in higher education and adds to the knowledge base on using scenario planning in a bureaucratic, hierarchical context. Our experiences are incongruent with implicit assumptions that scenario planning can be used in any context (Balarezo et al., 2017), and illustrate some important constraints to consider before using this type of forward-thinking intervention. We provide recommendations for using scenario planning and for transformational change in higher education. These changes have implications for more creative, future-oriented educational planning processes for improving higher education teaching and learning experiences.

INTRODUCTION

Universities increasingly need to be adaptable and able to evolve to meet the demands of society (Petersen & Bartel, 2020; Spanier, 2010). Current challenges facing universities include expanding expectations for productivity, technological advances, lack of public funding, reliance on external financial support, and serving multiple functions and missions (Greer & Shuck, 2020; Petersen & Bartel, 2020). Higher education increasingly functions in an unpredictable and uncertain landscape, suggesting that large-scale transformational change may be needed. However, change in higher education is difficult (Petersen & Bartel, 2020), requiring the old guard to embrace paradigmatic shifts (Greer & Shuck, 2020) and implement forward-thinking change interventions that expose, critique, and even change, if necessary, underlying assumptions, beliefs, and values about the function and purpose of higher education (Greer & Shuck, 2020; Petersen & Bartel, 2020). Research is lacking on how universities are responding to disruptive changes in our society (Hall & Lulich, 2021). Over twenty years ago, Rieley (1997) recommended that higher education institutions use interventions such as scenario planning to better understand multiple, plausible futures, as strategic decisions can often be based on bias and overconfidence that keeps university structures and systems from evolving. In a follow-up response twenty-one years later, Rieley (2018) posited that not much progress in planning for higher education's future has been made.

In this time of increasing demands on higher education the need for questioning our assumptions, values, and belief systems at the department and program levels of universities matters. Researchers recommend supporting and promoting high quality, innovative graduate programs because students are entering a dramatically different job market than in prior years (Hakkola & King, 2016; Spanier, 2010). In alignment with these recommendations, our graduate program responded to the findings of an external review team to position our program to better reflect the field and be a competitor in the marketplace. The external review findings suggested the

main obstacle to the program's potential growth and impact was an ambiguous program identity that impacted other foundational factors including core competencies and capabilities. We needed an intervention that forced us to question our biases and assumptions as a program situated within a mid-size university. We also sought a process that incorporated and supported strategic planning flexibility and adaptability. We selected scenario planning to help us consider several plausible and desired futures for our program. This approach could help inform our decision-making by creating a shared mental model of our identity and a more comprehensive and effective plan for addressing the recommendations from the external review team.

The purpose of this article is to share our experiences with scenario planning for program development and highlight our perceived barriers to implementation. Our retrospective analysis contributes to the understanding of the complexity of change in higher education and adds to the knowledge base on using scenario planning in a bureaucratic, hierarchical context. Our experiences are incongruent with implicit assumptions that scenario planning can be used in any context (Balarezo et al., 2017), and illustrate some important constraints to consider before using this type of forward-thinking intervention.

This article is structured into six sections. First, the context of our program is presented. Second, the scenario planning process is described. Third, we present relevant literature specific to organizational design and understanding the underlying assumptions of a functional structure that create the barriers we experienced. Fourth, we describe the perceived barriers encountered as misalignment of culture and change intervention; constructing organizational reality and meaning making; knowledge creation and transfer of knowledge, and short term versus long term outcomes. Fifth, we provide recommendations for using the scenario planning process at a program level in higher education. Finally, we discuss implications for educational planning initiatives.

OUR CONTEXT

In accordance with other universities, our graduate program is located within a bureaucratic and hierarchical operating system (Manduk, 2023; Petersen & Bartel, 2020). It is our observation that the overall university is pursuing a more centralized approach to how work gets done including, as examples, but not inclusive of all efforts, centralization of academic advising, career planning, and research and development. Our graduate program is an applied field situated within a College of Education heavily focused on public education and teacher preparation. Most programs in our field are situated in colleges/schools of education based on the focus of learning through adulthood (Li & Nimon, 2009). In our program, students learn the skills and knowledge to secure positions focused on developing both people in the workplace and organizations themselves. This is accomplished through understanding the areas of adult education/learning, training and development, organization development, and career development.

Academic program reviews are conducted for the purpose of providing evidence of program effectiveness, to inform decisions about resources, and for continuous improvement initiatives that advance the mission of the University ("Academic Program Review," 2022). The review begins with faculty submitting an internal self-study report (ISSR) that provides data on the current state of the program, followed by an external review team visit. In our case, the external review team conducted a virtual visit. The external team is led by a campus faculty member and is composed of members from other programs across campus, faculty from other institutions, and industry experts. During our visit, the team reviewed the ISSR, supporting documentation, and conducted virtual interviews. The team provided a report with findings and recommendations for program improvement. Review of the findings led to faculty prioritizing the program's ambiguous

identity. Over time, the program had been influenced by the expertise, background, and interests of faculty in charge. The program had become less grounded in the field. Resolving our identity would inform the program's core competencies and capabilities, contributing to a sustainable, competitive program that provides value to students in the workplace. The outcome of the process would align the foundational and critical program components including mission, vision, values, curriculum— and related facets of marketing, recruiting, evaluation, networking relationships with alumni, and other external and internal partnerships.

SCENARIO PLANNING

Scenario planning is an organizational level change intervention grounded in system's theory (Anderson, 2012; Balazero et al., 2017; Chermack, 2011; Chermack & Walton, 2006). Traditional strategic planning tools are often rooted in the notion of stability and single focused forecasting (Chermack, 2011). In contrast, scenario planning develops multiple futures, making it appropriate for use in the uncertain, complex, unpredictable, and continuously changing landscape (Balarezo et al., 2017; Chermack, 2011) of higher education today. Developing multiple scenarios yielded several plausible outcomes, different driving forces, and impact levels to better inform decision options. Scenario planning allowed us to think deeply about plans; assess a wider array of threats; opportunities, strengths; and better contextualize our complex problems. As a highly participative, collaborative effort that requires dialogue and transfer of knowledge within the organization (Balarezo et al., 2017; Chermack, 2011; Chermack & Payne, 2006), scenario planning seemed to suit our situation at the time. We engaged in the step-by-step phases of the performance-based scenario system intervention (Chermack, 2011) of project preparation, scenario exploration, scenario development, and scenario implementation. For project preparation, we received support from college and department leadership. We engaged in the scenario planning process from fall 2020 to spring 2022. The scenario team consisted of program faculty intent on making sense of our program identity and learning how the program could become more strategic and competitive. For the scenario exploration phase, data were gathered in spring and summer 2021. Data collection methods included existing data, focus groups with students, individual interviews with faculty, an interview with the leadership team, a survey to prospective students, benchmarking data on programs in the field, and peer-reviewed research. A report of the findings was shared with program faculty and college leadership in September 2021.

In fall 2021, the scenario development phase began with the faculty team meeting weekly to brainstorm major forces informing the program, and then ranking these forces by impact and uncertainty levels. The two critical uncertainties selected were audience and delivery. Using the critical uncertainties we created a research agenda, defined our plots and titles, wrote four scenario stories and shared them with one another, anticipating the next phase of scenario implementation.

We were able to conduct some steps within the scenario implementation phase. We wind tunneled the four scenario stories by returning to the original purpose of intervention: asking questions, exploring ideas and insights, and brainstorming potential issues. We immersed ourselves in the scenario stories. We identified threats and opportunities that informed the development of effective strategies within each scenario. We developed plausible and actionable strategies in each scenario for working towards our desired future for the program. These sessions lead to our team creating a business idea, analyzing the current goals of our college/university through the lens of each scenario, and developing program indicators of successful scenario fruition. We were unable to progress from our team strategic conversations to implementing our strategic plans or the final phases of overall project assessment and outputs.

Our experiences with scenario planning provide insight on many aspects of the use of the scenario planning process in the higher education organizational context. Organizational barriers we encountered seem to stem from organizational design and structure that clashed at the implementation stage of the scenario planning process with the outcomes the scenario planning process is designed to yield.

ORGANIZATIONAL DESIGN AND UNDERLYING ASSUMPTIONS OF STRUCTURE

Organizational design is the interconnected systems that create the conditions in the workplace for employee success (Kates, 2010). To fully support the work, all the system components need to be aligned to reinforce the desired actions and behaviors. These components include strategy, structure, processes, rewards, people practices, culture, performance management systems, technology, and feedback loops (Anderson, 2012; Kates, 2010). Structure is often perceived as the way the boxes are visually organized on a chart (Petersen & Bartel, 2020), which has underlying assumptions about the functioning of an organization and its responses to change.

Bureaucratic structure is defined by control, high centralization, unequal power distribution, standardization, and high uncertainty avoidance (Petersen & Bartel, 2020). Centralization organizes organizational initiatives under the assumption that they are more likely to be successful if developed from the top-down (Petersen & Bartel, 2020). In alignment with these characteristics the functional structure is a hierarchy (Anderson, 2012). A hierarchical functional structure has chains of command where information sharing is slow, providing obstacles in communication and coordination among employees (Anderson, 2012; Cummings & Feyerherm, 2010). There is often a short-term focus of the organization around routine and standardization of work (Cummings & Feyerherm, 2010). These focuses reinforce the sense of stability and certainty that these structures are built upon (Alvesson & Spicer, 2012; Roubelat, 2006). Coordination and decision-making happen at the top levels of the organization resulting in narrow perspectives and the possibility of groupthink (Alvesson & Spicer, 2012; Anderson, 2012). In this type of system, employees are passive. The standardization of work and emphasis on efficiency provides a lack of space and openness for deep thinking, reflectiveness, and asking difficult questions (Alvesson & Spicer, 2012). Consequently, employees do not disrupt this system because challenging it creates conflict, which is unwelcome (Alvesson & Spicer, 2012).

PERCEIVED BARRIERS DURING THE SCENARIO PLANNING PROCESS

Misalignment of Culture and Change Intervention

Culture is an organization's assumptions of the world and how to succeed in it (Schein & Schein, 2019). It is how an organization gets work done in the day-to-day activities (Howard-Grenville, 2020). Culture stems from, and is informed by, the historical context of the organization (Schein & Schein, 2019). Schein and Schein (2019) identify three levels of culture. The first level is the outer layer known as artifacts, which are what is seen in terms of the visible structures, processes, and behaviors. The middle layer is the espoused values and encompasses what the organization wants you to see and experience, such as its value claims, goals, and ideals. The inner layer is the underlying assumptions and beliefs that drive the behavior, actions, and organizational practices. The inner layer is reflective of the organization's collective assumption on how to be successful in the world. Core elements of culture can be described in terms of understanding how organizations address challenges, solve problems and respond to change (Cummings & Worley, 2009; Howard-Grenville et al., 2020); the norms, standards, rules of conduct, values, basic assumptions, and mindsets that drive behavior among organizational members (Burke, 1994; Cummings and Worley,

2009; Katz & Miller, 2010); authority structure, distribution of power, reward allocation systems, communication patterns (Burke, 1994), and decision-making processes (Howard-Grenville, 2020). There are many different types of organizational cultures described in the literature. Commensurate with the functional organizational structure, or hierarchy, higher education culture can be understood as one that values unequal power distribution, formality, tradition, stability, rules, and efficiency (Cameron & Quinn, 2011).

Organizational culture plays a significant role in the sustainably of change efforts (Burke, 1994). In fact, researchers and practitioners warn us that a change initiative will not succeed in the workplace if it does not align with the culture of the organization (Katz & Miller, 2010; Kezar & Eckel, 2002; Merton et al., 2019). Through their case studies, Kezar and Eckel (2002) found that change initiatives that violated organizational cultural norms experienced challenges. By using scenario planning as our change intervention, in hindsight, we recognize that we violated several norms of our organization cultural that is steeped in a historical context of being a hierarchy. We did not expect that our organization was not designed for program level transformational change that would help us better respond to the unpredictable, uncertain environment. Yet, our program is in an applied field that must change with the nature of work. In our program we provide preparation for highly uncertain environments, so we must take into consideration work itself, the needs and skills of the job market, perceptions of graduate degree utility and the purpose of higher education in general. We selected the scenario planning process to increase our program's capacity to function in this type of environment because the process itself requires imagining multiple futures that account for complexity, unpredictability, and continuous change (Chermack, 2011). While scenario planning increased our ability to make decisions to adapt, remain competitive, and survive (Korte & Chermack, 2007), its results infringed on organizational elements of the functional structure of a hierarchy such as stability, control, power, and limited use of cognitive capacities (Alvesson & Spicer, 2012).

Systemic interventions, such as scenario planning implementation, involve a paradigmatic shift in thinking about how things are done in organizations, working best in flexible, adaptable, decentralized environments that value participative decision-making (Cummings & Feyerherm, 2010). Our assumptions about the functional structure of our organization anticipated sufficient adaptability, decentralization and valuing of participative decision-making for scenario implementation. However, the process challenged existing paradigms and aspects of the status quo (Roubelat, 2006) becoming disruptive to, and challenging, the system's assumptions. A culture based on control inherently limits creativity, innovation, and flexibility by design (Eversole et al., 2012). This is in alignment with Burke's (1994) perspective on the relationship of change and culture in that the two are so intertwined that "some significant aspect of an organization's culture will never be the same" (p. 9). When assumptions of how the system is supposed to work are disturbed, stakeholders take action to reduce conflict and tension for equilibrium of the status quo (Burke, 1994). In this context, implementation of the strategic plan developed at the program level did not align with a more imposing and less participatory organizational culture. This outcome informs our next barrier which we identify as construction of organizational reality and meaning making.

Constructing Organizational Reality and Meaning-Making

In a functional structure, decision-making happens at the upper levels of the organization. There is a lack of autonomy provided to employees for reflectiveness and deeper thinking (Alvesson & Spicer, 2012; Anderson, 2012). Such structures can be experienced as oppressive by not allowing employee's experiences for the constructed meaning of their work to matter (Alvesson & Johnsson,

2022). Work is routine and standardized where "actors dutifully follow a script they have been handed, which tells them what to do" (Alvesson & Spicer, 2012, p. 729). This level of control can be argued to be dehumanizing because "the activity of being a person is the activity of meaning-making" (Kegan, 1982, p. 11). In a functionally-oriented structure, people in the upper levels of an organization are practicing sense-giving in that they are *giving* employees the organizational reality (Gioia & Chittipeddi, 1991) with the assumption of not being challenged. Organizational reality is not meant to be a shared construction between employees and leaders, which further reinforces control and unequal distribution of power. Imposed sense-making for our program has historically been influenced by a focus on education as elementary and secondary schooling, with less attention on learning and development in adulthood. This organizational reality is in alignment with research showing that there is an overall a lack of understanding of our field's focus on "organizational life" and a divergence of values, purpose, and outcomes with other departments that mostly focus on K-12 education in the United States (Cho & Zachmeier, 2015, p. 150). We conjecture that over time the foundations and bounds of our program identity started becoming more malleable to better *fit* the organizational reality created by those in leadership positions to reduce conflict and tension for the college's identity.

Using scenario planning and imagining plausible, challenging futures required us to think deeply, be reflective, and ask difficult questions. We were making meaning of our experiences and our work while creating a shared mental model and vision of the identity of our program. As this process unfolded, our *fit* within the constructed organizational reality was becoming more uncontrollable. The more grounded and vocal we became about our shared mental model, program possibilities, and needed resources to flourish, more tension and conflict occurred, creating "organizational dis-synchronization" (Alvesson & Jonsson, 2022, p. 725). Dis-synchronization occurs when the levels of sense-making and shared meaning of the organizational reality are no longer in equilibrium (Alvesson & Jonsson, 2022). In the given organizational reality, meaning-making is restricted, so individuals are supposed to follow orders "without complaining, being a responsible, law-abiding employee" (Alvesson & Spicer, 2012, p. 740). Our disruption of sense-giving further illuminated the misalignment between the espoused values of a higher education system, such as innovation and collaborative decision-making, and the underlying assumptions of what it means to be successful in a centralized, hierarchical functional structure.

Knowledge Creation and Transfer of Knowledge

The transfer of knowledge of the constructed mental models from those doing the scenario planning to the wider organization can be problematic and is not well understood in the literature (Balarezo et al., 2017; Chermack & Payne, 2006). Gaining wide-spread support and buy-in for the scenario planning generated changes within the system requires the newly created knowledge and meaning to be communicated through all organizational levels. Doing this requires trust of interactions, relationships, and lots of vertical and lateral dialogue (Chermack, 2011; Chermack & Payne, 2006; Nonaka, 1994). Management style and organizational design factors are critical for successfully transferring knowledge, especially when employees are not able to interact on equal terms (Nonaka, 1994). Additionally, differentiation of power and top-down information sharing can be difficult for coordination and communication among employees (Anderson, 2012; Cummings & Feyerherm, 2010). There is an underlying assumption that knowledge creation only happens at the upper levels of the organization, so lower-level employees serve only minor relevance because they should be focused on implementing the objectives and goals dictated by leadership (Nonaka, 1994). Participating in the scenario planning process enhanced both our learning and imagination

(Chermack, 2011). However, because new knowledge was generated at our program level that disrupted the *given* organizational reality and threatened control and power, the possibility of gaining buy-in and support from the wider organization for future actions became more challenging than anticipated. Scenario planning needs space for the mental models to be put into practice, requiring experimentation and refinement (Nonaka, 1994) in an organizational context that is adaptable, flexible, takes risks, and learns from failure to make continuous improvements. These conditions are incongruent with the functional, hierarchical structure assumptions of environmental stability and predictability.

Short Term Versus Long Term Outcomes

Organizations are weakened by a high dependency on management for decision-making, (Nonaka, 1994) resulting in the possibility of narrow perspectives and groupthink as employee's cognitive capacities are limited by power, control, and coercion (Alvesson & Spicer, 2012). Dependence on management decision-making provides only short-term rewards that maximize profit versus long-term gains (Dal Borgo & Sasia, 2022). Since the functional structure of an organization can dehumanize people by stripping away autonomy, decision-making and the ability to make deeper meaning of their work, it can inevitably erode overall purpose. Routine behavior requires only mindlessness (Alvesson & Jonsson, 2022). Finkielsztein and Wagner (2023) propose that the bureaucratization of universities leads to meaningless work, highlighting that research is inherently innovative, leading to new knowledge and discoveries. In contrast, bureaucratic work becomes predictable and boring. Alvesson and Jonsson (2022) suggest that part of an academic identity is autonomy.

In alignment with the scenario planning literature, we were motivated and energized about our program's future possibilities when we imagined we could build and sustain it to proactively respond to the external environment (Chermack, 2011; Haeffner et al., 2012). Through the scenario planning process, we learned that much of our purpose at work stems from the autonomy and ability to make and implement programmatic strategic decisions, some of which may have disrupted the status quo. The scenario planning process revealed paradigmatic shifts in the how and why of our program. However, implementing these paradigmatic shifts became challenging. Our organizational design ultimately did not allow the space and support to develop meaningful long-term, sustainable gains for the program, department, college, and university. The time and resources necessary for the long-term approach did not materialize.

RECOMMENDATIONS

In this article we present our learning experiences about perceived barriers encountered in using the scenario planning process in an organizational structure strongly rooted in stability. Based on our experiences, we provide recommendations for using scenario planning in a functional structure and conducting transformational change in higher education institutions.

Assess Organizational Readiness

Scenario planning is a powerful tool, thought to be useful in any context (Balazero et al., 2017). Our experience underscores the importance of assessing the organizational readiness for change before initiating a strategic planning process with possibilities for transformational change. Clarifying the deeper, underlying assumptions of an organizational structure and culture would better assist in determining the fit of a strategic planning method to the environment. Many change interventions fail because of a lack of organizational readiness for change (Anderson, 2012). Lack

of readiness may take the form of resistance due to underlying concerns of upper levels for losing control, power, and showing vulnerability (Block, 2000) in a functional hierarchical structure. Assessing readiness will aid in the fit for and use of the scenario planning process.

Assess Espoused Values and Underlying Assumptions

Beer and Eisentat (2000) suggest that top-down management styles and poor vertical communication and coordination are the "silent killers of strategic implementation" (as cited by Anderson, 2012, p. 277). Success in bureaucratic hierarchies is often based on valuing and protecting unequal power distribution, control, and coerciveness. Scenario planning is incongruent with these styles, values, and assumptions. The capacity and motivation to share and use the knowledge from scenario planning to create a more robust vision of the organization and its future must be understood beyond the scenario planning team. This requires assessing assumptions and beliefs about where knowledge is created and by whom. Scenario planning is a highly participative intervention with outcomes of changed thinking, informed decision-making about the future, increased learning, and the use of imagination for people and the organization (Chermack, 2011). These outcomes challenge the status quo of an organization and could be perceived as a threat to the *given* organizational reality rather than an opportunity for growth and development. The level of shared meaning of the organizational reality needs to be assessed. Also, the deeper beliefs of how organizational reality is constructed and by whom need to be considered. Is organizational reality primarily constructed by upper-level positions, or is it a shared construction among employees at all levels of the organization? Is knowledge creation restricted to the upper-level positions or is it a dynamic process valued at all levels of the organization? Asking these questions can help determine if scenario planning is right for the organization. At the time, we did not know the importance of exploring the responses to these questions to adequately determine the required levels of support from leadership, and the corresponding structures and systems necessary to use and implement the results. Had we been more proactive in understanding these underlying assumptions, we would not have implemented scenario planning at the program level, recognizing that the organizational conditions were not yet present to support the transformational change we sought. As with our experience, there is the risk that while the process itself is supported, the ability to put the shared mental models into practice is not possible. Additionally, sharing new knowledge to the wider organization in a functional structure is challenging. Thus, we undertook this reflective analysis as a means of continuing our learning and offering the knowledge gained as a resource for others in higher education settings considering a strategic planning process like scenario planning.

Embrace Flexible, Adaptable Organizational Designs

Our experiences illustrate the importance of embracing organizational designs that support programs in universities to proactively respond to continuously changing external environments. If upper levels of the organization can embrace flexible, adaptable structures that relinquish central control, and "encourage emergent thinking, experimentation, and expansion of information flows in their social networks" (Mandzuk, 2023, p. 4), meaningful change is possible. By moving away from centralization (McGrath, 2019) toward decentralization, faculty are more involved in collaborative decision-making and shared governance, which are often espoused values of higher education institutions. Initiatives are more likely to succeed when created from the ground-up instead of top-down (Janicijevic, 2017; Petersen & Bartel, 2020). Higher education institutions are complex and serve multiple missions and functions (Greer & Shuck, 2020; Peterson & Bartel, 2020). Faster paced information-sharing is critical to creating more lateral and horizontal systems and capabilities

(Anderson, 2012). To disrupt and challenge existing paradigms and the status quo (Alvesson & Spicer, 2012; Roubelat, 2006) with low centralization, high employee involvement in decision-making, high autonomy, and equal distribution of power among all levels and positions within the organization (Janicijevic, 2017) requires trust and resources. Decentralizing administrative responsibilities to colleges and programs has been linked to higher quality student experiences (Hakkola & King, 2015) when provided with the appropriate resources.

Align Structure and Organizational Components for Autonomy

Redesigning structures requires change that reinforces desired behaviors and actions including strategy, processes, rewards, culture, people practices and organizational feedback systems (Anderson, 2012; Cummings & Feyerherm, 2010; Kates, 2010). Changing a culture from being focused on power and hierarchy to one that reinforces innovation and inclusiveness requires learning and an inclusive culture (Anderson, 2012; Katz & Miller, 2010). An adhocracy is focused on innovation, where employees, in this case faculty, have autonomy to create cutting-edge outcomes (Anderson, 2012). A learning culture in a learning organization is designed to respond to uncertainty by valuing learning as the key to continuous change (Ahmad et al., 2023; Haeffner et al., 2012). Miller and Katz (2002) define an inclusive culture as one that enables ideas, perspectives, and experiences to be fully leveraged, creating a bandwidth for problem solving and innovation (as cited in Katz & Miller, 2010). They define inclusion as "a sense of belonging: feeling respected, valued, and seen for who we are as individuals; and a level of supportive energy and commitment from leaders, colleagues, and others so that we—individually and collectively—can do our best work" (Katz & Miller, 2010, p. 437). An inclusive structure and culture positively influence academic programs for continuous change and innovation instead of bureaucratic outcomes such as accountability and compliance (Hakkola & King, 2015). For innovation to happen at the group and organizational level, autonomy and encouragement is required from all levels of the organization (McLean, 2005).

Use Dialogic Organization Development for Transformational Change

The approach to conducting transformational change must not be coercive, as it is in functional structures (Petersen & Bartel, 2010). Instead, the change effort should follow the practices of dialogic organization development that prioritizes changing the conversations among employees, in this case faculty, and exploring common underlying assumptions and aspirations of what it means to be successful in the organization (Bushe, 2010). Scenario planning does this. However, embarking on the process, without engaging in dialog outside of the program needs to occur. Questions need to be asked such as, what are we rewarding and how do we build the organizational structures and systems to pursue those things we should be rewarding? For example, in a functional structure conformity is rewarded, whereas in a more flexible structure autonomy, collaboration, participation and innovation are rewarded.

Shift the Role of Leadership in Higher Education

To implement scenario planning requires a paradigmatic shift in the perception of what leadership is and how it functions in higher education. Innovation requires trust of leadership, not control and authority over decision-making (Supriyanto, et al, 2023). Often 'good' or 'effective' leadership is described in terms of specific leadership styles with corresponding characteristics and attributes, singularly focused outcomes such as profit, and identifiable followers (Lynham, 2010; Shier, 2019). These approaches are leader-centered perspectives that focus less on the interactions

with others in the organization and their influence on desired outcomes (Shier, 2019; Younas et al., 2021). Instead, it is important to focus on leadership skills that are more integrated and multi-faceted, and that recognize results are obtained collectively through people (Katz & Miller, 2010). Leaders must be able to understand the whole system (i.e., organizational context/culture, structures, processes, external environment) to strategically think and act in navigating the unknowns and uncertainties within the external environment (Schoemaker et al., 2013). They must empower others in the organization to engage in continuous strategic thinking and planning. Often, interventions such as scenario planning become a one-time initiative, but to remain competitive there needs to be a continuous planning cycle and strategic adjustments (Cummings & Feyerherm, 2010; Haeffner et al., 2012). Leaders must recognize that they are responsible for both their context-specific outcomes, and the people within the system (Lynham & Chermack, 2006) including internal and external stakeholders. In doing so, leadership must be perceived as an equitable, collective process where all individuals are perceived as equal and ideas can reside at all levels of the organization (Katz & Miller, 2010; Ryan, 2007).

IMPLICATIONS FOR EDUCATIONAL PLANNING

The barriers identified from this retrospective analysis have implications for educational planning in higher education. With higher education facing unprecedented challenges and ever-changing demands (Greer & Shuck, 2020; Petersen & Bartel, 2020) there is a need for forward-thinking planning processes that are innovative and can respond to the uncertain and continuously changing environment. Traditional strategic planning processes often result in decisions that only perpetuate the current status quo of an organization (Chermack, 2011). To truly improve education and offer high quality graduate programs, program reviews should be used as an opportunity for planning in a variety of possible futures that improve teaching and learning experiences. Program reviews can serve as an ongoing process for continuous, systemic approaches to strategic thinking and planning instead of singular events or check-the-box tasks. On an organizational level this approach requires leaders to work to identify and remove barriers that hinder faculty and staff from engaging in creative planning for programs and corresponding activities. Change in higher education is difficult (Petersen & Bartel, 2020) and demands a paradigmatic shift (Greer & Shuck, 2020) in assumptions on how organizations function and how work gets done. These changes necessitate using effective change processes for planning to create flexible and adaptable organizational structures and systems that encompass participative decision-making, collaboration, and inclusiveness.

CONCLUSION

In conclusion, Anderson (2012) reminds us that "what counts as a failed intervention is a matter of perspective" (p. 181). While we are disappointed with the outcomes of our scenario planning process, it is our hope that our retrospective analysis can serve as a catalyst for change for higher educational institutions and academic programs to reach their full potential. As a result of our scenario planning experience and with this retrospective analysis, our sensemaking of the organizational context we were functioning in eroded. We became more cognizant of the tensions in the system between our purpose as a program and faculty members, and the institutional purpose and given organizational reality. The process changed our perspectives, provided clarity, and made our program needs more explicit. Clarity has only exacerbated our differences with our organizational context and exposed the need for more inclusive structures, systems, and practices.

These are important understandings as we continue to navigate our program identity, our fit, and our individual roles as faculty seeking purpose within a hierarchical system. We have come

to value even more deeply the idea that to thrive, we need to "face the unknown with equanimity and to be curious, receptive, and humble. It is the work of asking questions that focus our attention toward deeply felt, collective aspirations" (Axelrod et al. 2010, p. 367). To be able to address and solve the wicked problems we need to mobilize, energize, and empower the cognitive and meaning-making capabilities of all employees at all levels of an organization.

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