

ACADEMIC LEADERSHIP IN THE TUNA ERA: NAVIGATING TURBULENCE, UNCERTAINTY, NOVELTY, AND AMBIGUITY IN HIGHER EDUCATION

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ABSTRACT

The TUNA era (Turbulence, Uncertainty, Novelty, and Ambiguity) signifies a paradigm shift in higher education, characterized by heightened uncertainty, novelty, and ambiguity. This study explores the challenges and opportunities faced by academic leaders amidst these transformations, emphasizing the strategic skills required, including emotional intelligence, innovation, and adaptability. It identifies that effective academic leadership necessitates an inclusive, holistic, and value-based approach to address external pressures such as technological advancements, globalization, and shifting societal expectations. By fostering resilient leadership capacities, higher education institutions can proactively and strategically respond to complexities, ensuring academic sustainability in an ever-evolving landscape.

Keywords: TUNA era, academic leadership, higher education, uncertainty, innovation, strategic adaptability.

A. INTRODUCTION

Some ten years ago, these four categories of classification of the accelerating pace of change and the non-linearity of change represented a critical necessity for understanding how leaders could excel in the face of increasing organizational turbulence, uncertainty, novelty, and ambiguity (Naveed *et al.*, 2022; Southworth *et al.*, 2023; Hanelt *et al.*, 2021). In short, to survive and thrive in times of turbulence—the T in TUNA—academic leaders need to understand and adopt strategies that maintain excellence and build momentum in a context rife with uncertainty, novelty, and ambiguity (Beauchamp *et al.*, 2021; Tran *et al.*, 2020).

The objective of this paper is to explore what each of the TUNA concepts means, particularly as it pertains to the reality of academic leadership in institutions of higher education. What does it mean to operate in a space characterized by increasing turbulence, as well as challenges that stem from the interplay among uncertainty, novelty, and ambiguity? Today's academic leader is often viewed as a responder in those moments, but if academic

institutions are to develop the resiliency needed to navigate life in the TUNA era, one curious set of skills and mindsets of leaders must evolve to meet the challenges that TUNA implies. Only now is it becoming clearer, through a systematic and growing body of respective research, the contexts in which these four sub-disciplines of change are manifesting themselves in the TUNA era and the adaptive leadership capacity that will be necessary to thrive in turbulent, uncertain, novel, and ambiguous higher education institutions. The pace and the types of change that are, or will be, required are monumental (Salun & Zaslavska, 2024; Enayati *et al.*, 2024).

1. Background and Rationale

Over the past two decades, academia has entered into a new period characterized by turbulence, uncertainty, novelty, and ambiguity, often referred to as TUNA. This era is powered by the disruptive and transformative potentials of technology, shifting political landscapes across the globe, world events impacting every level of our society, and accelerating shifts in worldwide wealth and influence. The dynamic compositions of "knowledges" and their applications in university contexts are evolving as these engines drive the settings within which academic institutions operate. These contexts increasingly require academic leaders to have a fine-grained appreciation of how transitory disruptions and sustained agonistic strategies shape the practice of those they work with and those they lead (Gilead & Dishon, 2022; Griffin & Grote, 2020; Arar *et al.*, 2024). While revisiting significant influences framing this study, this sub-section provides a longer view of this potentially irreversible stage our institutions, our staff, and our research and learning practices are tussling within.

While it might be supposed that such developments are only hugely impacting elite institutions, creating even more complicated positioning constraints on the non-elite higher education institutions, it is crucial to consider the constant transformations of the terms of accreditation and assessment and the possible appetite of students and sponsors for qualifications at world-leading institutions that might or might not seem to deliver excellence in their particular areas. Alternatively, such interested stakeholders might expect other kinds of value from engaging with the learning and research opportunities at world-leading universities (Kumar *et al.*, 2020; Fernandes & Singh, 2022; Romanowski, 2022). In any event, the TUNA era confronts the academic leaders of higher education of nearly all sizes both internationally and domestically. That leaders do not already lead within such contexts of turbulence is evidenced by the emerging focus on professional development and

capabilities education being delivered to new embarking higher education leaders to develop the dispositions and sensitivities necessary to practice discerning judgment, leadership, and published scholarship.

2. Scope and Objectives

Although this essay is reflective, it is also written with a practical purpose. For practitioners, it looks at some of the challenges that confront academic leaders and discusses some of the strategies and drivers available to them for managing both the turbulence and the underlying felt intensities that are associated with it. Its object is to provide insights that are related to the role of the academic leader in the TUNA era. In particular, the essay outlines some of the changes that characterize the new era – or the mega-externalities – for those who work and lead in contemporary academic settings. It also addresses the skills and leadership repertoire needed for managing academic delivery while establishing an analytical terrain for a critical approach to academic leadership. The era of TUNA indicates a turbulent sea on which we currently all sail. The era suggests that we work in environments that are challenging and highly unpredictable, and that we regularly face multiple forms of crisis, change, intensification, complexity, and uncertainty. As well as the occasional calm, the turbulence of the TUNA era means that we should expect significant waves with crests and troughs of negative, positive, and shared consequences (Ramaditya *et al.*, 2022; Tuna & Avci, 2023; Fülöp *et al.*, 2023).

Whereas the turbulence of the TUNA era is external to academia, there is depth to some of its drivers and felt intensities. It is these felt intensities that are the concern of the paper. It suggests that the said era represents a coalescence and a synergy of various forces that have profound implications for the way we lead and manage academic systems. Academic institutions can be differently and unpredictably impacted by these forces, and the mechanisms through which they are sensed, interpreted, mediated via policy, and experienced through practice may also differ. To put it differently, the TUNA era represents highly uncertain iterative webs of drivers that eventually become integrated in our ways of being and acting. The paper sets out our stall with a number of key themes and objectives. First, it focuses on a brief exploration of the definition of the “TUNA era”. Here it discusses a range of contributing drivers that animate the era of course intensities, and it terms this period accordingly as one of turbulence, uncertainty, novelty, and ambiguity. Despite its common origins in contemporary organizational studies, the TUNA concept finds particular resonance within higher education.

B. Understanding the TUNA Era

The TUNA era stands for “turbulent, uncertain, novel, and ambiguous” and signifies a radical departure from the past for all kinds of social systems, including higher education. These constituents are all connected. Turbulence can heighten uncertainty, ambiguity, and novelty. Uncertainty can result in greater ambiguity and novelty; ambiguity can spawn uncertainty and novelty, and embracing the innovative or inventing the new can heighten turbulence, uncertainty, and ambiguity or create related conditions for those around us (Means & Slater, 2022; Abdullah *et al.*, 2022)

Turbulence outlines the pace, pressure, and psychological upheavals typical of some kinds of change, such as that described above in relation to organizational “turbulence”. System-wide turbulence in a given region or for specific reasons, such as societal change, can arise from political shifts or from natural disasters. The exploration of new forms of leadership within higher education also emphasized the tremendous sense of ambiguity and chaos that can accompany such profound change, whether brought on intentionally by a college or university or engendered by a variety of forces outside the campus. This tendency of change to “disconcert” is notable. For instance, anticipating outcomes from broad banding is quite unlike anticipating what will occur during a strategic planning project, in which the dynamics of human interaction shape the “results”—or lack thereof. A strategic planning project underway at a university was described as making strategic planning dreaded by mid-level administrators. Because the anticipated outcomes of the effort were not what they had previously experienced during similar activities in the university, they were not seeking to be involved. Many who did become involved would criticize the process as lacking in vision or depth ultimately—a reaction no one involved in the project had anticipated or intended. This does not mean, however, that some general theories of change or leadership could not help those involved in a bandwidthing process anticipate or pull up other instances that may have some overlap (Țiclău *et al.*, 2020; Trondal *et al.*, 2022; Scoones, 2024).

1. Defining TUNA: Turbulence, Uncertainty, Novelty, and Ambiguity

Academic leadership operates within an environment affectionately described as TUNA: one that is characterized by turbulence, uncertainty, novelty, and ambiguity. As such, academic leadership may not be everyone's idea of fun, but it's where the smart people go.

a. Turbulence

Turbulence is characterized by its speed and volatility, the result of both sudden disruptive events and artifacts of increasing interconnectedness. Rapid change occurs at an unprecedented scale and is often experienced across markets, societies, and political systems. Many such changes are the result of external pressures, changes, and demands, while others emerge from within higher education itself, caused by disruptions from technology and pressures from without. Within turbulence, the pressure to keep up is persistent, stressful, and often drains intellectual, emotional, and psychological resources (del *et al.*, 2024; John & Thakur, 2024; Ansell *et al.*, 2021).

b. Uncertainty

Uncertainty is a risk factor that arises from the lack of predictability. Such unpredictable actions may emerge from any scale, and academic leaders and managers may find both long- and short-term decision-making and strategy a challenging task. This unpredictability can lead to a pragmatic survival and pessimism orientation and set the scene for entrapment in a cost-down, workforce-reducing strategy, reduced investments in teaching and research infrastructures, and reduced maintenance of buildings and assets, ultimately impacting the mission of higher education provision and the academic staff that are integral to this context. In some cases, the management strategies and corporate communications may traverse into a culture of fear and insecurity within higher education, which ultimately puts pressure on the statistical well-being and emotional health of staff, who may then choose to leave. Essentially, uncertainty is linked to the strategic anxiety of “what is going to hit us next?” and many hold their breath for the next big disruptive event, such as an unexpected competitor or funder withdrawing support without an alternative (Packard & Clark, 2020; Gu *et al.*, 2020).

c. Novelty

Novelty is the quality of being new, original, and different from anything that has been done or seen before. It encompasses an element of surprise, novelty, and uniqueness that captures attention and stands out from the familiar. In a world saturated with information and content, novelty plays a pivotal role in attracting and engaging audiences. Its ability to inspire curiosity and excitement pushes boundaries, encourages exploration, and stimulates innovation. Novelty sparks creativity, drives progress, and keeps us constantly intrigued and eager to discover what lies beyond the known. It invites us to embrace change, accept challenges, and seek fresh perspectives. Novelty breathes life into our experiences, injecting freshness and vitality into our mundane routines. It urges us to embrace the unexpected, to deviate from the ordinary, and to find beauty and inspiration in the unexplored corners of our

world. With its power to awaken our senses, stir our imaginations, and ignite our passions, novelty empowers us to redefine possibilities and shape a future where creativity knows no bounds (Vashisht, 2021; Falchetti *et al.*, 2022).

d. Ambiguity

Ambiguity refers to the state or condition of being open to more than one interpretation, and it can exist in various forms such as language, situations, or relationships. The presence of ambiguity often leads to confusion and uncertainty, as it challenges our ability to clearly comprehend or communicate information. Furthermore, ambiguity can arise due to a lack of specificity or precision in our expressions or the existence of multiple possible meanings. It can be found in literature, art, conversations, and many other aspects of our daily lives. Embracing ambiguity can be both challenging and liberating, as it allows for creativity, flexibility, and diverse perspectives. However, it also necessitates careful consideration and effective communication to minimize misunderstandings and ensure a shared understanding (Levine, 2022; Herjanto *et al.*, 2021).

2. Drivers and Implications in Higher Education

The sections in the first part of the paper recognize the external factors that are commonly observed to cause TUNA in nominally secular, liberal institutions of higher education. What are the stimuli or 'drivers' that are said to lead to TUNA? Responses to this question usually group the power of institutional life into three broad, intersecting domains: technological advancements, globalization, and the changing expectations and shape of civil society. We might enumerate the drivers in the following order: technological advancements, shifts in the geopolitical, macroeconomic, and ideological milieu, and the end-userism paradigm resulting from an increasingly diverse and intercultural student body.

The key implication of these environmental drivers is that these factors are mostly external and completely beyond the control of institutional leaders, and thus possible solutions must either live with that fact or construct changes to counter them. What these drivers have in common is a capacity to generate impacts that will jar, disrupt, and dislodge established patterns of institutional functioning. For higher education leaders who are alert to these drivers, the alternative to being caught unprepared by the turbulence these drivers will generate is to adapt daily practices and processes so that they find a coherent way to respond. Otherwise, they will find themselves presiding over declines in student inflows and the intellectual capital that is essential to a university's performance on global academic league

rankings. For the kind of university or higher education leader who couldn't care less about league tables, the consequences for aggregate institutional performance will still be negative over time, as internal cross-subsidies that protect a surplus of research over teaching erode and key researchers move as easy movement across the sector is encouraged for both seasoned and new academics.

C. Challenges and Opportunities for Academic Leadership

Leadership in the Era of TUNA introduces academic leaders to relentless change, turbulence, uncertainty, novelty, and ambiguity in the environments in which they navigate. This section showcases a range of challenges that leaders are likely to encounter in the TUNA era. Leaders pursuing change on behalf of their institutions counter traditional vested interests, cultivate effective stakeholders, and keep an eye on the bottom lines. Academic leaders may feel they operate in a no-win situation as they continually make unpopular decisions, try to please too many people with divergent interests, and strike balances between struggling departments. Universities continually press against the limits of held resources (be these financial, human, material, time, or attention). Many universities find themselves in an excruciating position of significant funds expended in modernizing aging technological infrastructures, some of which are then dragged rapidly toward obsolescence—a version of competing imperatives in a time of rising TUNA.

On the other hand, cultivating networks of collaborators inside and outside the university, adapting to resource uncertainties and scarcities, and grappling with seemingly unbounded problems may yield a range of opportunities. Many of these revolve around the theme of transforming and launching highly desirable impacting scholarship and education that defines and advances their broader intellectual communities and makes these programs and ideas sought after by students, funders, and employers. The enormous challenges and speeds of transforming communities of change are forcing institutions to evolve quickly and to foster a denser set of partnerships, both on and off campuses. Deans report joining forces across the university to discover and roll out new educational technologies, refocus curricula on jobs that do not exist yet, and reimagine their institutions in the 21st century. Thus, one possible opportunity of the rise of the TUNA turn is the breakdown of silos. If other faculties, units, and departments, not to mention the students, do not understand what it is you do and cannot easily explain or market what you do—the consequence is missing out on both talent and resources. Many predict that, over the course of the next several decades, researchers, tools, and technologies presently existing in the fields of computing, engineering, and

physical sciences will coalesce into a perfect knowledge of everything that will exert a cooling influence on the pace of innovation, supplying humanity with answers to big questions of life and existence and reducing opportunities for indeterminacy (Salmi, 2020; Akour *et al.*, 2020).

Educators will shift focus from current practices and paradigms to the new landscape, adopting transcendent, interdisciplinary perspectives that afford students new literacies, skills, and knowledge sets. Until then, these endemic swings and churns of innovation and adaptation require that academic leaders develop strategic and creative responses to the unceasing fury of today. Even now, there can be a few disenchanting aspects of the TUNA literature. If so much is unpredictable and uncertain, what could leadership possibly effect? We respond to this limit by explicating the future anticipatory and resilience-building dimensions in the next section. Such a response turns a TUNA challenge into a leadership opportunity. Characterizing academic leadership in the TUNA era in this way fosters hope and an agenda for strategic, incremental change—critical elements in instigating momentum repeatedly and moving our universities forward in the TUNA. To date, curves do not vanish from the landscape of transformation given time, attention, and leadership.

D. Key Skills and Competencies for Academic Leaders in the TUNA Era

The following competencies were identified as important for academic deans to demonstrate in order to effectively navigate related changes and strategic efforts: - Adaptability: The learning approach coupled with the ability to create a learning organization (Malik & Garg, 2020; Do *et al.*, 2022). - Strategic thinking: The ability to make decisions that are informed by dynamic change (Partidário, 2021; Magistretti *et al.*, 2021). - Emotional intelligence: The ability to manage oneself in the face of change (Goleman, 2021; Zheng *et al.*, 2021). - Interpersonal and collaborative relationships: The ability to get groups to work together effectively (Afsar *et al.*, 2021; Presbitero, 2021). - Engaging diverse stakeholders: The ability to elicit and garner support from varied constituents (Gibson *et al.*, 2021). - Innovation. - Embracing change as a continuous process (Gibson *et al.*, 2021; Journeault *et al.*, 2021).

Frameworks in higher education were recommended. Both participants responses and the model suggest that academic leaders need to be multi-talented, not multi-tasked. Academic leaders in the current era are required to demonstrate the following competencies: using widely, but retaining innovation in certain areas; the ability to manage complexity and demonstrate resilience; the ability to think about strategic leadership; the ability to develop,

maintain, and encourage collaborative relationships; the ability to have a values orientation and internal motivation based on shared values; the ability to anticipate change; although recruiting for positions that do not yet exist, and living today as a professional and person.

In addition, academic leaders must also be able to maintain emotional intelligence connected to themselves and their values, developing it above all through continuous learning, supported by the selection of internal and external levers necessary to the thesis. In this sense, lifelong learning could mean transforming the traditional professional development of academic leaders into a new trajectory capable of making these subjects feel more at ease with change and, at the same time, making this evolutionary pathway more effective.

E. Strategies for Effective Academic Leadership in Times of Turbulence, Uncertainty, Novelty, and Ambiguity

Despite an environment characterized by turbulence, uncertainty, novelty, and ambiguity, academic leaders cannot afford crises to drip. As students and community members expect action, committed academic leaders implement a strategy early. Strategy questions include these topics: 1) Use strategic thinking and planning; 2) Communicate; 3) Cultivate a culture of innovation; 4) Manage risks; and 5) Commit to the continuous improvement cycle. Consistent with the themes of this text, participants repeatedly emphasize the need for practical and proactive strategies to catalyze the direction in TUNA conditions in higher education.

This fundamental formulation is the same in practice, though its truth is one of the most difficult choices if we become academic leaders. At that time, we need to adapt our strategies throughout the year to reflect the changing fundamental conditions. This text explores systemic thinking, strategic planning, and communication processes. More than just stating the process, we have provided concrete examples of what academic leaders can do to address these challenges in higher education. In addition, we explain the need to develop new risk prevention factors that point to a new environment from TUNA, and models for the established fair, complaint, quality, reflection cycle rather than cycling. The model reintroduced here requires, especially taking into account the TUNA environment, that the challenge of resistance, focused on the institution's vision and target, and the established collaboration become the norm. What was completed by feedback was to renew the level of duty itself?

F. CONCLUSION AND FUTURE DIRECTIONS

The increasing complexity of the higher education landscape is calling forth new processes, methods, and approaches to navigate the TUNA world. Leading in the TUNA era is an ever-changing and ongoing professional development, not a destination. In this essay, we have asserted that the leadership emphasis might not reflect the true nature of turbulence, that of dealing with novelty and ambiguity. Furthermore, we propose that leaders require key leadership orientation approaches, grounded in emotional intelligence and inclusivity, in order to manage the TUNA landscape in higher education. In conclusion, we believe that the TUNA leadership identity is, and will continue to be, a blend of learned core competencies and hybrid strategic approaches. We proceed to understand academic leadership as an emergent practice, which is best supported by a tactical leadership focus that is both inclusive and holistic.

Overall, effective academic leadership in the TUNA era requires the ongoing development of a leadership identity at an individual, cultural, and structural level. The realization of leadership work is not a disparate set of individual tools or solutions, but rather a leadership process woven into and informed by a commitment to the values of the academic work of teaching, research, and work-integrated learning. We hope that our discussion provides a lens for all those engaged with academic leadership, be it in policy and governance roles, intersecting services, or within faculty or academic teams, to reflect on the complexity of the TUNA era and the vital, never-finished journey of becoming a leader navigating the academic landscape. Future research we encourage might explore the leadership perspectives of non-academic staff navigating TUNA, as well as broadening the discussion to examine the challenges TUNA leadership presents to academics and individual teachers. Given the evolution of resistance strategies for coping with TUNA leadership, resilience in the context of leading might also offer fertile grounds for exploration. While the challenges, ambiguities, and uncertainties remain the same in TUNA leadership, so too does the possibility for leaders to carry and engage with hope in their leadership endeavors.

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