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Building Leadership Capacity in Health Sciences: Rationale, Design, and Early Outcomes of the Emerging Leadership Academy at Dow University of Health Sciences

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ABSTRACT:

Background: Many universities, particularly medical schools, report persistent gaps in formal leadership training, despite a consensus that leadership development enhances individual performance, team function, and institutional outcomes.

Objective: To describe the rationale, design, implementation, and early outcomes of the Emerging Leadership Academy (ELA) at Dow University of Health Sciences (DUHS), created to address this unmet training need across faculty, trainees, and administrative leaders.

Methods: ELA was implemented as a hybrid, cohort-based program emphasizing servant leadership, core human skills, and applied problem-solving. Program architecture, eligibility criteria, and selection criteria, as well as competency maps, were defined prospectively. The curriculum integrates case-based seminars, simulations, peer-learning circles, and individualized coaching aligned with DUHS priorities. Evaluation utilizes multiple modalities, including application and selection metrics, participation and completion rates, pre– and post–self–assessments mapped to leadership competencies (e.g., self-awareness, communication, teamwork, conflict management, decision-making, and change leadership), and qualitative feedback from mentors and supervisors. A longitudinal tracker follows alumni milestones, including role expansion, project impact, and contribution to institutional initiatives.

Results: Launched in September 2023, ELA has run multiple cohorts with sustained demand and capacity-limited enrollment. Participants report high perceived relevance and applicability to clinical, academic, and operational settings. Preliminary analyses indicate gains in leadership self-efficacy, teamwork behaviors, emotional intelligence, and communication clarity, with capstone projects demonstrating practical improvements in service quality, research operations, and learner experience. Early signals indicate a growing pipeline of graduates assuming formal and informal leadership roles.

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Conclusion: A structured leadership academy embedded within a health-sciences university is feasible, scalable, and responsive to the documented training gap. By combining competency-based design, hybrid delivery, mentorship, and project-based learning, ELA offers a reproducible model for cultivating leaders who can advance patient care, education, and research. Continued cohorts and longitudinal follow-up will clarify downstream effects on individual and organizational performance and culture.

KEYWORDS: *Emerging Leadership Academy, ELA, Leadership Development, Servant Leadership, Competency-based Training, Hybrid Learning, DUHS, Soft Skills, Human Skills*

INTRODUCTION:

Calls to strengthen leadership education in higher education and in medical education specifically have accelerated over the past decade, yet many institutions still lack scalable, evidence-informed programs capable of reaching diverse learner groups across faculty, residents, and administrative staff (Evans, 2023; Center for Engaged Learning, 2025; Phillipson *et al*., 2025). While the clinical curriculum reliably develops diagnostic and procedural expertise, it often underemphasizes competencies central to leading teams and systems, such as self-awareness, communication, emotional intelligence, change management, and ethical decision-making, creating a persistent preparation gap for roles that require influence beyond the bench or the bedside (Evans, 2023; Phillipson *et al*., 2025).

A growing synthesis of evaluations and reviews indicates that leadership development in healthcare is linked with improved individual, organizational, and, in select settings, clinical outcomes, particularly when programs combine classroom learning with mentoring and delivery by internal or mixed (internal/external) faculty (Lyons *et al*., 2021). Nonetheless, coverage remains uneven in undergraduate and early graduate medical education, where variability in terminology, learning outcomes, and assessment practices has hampered consistency and transferability across schools (Evans, 2023; Chavan *et al*., 2022). These implementation challenges are compounded by crowded curricula, inconsistent institutional sponsorship, and uncertainty about "what works" in resource-constrained environments, all of which discourage longitudinal investment in leadership pathways (Center for Engaged Learning, 2025; Evans, 2023).

Against this backdrop, design principles are converging around several features that make leadership programs more effective and durable: hybrid delivery to enhance access and scalability; cohort-based structures that promote peer learning and accountability; explicit competency maps tied to institutional priorities; and mentored, real-world case studies that generate visible organizational value (Lyons *et al*., 2021; Phillipson *et al*., 2025). Programs grounded in servant-leadership values, which place service, empathy, and stewardship at the center of professional identity, may be particularly well-suited to academic health systems, where multidisciplinary collaboration and patient-centered outcomes are paramount (Evans, 2023; Phillipson *et al*., 2025).

In response to these needs, and as part of its Master Strategic Plan 2018-2030 and subsequently in the revised plan 2024-2030, DUHS established the ELA in September 2023 to cultivate future leaders, address organizational and societal challenges, and embed a culture of servant leadership within its academic and clinical enterprises (DUHS Strategic Plan 2024-2030). ELA's published overview details program goals, faculty engagement, and an anchor course entitled *Mastering the Art of Effective Leadership,* with active registration continuing through 2025 (Figure 1). The initiative was intentionally designed as a hybrid, cohort-based experience to accommodate students' schedules while maintaining the depth and continuity required for meaningful growth (DUHS, 2025; Evans, 2023).

Figure 1: Recruitment Poster for ELA Cohort V: "Mastering the Art of Effective Leadership" Program.

This manuscript situates ELA within the broader leadership-education gap and summarizes its rationale, design, and early experiences at a leading public health sciences university in Pakistan. In doing so, it contributes practice-based evidence on how a competency-mapped, case-based anchored, values-driven academy can be established and sustained in a complex academic medical environment, with implications for adapting similar models in other universities and low- and middle-income settings (Center for Engaged Learning, 2025; Lyons *et al*., 2021; Phillipson *et al*., 2025).

METHODS

ELA operates within DUHS under the oversight of an executive director and program faculty, with a mission to cultivate ethically grounded, service-oriented leaders across the health sciences enterprise (DUHS, 2025). The program employs a hybrid delivery model comprising live online sessions punctuated with critical in-person meetings. Each cohort completes 13 sessions, each lasting 180 minutes, augmented by dedicated Q&A periods, reading packets, and brief formative surveys. The curriculum emphasizes self-assessment and human skills, integrating servant leadership, teamwork, emotional intelligence, communication, transparency, accountability, strategic thinking, conflict resolution, and techniques for conducting difficult conversations (Table 1).

Table 1: Titles of Case-based Sessions in the Mastering the Art of Effective Leadership Program.

SESSIONS	TITLE
I	Orientation
II	Self-Assessment
III	The Power of Servant Leadership
IV	Difficult Conversation
V	Emotional Intelligence
VI	Effective Communication
VII	Accountability
VIII	Conflict Resolution
IX	Trusting Teams
X	Strategic Thinking
XI	Time Management
XII	Ethics & Integrity
XIII	Student Presentations & Self-Reflection

Consistent with ELA's stated philosophy, servant leadership, prioritizing shared power, service to others, and team development, anchors both content and pedagogy as articulated on the DUHS ELA page (DUHS, 2025). Cohorts are capacity-limited to ~30 participants; admission requires a written application and virtual interview, and the course is offered free of charge to the selected participants (Figure 2).

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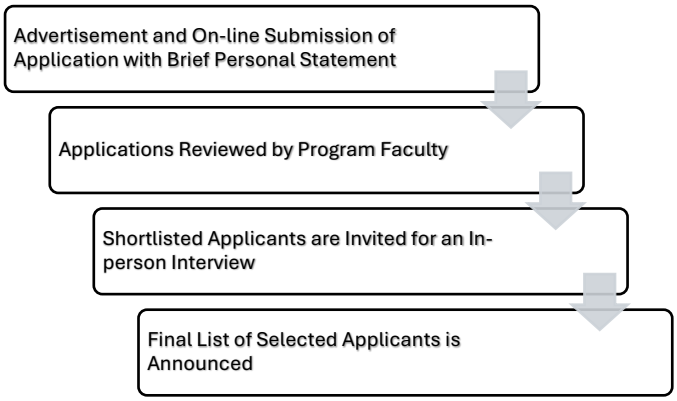
Figure 2: Selection Process for Participants for the Mastering the Art of Effective Leadership Program.



Eligible participants include students from DUHS colleges and schools who demonstrate leadership potential and a commitment to personal and professional growth. Selection balances academic performance, motivation, and the diversity of perspectives to create multidisciplinary learning communities that reflect DUHS's educational and clinical environment (DUHS, 2025).

Evaluation followed a mixed-methods design. Program analytics tracked applications, acceptances, enrollments, and completions to assess demand and throughput. Learner outcomes were captured through pre– and post–self–ratings of leadership self-efficacy, teamwork, emotional intelligence, and communication, alongside open-ended reflections on the transfer of learning to applied behaviors. Competency mapping aligned outcomes with widely cited leadership domains in academic medicine, drawing on the AAMC Graduate Medical Education Leadership Competencies (GMELCs) framework to ensure relevance and comparability (AAMC, 2023). Program documents and records, including the "Proposed Leadership Course for Students" brief and internal spreadsheets of applications, enrollment, and outcomes, served as primary data sources for course structure and operational metrics (DUHS, 2025).

RESULTS

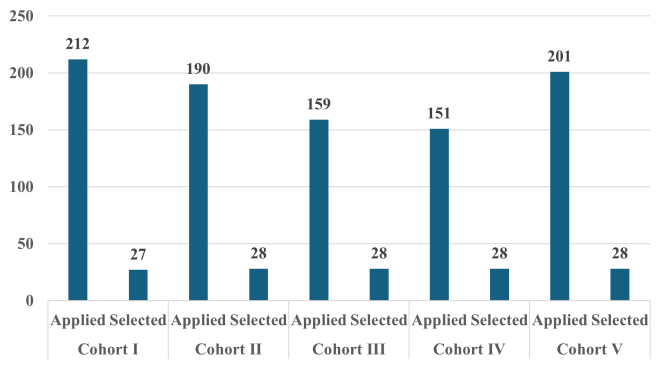
Program Launch, Reach, and Early Signals of Impact.

DUHS formally introduced the ELA in September 2023 and has since publicized additional cohorts through an active online "Applications" section with registration windows extending through 2025, and linked cohort pages that outline aims, schedules, and faculty engagement (DUHS, 2025). This staged rollout was designed to build visibility, streamline applicant guidance, and sustain momentum across academic terms (Figure 1). Program communications emphasize ELA's mission to cultivate ethically grounded, service-oriented leaders, highlighting servant-leadership values as the program's organizing ethos. This reinforces alignment between institutional priorities and the competencies the curriculum seeks to develop (DUHS, 2025).

Participation and Completion.

Program records indicate that demand consistently exceeds the fixed ~28-seat capacity per cohort, resulting in multi-cohort enrollment since the program's launch (Figure 3). Admission is based on a written application and an in-person interview, which aims to balance motivation, leadership potential, and diversity of perspectives across colleges and schools (Figure 2). Completion is tracked at the cohort level; participants who meet attendance and assessment expectations receive certificates and are inducted into the Academy, creating an identifiable community of alumni that can be mobilized for mentorship, peer learning, and cross-unit projects (DUHS, 2025).

Figure 3: Applications and Selections by Cohorts I-V for the Mastering the Art of Effective Leadership Program.



Learner Outcomes and Transfer of Learning.

ELA's evaluation framework centers on pre- and post–self–assessments in four domains: leadership self-efficacy (confidence to lead teams and projects), teamwork and communication, emotional intelligence, and ethical/servant-leadership behaviors such as empowering others and practicing accountability, supplemented by qualitative reflections on real-world applications (DUHS, 2025). Participant narratives frequently reference the practical use of difficult-conversation frameworks, strategic-thinking tools, and structured peer feedback in clinical, educational, and administrative settings, mirroring evidence that mentorship and project-based formats improve the transfer of leadership skills into workplace behaviors (Lyons *et al*., 2021; Phillipson *et al*., 2025). Early signals from group activities and supervisor feedback suggest observable gains in collaborative problem-solving, communication clarity, and team climate, consistent with the broader literature on healthcare leadership programs that integrate applied projects, coaching, and mixed (internal/external) faculty (Lyons *et al*., 2021; Phillipson *et al*., 2025).

DISCUSSION

The early experience with the ELA at DUHS addresses an institutional and sector-wide training gap that mirrors international trends in higher and medical education (Participant Testimonial). Numerous reviews and position papers continue to document uneven implementation of leadership curricula, even as stakeholders increasingly expect graduates to demonstrate team leadership, systems thinking, and ethical decision-making in complex clinical and academic environments (Evans, 2023; Chavan *et al*., 2022; Center for Engaged Learning, 2025). ELA's emphasis on servant leadership, its hybrid delivery model, and its explicit competency mapping were intentionally selected to address these well-described deficits and align leadership preparation with day-to-day workplace demands in the health sciences (DUHS, 2025; AAMC, 2023).

Programmatically, ELA offers a scalable blueprint: a modular, cohort-based format with a documented syllabus, transparent selection criteria, and standard operating procedures that support predictable delivery, quality assurance, and replication across terms. Hybrid scheduling expands access for busy students and educators while preserving the peer dynamics that make cohort models effective for accountability and reflective practice (DUHS, 2025). This structure positions ELA to grow both horizontally (through additional cohorts) and vertically (via advanced tracks), while maintaining fidelity to core design principles (Evans, 2023).

ELA's pedagogy is purposefully evidence-informed. Integrating mentoring, case-based outcomes, and mixed faculty (internal subject-matter experts complemented where appropriate by external facilitators) targets mechanisms known to enhance learning transfer and organizational impact in healthcare leadership programs (Lyons *et al*., 2021). The curriculum's recurring use of difficult-conversation frameworks, feedback protocols, and strategy tools is designed to translate classroom concepts into observable behaviors, communication clarity, conflict competence, and cross-unit collaboration that are salient to clinical operations and academic governance (Lyons *et al*., 2021; Phillipson et al., 2025). Servant-leadership values provide the ethical spine for this translation, anchoring influence in service, stewardship, and the

development of others (Evans, 2023; Phillipson *et al*., 2025).

A further implication is alignment with recognized competency frameworks. By mapping learning objectives and assessments to the AAMC Graduate Medical Education Leadership Competencies, ELA bridges the expectations of undergraduate and postgraduate programs, creating a pathway for integrating leadership growth into competency-based assessment and e-portfolio systems (AAMC, 2023). This alignment also facilitates articulation agreements, micro-credentialing, and external benchmarking, enabling DUHS to compare outcomes over time and against peer institutions (AAMC, 2023; DUHS, 2025).

The initiative has limitations typical of early-stage, single-institution programs. Cohort numbers are modest, quantitative outcomes are preliminary, and self-report measures may be susceptible to social desirability and selection effects (Evans, 2023). To strengthen inference and generalizability, next steps include publishing pre–post effect sizes with confidence intervals for each competency domain drawn from the ELA dataset; instituting rubric-based evaluation for case-based capstone projects to capture organizational value more reliably; and developing an alumni mentorship network to sustain practice and diffusion of leadership behaviors across units (Lyons *et al*., 2021; DUHS, 2025). Multi-institutional collaborations and comparison groups would enhance external validity. At the same time, longitudinal tracking of downstream outcomes, such as formal leadership appointments, participation in quality improvement, grant leadership, and educational innovations, will clarify ELA's contribution to organizational performance and culture (Phillipson *et al*., 2025).

In essence, ELA contributes practice-based evidence for a feasible, values-driven, and competency-aligned leadership pathway in an academic health setting. By pairing servant-leadership principles with hybrid, cohort-based delivery and case-based learning, the program addresses persistent gaps identified in the literature and offers a replicable model for low- and middle-income contexts where resource constraints demand scalable, high-yield designs (Chavan *et al*., 2022; Center for Engaged Learning, 2025). With sustained institutional support and rigorous evaluation, ELA is positioned to mature from a promising initiative into a durable engine for leadership capacity building at DUHS and beyond (AAMC, 2023; DUHS, 2025).

CONCLUSION

ELA at DUHS demonstrates that a values-driven, competency-mapped leadership program can be feasibly launched and sustained within a busy academic health system, addressing a long-recognized training gap in higher and medical education (Evans, 2023; Chavan *et al*., 2022). Early experience characterized by strong demand, high completion, and self-reported gains in leadership self-efficacy, teamwork, emotional intelligence, and ethical/servant-leadership behaviors- suggests that hybrid, cohort-based delivery coupled with mentored, case-based learning is both acceptable and practically valuable for participants and their units (Lyons *et al*., 2021; DUHS, 2025). By aligning curriculum objectives and assessment plans with established leadership competencies, the program bridges the gap between undergraduate and postgraduate expectations, laying the groundwork for integration into competency-based assessment and e-portfolio systems (AAMC, 2023; Phillipson et al., 2025).

While findings to date are preliminary and drawn from a single institution, they provide practice-based evidence for a scalable model that can be adapted to resource-constrained contexts without compromising educational rigor. Next steps, including publishing effect sizes for targeted competency domains, implementing rubric-based evaluation of capstone impact, expanding alumni mentorship, and pursuing multi-institutional collaborations, will strengthen causal inference and external validity (Lyons *et al*., 2021; DUHS, 2025). *Suppose DUHS can sustain institutional*

sponsorship and continue to drive data-driven improvements. In that case, ELA is well-positioned to evolve from a promising initiative into a durable engine for leadership capacity building, with downstream benefits for organizational culture, educational quality, and patient-care outcomes (AAMC, 2023; Phillipson *et al*., 2025).

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