

From Practitioner to Professor: An Evidence-Informed Model for Sustainable Cybersecurity Faculty Recruitment and Retention

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Abstract Higher education continues to face difficulty recruiting and retaining cybersecurity educators combining current professional credibility with the capacity and motivation for teaching. The article develops an evidence-informed faculty sustainability model through integration of findings from a qualitative phenomenological study of 17 postsecondary cybersecurity educators and a subsequent practice-oriented synthesis of cybersecurity faculty recruitment and retention. The original study identified three themes sense of calling, early adulthood influences, and approaching occupational choice and eight related subthemes describing practitioner movement toward teaching as a viable professional path. The later synthesis reframed the findings as an institutional design problem and proposed four candidate-evaluation domains: instructional capability, instructional readiness, professional credibility, and motivation and commitment. The present analysis extends the integration through examination of practitioner identity, career timing, institutional signals, role design, onboarding, mentoring, workload calibration, professional development, governance, and continuous improvement across a faculty lifecycle. The resulting model positions recruitment and retention as a single leadership system rather than separate administrative activities. Practical implications address academic leaders, human resource professionals, search committees, and institutions seeking durable cybersecurity faculty capacity, while a measurement framework supports evaluation of faculty sufficiency, early retention, instructional effectiveness, and institutional learning.

Index Terms cybersecurity education, faculty recruitment, faculty retention, higher education leadership, occupational choice, practitioner faculty, social cognitive career theory, transformative learning.

I. INTRODUCTION

Cybersecurity education occupies an unusual position within higher education. Programs are expected to remain technically current, respond to an evolving threat environment, satisfy institutional and accreditation expectations, and prepare graduates for practice-oriented work. Program expectations depend heavily on faculty capable of translating complex operational knowledge into coherent learning experiences. Yet educator supply remains constrained by competition with industry, academic screening practices often privileging traditional scholarly markers, and difficulty persuading experienced practitioners to view teaching as a credible continuation of professional service rather than a departure from professional practice [1], [3]–[6].

The cybersecurity faculty problem is frequently described as a vacancy problem: an institution identifies an open position, advertises the opening, screens applicants, and attempts to secure the strongest available candidate. The sequence appears administratively rational but can obscure deeper conditions determining practitioner entry into an applicant pool, offer acceptance, first-year survival, and long-term contribution to program maturity. A vacancy-focused model therefore addresses only the visible end of a much longer process.

The central argument positions cybersecurity faculty shortages as both a labor-market problem and an institutional design problem. A sustainable faculty model requires assessment of practitioner readiness, formative experiences, instructional capabilities, commitment signals, role-related risk, and recruitment-investment protection through onboarding, workload design, mentoring, and professional development. Recruiting a technically accomplished practitioner into a poorly designed role can simply convert a vacancy problem into an early-retention problem.

The article integrates two related bodies of work by the author. A 2021 qualitative phenomenological study examined career decisions among 17 cybersecurity technologists in Texas entering postsecondary education [1]. A 2026 practice-oriented synthesis translated lived-experience findings into a broader strategic model for cybersecurity faculty recruitment,

development, and retention [2]. Integration of both works produces a research-to-practice framework for institutional leaders, faculty search committees, and human resource professionals.

The article offers three contributions. First, the analysis preserves the empirical logic of the original phenomenological study rather than treating the later book as an independent source of conclusions. Second, the analysis explicitly links original themes to a four-domain faculty evaluation model. Third, the combined findings extend into a faculty sustainability lifecycle encompassing cultivation, selection, onboarding, development, retention, governance, and measurement. The resulting framework functions as both a conceptual model and an operational guide for institutions seeking cybersecurity program stability.

II. RESEARCH FOUNDATION

A. Problem Context

Cybersecurity is a practice-formed discipline. Knowledge develops through interaction among technical foundations, operational judgment, emerging threats, regulation, and organizational risk. Prior research has described a persistent cybersecurity workforce gap along with shortages of educators capable of preparing students for the workforce [4]–[6]. Studies of cybersecurity education also emphasize applied learning, current technical content, and engaging instructional experiences [7]–[9]. Such characteristics complicate faculty hiring because highly valuable instructional candidates may develop expertise primarily in professional rather than traditional academic environments.

The original dissertation framed the problem as a shortage of cybersecurity graduates choosing higher education over corporate employment. The dissertation also identified a literature gap: extensive discussion covered students and workforce demand, while comparatively little research addressed lived experiences leading cybersecurity practitioners toward teaching. The study therefore focused on occupational choice and on personal, academic, and professional experiences shaping career decisions [1].

The framing remains useful because institutions often assume candidate availability begins only with an active academic job search. The dissertation suggests a different process. Interest can form much earlier through faculty interaction, training participation, mentoring, internship experiences, military instructional roles, or a growing desire to give back. A sustainable recruitment system therefore begins before a vacancy and before full development of educator identity.

B. Theoretical Framework

The study was grounded in Social Cognitive Career Theory (SCCT) and Transformative Learning Theory (TLT). SCCT connects self-efficacy, outcome expectations, interests, goals, contextual supports, and barriers to career development and occupational choice [10]–[12]. Within the study context, a practitioner may possess technical teaching capability long before development of sufficient confidence, identity, or perceived opportunity for an academic role. TLT provides a complementary lens through emphasis on adult reinterpretation of experience and revision of frames of reference through reflection [13], [14]. Initial perceptions of academia as disconnected from practice can later shift after mentoring, training, or leadership experiences provide evidence of educator identity.

The combination of SCCT and TLT is especially relevant to practitioner-to-professor transitions because career decisions involve both cognition and development. Practitioners assess compensation, prestige, schedule, autonomy, mobility, and professional relevance while also reinterpreting accumulated experience and defining preferred forms of future contribution. Career choice therefore extends beyond an economic comparison between industry and higher education. Career choice becomes an evolving judgment involving identity, purpose, confidence, opportunity, and risk.

The theoretical position supports a major institutional implication: readiness can be influenced. Institutions cannot control all labor-market conditions but can create exposure, reduce ambiguity, validate professional experience, demonstrate support, and make teaching roles more reversible or less threatening to practitioner identity. Such actions may alter self-efficacy and outcome expectations while providing experiences capable of transforming practitioner interpretations of academic careers.

C. Methodology and Trustworthiness

The original research used a qualitative phenomenological design. Seventeen postsecondary cybersecurity educators in Texas participated in videoconference interviews and member-checking review. Participants met defined experience and professional criteria. Two research questions examined experiential factors prompting cybersecurity technologists to enter postsecondary education rather than corporate employment and academic degree-program experiences influencing occupational choice [1]. Interview transcripts were coded and analyzed using ATLAS.ti. Analysis relied on natural language coding and iterative grouping of related codes into themes rather than a preset coding structure [18], [19].

Credibility and dependability were strengthened through member checking, participant transcript review, reflective journaling, and attention to trustworthiness. Every participant

received an opportunity to review the interview transcript and correct or expand the record. The dissertation also acknowledged the researcher as the primary data-collection instrument and used reflexive practices to reduce influence from prior assumptions. Such strategies do not convert qualitative results into statistical evidence, but the strategies strengthen confidence in accurate representation of participating educators' accounts.

The study was intentionally bounded to Texas and used a relatively small qualitative sample. The original dissertation explicitly cautioned against presumed transferability across all cybersecurity educators. The findings are therefore best treated as analytically informative patterns requiring contextual judgment rather than population estimates. The same distinction remains preserved throughout the article.

III. EMPIRICAL FINDINGS: WHY PRACTITIONERS BECOME EDUCATORS

Three themes emerged from the interview data: sense of calling, early adulthood influences, and approaching occupational choice. Eight subthemes further described experiences associated with the themes. Table I summarizes coding frequencies reported in the dissertation. The frequencies indicate recurrence within the qualitative sample and should not be interpreted as prevalence rates for the broader cybersecurity educator population.

TABLE I
EMPIRICAL THEMES AND REPORTED CODE FREQUENCIES

Subtheme / Code Group	Theme	f
Career trajectory changing during college	Sense of calling	16
Interest in technology	Sense of calling	14
Desire to give back	Sense of calling	17
Need to inspire future generations	Sense of calling	14
Influence of armed forces service	Early adulthood influences	10
Courses inspiring teaching practice	Early adulthood influences	16
Internship	Approaching occupational choice	15
Excitement to teach	Approaching occupational choice	17

A. Sense of Calling

The most salient pattern involved participant descriptions of teaching as more than an alternative job. Participant narratives framed teaching as a means of contribution, service, professional influence, and inspiration for future generations. All 17 participants were coded within the desire-to-give-back subtheme, while 14 participants were coded for the need to inspire future generations [1]. The dissertation also reported strong emergence of a sense of calling, particularly the desire to shape future generations, despite limited prominence in the preexisting literature reviewed for the study.

The finding changes interpretation of academic recruitment. Candidate motivation based partly on contribution creates a gap when recruitment messaging describes only duties, credentials, and compensation. A practitioner considering academia may evaluate opportunities for accumulated experience to benefit learners, institutional support for meaningful curriculum influence, and professional stewardship within the teaching role.

The later strategic synthesis extends the result by treating motivation and commitment as a distinct hiring domain [2]. The institutional implication does not position purpose as a replacement for compensation. Compensation remains an important condition, especially amid substantial differences

from industry. Rather, compensation represents one element of a larger value proposition. A credible academic role must support professional coherence between teaching, practitioner identity, and long-term contribution.

B. Early Adulthood Influences

Faculty relationships, influential courses, and military instructional experiences were important formative mechanisms. Fifteen participants identified inspiration and encouragement from student and faculty relationships as critical to choosing education, and 16 responses were coded to courses inspiring teaching practice [1]. Ten participants were associated with armed-forces influences. The findings reinforce the importance of exposure: practitioner entry into education often follows prior experience with teaching, mentoring, training, or role modeling.

Faculty influence carries particular importance for institutional leaders because current educators help create future faculty pipelines. A strong instructor contributes beyond course-content delivery. Strong instruction can model an academic role viewed by a student or early-career practitioner as attainable, serious, and professionally meaningful. Conversely, poor instructional experiences can reinforce perceptions of academia as detached from practice or perceptions of teaching as inconsistent with technical credibility.

Military experience offers a related pathway. Participants with prior armed-forces instructional roles had already encountered responsibilities involving technical explanation, development of others, and accountability for learning outcomes. Institutional disregard for such experiences because of nontraditional classroom settings may obscure a mature instructional foundation. Partnerships with military transition programs, reserve components, veterans' networks, and professional training communities may therefore represent underused faculty-development channels.

The theme suggests broader recruitment beyond individuals already declaring an intention to enter academia. Guest lecturing, practitioner-in-residence opportunities, adjunct pathways, mentoring relationships, curriculum advisory roles, and partnerships with military or professional training communities can serve as low-risk mechanisms for educator-identity development. In SCCT terms, such experiences can strengthen self-efficacy and outcome expectations; in transformative-learning terms, such experiences can alter practitioner interpretations of academic roles.

C. Approaching Occupational Choice

The final theme emphasizes timing. Internships and excitement to teach appeared as recurring subthemes, while participants also described changes in degree pathways and career direction. The decision to teach therefore emerged through accumulation rather than through a single trigger. A practitioner may possess deep expertise but remain unready to transition because the perceived risks of reduced professional relevance, lower compensation, academic unfamiliarity, or career irreversibility remain too high.

The dissertation findings also showed several participants pursuing alternative degree paths before arrival in cybersecurity. The pattern reinforces a nonlinearity of career development. Occupational identity can change as individuals

accumulate new experiences and reinterpret earlier experiences. For institutions, a candidate's nontraditional path should not automatically signal deficiency. A nontraditional path may instead provide evidence of deliberate career development and a broader experience base supporting instructional judgment.

Candidate availability and candidate readiness are not synonymous. Sustainable recruitment requires relationship building before a vacancy exists. Institutions waiting until a position opens may pressure a professional during an incomplete identity transition. By contrast, earlier exposure and continued engagement create a pipeline with teaching already established as a credible option when career timing becomes appropriate.

IV. DISCUSSION: TRANSLATING LIVED EXPERIENCE INTO INSTITUTIONAL DESIGN

A. Recruitment as Alignment Rather Than Acquisition

The combined research supports a shift from acquisition logic to alignment logic. Acquisition focuses on rapid candidate acquisition. Alignment focuses on fit among professional identity, instructional need, career timing, and institutional culture for durable performance. The distinction is central because many cybersecurity practitioners already possess training in organizational risk, ambiguity, governance, and operational maturity. Recruitment processes can therefore function as evidence of institutional operations.

An unclear job description, inconsistent communication, excessive delay, conflicting messages from academic and human resource leaders, or vague expectations regarding workload can therefore have meaning beyond inconvenience. Such signals may be interpreted as indicators of weak governance or unsustainable operating conditions. Conversely, transparent timelines, credible descriptions of the teaching assignment, visible support from future colleagues, and honest acknowledgment of constraints can reduce uncertainty and build trust.

B. Compensation as a Necessary but Incomplete Variable

Industry compensation often exceeds academic compensation, particularly for experienced cybersecurity professionals. Dismissal of the compensation difference would be unrealistic. However, dissertation findings show occupational-choice influence from purpose, influence, mentoring, teaching excitement, and a desire to give back. The later book therefore argues against framing compensation as the only competitive variable [2].

A more useful consideration involves total professional value offered by the role. Autonomy, schedule stability, intellectual engagement, curriculum influence, reduced exposure to continuous operational escalation, student connection, institutional leadership opportunities, and workforce influence can all matter. Such factors do not compensate for every salary gap but may explain deliberate practitioner movement toward academia under credible role design.

C. Identity Continuity and Professional Relevance

Entry into higher education does not necessarily require abandonment of practitioner identity. Many educators continue to identify as cybersecurity professionals engaged in teaching. Identity continuity matters because professional credibility

often derives from applied judgment and connection to current practice. Institutional expectations requiring complete separation from industry may therefore weaken a quality contributing to candidate value.

Reasonable pathways for consulting, professional association activity, applied research, certification maintenance, advisory work, or industry collaboration can support identity continuity. The objective does not privilege outside work over academic responsibilities. Recognition of continued field engagement can strengthen instructional relevance and retention under appropriate governance.

V. FROM EMPIRICAL THEMES TO A FOUR-DOMAIN FACULTY MODEL

The 2026 synthesis translated lived-experience findings into a capability-oriented framework for institutional hiring [2]. The model evaluates a cybersecurity educator across four domains: instructional capability, instructional readiness, professional credibility, and motivation and commitment. The approach deliberately distinguishes observable instructional potential from traditional academic proxies such as degrees, publication history, or prior faculty titles.

TABLE II
FOUR-DOMAIN CYBERSECURITY EDUCATOR EVALUATION MODEL

Domain	Primary Question	Illustrative Evidence
Instructional capability	Translation of complex cybersecurity concepts into meaningful learning	Clarity, contextual framing, adaptation, learner-centered explanation
Instructional readiness	Current capacity for instructional design and management, with reasonable support	Lesson planning, assessment reasoning, engagement strategies, course design
Professional credibility	Instructional authority supported by relevant experience in the assigned domain	Operational responsibility, applied judgment, current practice, reflective examples
Motivation and commitment	Durability of teaching motivation and commitment	Purpose, long-term orientation, giving back, influence, educator identity

A. Instructional Capability

Instructional capability concerns the ability to make cybersecurity understandable, relevant, and usable by learners. Practitioners often develop instructional capability outside formal classrooms through mentoring junior analysts, leading incident-response exercises, conducting security awareness training, creating internal documentation, or explaining risk to executives. Traditional academic screening may overlook such experiences because formal teaching labels may be absent. Yet such experiences can provide direct evidence of explanation, adaptation, audience awareness, and judgment.

Behavioral assessment offers the strongest evaluation of capability. Scenario-based interviews and teaching demonstrations can reveal a candidate's capacity for technical framing, contextual connection, recognition of learner confusion, and adaptive explanation. Research emphasizing applied and engaging cybersecurity education supports such assessment [7]–[9]. A teaching demonstration should therefore function as evidence of instructional reasoning rather than as a performance contest rewarding polish alone.

B. Instructional Readiness

Capability and readiness are related but distinct. A practitioner may be an excellent explainer yet possess little experience designing a course, building assessments, sequencing learning activities, interpreting accessibility expectations, or navigating academic policy. Treating developmental gaps as evidence of unfitness can unnecessarily

narrow the candidate pool. A sustainable system instead distinguishes deficits suitable for onboarding from deficits indicating fundamental mismatch.

The distinction changes selection logic. Hiring decisions should consider both prior performance and institutional capacity for reasonable development into the role. A potential-based hire also creates an ethical obligation for mentoring and pedagogical support sufficient for capability development.

C. Professional Credibility

Professional credibility anchors the applied nature of cybersecurity education. Professional credibility derives from relevant responsibility, decision making, and engagement with real operational problems rather than certification counts alone. Credibility helps instructors connect abstractions to consequences involving control failure, incident escalation, competing-risk balance, and governance effects on technical decisions.

Professional credibility should nevertheless be aligned to instructional scope. A highly accomplished practitioner in one cybersecurity domain is not automatically qualified to teach every domain. Role design should therefore define the technical boundaries of the position clearly and avoid treating cybersecurity expertise as universally interchangeable. When institutions advertise an unrealistically broad role, strong candidates may interpret the breadth as evidence of understaffing rather than opportunity.

D. Motivation and Commitment

The motivation domain provides the clearest bridge to the dissertation. Empirical themes involving calling, giving back, inspiration of future generations, and excitement to teach demonstrate commitment as more than an interview-table attitude. Commitment frequently emerges from prior relationships, professional reflection, and identity development. Narrative inquiry can therefore reveal candidate understanding of teaching within a longer professional trajectory.

The domain also carries retention implications. Candidates viewing teaching as an integrated extension of professional contribution may tolerate the inevitable learning curve of academic work more effectively under conditions free from role ambiguity, excessive workload, and broken recruitment promises. Motivation should therefore be understood as both a selection variable and an institutional resource requiring post-hire protection.

VI. THE FACULTY SUSTAINABILITY LIFECYCLE

Hiring alone does not create sustainable faculty capacity. The book synthesis links retention inseparably with recruitment because attraction conditions must remain credible after appointment [2]. A lifecycle model therefore includes five linked stages: cultivation and exposure, capability-based selection, transition and onboarding, development and retention, and institutional learning.

A. Cultivation and Exposure

Institutions can create early pathways into teaching through guest lectures, advisory boards, practitioner fellowships, adjunct experiences, mentoring, internships, industry partnerships, and military-community engagement. Such experiences lower uncertainty and allow practitioners to test educator identity before a full career transition. Academic

leaders also gain opportunities to observe instructional potential in contexts less artificial than a formal search process.

Cultivation should remain continuous rather than activate only when a search opens. Department chairs and program directors can maintain practitioner networks, invite experienced professionals into curricular conversations, and identify individuals repeatedly demonstrating teaching, mentoring, or complex-concept translation ability. Continuous cultivation transforms the faculty pipeline from an applicant database into a relationship community.

B. Capability-Based Selection

Selection should combine structured interviews, teaching demonstrations, curriculum-alignment review, and evaluation across the four domains. The combined approach reduces dependence on proxy credentials and creates a transparent connection between program needs and hiring evidence. Search committees should also distinguish non-negotiable role requirements from attributes suitable for post-appointment development.

Structured evaluation is especially important when committee members come from different disciplinary backgrounds. Without a common rubric, evaluators may default to familiarity, pedigree, or biography. A shared framework gives committees a language for comparing candidates with different career histories while preserving professional judgment.

C. Transition and Onboarding

Onboarding should be treated as the final phase of recruitment rather than as an administrative handoff. Practitioners entering higher education must learn institutional systems, teaching expectations, assessment practices, governance norms, and workload boundaries simultaneously. The strategic model therefore recommends a faculty mentor, explicit teaching-load expectations, early access to curriculum and learning systems, clear evaluation criteria, and a structured first-year development plan [2].

Early role clarity is critical. Ambiguity surrounding advising, committee work, office hours, course-development responsibility, service expectations, research requirements, or numbers of distinct preparations can rapidly convert enthusiasm into overload. New faculty should receive clear sequencing for immediate obligations, developmental obligations, and responsibilities introduced only after successful instructional stabilization.

D. Development and Retention

Professional development should address both pedagogy and continued cybersecurity relevance. New educators may require support in assessment design, student engagement, accessibility, academic policy, or online instruction. At the same time, institutions should avoid forced separation between practitioners and the field establishing professional credibility. Appropriate consulting, professional association activity, applied research, certification maintenance, or advisory work can help maintain relevance.

Workload calibration carries equal importance. Poorly defined roles can create rapid burnout when new faculty must master multiple unfamiliar courses while absorbing advising, committee, service, and program-development duties. Early workload reviews allow leadership identification of role creep

before attrition develops. Mentorship can also help new faculty distinguish normal academic adjustment from structural overload.

E. Institutional Learning and Governance

A sustainable faculty model requires measurement beyond time-to-fill. Institutions should track early retention, time to instructional productivity, faculty satisfaction, teaching performance, mentorship effectiveness, workload stability, candidate withdrawal, and relationships between faculty sufficiency and student outcomes. Evidence from such measures should feed back into role design, search practices, onboarding, and professional development.

Governance also matters. Responsibility for cybersecurity faculty capacity is distributed among academic leadership, human resources, search committees, faculty governance, and executive leadership. Without explicit decision authority and shared accountability, recruitment can fragment into disconnected procedural steps. Documentation, succession planning, and repeatable evaluation frameworks help preserve institutional memory when leaders change.

VII. IMPLEMENTATION FRAMEWORK FOR INSTITUTIONS

A. Phase 1: Diagnose the Existing System

Implementation should begin with diagnosis rather than immediate redesign. Leaders should examine recent searches, candidate withdrawals, failed offers, time-to-fill, early attrition, course overload, adjunct dependence, and faculty feedback. The purpose involves identification of breakdown points across the current lifecycle. A program with a healthy applicant pool but poor offer acceptance presents a different problem from a program receiving few credible applicants. Successful hiring followed by faculty loss within two years indicates a retention-design problem rather than a sourcing problem.

Role descriptions should undergo review for breadth, realism, and alignment with program mission. Institutions should distinguish requirements necessary at entry from requirements suitable for later development. Search-process review should also identify possible signals of instability, including long delays, shifting expectations, or poorly coordinated decision authority.

B. Phase 2: Redesign Selection and Transition

The second phase introduces the four-domain evaluation framework, structured interviews, teaching demonstrations, and a hiring-decision matrix. The objective involves traceability between program needs and committee evaluation. The phase should also redesign onboarding before the next hire. Hiring for instructional potential without a prepared development pathway simply transfers risk from selection to retention.

Search committee training is essential during the second phase. Committee members should understand practitioner experience as possible instructional evidence and avoid overvaluation of conventional academic proxies outside central program needs. Institutions should also preserve appropriate academic standards; capability-based evaluation does not argue for elimination of qualifications but instead for alignment between qualifications and actual instructional responsibilities.

C. Phase 3: Institutionalize Measurement and Stewardship

The third phase embeds cybersecurity faculty capacity into strategic planning and institutional effectiveness. Recruitment metrics should be reviewed alongside enrollment forecasts, curriculum development, succession risk, budget planning, and student-learning outcomes. Executive leaders should be able to determine whether the institution is building durable instructional capacity or repeatedly solving the same staffing problem.

TABLE III
ILLUSTRATIVE FACULTY SUSTAINABILITY METRICS

Lifecycle Area	Illustrative Metric	Management Question
Pipeline	Qualified practitioner relationships; guest/adjunct conversion	Cultivation of educators before vacancies
Selection	Offer acceptance; candidate withdrawal; rubric consistency	Identification and retention of credible candidates during selection
Onboarding	Time to course readiness; mentor engagement; first-term workload variance	Effective faculty transition without avoidable overload
Retention	1- and 2-year retention; satisfaction; role creep; development participation	Persistence of recruitment gains
Instructional quality	Teaching evaluations; assessment alignment; curriculum continuity	Contribution of faculty stability to the learning environment
Strategic capacity	Faculty sufficiency; adjunct dependence; succession exposure	Program capacity for sustainable growth and change

Metrics should function as a learning system rather than a punitive scorecard. Early attrition may reveal a poor hire, while repeated attrition across otherwise capable faculty more likely indicates a structural problem. Long time-to-fill may reflect market scarcity but can also expose overly narrow qualifications, slow approval processes, or uncompetitive role design. Measurement provides value only under leadership willingness to investigate indicator meaning.

VIII. AN INTEGRATED MODEL OF ALIGNMENT

The combined research supports an alignment model based on four simultaneous forms of alignment for sustainable cybersecurity faculty capacity. Identity alignment reflects coherence between teaching and professional purpose. Capability alignment reflects correspondence between applied experience, instructional ability, and curriculum. Timing alignment reflects practitioner readiness for transition beyond technical qualification alone. Institutional alignment reflects credible and sustainable role conditions across workload, culture, leadership behavior, resources, and development systems.

The four forms of alignment are interdependent. Strong instructional capability may coexist with role rejection under institutional instability. Excellent professional credibility may coexist with limited course-design readiness and a need for supported transition. High educator motivation may still end in departure under unsustainable workload or governance. Sustainable capacity therefore cannot arise from optimization of a single variable.

The model also explains the insufficiency of compensation as a standalone diagnosis or solution. Higher education may not match industry compensation in many cybersecurity specialties, but institutions can still influence role clarity, autonomy, professional respect, mentoring, teaching support, realistic workload, continuing engagement with practice, and recruitment-process credibility. Such factors do not erase salary differences; such factors shape candidate assessment of professional meaning and sustainability within the overall exchange.

IX. IMPLICATIONS FOR HIGHER EDUCATION LEADERSHIP

The first leadership implication involves redefining faculty recruitment as capacity planning rather than vacancy management. Cybersecurity programs should anticipate enrollment, curriculum change, succession risk, and emerging specialization needs before vacancies become urgent. Proactive planning allows institutions to cultivate practitioner relationships over time and reduces pressure to compromise role design during a search.

Second, search committees should be trained to recognize practitioner evidence. Corporate training, mentoring, tabletop facilitation, customer education, technical documentation, security awareness leadership, military instruction, and executive risk communication can all provide relevant evidence of instructional potential. A candidate should not be treated as instructionally inexperienced merely because the experience occurred outside a college classroom.

Third, leadership should make the educator value proposition explicit. Candidates need clarity regarding curriculum influence, autonomy, professional-development support, workload, advancement, research expectations, industry-engagement rules, and available mentoring. Ambiguity increases perceived career risk, particularly among professionals accustomed to risk evaluation as part of daily work.

Fourth, retention investment should begin at appointment. Institutions expending substantial effort on practitioner recruitment but providing minimal onboarding place recruitment investment at risk. Structured mentorship, realistic course preparation, development support, and early feedback provide comparatively low-cost protection for recruitment investment.

Fifth, institutions should preserve professional identity while socializing faculty into academic culture. New cybersecurity educators may need support with grading, academic integrity, learning outcomes, accessibility, governance, and assessment. Academic socialization should preserve operational judgment and field experience contributing to instructional relevance. Integration provides a stronger model than replacement.

Finally, executive leaders should treat cybersecurity faculty capacity as a strategic asset. Stable, credible faculty influence curriculum quality, student confidence, employer relationships, assessment continuity, accreditation readiness, and program reputation. Recurring difficulty in faculty recruitment or retention therefore represents an institutional effectiveness problem rather than solely a human-resources problem.

X. LIMITATIONS AND FUTURE RESEARCH

The empirical foundation for the article is bounded by the original study design. The sample included 17 educators in Texas, participation was qualitative, and research relied on retrospective accounts collected through videoconferencing. The study therefore supports thematic interpretation rather than statistical generalization. Member checking and reflexive practices strengthened credibility but cannot eliminate limitations inherent in a geographically bounded phenomenological study.

The four-domain evaluation and faculty-lifecycle model presented here should consequently be treated as an evidence-informed framework requiring further empirical validation. Future research could test the model across regions, institution types, faculty appointment models, and cybersecurity specializations. Quantitative or mixed-method studies could examine whether motivation, instructional readiness, professional credibility, onboarding quality, or workload calibration predict measurable outcomes such as offer acceptance, first-year retention, instructional performance, and faculty satisfaction.

Additional research should examine groups underrepresented in the original sample and in cybersecurity faculty literature, including women and educators entering academia through nontraditional pathways. Longitudinal research would provide particular value through observation of practitioners from initial teaching exposure through career transition and several years of academic employment rather than retrospective reconstruction alone.

A further line of inquiry should examine institutional interventions directly. Researchers could compare programs using capability-based hiring and structured onboarding with programs using conventional credential-based searches. Comparative studies could test broader practitioner pipelines for equivalent or stronger instructional outcomes, mentorship effects on early attrition, and continued professional engagement effects on teaching relevance. Such inquiry would move the framework from conceptual synthesis toward validated institutional practice.

XI. CONCLUSION

Cybersecurity faculty shortages are commonly described in terms of scarcity, compensation, and competition with industry. Such conditions are real but incomplete as explanations. Lived experiences among cybersecurity educators show development of teaching decisions through purpose, formative relationships, exposure, professional identity, confidence, timing, and perceived opportunity. Institutions therefore influence recruitment outcomes long before application submission.

The integrated model presented in the article converts the findings into an institutional strategy. Sustainable recruitment evaluates instructional capability, instructional readiness, professional credibility, and motivation and commitment; sustainable retention protects the same attributes through onboarding, mentorship, workload calibration, continuing professional engagement, governance, and evidence-based improvement. The objective extends beyond filling a faculty position toward durable educator capacity capable of sustaining quality, relevance, and continuity in cybersecurity education.

For higher education leaders, the practical conclusion defines faculty capacity as a long-term design responsibility. Institutions cultivating practitioners, assessing appropriate capabilities, communicating clearly, supporting transition, preserving professional relevance, and learning from retention data are better positioned to develop stable cybersecurity programs. Recruitment then becomes less a recurring emergency and more an institutional capability.

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