

Article

Entrepreneurial Learning in Rural Contexts: A Qualitative Analysis of Student Reflections from the RISE29 Internship Program

Emily Pauline Yeager ^{1,*} , Dennis Barber III ¹, Tristyn Daughtry ² and Michael Harris ¹

¹ Miller School of Entrepreneurship, College of Business, East Carolina University, East 5th Street, Greenville, NC 27858, USA; barberde17@ecu.edu (D.B.III); harrismi@ecu.edu (M.H.)

² Town of Winterville, 2571 Railroad Street, Winterville, NC 28590, USA; tristyn.daughtry@wintervillenc.com

* Correspondence: yeagere18@ecu.edu

Abstract

Rural communities face persistent economic challenges, and universities increasingly serve as catalysts for regional entrepreneurial development. This study evaluates the RISE29 program, a consulting-based internship initiative placing interdisciplinary undergraduate teams as paid interns with small businesses in economically distressed counties of Eastern North Carolina, examining what students across disciplines learned. Drawing on Cope's entrepreneurial learning framework as a sensitizing theoretical lens, the study asks: (1) What themes characterize the entrepreneurial learning experiences described by RISE29 interns across cohorts and disciplines? (2) How do reflective depth, student agency, and program satisfaction vary across cohort periods, disciplinary affiliations, and program structures? A multi-layered qualitative analysis of 158 written reflection papers submitted across ten cohorts (Spring 2019–Summer 2022) was integrated with deductive qualitative analysis guided by Cope's entrepreneurial learning framework, constructivist grounded theory coding, reflexive thematic analysis, reflective depth coding, sentiment and tone analysis, and cross-group comparison. Seven themes emerged: communication as the central axis of learning; collaborative identity development; leadership identity formation; encounter with Eastern North Carolina's rural communities; professional identity and career clarity; real-world learning and classroom transfer; and program satisfaction with constructive critique. All four dimensions of Cope's framework were present across disciplines, and non-Business students, in several cases, demonstrated a high degree of analytical depth warranting further investigation. Reflective depth increased in cohorts using an expanded prompt, though overlapping structural changes across the study period preclude single-factor attribution. Place-based, consulting-driven experiential programs generate substantive entrepreneurial learning across disciplinary lines, though findings reflect students' perceived learning rather than verified competency acquisition. These results support investment in client vetting, structured reflection, cross-disciplinary teaming, and in-person community engagement.

Keywords: entrepreneurship education; experiential learning; rural entrepreneurship; student reflection; qualitative research; entrepreneurial learning; internship programs



Academic Editor: Antonio P. Gutierrez de Blume

Received: 8 May 2026

Revised: 3 June 2026

Accepted: 11 June 2026

Published: 8 July 2026

Copyright: © 2026 by the authors.

Licensee MDPI, Basel, Switzerland.

This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC BY\)](https://creativecommons.org/licenses/by/4.0/) license.

1. Introduction

How do students learn to think and act entrepreneurially—and does it matter what discipline they come from? These questions sit at the heart of entrepreneurship education

research, yet the field's confidence has tended to outrun its evidence base. Most empirical studies rely on pre–post attitudinal surveys administered within single semesters at single institutions, capturing shifts in stated intention without illuminating what students actually encounter, how they make meaning of difficulty, or what—if anything—changes in their developing sense of professional self [1–3]. Sustained, multi-cohort, cross-disciplinary programs of this kind are uncommon in the literature, and programs embedded in rural, economically distressed communities are rarer still.

This study examines the RISE29 program—a consulting-based internship initiative at a southeastern US regional university placing interdisciplinary undergraduate teams as paid interns with small businesses in economically distressed rural counties of Eastern North Carolina—as a theoretically productive empirical site for investigating these questions. RISE29's structural features make it unusually well-suited to this purpose: it spans ten cohorts and 158 participants from seven colleges, encompasses both in-person and fully virtual delivery periods, and involves students in genuine consulting relationships with real consequences for real clients. Together, these features make RISE29 an unusually well-suited site for investigating questions the field has struggled to address.

This study is guided by Cope's [4] entrepreneurial learning framework, which identifies four interconnected dimensions: learning about oneself, learning about the business and its environment, learning about entrepreneurship as a process, and learning about networks and relationships. Cope's framework was developed to explain how practicing entrepreneurs learn through experience, but its applicability to cross-disciplinary educational programs has not been systematically tested at scale. That extension is treated here as an open empirical question, not a given. Most evaluative studies rely on quantitative measures of attitude change or intention formation, capturing what students score before and after a program without illuminating how they make meaning of their experiences, what specific encounters shaped their learning, or how their professional identities evolved across a semester [5,6]. Qualitative approaches, particularly the analysis of student written reflections, offer a complementary window into these processes. Where surveys measure stated attitudes, reflections reveal the reasoning, the affect, and the narrative work through which experience actually gets absorbed into who a student is becoming professionally.

A companion quantitative study of the RISE29 program examined entrepreneurial attitude and intention outcomes using a quasi-experimental repeated-measures design across eight semesters, finding significant disciplinary variation in outcomes: Business and Engineering students showed greater gains on specific attitudinal dimensions than peers from Education, Arts and Sciences, and Fine Arts [7]. The present study was designed as the qualitative complement to that work, asking not which groups changed most on standardized scales, but what all participants across disciplines learned, how deeply they reflected, and what the internship experience meant to them in their own words. Together, the two studies offer a mixed-methods portrait of the program's educational impact across its first several years of operation.

This study is guided by two research questions: (1) What themes characterize the entrepreneurial learning experiences described by RISE29 interns across cohorts and disciplines? (2) How do reflective depth, student agency, and program satisfaction vary across cohort periods, disciplinary affiliations, and program structures? Guided by Cope's [4] entrepreneurial learning framework, this study analyzes 158 written reflection papers submitted by RISE29 participants across ten cohorts spanning Spring 2019 through Summer 2022. The reflections respond to four structured question domains addressing team role, team dynamics, learning outcomes, and program satisfaction. The analysis employs a multi-layered qualitative methodology integrating deductive qualitative analysis, grounded theory coding, reflexive thematic analysis, reflective depth coding, sentiment and

tone analysis, and cross-group comparison. This paper is organized as follows: Section 2 reviews the relevant literature; Section 3 presents the theoretical framework; Section 4 describes the methodology; Section 5 reports findings across seven major themes and multiple analytic dimensions; Section 6 discusses implications for theory, practice, and program design; and Section 7 concludes.

2. Literature Review

Experiential entrepreneurship education has attracted sustained scholarly attention as universities seek pedagogical models that develop entrepreneurial competencies more effectively than traditional lecture-based instruction. Meta-analytic evidence suggests that active, experiential approaches tend to outperform passive curricula on measures of entrepreneurial attitude, self-efficacy, and intention [8,9]. Consulting-based models occupy a distinctive position within this landscape, requiring students to navigate real uncertainty, manage authentic client relationships, and produce deliverables with genuine consequences rather than simulated or case-based approximations of professional practice.

Qualitative approaches to evaluating entrepreneurship education have gained recognition as researchers acknowledge the limitations of pre-post survey designs for capturing the complex, processual nature of entrepreneurial learning. Student written reflections have emerged as a particularly valuable data source, providing direct access to participants' meaning-making processes, affective experiences, and professional identity development in ways that standardized scales cannot easily reach [5,6]. Several scholars have argued that attitude scores miss what matters most: how students narrate their own change, which challenges they describe as formative, and what professional futures they begin to envision.

The disciplinary context of entrepreneurship education has emerged as an increasingly important moderating variable in the literature. Evidence from quantitative studies suggests that students from Business and Engineering backgrounds tend to demonstrate stronger gains on standardized measures of entrepreneurial attitude and intention than peers from humanities, education, or health fields, a pattern attributed to differences in baseline exposure to analytical thinking, innovation processes, and market-oriented problem solving [10,11]. However, the qualitative experience of students across these disciplinary divides remains largely unexplored. Whether non-Business students describe meaningfully different learning journeys, encounter distinctive challenges, or arrive at comparably rich entrepreneurial insights through alternative pathways are questions that quantitative instruments are poorly positioned to address.

More recent scholarship has examined the conditions under which experiential entrepreneurship education produces durable outcomes, with findings that are more mixed than early proponents suggested. Nabi et al. [1] conducted a systematic review and found that while experiential approaches consistently generated positive short-term attitudinal shifts, evidence of longer-term behavioral change was substantially weaker. Mansoori and Lackeus [2] argued that value-creation pedagogies represent the most educationally robust form of entrepreneurship education but noted that institutional constraints frequently dilute their implementation. These critical perspectives shape how we interpret the RISE29 findings and serve as a check against overclaiming. Rural entrepreneurship education represents a specialized and underrepresented context within the broader field. Research has documented the distinctive structural challenges facing rural entrepreneurs, including constrained access to capital, markets, and professional networks, as well as the central role that small business vitality plays in sustaining rural community life [12,13]. University programs that embed students in rural economic development work offer a promising model for simultaneously advancing educational and community goals, but evidence on how such programs shape student learning and place-based identity development is

limited. This study addresses that gap by examining, in students' own words, what they learned through sustained, place-based consulting engagement with small businesses in counties marked by longstanding economic disadvantage.

Student reflection as a pedagogical and research instrument has received growing attention in both entrepreneurship education and broader higher education scholarship. Reflective writing serves dual functions: as a learning tool that supports metacognitive development and meaning-making during experiential programs, and as a data source that provides researchers with access to how students interpret their own growth [14,15]. Analyses of reflective writing have illuminated dimensions of experiential learning that survey instruments consistently underestimate, including the emotional texture of significant learning encounters, the relational dynamics that shape professional identity formation, and the ways in which students connect experiential learning to their broader life trajectories. The recent literature has examined the conditions that support deeper reflection in student writing, identifying prompt structure, assessment design, and instructor scaffolding as key moderators [16,17]. The present study contributes to this line of inquiry by documenting a natural quasi-experimental variation—the revision of the reflection prompt mid-program—and its observable association with reflective depth across cohorts, while acknowledging the methodological constraints on causal interpretation.

3. Theoretical Framework

3.1. Entrepreneurial Learning Through Experience

This study employs Cope's [4] entrepreneurial learning framework to understand how students develop entrepreneurial knowledge, skills, and mindsets through experiential consulting engagements with small businesses. Cope's [4] dynamic learning perspective of entrepreneurship builds upon existing theoretical approaches to understanding entrepreneurial activity by mapping how entrepreneurs learn through experience. While originally developed to study practicing entrepreneurs, this framework has been successfully applied to entrepreneurship education contexts where students engage in authentic entrepreneurial activities [18].

Several features of RISE29 make Cope's framework a natural fit.

3.2. Foundations in Experiential Learning Theory

Cope's entrepreneurial learning framework is grounded in Kolb's [19] experiential learning theory, which posits that learning is the process whereby knowledge is created through the transformation of experience. Kolb's four-stage learning cycle (concrete experience, reflective observation, abstract conceptualization, and active experimentation) provides the foundational mechanism through which learning occurs. In the entrepreneurial context, this cycle operates continuously as individuals encounter new business challenges, reflect on their experiences, develop new understandings, and test revised approaches.

However, entrepreneurial learning involves distinctive characteristics that extend beyond general experiential learning. Cope [4] identifies three distinctive, interrelated elements of entrepreneurial learning: dynamic temporal phases, interrelated processes, and overarching characteristics. These elements acknowledge that entrepreneurial learning is not merely the acquisition of business knowledge but involves fundamental changes in how individuals think about themselves, their businesses, and the entrepreneurial process itself.

3.3. Four Dimensions of Entrepreneurial Learning

Cope's framework distinguishes four interconnected dimensions of entrepreneurial learning, each of which can be observed in student reflections on experiential entrepreneurship education.

Learning about oneself: This dimension encompasses the development of self-awareness, self-confidence, and personal efficacy as an entrepreneur or business professional. Students learn about their own strengths, weaknesses, leadership styles, work preferences, and ability to manage stress and ambiguity. This personal learning often involves confronting preconceptions about one's capabilities and developing realistic self-assessment. In student consulting contexts, this may manifest as students discovering their leadership style, recognizing their communication strengths, or building confidence through successful problem-solving.

Learning about the business: This dimension involves acquiring knowledge about how businesses operate, including understanding industry dynamics, competitive environments, operational challenges, financial management, and strategic decision-making. Students develop comprehension of business models, revenue generation, resource allocation, and the day-to-day realities of running a small enterprise. This learning extends beyond classroom theory to encompass the tacit, contextual knowledge that comes from working within actual business settings.

Learning about entrepreneurship: This dimension addresses understanding the entrepreneurial process itself, the challenges, mindsets, and behaviors that characterize entrepreneurial activity. Students learn about resource constraints, the dedication and perseverance required for venture success, managing uncertainty, dealing with failure, and thinking creatively about problems. This meta-level learning develops what is often termed the "entrepreneurial mindset"—a way of thinking and acting that emphasizes opportunity recognition, resourcefulness, and resilience.

Learning about relationships and networks: Entrepreneurial success depends heavily on the ability to build, manage, and leverage relationships with various stakeholders. Students learn about team dynamics, client communication, conflict resolution, networking, and managing expectations. This dimension includes learning to work effectively with diverse personalities, navigating professional relationships, and understanding the social capital that enables business success.

These four dimensions are not discrete categories but rather interconnected aspects of a holistic learning process. Learning about oneself and learning about one's business are inextricably linked, creating fluidity and overlap between higher-level learning outcomes and processes [4].

3.4. The Role of Critical Events in Entrepreneurial Learning

A distinctive feature of Cope's framework is its emphasis on critical incidents or discontinuous events as catalysts for higher-level learning. Unlike routine experiences that reinforce existing knowledge, discontinuous events—such as unexpected failures, major setbacks, or significant challenges—disrupt established patterns and force individuals to fundamentally reconsider their assumptions and approaches [4,20]. These events trigger what Argyris and Schön [21] termed "double-loop learning," where individuals not only solve immediate problems but also question and modify the underlying beliefs and strategies that guide their actions.

In student consulting contexts, discontinuous events may include scope changes, client communication breakdowns, partnership conflicts, unexpected business crises, or the realization that initial approaches are ineffective. While often experienced as stressful or frustrating, these critical incidents provide powerful learning opportunities. The challenge lies in whether students can effectively reflect on these experiences and extract meaningful lessons, or whether they become overwhelmed and miss the learning potential.

Cope [20] identifies that the learning triggered by critical incidents often involves moving through phases of confusion and struggle before achieving new understanding.

Students may initially experience confidence loss, self-doubt, or frustration when confronting challenges that expose gaps in their knowledge or capabilities. However, working through these difficulties, with appropriate support and reflection, can lead to transformative learning that significantly enhances entrepreneurial capability.

3.5. Temporal Dimensions of Entrepreneurial Learning

Cope's framework recognizes that entrepreneurial learning unfolds across distinct temporal phases: pre-venture learning (preparation and planning), entrepreneurial learning during venture creation and development, and post-venture learning (particularly learning from failure) [4]. For student consulting experiences, the semester-long engagement represents a compressed version of the "during-venture" phase, where learning occurs dynamically and continuously as students actively work with clients, encounter challenges, and implement solutions.

This temporal perspective emphasizes that learning is not a discrete event but an ongoing process of adaptation and development. Early-semester experiences establish baseline knowledge and relationships, mid-semester experiences involve grappling with complexity and ambiguity, and end-of-semester reflections allow for synthesis and meaning-making.

3.6. Application to Student Reflection Data

This study applies Cope's entrepreneurial learning framework to analyze student reflections on their semester-long consulting experiences in the RISE29 program. Student reflections provide direct access to how participants make meaning of their experiences, what they identify as significant learning, and how they understand their own development. By systematically coding reflections according to the four learning dimensions and identifying critical incidents that triggered deeper learning, this study aims to reveal the mechanisms through which experiential entrepreneurship education translates experience into learning.

The framework guides both deductive coding (applying the four learning dimensions) and inductive analysis (remaining open to themes that emerge from the data). This approach aligns with Braun and Clarke's [5] theoretically flexible approach to thematic analysis, which allows researchers to identify patterns within data while maintaining connection to theoretical frameworks.

4. Materials and Methods

4.1. Research Design

This study employs a qualitative research design to evaluate the learning outcomes of student participants in the RISE29 program. Qualitative inquiry is appropriate here because it opens access to the meanings, processes, and experiences students construct—rather than forcing learning into measurable outputs alone [6]. The primary data source consists of student written reflections submitted across the program semester. These reflections offer direct access to participants' interpretations of their own learning, making them particularly well-suited to an analysis grounded in experiential and entrepreneurial learning theory.

The analytic approach integrates deductive and inductive strategies to ensure both theoretical coherence and openness to emergent findings. Specifically, this study draws on Gilgun's [22] deductive qualitative analysis (DQA) framework as its primary methodological anchor, supplemented by grounded theory's systematic coding procedures [23] and Braun and Clarke's [5] reflexive thematic analysis.

4.2. Research Context and Program Description

The RISE29 program is an interdisciplinary entrepreneurship education initiative at a regional university in the southeastern United States, created to cultivate entrepreneurial knowledge, skills, and civic awareness among students from diverse academic backgrounds while simultaneously providing meaningful consulting support to small businesses in economically distressed rural communities. The program draws its name from the US Route 29/264 corridor that bisects Eastern North Carolina, a region characterized by persistent poverty, limited economic diversification, and an urgent need for sustained entrepreneurial activity.

The program enrolled students from across the university, representing seven colleges: Allied Health Sciences, Arts and Sciences, Business, Education, Engineering and Technology, Fine Arts and Communication, and Health and Human Performance. This broad disciplinary reach was by design, reflecting the program's conviction that entrepreneurial thinking belongs to no single field and that cross-disciplinary consulting teams would bring richer, more contextually relevant perspectives to clients' diverse business challenges. Students participated as paid interns, working approximately twenty hours per week over the course of a single semester, each cohort constituting an independent group of eight to twelve students.

Client placements were concentrated in four Eastern North Carolina counties selected for their economic need and the presence of small businesses that could benefit from student consulting support. Students were assigned to clients in pairs, forming two-person interdisciplinary consulting teams that worked with their assigned businesses from initial scoping through final deliverable presentation. The program required teams to spend designated hours at a shared worksite, the Willis Building, which created a cohort culture and facilitated coordination between teams, program staff, and visiting guest lecturers.

The curriculum centered on direct client work rather than traditional coursework, supplemented by structured guest lectures on industry analysis, internal organizational analysis, the consulting process, public speaking and presentation skills, and special topics tailored to each cohort's client portfolio. This kept conceptual content tied directly to what students were working on each week, rather than running as a parallel track.

A significant structural evolution occurred during the study period with the introduction of a dedicated Program Manager role, beginning in the fourth semester of program operation. Prior to this change, program coordination responsibilities were distributed among faculty and administrative staff without a single point of accountability. The Program Manager role consolidated these functions, encompassing client acquisition and relationship management, student onboarding and employment documentation, scope-of-work development, weekly check-ins and timecard review, and the organization of final client presentation events. This sustained supervisory presence positioned the Program Manager as a functional mentor within the experiential learning environment, providing ongoing professional guidance and accountability beyond what distributed coordination had previously offered.

The study period also encompassed the COVID-19 pandemic, which forced the program to transition to fully virtual operations for the Spring 2020 and Fall 2020 cohorts. This disruption eliminated the shared worksite experience, constrained in-person client interaction, and altered the social fabric of cohort life in ways that participants described as having tangible effects on their learning experience. Program operations returned to full in-person delivery beginning in Spring 2021, including the resumption of field trips to the rural counties where client businesses were located. The program thus evolved substantially across the ten cohorts covered by this study, providing a naturalistic context for examining how structural features shape the quality and character of student learning.

Student reflection was embedded as a formal program requirement throughout the study period. Participants submitted written reflection papers addressing four structured question domains: their role within the consulting team (Q1), the dynamics of team collaboration and any challenges encountered (Q2), the most important things they learned through the experience (Q3), and their overall assessment of the program along with any recommendations for improvement (Q4). Beginning approximately in Spring 2021, the reflection prompt was revised to encourage more elaborated responses, explicitly asking students to devote approximately one page to each question and to support their responses with specific details and examples. These reflections constitute the primary data source for the present study.

4.3. Participants and Data

The dataset for this study comprises 158 written reflection papers submitted by students who participated in the RISE29 program across ten consecutive cohorts from Spring 2019 through Summer 2022. Each reflection was authored by a single participant and submitted at or near the conclusion of the student's semester-long internship engagement. Participants represented seven colleges across the university: Allied Health Sciences, Arts and Sciences, Business, Education, Engineering and Technology, Fine Arts and Communication, and Health and Human Performance. Business college students constituted the largest single group, reflecting both the program's organizational home and the strong interest among business students in applied, real-world learning experiences.

A notable feature of the dataset is its disciplinary breadth. Students from outside the Business college collectively constituted the majority of participants, with particularly robust representation from Allied Health Sciences, and Arts and Sciences. This cross-disciplinary composition created a rich comparative basis for examining how students from different academic traditions experienced and made meaning of a consulting-based entrepreneurship program. Fourteen participants completed the program in more than one semester; their reflections across multiple cohorts provide a longitudinal dimension to the dataset, enabling examination of how learning deepens and professional identity consolidates through repeated engagement with the program.

The program cohorts span three distinct structural periods that are analytically significant for understanding variation in the reflection corpus. The pre-pandemic cohorts (Spring 2019 and Fall 2019) operated under the original program design, before the Program Manager role was established and before the reflection prompt was expanded. The COVID-era cohorts (Spring 2020 and Fall 2020) experienced fully virtual program delivery, with all client interactions, team collaboration, and guest lectures conducted remotely. The post-pandemic cohorts (Spring 2021 through Summer 2022) benefited from the return to in-person delivery; the presence of the Program Manager; and the revised, more expansive reflection prompt. These structural differences are treated throughout the analysis as contextual factors shaping the character and depth of participants' reflective engagement.

All reflection papers were collected as part of routine program administration and subsequently de-identified prior to analysis. Participants are identified in all quotations and references by assigned numerical codes only (e.g., Participant 27). This study received IRB approval (Protocol #UMCIRB 20-001664, East Carolina University) for the use of student reflection data in research, and informed consent was obtained from all participants whose materials are included in the analysis.

4.4. Analytic Framework: Deductive Qualitative Analysis

Gilgun's [22] deductive qualitative analysis (DQA) provides the overarching methodological logic for this study. DQA is designed precisely for situations where an established

theoretical framework exists and the researcher seeks to examine how empirical data confirms, disconfirms, or elaborates that framework. Rather than treating theory as a rigid coding template, DQA uses theory to generate a priori categories that are then tested against the data, with the analytic process remaining open to the ways in which data challenges or refines theoretical expectations [22].

In the present study, the four dimensions of Cope's [4] entrepreneurial learning framework—learning about oneself, learning about the business, learning about entrepreneurship, and learning about relationships and networks—serve as the a priori theoretical categories guiding initial deductive coding. Each student reflection was systematically examined for evidence that corresponds to, extends, or contradicts these dimensions. Where student accounts reveal patterns that cannot be adequately captured within the existing framework, those instances were flagged for inductive elaboration, consistent with DQA's principle that disconfirming evidence and novel findings are analytically valuable rather than problematic [22].

4.5. Grounded Theory Coding Procedures

To complement the deductive analytic frame and ensure that emergent patterns in the data are systematically identified, this study adopts the coding procedures associated with constructivist grounded theory [23]. Grounded theory coding proceeded through three sequential phases: initial (open) coding, focused coding, and theoretical coding. During initial coding, all reflection texts were read line-by-line and assigned gerund-based codes that capture the actions and processes described by students (e.g., “navigating client expectations” and “recognizing personal limitations”). This phase prioritized proximity to participant language and resisted premature abstraction. Table 1 presents representative examples of this progression from open code to theme.

Table 1. Representative coding examples: from open code to theme.

Open Code	Focused Code	Theme	Example Excerpt (Abbreviated)
‘client wouldn’t respond’	Client communication barriers	Theme 1: Communication	“Very difficult to work remotely when having little communication with my client.” (P27)
‘divided tasks by strength’	Complementary strengths division	Theme 2: Teamwork	“Since we focused on different areas, this made research more useful.” (P97)
‘I realize I lead differently now’	Leadership style evolution	Theme 3: Leadership Identity	“I began to realize the ways in which my leadership style has changed.” (P107)
‘never thought about rural before’	Place-based perspective shift	Theme 4: ENC Encounter	“I will never look at rural areas the same, and for good reason.” (P103)
‘this felt like a real consulting job’	Career identity crystallization	Theme 5: Professional Identity	“This internship has inspired me to look into consulting as a career.” (P108)

Table 1. Cont.

Open Code	Focused Code	Theme	Example Excerpt (Abbreviated)
‘learned more than 3 years in class’	Authentic stakes as learning catalyst	Theme 6: Real-World Learning	<i>“This was the real thing for once—nice to dive in rather than read about it.” (P48)</i>
‘one of the best semesters I have had’	Overall program satisfaction	Theme 7: Satisfaction	<i>“RISE29 was an unforgettable experience.” (P64)</i>

Note. Excerpts abbreviated for display. P = Participant.

Focused coding identified the most analytically significant and frequently occurring codes and used them to sort and synthesize large amounts of data. This phase enabled comparison across reflections and the identification of candidate themes. Finally, theoretical coding examined how focused codes relate to one another conceptually, exploring potential causal, conditional, or consequential relationships between categories [23]. Constant comparison was applied throughout all coding phases: new data segments were continuously compared against previously coded segments to refine definitions, identify variation, and ensure conceptual clarity.

4.6. Reflexive Thematic Analysis

Following the coding phases, this study applies Braun and Clarke’s [5] six-phase reflexive thematic analysis to develop and refine overarching themes from the coded data. The six phases are (1) familiarization with the data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the analysis. This approach is described as “theoretically flexible” [5] because it can be applied within both inductive and deductive orientations, making it well-suited to an integrated DQA-grounded theory design.

Themes were identified at both the semantic level (explicit content of student reflections) and the latent level (underlying assumptions, ideologies, and meaning-making patterns). Themes were assessed for their prevalence across the dataset as well as their significance in illuminating the program’s learning mechanisms, consistent with Braun and Clarke’s [5] caution against equating frequency with importance.

4.7. Reflective Depth Analysis

A central aim of this evaluation is to assess not only the content of student learning but also the quality and depth of students’ reflective engagement. To this end, each reflection was assessed using a reflective depth rubric informed by Gibbs’ Reflective Cycle [14] and Moon’s [15] map of reflective writing. Reflective depth was coded along a four-level continuum: (1) descriptive, in which the student reports what happened without interpretation; (2) evaluative, in which the student makes judgments about their experience; (3) analytical, in which the student identifies causal relationships and draws connections between experience and broader concepts; and (4) transformative, in which the student articulates a fundamental shift in perspective, belief, or professional identity.

4.8. Sentiment and Tone Analysis

To capture the affective dimensions of student learning, this study incorporates a manual sentiment and tone analysis of reflection texts. The emotional register of reflections is analytically significant because Cope’s [4] framework positions affective experience—including confidence loss, frustration, and eventual efficacy—as a key mechanism through

which critical incidents produce learning. Sentiment analysis proceeded through systematic identification of affective vocabulary, hedging language, and evaluative statements, coding each reflection for dominant emotional tone (positive, negative, and ambivalent) as well as specific affective markers (e.g., confidence, uncertainty, enthusiasm, frustration, and resilience).

Tone analysis attended to dimensions beyond valence, including student positioning (active vs. passive voice as indicators of agency), certainty vs. tentativeness, and the presence of growth-oriented language. This analysis was conducted interpretively rather than computationally in order to preserve contextual nuance.

4.9. Cross-Group Comparative Analysis

To address the program evaluation purpose of this study, the analysis includes systematic comparison of findings across participant groups defined by classification variables recorded in the accompanying data. Cross-group comparison enables the identification of differential patterns in learning outcomes, reflective depth, and thematic emphases that may be associated with student characteristics or program structure variables. This phase of analysis is guided by framework analysis principles [24], which organize coded data into a matrix structure to facilitate systematic cross-case comparison.

4.10. Trustworthiness and Rigor

Trustworthiness was addressed through several strategies drawn from Lincoln and Guba's [25] criteria. Credibility rested on extended engagement with the data, reflexive memo-writing throughout analysis, and member-checking where feasible. Transferability was supported through thick description of the program context, participants, and procedures, giving readers enough information to judge relevance to their own settings. Dependability and confirmability were supported through an audit trail documenting all analytic decisions, including codebook development, theme revision history, and rationale for cross-group comparisons.

Researcher positionality is acknowledged as a relevant factor in this evaluation. As researchers engaged with the RISE29 program, the analytic team brings both contextual knowledge and potential interpretive bias to the data. Reflexivity was maintained through documented assumptions, regular peer debriefing, and the discipline of structured analytic frameworks (DQA and grounded theory) as checks on purely impressionistic reading. The use of multiple analytic methods (thematic analysis, reflective depth coding, sentiment analysis, and cross-group comparison) provides methodological triangulation that strengthens confidence in the findings.

4.11. Ethical Approval

This study was approved by the University and Medical Center Institutional Review Board at East Carolina University (protocol #UMCIRB 20-001664). All participants provided informed consent for the use of their reflection materials in research. Prior to analysis, all identifying information was removed from reflection texts, and participants are referenced solely by assigned numerical codes throughout this paper.

5. Results

A multi-layered qualitative analysis of 158 student reflection papers submitted by RISE29 internship participants across ten cohorts from Spring 2019 through Summer 2022 was conducted. Drawing on reflexive thematic analysis, reflective depth analysis, content analysis, sentiment and tone analysis, voice and agency analysis, and cross-group comparison, the findings illuminate how students made meaning of their internship experiences,

what they learned, and how the program evolved across cohorts and participant subgroups. All direct quotations are identified by participant ID only to protect confidentiality.

5.1. Theme 1: Communication as the Central Axis of Learning

The single most consistent theme across all ten cohorts and all four question domains is communication—its centrality to professional effectiveness, its role as a source of challenge and growth, and its emergence as the skill students most frequently reported developing. Communication was not merely one outcome among many—it was the thread running through how students narrated the whole experience.

Across Question 1 (role in team), students described themselves overwhelmingly in communicative terms—as the person responsible for keeping the team connected, scheduling client meetings, relaying information, or writing updates. Question 2 (team dynamics) featured communication more than any other topic, consistently identified as both the primary strength when it functioned well and the primary weakness when it broke down. In Question 3 (learning), communication skill development ranked as the most frequently mentioned takeaway.

5.1.1. Communication with Clients

Students described navigating substantial challenges in reaching and sustaining professional communication with clients, and these difficulties became formative learning experiences in their own right. Clients who were unresponsive, inconsistent in meeting attendance, or unclear about their expectations featured prominently across cohorts as sources of frustration that ultimately yielded professional growth.

“My client was not the best communicator. I understand my client was very busy, but I feel he could have tried a little more to communicate with me. It was very difficult to work remotely when having little communication with my client.” (Participant 27)

“Despite the communication challenges with the client throughout the semester, I still learned how to interact professionally and how to fix when communication is altered.” (Participant 105)

5.1.2. Communication Within Teams

Within-team communication was almost universally identified as a defining determinant of team success. Students who reported strong intra-team communication tended to describe highly productive partnerships; those who reported breakdowns traced nearly all of their challenges to this source.

“Communication was key for what we had to do for the upcoming week. One great thing we did is we knew how we did work as a team.” (Participant 81)

Students did not just reflect on communication difficulties; a number of them developed concrete workarounds—meeting summaries sent by email, rotating who reached out to the client, and shared documents to keep everyone current.

5.1.3. Professional Communication Skills

Students also described gains in formal professional communication—email writing, virtual presentation skills, navigating difficult conversations, and adapting tone and language to different audiences. The shift from academic to professional communication register was named by many students as a genuine developmental challenge.

“I have sent professional short emails to professors before this internship, but I never have had to constantly communicate with a client through email. This experience has given

me a lot of tools on how to write professional emails, how to properly address individuals, as well as getting back to clients in timely manners.” (Participant 52)

5.2. Theme 2: Teamwork and Collaborative Identity

A second dominant theme concerns students’ understanding of teamwork—how it works, why it matters, and what they specifically learned about themselves as collaborators. In nearly every reflection, students articulated a theory of effective teamwork shaped by their RISE29 experience.

5.2.1. Complementary Strengths as a Framework for Team Success

Across cohorts and colleges, the most frequently invoked explanation for effective team functioning was the presence of complementary strengths across members. Students repeatedly described dividing tasks according to individual strengths—not as a compromise, but as a deliberate approach to doing better work together.

“My partner is a Marketing major and aided in the state of the market analysis and research. I am a Public Health major and aided in the sanitation and health needs of the business. Since we were able to focus on different areas, this made conducting research more useful when we came together to share ideas.” (Participant 97)

5.2.2. Discovering the Power of Teamwork

For many students, particularly those who described prior negative experiences with group work, RISE29 was transformative in reshaping their relationship to collaborative work.

“I learned how to work with a team because of RISE29. Before this I always had to take on the leadership role and never fully understood the power of a team and what a team can get accomplished.” (Participant 64)

5.2.3. Team Challenges and Conflict

The corpus also contains candid accounts of team dysfunction—imbalanced workload, personality clashes, declining communication, and frustration with partner performance. These accounts matter as counterweight: the program’s team dynamics were not uniformly smooth.

“I took on more roles on the research and business side of things to make sure we kept on track. This was a huge challenge for me. Overtime, I did become frustrated with how the team was working, or lack thereof.” (Participant 125)

5.3. Theme 3: Leadership Identity Development

Across all ten cohorts, the program functioned as a significant site of leadership identity formation. Students were not just reporting what they did as leaders—they were working out who they were as leaders, naming their tendencies, their blind spots, and how their approach shifted across the semester.

5.3.1. Diversity of Leadership Styles

Students named a wide array of leadership styles across the corpus, including democratic, transformational, servant, participative, coaching, autocratic, and supportive. Importantly, students frequently described adopting different styles at different moments within the same semester, suggesting sophisticated situational awareness.

“I believe that implementing different leadership styles based on the stages of our project was essential and helped us achieve our goals.” (Participant 128)

5.3.2. Leading Without Hierarchy

A recurring subtheme was students describing their leadership in explicitly non-hierarchical terms—as facilitation, enablement, or behind-the-scenes contribution rather than direction and control.

“I naturally lead projects but make sure I try not to seem like a boss because we are all co-creators in team settings.” (Participant 82)

5.3.3. Leadership Self-Awareness as a Key Outcome

Many of the most reflectively deep statements in the corpus concern students’ developing awareness of their own leadership tendencies, blind spots, and areas for growth.

“I began to realize the ways in which my leadership style has changed. In high school, I typically was a quiet contributor. This trend began to shift as I joined teams during college, but the change was very clear this semester.” (Participant 107)

5.4. Theme 4: Encounter with Eastern North Carolina

Among the most unexpected patterns in the corpus was the depth of students’ responses to Eastern North Carolina itself—its communities, its economic pressures, and what one student called its “hidden vitality.”

5.4.1. Spatial and Social Discovery

“I will never look at rural areas the same, and for good reason. I have come to reconsider living in an area so remote as Hyde County.” (Participant 103)

“Before this internship I only saw Williamston as just a drive-through town. But I found that it was a hidden gem of a place with great potential for growth.” (Participant 64)

5.4.2. Economic Development as Personal Mission

A significant subset of students described their experience as crystallizing a sense of personal mission toward contributing to rural economic development.

“The communities we have worked in depend on entrepreneurs to help sustain and develop their economy. During my research, I was able to see how business and businesses can positively impact these communities.” (Participant 69)

5.4.3. Contrast and Perspective Shift

Many reflections are organized around an explicit before/after structure—this is not a rhetorical convention so much as evidence of genuine reorientation.

“Growing up in Charlotte since elementary school, I never realized the vast differences across the Carolinas.” (Participant 29)

5.5. Theme 5: Professional Identity and Career Clarity

For many students, the program was where vague career interests sharpened into something more specific—a space to test a professional identity in conditions that actually carried stakes.

5.5.1. Confirmation and Discovery of Career Interest

“This internship truly felt like a consulting job, and I loved it. This internship has inspired me to look into consulting as a potential career avenue.” (Participant 108)

“This was my first experience ever that I knew being an entrepreneur is what I should be.” (Participant 64)

5.5.2. Professionalism and Workplace Readiness

“The program has given me the opportunity to better my public speaking skills and to act in a professional way in meetings.” (Participant 109)

5.5.3. Networks and Connections

Relationship-building—with clients, staff, fellow interns, and community stakeholders—was named as a valued outcome across cohorts.

“The connections I made with RISE29 will be a key factor in my professional career.” (Participant 112)

5.6. Theme 6: Real-World Learning and Classroom Transfer

The sixth theme concerns what students valued most about the program’s learning environment: that the work was real, the stakes were real, and no textbook had the answer.

5.6.1. The Value of Authentic Stakes

“The biggest thing that I couldn’t have learned in a classroom is doing the work. This was the real thing for once. It was nice to dive in and get to experience it rather than read or hear about it.” (Participant 48)

5.6.2. Learning to Research

The development of research competence was among the most widely reported specific skill outcomes, with students describing marked improvement in their ability to conduct industry analysis and use professional databases.

“When I first joined the program, I expected Google to give me all of the answers. I found out who was interested in what I was selling, what their hobbies were, education levels, how much they made.” (Participant 91)

5.6.3. Learning to Learn on the Fly

“RISE29 has really helped me think on my feet. The way we kind of learn on the fly and spend time figuring out the process on our own has shown me to take much more of an initiative.” (Participant 41)

5.7. Theme 7: Satisfaction, Program Reception, and Constructive Critique

Question 4 (satisfaction and recommendations) yields the most complex tonal profile in the dataset. High satisfaction was nearly universal, but that surface uniformity conceals real variation in how students described what worked and what fell short.

5.7.1. Patterns of Overall Satisfaction

“RISE29 was an unforgettable experience because I learned so much about business and myself that I can take with me as a tool for the rest of my life.” (Participant 64)

5.7.2. Praise for Staff and Program Structure

“Whenever I had a question, I felt confident that the RISE29 team had an answer or could point me to a resource that could help.” (Participant 112)

5.7.3. Recurring Constructive Critiques

Despite high overall satisfaction, a consistent set of constructive critiques appeared across cohorts: (1) client vetting and preparation; (2) scheduling and structure; (3) social cohesion among cohort members; and (4) work-site logistics.

“One of my biggest recommendations is to have an outlined calendar for when things are due. That was one of the hardest things in my opinion, not knowing when things were going to be due until a few days before.” (Participant 36)

5.8. Reflective Depth Analysis

Applying Gibbs’ Reflective Cycle [14] as an analytic lens, the corpus reveals marked variation in reflective depth both across participants and across question domains. Questions 1 and 2 (role and team dynamics) elicited primarily descriptive and evaluative responses. Questions 3 and 4 (learning and satisfaction) generated substantially deeper reflection.

A minority of reflections—approximately 15 to 20 percent of the corpus—demonstrated what Gibbs would classify as critical or transformative reflection. The majority—approximately 60 to 65 percent—demonstrated moderate depth. Surface-level reflections constituted the remaining 20 percent and were more prevalent among earlier cohorts and in responses to Questions 1 and 2. Table 2 presents the distribution of reflective depth levels by cohort period.

Table 2. Reflective depth distribution by cohort period.

Cohort Period	n	Surface (%)	Moderate (%)	Critical (%)
Pre-Pandemic (Sp19–Fa19)	28	32%	55%	13%
COVID-Era (Sp20–Fa20)	37	28%	58%	14%
Transition (Sp21)	22	22%	60%	18%
Post-Pandemic (Fa21–Su22)	71	15%	64%	21%
Total	158	22%	60%	18%

Note. Percentages approximate based on two-coder independent assessment. Multiple structural changes co-occurred across cohort periods; depth differences are multi-determined and should not be attributed to any single factor.

The revised prompt introduced around Spring 2021—which asked for a page per question with specific examples—appears associated with deeper reflection in later cohorts, though the co-occurrence of other structural changes means this cannot be attributed to the prompt alone.

5.9. Voice and Agency Analysis

Agency coding across Questions 1 and 3 revealed a corpus broadly oriented toward active, first-person narration of experience—students generally described themselves as actors who made decisions, initiated actions, and drove outcomes rather than as passive recipients of instruction.

High-agency accounts were most prevalent among returning interns, students who described themselves as natural leaders, and students in the RISE29 track. Lower-agency accounts were more common in early-semester reflections and in descriptions of the COVID-era fully virtual semesters.

“I was the primary point of contact with the client’s HR Manager. Rather than drafting emails and reviewing with my team members, this was a turning point into taking the reins with an important connection.” (Participant 54)

5.10. Cross-Cohort Patterns and COVID-Era Analysis

5.10.1. Pre-Pandemic Cohorts (Spring 2019–Fall 2019)

The earliest cohorts show shorter, less elaborated reflections with a higher proportion of surface-level responses, consistent with the simpler question prompt used during these

semesters. Despite their brevity, these reflections already express the core thematic content that would persist throughout the corpus.

5.10.2. COVID-19 Disruption (Spring 2020–Fall 2020)

The Spring 2020 and Fall 2020 cohorts represent the most distinctive segment of the corpus. Students in these cohorts expressed greater frustration with isolation, reduced intra-team cohesion, and loss of the shared workspace. The in-person work requirement was retrospectively valued by students who experienced its absence.

“I think being stuck at home had a huge impact on the team’s morale. I think we were able to effectively manage the dynamics of the team by being open and honest with each other.”
(Participant 47)

5.10.3. Post-Pandemic Cohorts (Spring 2021–Summer 2022)

With the return to in-person programming, reflections show a marked increase in references to field trips, in-person team bonding, and connections made with fellow interns. The emotional register of these cohorts is notably warmer.

“I am also very fortunate to have had this opportunity while we returned to in-person instruction, as I was able to form stronger bonds with my teammates, other interns, mentors, and clients.” (Participant 106)

5.11. Cross-Group Comparisons

5.11.1. By College Affiliation

Business students ($n = 91$) constituted the largest college group and produced reflections with the highest frequency of entrepreneurship-related vocabulary. Non-Business students consistently described a steeper initial learning curve with business concepts but also described greater surprise and discovery in their engagement with the program’s content. Engineering students were notable for describing technical-to-non-technical communication as a major developmental challenge and gain. Table 3 summarizes this cross-group comparison by college affiliation.

Table 3. Cross-group comparison by college affiliation.

College Group	n	Dominant Themes	Critical Refl. (%)	Notable Subtheme
Business	91	Communication, Teamwork, Career Clarity	14%	Entrepreneurship vocabulary; business plan framing
Engineering & Technology	13	Communication, Real-World Learning	23%	Technical-to-non-technical communication as key challenge
Health & Allied Health	14	ENC Encounter, Leadership	21%	Community health framing; place-based mission orientation
Arts, Fine Arts & Comm.	12	Teamwork, Professional Identity	18%	Creative contribution narrative; non-hierarchical leadership
Education, A&S, Other	28	Communication, ENC Encounter	17%	Cross-disciplinary bridge narrative; discovery framing

Note. Critical reflection percentages approximate. Group size disparities (Business $n = 91$ vs. most non-Business groups $n < 20$) limit comparative claims; patterns warrant further investigation. In total, 14 returning participants appear across multiple cohorts.

5.11.2. By Placement County

Students placed in Hyde County—the most geographically isolated of the four counties—produced the most emotionally resonant accounts of encountering rural poverty and community resilience. Students placed in Martin County consistently described working with clients in earlier-stage business development, yielding distinctive learning about organizational foundations.

5.11.3. Returning Participants

Fourteen participants appeared in the dataset across multiple semesters. Their longitudinal accounts show consistent directional development: second-semester reflections universally described higher confidence, clearer professional self-concept, and more sophisticated understanding of the program structure.

“Since I am a returning intern, I played a leadership role guiding my team throughout the semester in clarifying the tasks that needed to be completed and what the final deliverables should consist of.” (Participant 49)

5.12. Sentiment and Tone Analysis

Sentiment analysis across the four question domains reveals a consistent pattern: positive affect dominates Questions 3 and 4, while Questions 1 and 2 are more neutral and descriptive. Approximately 85 percent of Question 4 responses express overall positive sentiment; approximately 12 percent are mixed; and approximately 3 percent are ambivalent or neutral.

The most emotionally intense language in the corpus clusters around two types of statements: (1) descriptions of the moment of recognizing one’s own capability, and (2) descriptions of connection to a place, community, or people encountered through the program.

“The most important thing I learned was about myself. Before this internship I never viewed myself as intelligent. After doing RISE29 and seeing how much I got accomplished in just 16 weeks I learned that I can do anything with enough dedication.” (Participant 64)

6. Discussion

The central finding is not simply that students learned from RISE29—that much was expected.

The most theoretically generative finding is one that Cope’s framework does not fully anticipate: the emergence of what we term place-based entrepreneurial learning—a form of civic and ethical engagement with specific communities and their economic realities that exceeds what any of the framework’s four dimensions comfortably contain. Students did not merely learn about a business environment in the abstract; they formed commitments to particular places and people. This is distinct from Cope’s ‘learning about the business and its environment’ dimension, which theorizes market and competitive knowledge rather than civic identity formation. Whether place-based learning constitutes a fifth dimension of entrepreneurial learning in geographically anchored programs or a contextual moderator of the existing four is an open question this study cannot resolve—but one that surfaced clearly, reserved for future theoretical development. This was not what Cope’s original formulation anticipated: the framework was built to explain how practicing entrepreneurs learn through running real ventures, not how undergraduates learn through semester-long consulting engagements. The present findings suggest that what activates these learning dimensions is not entrepreneurial practice per se, but the combination of authentic stakes, genuine consequence, and relational complexity—a distinction worth building into how

the framework is used in educational settings. Communication, teamwork, and leadership themes correspond most directly to learning about relationships and networks and learning about oneself, the two dimensions most consistently present across the corpus. The ENC encounter theme represents a distinctive form of learning about entrepreneurship that is place-embedded and community-oriented, connecting students' professional development to the social and economic realities of the communities their clients inhabit. Professional identity and career clarity, and real-world learning and classroom transfer, map onto learning about oneself and learning about the business, respectively, both of which depend on the authentic stakes and genuine uncertainty that distinguish consulting-based programs from classroom simulations.

The data align with Cope's [20] account of critical incidents as triggers for deeper learning—but add texture to what that looks like in practice. Client communication failures, team conflicts, and the wholesale disruption of COVID-19 all functioned as discontinuous events that forced students to abandon established approaches and reconstruct their understanding—precisely the mechanism Cope describes. The most reflectively deep accounts in this corpus almost uniformly began with something going wrong. This has a practical implication: struggling students are not a program failure to manage around but a learning opportunity that requires scaffolded reflection, not rescue—consistent with Pittaway and Cope's [18] argument that authentic stakes are what make entrepreneurial learning possible, as catalysts for higher-level learning [20]. Client communication difficulties, team conflicts, unexpected scope changes, and the wholesale disruption of COVID-19 all functioned as discontinuous events that forced students to abandon established approaches and develop new understanding through struggle. The most reflectively deep statements in the corpus frequently cluster around exactly these kinds of challenging encounters, consistent with Cope's argument that it is precisely the moments of disruption and difficulty that generate the deepest entrepreneurial learning. This finding carries direct implications for program design: the appropriate response to student difficulty is not to smooth it away but to provide sufficient support for students to work through it and extract the learning it contains.

This finding sits in productive tension with the companion quantitative study [7], which found greater attitudinal gains among Business and Engineering students than among peers from other disciplines. The tension is instructive: standardized attitudinal scales may be more sensitive to changes salient to students already oriented toward business, while reflective accounts show identity-level development that those scales were never designed to capture. Put simply, the two instruments may be measuring different things—which is an argument for treating mixed-methods evaluation as a default in entrepreneurship education research, not an optional supplement.

6.1. Programmatic Implications

These theoretical observations carry practical implications, though we present them as evidence-informed suggestions rather than empirical conclusions.

First, client vetting and preparation emerges as the most persistent and substantively consequential programmatic challenge. Students' learning was materially shaped by client responsiveness and engagement, and reflections from cohorts with difficult clients consistently described curtailed learning outcomes. A more structured client onboarding process is consistently recommended by students across cohorts.

Second, the in-person work requirement at the Willis Building was retrospectively valued by students who experienced its absence during COVID-era cohorts. The field trips to RISE29 counties were among the most frequently cited highlights of the in-person experience.

Third, the prompt revision that took effect approximately in Spring 2021—which explicitly asked for elaborated, page-length responses to each question—appears associated with measurable increases in reflective depth across the corpus.

Fourth, the consistent cross-cohort desire for more inter-team social interaction and cohort cohesion suggests that structured social programming among interns represents a low-cost, high-impact enhancement.

Finally, the depth and emotional resonance of non-Business students' reflections underscore the program's value as a genuinely cross-disciplinary learning environment.

6.2. Implications for Research and Teaching

The findings from this analysis carry meaningful implications for audiences engaged in rural entrepreneurship policy, research, pedagogy, and ecosystem development. For researchers, the corpus provides a longitudinal, multi-cohort dataset that documents how students from diverse disciplinary backgrounds engage with rural economic challenges—a population and setting underrepresented in the entrepreneurship education literature.

For educators and curriculum designers, the findings argue forcefully for pedagogical models that integrate real-client consulting with sustained mentorship, cross-disciplinary teaming, and deliberate place-based exposure. The consistent finding that students outside of Business produced some of the most analytically rich and emotionally invested reflections has direct implications for how entrepreneurship education is marketed, sequenced, and designed across universities.

For rural entrepreneurship ecosystem practitioners—economic developers, community foundations, small business development centers, workforce boards, and regional planning bodies—this analysis documents what a well-designed university–community partnership can accomplish in terms of talent pipeline development, place attachment, and practical consulting support for under-resourced businesses.

6.3. Limitations

Several limitations of this study warrant explicit acknowledgment. First, the analysis is grounded in a single program at a single regional institution, which constrains generalizability in important ways. Its rural Eastern North Carolina placement context, interdisciplinary design, paid-internship structure, and evolving leadership arrangements are not features shared by most comparable programs, and the findings should be read with that specificity in mind. Readers seeking to apply these findings in other settings should assess the degree to which their program context resembles the one described here.

Second, researcher positionality is a relevant and acknowledged factor. Three of the five authors are current or former RISE29 program staff, which creates a conflict of interest that bears on interpretive objectivity and should be weighed when evaluating the findings. Members of the analytic team have professional connections to the RISE29 program, which brings the benefit of deep contextual knowledge but also carries the risk of interpretive bias toward favorable readings of the data. Multiple strategies were employed to manage this risk, including structured analytic frameworks, explicit reflexive memo-writing throughout the coding process, and methodological triangulation across multiple analytic approaches. Nonetheless, readers should weigh these positionality considerations when evaluating the findings.

Third, these are self-report data produced in a graded programmatic context. Students may have written toward what they believed was expected, rather than giving a fully candid account. Students who had negative experiences may have been less likely to express dissatisfaction fully, particularly in a document submitted to program administrators. The predominantly positive tone of the corpus, while genuine in many instances, may also

partially reflect this dynamic. Additionally, reflection prompt wording varied across the study period, with a more expansive prompt introduced beginning approximately in Spring 2021. This variation complicates direct cross-cohort comparison and likely contributes to the observed increase in reflective depth among later cohorts.

Fourth, this study does not include independent observer ratings, client perspectives, or multi-rater reliability data for the coding frameworks applied here. The reflective depth coding scheme and the thematic categories were developed and applied by the research team without formal inter-rater reliability testing, which represents a methodological limitation relative to stricter standards of qualitative rigor. Future replications of this approach should incorporate multiple independent coders and formal reliability assessment.

Finally, this study captures only the learning and development students described at the conclusion of a single semester engagement. It cannot assess whether the entrepreneurial insights, professional identities, and attitudinal shifts documented here persisted into subsequent career stages, translated into entrepreneurial behavior, or were affected by subsequent educational and professional experiences. Longitudinal follow-up with RISE29 alumni, tracing the long-term career and entrepreneurial trajectories of participants, represents a critical direction for future research that would substantially deepen the program evaluation evidence base.

7. Conclusions

The RISE29 reflection corpus constitutes a rich, longitudinally extensive record of how students across disciplines, counties, and program eras made meaning out of one of the most distinctive learning experiences the university offers. Seven major themes—communication as a central axis of learning, collaborative identity development, leadership identity formation, encounter with Eastern North Carolina, professional identity and career clarity, real-world learning and classroom transfer, and program satisfaction with constructive critique—describe the intellectual and developmental landscape of the internship across its first several years of operation.

The analysis also shows what makes the program educationally distinctive: it puts students in conditions of genuine consequence before they feel ready; it pairs that exposure with enough support to make the difficulty productive; and it ties students to a specific place and a set of relationships that outlast the semester. These features—visible in student voice across 158 reflections and across ten cohorts spanning 2019 to 2022—constitute the program's core educational identity.

This study makes several contributions to the literature on experiential entrepreneurship education. Theoretically, it extends Cope's [4] entrepreneurial learning framework to a multi-cohort, cross-disciplinary program context, demonstrating that all four learning dimensions, about oneself, about the business, about entrepreneurship, and about relationships and networks, are robustly present in student reflections across disciplines and program periods. This study also contributes to understanding how place-based programming shapes entrepreneurial learning, documenting the distinctive role that sustained engagement with rural communities plays in students' developing professional identities and sense of civic purpose.

For educators and program designers, the evidence here points toward treating reflective capacity as an explicit outcome worth teaching, not a byproduct; treating client vetting as a precondition for student learning, not an afterthought; and building cohort social structures with the same intentionality brought to curricular design. The consistent finding that non-Business students produced some of the most analytically rich and emotionally engaged reflections challenges assumptions about who benefits most from entrepreneur-

ship education and supports the continued expansion of experiential programs beyond business school walls.

Future research should pursue longitudinal follow-up with RISE29 alumni to determine whether the entrepreneurial identities, place-based commitments, and professional networks documented here persist and shape career trajectories over time. Multi-site comparative studies examining qualitative learning outcomes across different university-community partnership models would strengthen the evidence base for place-based experiential entrepreneurship education. Mixed-methods integration, pairing the qualitative analysis approach developed here with quantitative attitude and intention measurement, would enable deeper investigation of the mechanisms through which experiential learning translates into measurable outcomes across disciplinary subgroups. Finally, refinement and validation of the reflective depth coding framework applied here, through multi-rater reliability testing and application across diverse program contexts, would advance qualitative program evaluation methodology in entrepreneurship education research.

Author Contributions: Conceptualization, E.P.Y. and D.B.III; methodology, T.D.; formal analysis, E.P.Y. and D.B.III; investigation, E.P.Y. and D.B.III; resources, T.D.; data curation, E.P.Y., D.B.III and T.D.; writing—original draft preparation, E.P.Y. and D.B.III; writing—review and editing, E.P.Y. and D.B.III; project administration, T.D. and M.H.; funding acquisition, M.H. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: This study was conducted in accordance with the Declaration of Helsinki and approved by the University and Medical Center Institutional Review Board at East Carolina University (protocol #UMCIRB 20-001664). Informed consent was obtained from all subjects involved in this study.

Informed Consent Statement: Informed consent was obtained from all subjects involved in this study.

Data Availability Statement: The data that support the findings of this study are not publicly available due to participant confidentiality protections governing student-authored reflection materials. Anonymized excerpts are available from the corresponding author upon reasonable request.

Acknowledgments: We thank our student interns and businesses that participated in the RISE29 program.

Conflicts of Interest: The authors declare no conflicts of interest.

References

1. Nabi, G.; Liñán, F.; Fayolle, A.; Krueger, N.; Walmsley, A. The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Acad. Manag. Learn. Educ.* **2017**, *16*, 277–299. [[CrossRef](#)]
2. Mansoori, Y.; Lackéus, M. Comparing effectuation to discovery-driven planning, prescriptive entrepreneurship, business planning, lean startup, and design thinking. *Small Bus. Econ.* **2020**, *54*, 791–818. [[CrossRef](#)]
3. Hahn, D.; Minola, T.; Bosio, G.; Cassia, L. The impact of entrepreneurship education on university students' entrepreneurial skills: A family embeddedness perspective. *Small Bus. Econ.* **2020**, *55*, 257–282. [[CrossRef](#)]
4. Cope, J. Toward a dynamic learning perspective of entrepreneurship. *Entrep. Theory Pract.* **2005**, *29*, 373–397. [[CrossRef](#)]
5. Braun, V.; Clarke, V. Using thematic analysis in psychology. *Qual. Res. Psychol.* **2006**, *3*, 77–101. [[CrossRef](#)]
6. Creswell, J.W.; Poth, C.N. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, 4th ed.; SAGE: Thousand Oaks, CA, USA, 2018.
7. Yeager, E.; Barber, D., III; Daughtry, T.; Harris, M.L.; Paynter, S. Beyond one-size-fits-all: How academic discipline moderates entrepreneurship education effectiveness. *Small Bus. Inst. J.* **2025**, *in press*.
8. Barber, D., III; Harris, M.L.; Paynter, S. A model to increase the impact of student consulting projects in rural communities. In *Annals of Entrepreneurship Education and Pedagogy*; Matthews, C.H., Liguori, E.W., Eds.; Edward Elgar Publishing: Cheltenham, UK, 2021; pp. 116–132.
9. Bae, T.J.; Qian, S.; Miao, C.; Fiet, J.O. The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrep. Theory Pract.* **2014**, *38*, 217–254. [[CrossRef](#)]

10. Zhang, Y.; Duysters, G.; Cloudt, M. The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *Int. Entrep. Manag. J.* **2014**, *10*, 623–641. [[CrossRef](#)]
11. Barba-Sánchez, V.; Atienza-Sahuquillo, C. Entrepreneurial intention among engineering students: The role of entrepreneurship education. *Eur. Res. Manag. Bus. Econ.* **2018**, *24*, 53–61. [[CrossRef](#)]
12. Barber, D., III; Harris, M.L.; Jones, J. An overview of rural entrepreneurship and future directions. *J. Small Bus. Strategy* **2021**, *31*, 1–4. [[CrossRef](#)]
13. Zollet, S.; Monsen, E.; Chen, W.D.; Barber, D., III. Rural entrepreneurship education. *Entrep. Educ. Pedagog.* **2024**, *7*, 409–415. [[CrossRef](#)]
14. Gibbs, G. *Learning by Doing: A Guide to Teaching and Learning Methods*; Further Education Unit, Oxford Polytechnic: Oxford, UK, 1988.
15. Moon, J.A. *Reflection in Learning and Professional Development*; Kogan Page: London, UK, 1999.
16. Nguyen, Q.D.; Fernandez, N.; Karsenti, T.; Charlin, B. What is reflection? A conceptual analysis of major definitions and a proposal of a five-component model. *Med. Educ.* **2022**, *48*, 1176–1193. [[CrossRef](#)] [[PubMed](#)]
17. Ryan, M.; Ryan, M. Theorising a model for teaching and assessing reflective learning in higher education. *High. Educ. Res. Dev.* **2013**, *32*, 244–257. [[CrossRef](#)]
18. Pittaway, L.; Cope, J. Entrepreneurship education: A systematic review of the evidence. *Int. Small Bus. J.* **2007**, *25*, 479–510. [[CrossRef](#)]
19. Kolb, D.A. *Experiential Learning: Experience as the Source of Learning and Development*; Prentice Hall: Englewood Cliffs, NJ, USA, 1984.
20. Cope, J. Entrepreneurial learning and critical reflection: Discontinuous events as triggers for 'higher-level' learning. *Manag. Learn.* **2003**, *34*, 429–450. [[CrossRef](#)]
21. Argyris, C.; Schön, D.A. *Organizational Learning: A Theory of Action Perspective*; Addison-Wesley: Reading, MA, USA, 1978.
22. Gilgun, J.F. Qualitative research and family psychology. *J. Fam. Psychol.* **2005**, *19*, 40–50. [[CrossRef](#)] [[PubMed](#)]
23. Charmaz, K. *Constructing Grounded Theory*, 2nd ed.; SAGE: Thousand Oaks, CA, USA, 2014.
24. Ritchie, J.; Spencer, L. Qualitative data analysis for applied policy research. In *Analyzing Qualitative Data*; Bryman, A., Burgess, R.G., Eds.; Routledge: London, UK, 1994; pp. 173–194.
25. Lincoln, Y.S.; Guba, E.G. *Naturalistic Inquiry*; SAGE: Thousand Oaks, CA, USA, 1985.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.