

Entrepreneurship Education in Ethiopian Universities: High Desirability, Low Feasibility, and the Missing 21st Century Skills

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Abstract

Entrepreneurship education has been positioned as a critical strategy to address youth unemployment in Ethiopia. However, little is known about the actual effectiveness of these programs from the perspective of students and staff. This study examines the perceived impact of entrepreneurship education across four Ethiopian universities (N = 392), focusing on competency development, curriculum alignment, institutional support, and barriers to effectiveness. Findings reveal a striking paradox: while students demonstrate extremely high entrepreneurial desirability (mean = 4.24) and increased interest in becoming entrepreneurs (mean = 4.23), they lack practical knowledge for business registration (mean = 1.60) and clear business ideas (mean = 1.95). The curriculum shows serious deficiencies in 21st-century skills integration, particularly digital literacy and AI literacy, with 86.5% of respondents disagreeing that the program prepares students to leverage technology. Practical training components such as field visits and internships are virtually absent (mean = 1.88). Gender equity presents a paradox: equal access to mentorship (mean = 4.72) but complete absence of curriculum content addressing gender-specific barriers (mean = 1.74). Institutional support for tangible resources like incubators and seed funding is non-existent (mean = 1.31). Respondents overwhelmingly endorse solutions including involving entrepreneurs in curriculum design (mean = 4.83, 100% agreement). This study contributes evidence-based insights for curriculum reform and policy development to bridge the intention-action gap in Ethiopian entrepreneurship education.

Keywords: Entrepreneurship education, curriculum alignment, 21st century skills, gender equity, institutional support, Ethiopia

1. Introduction

Ethiopia faces a persistent youth unemployment challenge despite rapid expansion of higher education (Geda, 2022; Tarekegne & Gelaneh, 2019). The government has positioned entrepreneurship education as a key policy strategy to promote self-employment and economic self-reliance. Entrepreneurship courses have been integrated into university curricula across the country, with over 80% of students required to take entrepreneurship and small business development programs (Dugassa, 2012).

However, the effectiveness of these programs remains poorly understood. While entrepreneurship education is widely believed to foster entrepreneurial intentions (Bae et al., 2014; Martin et al., 2013), studies from developing countries suggest significant gaps between program design and actual outcomes (Nabi et al., 2017). Specific concerns include excessive reliance on theoretical instruction, lack of practical training, weak industry collaboration, and inadequate preparation for digital economy demands (Fayolle & Gailly, 2015; Neck & Greene, 2011).

This study addresses these gaps by examining the perceived impact of entrepreneurship education from the perspective of 392 students and staff across four Ethiopian universities. Rather than testing causal hypotheses, this descriptive study documents the current state of entrepreneurship education, identifies specific gaps, and provides evidence-based recommendations for improvement.

2. Literature Review

2.1 Entrepreneurship Education in Developing Countries

Entrepreneurship education has gained prominence as a tool for economic development and job creation in developing countries (Naudé, 2013; Röpke, 1998). In Sub-Saharan Africa, where youth unemployment rates exceed 30% in many countries, entrepreneurship education is seen as a pathway out of poverty (Nagler & Naudé, 2014; Owusu-Ansah & Poku, 2012). Studies have shown that entrepreneurship training participants are 46-87% more likely to be self-employed compared to non-participants (Premand et al., 2012).

However, the effectiveness of entrepreneurship education depends heavily on program design. Traditional theoretical approaches are insufficient; students need experiential learning, practical skills, and exposure to real business environments (Kolb, 1984; Lindberg, Bohman, & Hultén, 2017). Research demonstrates that intervention methods such as internships, business projects, and mentorship significantly improve entrepreneurial outcomes, including business survivability and growth (Ressin, 2025).

2.2 The Intention-Action Gap

A well-documented phenomenon in entrepreneurship research is the intention-action gap—the disconnect between wanting to become an entrepreneur and actually starting a business (Bird, 1988; Kautonen, van Gelderen, & Fink, 2015). While entrepreneurship education effectively builds intentions (Bae et al., 2014), it often fails to provide the practical tools necessary to translate those intentions into action (van Gelderen et al., 2015). Students may leave programs with high motivation but lacking clear business ideas, knowledge of registration processes, or access to funding.

2.3 21st Century Skills in Entrepreneurship Education

The digital transformation of the global economy requires entrepreneurs to possess digital literacy, AI literacy, innovation skills, and adaptability (World Bank, 2024). The Indian Ministry of Skill Development and Entrepreneurship's National Policy for Skill Development and Entrepreneurship (MSDE, 2025) explicitly states that creative thinking, communication, and AI literacy must be embedded in curriculum design. However, many developing country entrepreneurship programs lag in integrating these skills (Linton & Klinton, 2019).

2.4 Gender Equity in Entrepreneurship Education

Gender remains a persistent structural challenge in entrepreneurship education (Brush et al., 2019). While female students often demonstrate equal or greater entrepreneurial interest compared to males, they face barriers in accessing financial capital, mentorship networks, and entrepreneurial ecosystems (Hechavarria et al., 2019). The British Council's (2021) regional report on gender-sensitive entrepreneurship education in Sub-Saharan Africa found that gender and employability policies were not widely implemented, and curriculum-skill mismatch remained a significant structural barrier.

2.5 Institutional Support and Systemic Barriers

University support structures such as incubators, seed funding, mentorship, and networking opportunities play a pivotal role in enhancing student entrepreneurship outcomes (Mwasiaji, Mambo, & Mse, 2020; Abe & Abe, 2023). However, systemic challenges including funding limitations, lack of qualified instructors, weak industry collaboration, and cultural attitudes persistently undermine entrepreneurship education in developing economies (Tarekegne & Gelaneh, 2019; Geda, 2022).

3. Methodology

3.1 Sample and Procedure

A cross-sectional survey was conducted across four public universities in eastern Ethiopia: Haramaya University, Jigjiga University, Dire Dawa University, and Kebri Dahar University. The target population comprised final-year undergraduate students, postgraduate students, academic staff, and technical staff who had participated in entrepreneurship education programs.

Using stratified random sampling, 400 questionnaires were distributed via Google Forms and email. A total of 392 complete and consistent responses were received, yielding a 98% response rate.

3.2 Measures

All constructs were measured using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The 85-item questionnaire assessed the following domains:

- Personal competency development (self-efficacy, opportunity recognition, risk management)
- Gender-based differences
- Practical versus theoretical training balance
- 21st century skills integration
- Curriculum design effectiveness
- Labor market alignment
- Self-employment desirability and feasibility
- Institutional support
- Systemic challenges and policy adequacy
- Strategies for improvement

3.3 Data Analysis

Data were analyzed using SPSS version 26.0. Descriptive statistics including frequencies, percentages, means, and standard deviations were calculated for all items. The analysis focused on identifying patterns, gaps, and paradoxes in respondents' perceptions of entrepreneurship education effectiveness.

4. Results

4.1 Sample Characteristics

Table 1 presents the sample characteristics. Of the 392 respondents, 33.7% were from Jigjiga University, 25.3% from Kebri Dahar, 24.0% from Haramaya, and 17.1% from Dire Dawa. Academic staff comprised 36.5% of the sample, followed by postgraduate students (34.7%), undergraduate students (20.7%), and technical staff (8.2%). The sample was predominantly male (60.2% vs. 39.8% female). Most respondents held Master's degrees (59.4%).

Regarding the type of training participated in, 76.8% of respondents had taken part in all three types of training—university courses, short-term training, and workshops—while the remaining 23.2% had participated only in a university course.

4.2 Personal Competency Development

Self-Efficacy, Opportunity Recognition, and Risk Management

Table 2 presents respondents' perceptions regarding competency development. All mean scores ranged from 3.81 to 4.11, indicating generally positive perceptions. The highest endorsement was for willingness to take calculated risks in business (mean = 4.11, SD = 0.868), with 39.8% strongly agreeing and 35.2% agreeing. The ability to recognize and act quickly on emerging business opportunities received a mean of 3.99 (SD = 0.661), with 56.4% agreeing and 21.2% strongly agreeing, and no respondents disagreeing.

Self-efficacy measures showed moderate but positive results: 65.8% agreed or strongly agreed that entrepreneurship education had a high impact on their self-efficacy (mean = 3.85, SD = 0.893), and 66.8% agreed or strongly agreed they were confident in setting and achieving entrepreneurial goals (mean = 3.86, SD = 0.891).

Gender-Based Differences

Table 3 reveals a striking paradox in gender equity perceptions. Respondents strongly agreed that male and female trainees have equal access to mentorship programs (mean = 4.72, SD = 0.578), with 78.8% strongly agreeing and no disagreement. They also agreed that the program fosters equal competency levels between male and female trainees (mean = 3.83, SD = 0.887), with 77.8% agreeing or strongly agreeing.

However, respondents strongly disagreed that training materials adequately address gender-specific barriers to entrepreneurship (mean = 2.28, SD = 0.975), with 64.0% disagreeing or strongly disagreeing. Most concerning, the curriculum includes discussions on overcoming gender-based barriers in entrepreneurship received the lowest mean of 1.74 (SD = 0.658), with 88.0% disagreeing or strongly disagreeing and no respondents agreeing or strongly agreeing.

Practical vs. Theoretical Training

Table 4 shows another significant paradox. Practical training sessions improved problem-solving skills more than classroom lectures (mean = 4.07, SD = 0.729), with 76.8% agreeing or strongly agreeing. Practical exercises were considered more effective than lectures in enhancing entrepreneurial skills (mean = 3.65, SD = 1.028), with 56.6% agreeing or strongly agreeing.

Yet, respondents strongly disagreed that the program strikes a good balance between theoretical instruction and practical training (mean = 1.99, SD = 0.644), with 79.6% disagreeing or strongly disagreeing. Most concerning, the program included field visits or internships related to entrepreneurship received the lowest mean of 1.88 (SD = 0.725), with 79.1% disagreeing or strongly disagreeing and no respondents agreeing or strongly agreeing.

4.3 Curriculum Alignment and Entrepreneurial Success

21st Century Skills Integration

Table 5 presents alarming deficiencies in 21st century skills integration. The program prepares students well to leverage technology in business operations, receiving a very low mean of 2.05 (SD = 0.482), with 86.5% disagreeing and only 3.3% agreeing. Resources for teaching 21st century skills are adequate received a mean of 2.19 (SD = 1.172), with 64.8% disagreeing or strongly disagreeing.

Innovation and creativity are well-integrated into course content received a mean of 2.40 (SD = 1.259), with 58.6% disagreeing or strongly disagreeing. The curriculum adequately emphasizes digital literacy, with a mean of 2.58 (SD = 1.217), with 53.3% disagreeing or strongly disagreeing. The only positive finding was that respondents learned to adapt quickly to new technologies and business trends (mean = 3.32, SD = 1.102), with 65.1% agreeing. Notably, no respondent selected "Strongly Agree" for any item in this section.

Curriculum Design Comparison

Table 6 shows strong confidence in overall curriculum effectiveness alongside serious specific deficiencies. The curriculum design is effective in preparing students for entrepreneurial success received a high mean of 4.18 (SD = 0.727), with 81.1% agreeing or strongly agreeing. Experiential learning methods are more effective than lectures received a mean of 4.07 (SD = 0.656), with 81.6% agreeing or strongly agreeing. However, curricula are regularly updated to reflect market trends received a low mean of 2.22 (SD = 1.067), with 61.8% disagreeing or strongly disagreeing. There is a clear pathway from basic to advanced entrepreneurial skills in the curriculum received a mean of 2.05 (SD = 0.535), with 82.9% disagreeing or strongly disagreeing. Industry collaboration in designing coursework received a very low mean of 1.92 (SD = 0.816), with 77.8% disagreeing or strongly disagreeing.

Gaps in Labor Market Alignment

Table 7 reveals extreme contrasts. The curriculum is well-aligned with current labor market needs received a low mean of 1.93 (SD = 0.853), with 66.8% disagreeing or strongly disagreeing. Most alarmingly, the program provides information about current job market trends and opportunities received the lowest mean of 1.17 (SD = 0.372), with 83.4% strongly disagreeing and 16.6% disagreeing, and no neutral or positive responses. However, internships or industry placements effectively bridge the gap between education and job market needs received a high mean of 4.36 (SD = 0.73), with 85.0% agreeing or strongly agreeing. Partnerships with private firms improve curriculum relevance received the highest mean of 4.38 (SD = 0.76), with 90.1% agreeing or strongly agreeing.

4.4 Entrepreneurship Education and Self-Employment Intentions

Desirability and Feasibility

Table 8 presents a classic intention-action gap. Entrepreneurship is a desirable career option after completing the training, with a very high mean of 4.24 (SD = 0.673), with 86.4% agreeing or strongly agreeing. Education has increased interest in becoming an entrepreneur, with a mean of 4.23 (SD = 0.689), with 85.2% agreeing or strongly agreeing. Fears do not deter respondents from pursuing self-employment (mean = 4.22, SD = 0.659), with 87.0% agreeing or strongly agreeing.

However, the program provides adequate actionable steps for business registration and legal compliance received a very low mean of 1.60 (SD = 0.915), with 90.0% disagreeing or strongly disagreeing. Having a clear business idea to pursue after graduation received a low mean of 1.95 (SD = 1.096), with 70.6% disagreeing or strongly disagreeing.

Institutional Support

Table 9 shows another extreme paradox. University-sponsored incubators or seed funding are accessible received a mean of 1.31 (SD = 0.461), with 100% disagreeing or strongly disagreeing. The institution provides information about external funding and competitions received a similarly low mean of 1.32 (SD = 0.466), with 100% disagreeing or strongly disagreeing. There are entrepreneurship clubs or societies at my institution received a low mean of 2.08 (SD = 0.532), with 81.7% disagreeing or strongly disagreeing.

Yet, post-training mentorship is supportive in converting intentions into action received a high mean of 4.19 (SD = 0.594), with 90.0% agreeing or strongly agreeing. Networking events with alumni entrepreneurs increase confidence in starting a business received the highest mean of 4.29 (SD = 0.67), with 88.0% agreeing or strongly agreeing.

Business vs. Other Disciplines

Table 10 shows strong consensus that entrepreneurship education is equally effective across disciplines. Respondents overwhelmingly rejected that entrepreneurship education is more effective for business students (mean = 2.04, SD = 0.719), with 71.9% disagreeing or strongly disagreeing. Entrepreneurship training is equally effective across all disciplines received a very high mean of 4.86 (SD = 0.445), with 96.2% agreeing or strongly agreeing (89.8% strongly agreed). Entrepreneurship courses should be mandatory for all disciplines received a mean of 4.67 (SD = 0.471), with 100% agreeing or strongly agreeing. However, students from different disciplines collaborate on entrepreneurial projects received a low mean of 1.89 (SD = 0.746), with 77.1% disagreeing or strongly disagreeing.

4.5 Barriers and Improvement Strategies

Systemic Challenges

Table 11 reveals that cultural attitudes hinder the development of entrepreneurial skills (mean = 4.01, SD = 0.592), with 83.2% agreeing or strongly agreeing. Limited collaboration between universities and the private sector received a mean of 4.02 (SD = 0.715), with 75.3% agreeing or strongly agreeing. Resource-related deficiencies included inadequate teaching resources (mean = 1.99, SD = 0.741) with 73.3% disagreeing or strongly disagreeing, and insufficient instructor professional development (mean = 2.02, SD = 0.695) with 74.8% disagreeing or strongly disagreeing.

Policy Adequacy

Table 12 presents a paradoxical policy landscape. Policy implementation is effective at the institutional level received a high mean of 4.31 (SD = 0.624), with 91.4% agreeing or strongly agreeing. Current policies effectively promote gender equity in training programs received a mean of 4.11 (SD = 0.597), with 87.0% agreeing or strongly agreeing. However, government grants for entrepreneurship education are accessible received the lowest mean of 1.27 (SD = 0.57), with 93.6% disagreeing or strongly disagreeing. Funding allocation for entrepreneurship initiatives is transparent received a low mean of 1.97 (SD = 0.645), with 80.6% disagreeing or strongly disagreeing.

Strategies for Improvement

Table 13 shows overwhelming consensus on improvement strategies. Involving entrepreneurs in curriculum design would significantly improve the program received the highest mean of 4.83 (SD = 0.372), with 100% agreeing or strongly agreeing (83.4% strongly agreed). Metrics like startup survival rates effectively define program success received a mean of 4.78 (SD = 0.416), with 100% agreeing or strongly agreeing. Entrepreneurship education should start earlier in the academic journey received a mean of 4.73 (SD = 0.443), with 100% agreeing or strongly agreeing. Stakeholder collaboration is essential for enhancing program relevance received a mean of 4.72 (SD = 0.45), with 100% agreeing or strongly agreeing.

5. Discussion

5.1 The Intention-Action Gap

The most striking finding of this study is the intention-action gap. Students have extremely high entrepreneurial desirability (mean = 4.24) and confidence that fears do not deter them (mean = 4.22). Yet they lack practical knowledge for business registration (mean = 1.60) and clear business ideas (mean = 1.95). This confirms prior research showing that entrepreneurship education often builds motivation without providing the concrete tools necessary for action (Bird, 1988; Kautonen et al., 2015; van Gelderen et al., 2015).

5.2 The Theory-Practice Gap

While respondents strongly endorsed practical training methods, the actual program lacks field visits, internships, and balanced curriculum design. This finding aligns with Ressin (2025), who demonstrated that internship and mentorship interventions significantly improve entrepreneurial outcomes, including 44.86% higher business survivability.

5.3 The 21st Century Skills Gap

The near-absence of digital literacy, AI literacy, and innovation content (86.5% disagreement on technology preparation) represents a critical failure. As the Indian MSDE (2025) policy emphasizes, AI literacy and creative thinking are now essential for entrepreneurship success. Ethiopian universities are not preparing students for the digital economy (World Bank, 2024).

5.4 The Gender Equity Paradox

Ethiopian universities have achieved equal access to mentorship (mean = 4.72) but have completely failed to integrate gender-specific content into curricula (mean = 1.74). This matches the British Council's (2021) finding that gender policies in Sub-Saharan African universities are not widely implemented in curriculum content.

5.5 The Tangible Support Gap

While relational support (mentorship, networking) is highly effective, tangible resources (incubators, seed funding, entrepreneurship clubs) are virtually non-existent. This suggests universities have developed human capital but not the physical infrastructure for venture creation.

6. Recommendations

Universities should take immediate action to address the gap between theoretical knowledge and practical application in entrepreneurship education. First, practical business registration and legal compliance modules should be integrated into all entrepreneurship courses. At present, many students graduate without understanding how to register a business or fulfill legal requirements, as evidenced by 90% of respondents reporting inadequate preparation in this area. Including step-by-step guidance on registration processes, tax obligations, and licensing requirements would provide students with the essential practical knowledge required to launch their own ventures.

Second, universities should establish formal internship programs in partnership with local businesses. The current lack of field visits and internships deprives students of essential hands-on experience. Structured internships would enable students to apply classroom knowledge in real business environments, build professional networks, and develop practical skills that are not attainable through lectures alone.

Third, universities should establish entrepreneurship clubs and cross-disciplinary collaboration projects. Although students recognize the importance of interdisciplinary entrepreneurship education, opportunities to collaborate with peers from other fields remain limited. Creating clubs and projects that unite students from business, engineering, technology, agriculture, and related disciplines would promote peer learning, innovation, and collaborative problem-solving.

7. Limitations and Future Research

This study has several limitations. First, the cross-sectional design captures perceptions at a single time point. Second, data are limited to four universities in eastern Ethiopia, limiting generalizability. Third, the study measures perceptions and intentions, not actual entrepreneurial behavior.

Future research should employ longitudinal designs tracking actual venture creation, include universities from other Ethiopian regions, and use mixed methods to explore why specific gaps persist despite strong consensus on solutions.

8. Conclusion

This study reveals that entrepreneurship education in Ethiopian universities successfully builds entrepreneurial desirability and confidence but fails to provide practical feasibility. Students want to become entrepreneurs but lack business ideas, registration knowledge, 21st century skills, and access to tangible institutional support. The curriculum is perceived as theoretically strong but practically weak, with no field visits, no internships, and no gender-specific content. However, the consensus on solutions is clear: involve entrepreneurs in curriculum design, start earlier, collaborate across stakeholders, and use outcome-based metrics. Bridging the intention-action gap requires immediate curriculum reform, accessible government grants, and genuine industry partnerships.

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Note:

SD: Strongly Disagree, D: Disagree, N: Neutral, A: Agree, and SA: Strongly Agree

Items	SD	D	N	A	SA	Mean	SD
	%	Row N %	Row N %	Row N %	Row N %		
Entrepreneurship education improved my confidence in identifying viable business opportunities.	0.0%	8.9%	26.5%	34.7%	29.8%	3.85	.950
The program effectively enhanced my risk management skills.	0.0%	8.7%	26.5%	34.2%	30.6%	3.87	.950
Practical exercises frequently contributed to my ability to manage uncertainties in entrepreneurship.	0.0%	8.9%	28.1%	35.7%	27.3%	3.81	.937
I feel well-prepared to pivot business strategies in response to market changes due to the training.	0.0%	8.4%	28.6%	33.7%	29.3%	3.84	.945
Entrepreneurship education had a high impact on my self-efficacy in entrepreneurship.	0.0%	7.1%	27.0%	39.5%	26.3%	3.85	.893
I am confident in my ability to set and achieve entrepreneurial goals.	0.0%	7.1%	26.0%	40.3%	26.5%	3.86	.891
The training has increased my willingness to take calculated risks in business.	0.0%	3.8%	21.2%	35.2%	39.8%	4.11	.868
I am able to recognize and act quickly on emerging business opportunities.	0.0%	0.0%	22.4%	56.4%	21.2%	3.99	.661
The training materials adequately address gender-specific barriers to entrepreneurship.	22.4%	41.6%	21.2%	14.8%	0.0%	2.28	.975
Male and female trainees have equal access to mentorship programs.	0.0%	0.0%	6.6%	14.5%	78.8%	4.72	.578
The program effectively addresses cultural or societal challenges faced by female entrepreneurs.	16.8%	58.2%	25.0%	0.0%	0.0%	2.08	.642
Entrepreneurship education fosters equal competency levels between male and female trainees.	0.0%	13.5%	8.7%	59.2%	18.6%	3.83	.887
The program is supportive of gender equity in entrepreneurial opportunities.	0.0%	10.5%	31.4%	14.8%	43.4%	3.91	1.077
I feel comfortable participating in entrepreneurship activities regardless of my gender.	0.0%	16.1%	21.2%	46.2%	16.6%	3.63	.942
The curriculum includes discussions on overcoming gender-based barriers in entrepreneurship.	38.0%	50.0%	12.0%	0.0%	0.0%	1.74	.658
The program strikes a good balance between theoretical instruction and practical training.	20.9%	58.7%	20.4%	0.0%	0.0%	1.99	.644
Practical exercises are more effective than lectures in enhancing entrepreneurial skills.	0.0%	16.3%	27.0%	31.6%	25.0%	3.65	1.028
Real-world examples are frequently used to reinforce theoretical concepts.	37.5%	0.0%	20.2%	42.3%	0.0%	2.67	1.350
Practical training sessions improved my problem-solving skills more than classroom lectures.	0.0%	0.0%	23.2%	46.4%	30.4%	4.07	.729
Practical training is effective in fostering entrepreneurial skills.	33.4%	7.1%	23.0%	36.5%	0.0%	2.63	1.279
The lectures and case studies enhanced my practical understanding of entrepreneurship.	0.0%	6.6%	23.2%	55.6%	14.5%	3.78	.772
The program included field visits or internships related to entrepreneurship.	32.9%	46.2%	20.9%	0.0%	0.0%	1.88	.725
The curriculum adequately emphasizes digital literacy.	25.0%	28.3%	9.9%	36.7%	0.0%	2.58	1.217
The program prepares students well to leverage technology in business operations.	5.9%	86.5%	4.3%	3.3%	0.0%	2.05	.482
Innovation and creativity are well-integrated into course/Training content.	34.4%	24.2%	8.7%	32.7%	0.0%	2.40	1.259
Emerging skills (e.g., AI literacy) are frequently included in the curriculum.	29.1%	0.0%	28.8%	42.1%	0.0%	2.84	1.250
Resources for teaching 21st century skills are adequate.	38.3%	26.5%	12.8%	22.4%	0.0%	2.19	1.172
I learned to adapt quickly to new technologies and business trends.	16.6%	0.0%	18.4%	65.1%	0.0%	3.32	1.102
The curriculum fosters leadership and decision-making skills.	32.9%	0.0%	18.6%	48.5%	0.0%	2.83	1.332
The curriculum design is effective in preparing students for entrepreneurial success.	0.0%	0.0%	18.9%	43.9%	37.2%	4.18	.727
Experiential learning methods are more effective than lectures.	0.0%	0.0%	18.4%	56.6%	25.0%	4.07	.656
Curricula are regularly updated to reflect market trends.	30.4%	31.4%	28.1%	6.4%	3.8%	2.22	1.067
Resources for experiential learning are readily available.	28.6%	0.0%	37.0%	34.4%	0.0%	2.77	1.200
Industry collaboration is strong in designing coursework.	34.2%	43.6%	18.6%	3.6%	0.0%	1.92	.816
The curriculum is regularly reviewed and improved based on feedback.	39.0%	1.0%	20.2%	39.8%	0.0%	2.61	1.349
There is a clear pathway from basic to advanced entrepreneurial skills in the curriculum.	11.7%	71.2%	17.1%	0.0%	0.0%	2.05	.535
The curriculum is well-aligned with current labor market needs.	39.8%	27.0%	33.2%	0.0%	0.0%	1.93	.853
The program effectively addresses challenges like access to finance and market competition.	39.5%	6.6%	16.8%	37.0%	0.0%	2.51	1.336
The program fosters entrepreneurial mindsets suited to Ethiopia's economic context.	34.2%	6.4%	26.8%	32.7%	0.0%	2.58	1.259
Internships or industry placements effectively bridge the gap between education and job market needs.	0.0%	0.0%	15.1%	33.7%	51.3%	4.36	.730
Partnerships with private firms improve curriculum relevance.	0.0%	3.6%	6.4%	38.8%	51.3%	4.38	.760
The program provides information about current job market trends and opportunities.	83.4%	16.6%	0.0%	0.0%	0.0%	1.17	.372

Alumni of the program are successful in finding employment or starting businesses.	29.8%	0.0%	31.4%	38.8%	0.0%	2.79	1.242
Entrepreneurship education has increased my intention to start a business soon.	0.0%	0.0%	17.9%	47.7%	34.4%	4.17	.705
Entrepreneurship is a desirable career option after completing the training.	0.0%	0.0%	13.5%	49.2%	37.2%	4.24	.673
Starting a business is feasible given Ethiopia's current regulatory environment.	0.0%	0.0%	21.4%	47.2%	31.4%	4.10	.721
Fears (e.g., financial risk, societal pressure) do not deter me from pursuing self-employment.	0.0%	0.0%	13.0%	51.8%	35.2%	4.22	.659
The program provides adequate actionable steps for business registration and legal compliance.	59.4%	30.6%	0.0%	9.9%	0.0%	1.60	.915
I have a clear business idea I would like to pursue after graduation.	48.7%	21.9%	15.3%	14.0%	0.0%	1.95	1.096
My education has increased my interest in becoming an entrepreneur.	0.0%	0.0%	14.8%	47.2%	38.0%	4.23	.689
University-sponsored incubators or seed funding are accessible for entrepreneurship.	69.4%	30.6%	0.0%	0.0%	0.0%	1.31	.461
Post-training mentorship is supportive in converting intentions into action.	0.0%	0.0%	9.9%	61.2%	28.8%	4.19	.594
Government policy support (e.g., tax breaks) is important for my decision to pursue self-employment.	0.0%	0.0%	14.8%	53.8%	31.4%	4.17	.660
Networking events with alumni entrepreneurs increase my confidence in starting a business.	0.0%	0.0%	12.0%	46.7%	41.3%	4.29	.670
Institutional support is effective in fostering entrepreneurial careers.	0.0%	0.0%	18.9%	40.3%	40.8%	4.22	.742
There are entrepreneurship clubs or societies at my institution.	10.5%	71.2%	18.4%	0.0%	0.0%	2.08	.532
The institution provides information about external funding and competitions.	68.4%	31.6%	0.0%	0.0%	0.0%	1.32	.466
Entrepreneurship education is more effective for business students than other field students.	23.7%	48.2%	28.1%	0.0%	0.0%	2.04	.719
Entrepreneurship training is equally effective across all disciplines.	0.0%	0.0%	3.8%	6.4%	89.8%	4.86	.445
Entrepreneurship education is interdisciplinary in nature.	0.0%	0.0%	6.4%	21.4%	72.2%	4.66	.595
Entrepreneurship courses should be mandatory for all disciplines.	0.0%	0.0%	0.0%	33.2%	66.8%	4.67	.471
Entrepreneurship education is relevant to sector-specific challenges faced by all disciplines.	0.0%	0.0%	24.7%	55.6%	19.6%	3.95	.665
Entrepreneurship education is integrated into non-business courses.	0.0%	0.0%	29.8%	39.0%	31.1%	4.01	.782
Students from different disciplines collaborate on entrepreneurial projects.	33.7%	43.4%	23.0%	0.0%	0.0%	1.89	.746
Funding limitations significantly impact the effectiveness of entrepreneurship education.	21.9%	50.5%	27.6%	0.0%	0.0%	2.06	.702
Instructors frequently receive professional development training.	23.0%	51.8%	25.3%	0.0%	0.0%	2.02	.695
Teaching resources (e.g., case studies) are readily available.	28.1%	45.2%	26.8%	0.0%	0.0%	1.99	.741
Local businesses collaborate effectively with the institution in designing programs.	31.6%	0.0%	25.3%	43.1%	0.0%	2.80	1.288
Systemic challenges significantly hinder the effectiveness of entrepreneurship education/ training.	63.3%	0.0%	12.0%	24.7%	0.0%	1.98	1.322
Cultural attitudes hinder the development of entrepreneurial skills.	0.0%	0.0%	16.8%	65.1%	18.1%	4.01	.592
There is limited collaboration between universities and the private sector.	0.0%	0.0%	24.7%	49.0%	26.3%	4.02	.715
Government grants for entrepreneurship education/training are accessible.	79.6%	14.0%	6.4%	0.0%	0.0%	1.27	.570
Current policies effectively promote gender equity in training programs.	0.0%	0.0%	13.0%	63.3%	23.7%	4.11	.597
Funding allocation for entrepreneurship initiatives is transparent.	22.2%	58.4%	19.4%	0.0%	0.0%	1.97	.645
The national education strategy supports entrepreneurship in all fields.	30.6%	39.5%	7.1%	22.7%	0.0%	2.22	1.114
Government policies adequately support entrepreneurship education.	0.0%	0.0%	21.2%	62.2%	16.6%	3.95	.614
Policy implementation is effective at the institutional level.	0.0%	0.0%	8.7%	51.3%	40.1%	4.31	.624
There are clear guidelines for integrating entrepreneurship education into curricula.	0.0%	0.0%	18.4%	63.0%	18.6%	4.00	.609
Curriculum diversification is crucial for improving program effectiveness.	0.0%	0.0%	18.1%	65.1%	16.8%	3.99	.592
Involving entrepreneurs in curriculum design would significantly improve the program.	0.0%	0.0%	0.0%	16.6%	83.4%	4.83	.372
Post-graduation follow-up (e.g., mentorship hotlines) is important for entrepreneurial success.	0.0%	0.0%	0.0%	41.6%	58.4%	4.58	.493
Metrics like startup survival rates effectively define program success.	0.0%	0.0%	0.0%	22.2%	77.8%	4.78	.416
Stakeholder collaboration is essential for enhancing program relevance.	0.0%	0.0%	0.0%	28.1%	71.9%	4.72	.450
Entrepreneurship education should start earlier in the academic journey.	0.0%	0.0%	0.0%	26.8%	73.2%	4.73	.443
Success stories of local entrepreneurs should be highlighted in the program.	0.0%	0.0%	0.0%	29.6%	70.4%	4.70	.457

Table 1: Summary of Responses