

Difficulties of Connotation Upgrading of Innovation and Incubation Platform in Entrepreneurship a Higher Vocation College

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ABSTRACT

Upgrading platforms for innovation and entrepreneurial incubation poses several challenges, especially in improving connotations. In this context, this study aimed to determine the difficulties of connotation upgrading in innovation and entrepreneurship incubation platforms in a higher vocation college in Henan Province, China, during the School Year 2023-2024. Data needed for this study were collected from a sample of 253 teacher-respondents using a self-made survey questionnaire that has passed the rigorous tests of validity and reliability. Data gathered showed a high level of difficulties among teacher-respondents in connotation upgrading of innovation and entrepreneurship incubation platforms in higher vocational colleges. The ensuing analysis likewise showed no significant difference in the difficulties of connotation upgrading innovation and entrepreneurship incubation platforms in higher vocational colleges when teacher respondents were grouped according to demographics. The results of the study call for higher education institutions to foster innovation and entrepreneurship by putting those recommendations into practice in the conclusion section and giving students the tools and resources they need to thrive in the cutthroat world of contemporary business.

KEYWORDS

Education, Innovation and entrepreneurship incubation, Connotation, Curriculum development, Mentoring and guidance







INTRODUCTION

In Beijing China it is evident that innovation and entrepreneurship incubation platforms in higher vocational colleges are vital for nurturing business ventures and talent to drive economic growth. Many colleges have established such platforms, providing infrastructure, training, mentoring, and access to networks to assist students and faculty in developing innovative ideas and startups. In the words of Zhang and Fung (2023), these platforms aim to facilitate technology commercialization, job creation, and solutions for pressing societal needs.

In recent years, there has been a growing emphasis on upgrading the quality and impact of such incubation platforms, moving beyond basic infrastructure and services to enrich the connotation and effectiveness of the platforms. For example, platforms could expand their focus from general business incubation to specialize in technology commercialization or social enterprise tailored to local economic needs. Platforms could also increase their integration with the college curriculum to enable more experiential learning (Zhang et al., 2022).

However, higher vocational colleges need help to upgrade their incubation platforms. Constraints in funding, staff capabilities, incentive structures, and alignment with educational programming can slow enhancement efforts. There are also challenges in monitoring and evaluating progress if clear upgrade targets are not established initially. Upgrading the quality and connotation of incubation platforms is thus critical. This could involve sharpening platform focus on high-potential startups, forging deeper industry linkages for market access, integrating entrepreneurial experiences into more curricula, and refining processes to nurture ventures from the idea stage to commercial viability. Cultural perceptions also influence incubation platform development. Given China's economic policy support and stories of highly successful startups, entrepreneurship is increasingly seen as a desirable career path. This motivates more students to leverage incubation platforms to pursue entrepreneurial aspirations (Li et al., 2022).

Understanding the current practices and difficulties in upgrading incubation platforms can inform policy and decisions on how vocational colleges can enhance quality, output, and outcomes to boost innovation capacity and entrepreneurial impact. Based on the controversy, the researcher will investigate the current practices and difficulties a specific higher vocational college faces in trying to upgrade its innovation and entrepreneurship incubation platform. By examining the college's strategies, implementation experiences, and obstacles, the research provides insights into feasible approaches for enhancing incubation capacities and outcomes in similar higher education contexts. The findings could inform policy and decision-making regarding how vocational colleges can best leverage incubation platforms to drive positive economic and social impact through innovation and entrepreneurship.

Curriculum development has highlighted integrating innovation and entrepreneurship into vocational education curricula through experiential learning approaches to cultivate an entrepreneurial mindset among students (Bacigalupo et al., 2016). Studies have identified that access to financing is vital for translating ideas into viable new ventures. Developing funding channels and assistance facilitates entrepreneurial capacity building (Mason & Brown, 2014). In the words of Stam et al. (2017) and Soetanto and Jack (2016), fostering partnerships between vocational colleges, industry, and local communities strengthens the entrepreneurial ecosystem around incubation platforms. Implementing monitoring, evaluation, and learning frameworks assess incubator outcomes and facilitate improvement over time (Guerrero & Urbano, 2021). Studies have found that many vocational colleges lack access to experienced entrepreneurs, investors, and business executives to guide student entrepreneurs (Brown & Mason, 2017; O'Connor, 2013). This situation hinders knowledge transfer.

This study is anchored on institutional theory, which provides a framework for understanding how external pressures and expectations shape organizational policies and practices. Institutional theory suggests that colleges operate in collaboration in the context of upgrading innovation and entrepreneurship incubation platforms in higher vocational colleges. Wider social forces and the broader entrepreneurial ecosystem influence their platforms and activities. Specifically, regulatory requirements, funding availability, connections with industry partners, and the emphasis on entrepreneurship in the overall education system become salient factors. Upgrading incubation platforms requires aligning with the demands and resources of critical stakeholders that lend legitimacy and support. However, conflicting pressures between governmental controls, market forces, public perceptions, and internal capacity pose notable difficulties. By applying institutional theory, this study offers a structured approach to analyzing higher vocational colleges' activities to upgrade incubation platforms. It also facilitates examining difficulties faced due to alignment issues between institutional expectations versus internal objectives, resources, and competencies. The theory provides a valuable lens through which to interpret the findings and offer recommendations tailored to the context of Chinese vocational education (Lamorte, 2022).

Objectives

This study aimed to determine the difficulties of connotation upgrading innovation and entrepreneurship incubation platforms in higher vocation colleges in Henan Province, China, during the School Year 2023-2024. Specifically, it sought to determine: 1) the level of difficulty of connotation upgrading of innovation and entrepreneurship incubation platforms in higher vocation colleges in terms of curriculum development, mentoring and guidance, funding and financial support, collaboration and networking, and evaluation and assessment; and 2) the significant difference, if any, in the level of difficulty of connotation upgrading innovation and entrepreneurship incubation platforms in higher vocation colleges when grouped according to the aforementioned variables.

METHODS

This study used the descriptive research design to determine the difficulties of connotation upgrading innovation and entrepreneurship incubation platform in a higher vocational college in Henan Province, China, during the School Year 2023-2024. According to Bryman and Bell (2019), descriptive research design consists of collecting and analyzing data through various methods, such as surveys, interviews, observations, and secondary data analysis.

Respondents

The study's respondents were 253 college teachers in one higher vocational college in Henan Province, China, during the School Year 2023-2024, using purposive sampling.

Research Instrument

This paper used a self-made survey questionnaire to gather the data, mainly from college teacherrespondents. It was subjected to validity (4.56-excellent) and reliability (0.743-Acceptable). All of them were interpreted as worthy and good, respectively. This comprised two parts. Part I dealt with the profile of the respondents, and Part II contained topics that determine the difficulties of connotation upgrading of innovation and entrepreneurship incubation of the respondents in curriculum development, mentoring and guidance, funding and financial support, collaboration and networking, and evaluation and assessment as to very high level, high level, moderate level, low level, and very low level.

Data Collection

After the research instrument was found valid and reliable, the researcher wrote a letter to the management of the university asking permission to conduct the study and administer the questionnaire to the respondents. After the approval, the researcher administered the questionnaire to the respondents and gave instructions on how to complete the questionnaire objectively and honestly. The questionnaire was sent through email, and the respondents answered it online. After

answering, their responses were saved, retrieved, compiled, and tabulated. The data acquired from the respondents' responses were tallied and tabulated using the proper statistical tools with the aid of the Statistical Package for Social Sciences (SPSS) by the assigned statistician.

Data Analysis

Objective No. 1 used a descriptive-analytical scheme and mean as a statistical tool to determine the level of difficulty of connotation upgrading of innovation and entrepreneurship incubation in a higher vocational college in terms of curriculum development, mentoring and guidance, funding and financial support, collaboration and networking, and evaluation and assessment. Objective No. 2 used the comparative analytical scheme and Mann-Whitney U test to determine if there was a significant difference in the level of difficulties of connotation upgrading of innovation and entrepreneurship incubation in a higher vocational college when grouped and compared according to the abovementioned variables.

Ethical Consideration

Participants' identities were kept secret or anonymous, and they were guaranteed that self-identifying statements and information were not included in the data-gathering instrument. Anonymity and confidentiality are essential because they safeguard the privacy of persons who willingly consent to participate in research. The possible harm to the participants, the researcher, the larger community, and the institution was seriously considered in the study. The harm can be in the form of distress, shame, and worry, which are difficult to anticipate or manage, as well as bodily harm, resource loss, emotional harm, and reputational impairment

RESULTS AND DISCUSSION

Items	Mean	Interpretation
1. Faculty members are provided with professional		
development opportunities related to assessment	4.03	High level
techniques and best practices		
2. There are regular assessments of the impact of		
entrepreneurship programs on student's	4.12	High level
entrepreneurial skills and mindset development		
3. External experts or advisory boards are involved in the		
assessment process to provide insights into program	4.08	High level
improvement		
4. A dedicated team or committee is responsible for		
overseeing and improving the assessment and	4.00	High level
evaluation processes for innovation and	4.00	ingh level
entrepreneurship programs		
Mean	4.06	High level

Table 1. Level of difficulties of connotation upgrading of innovation and entrepreneurshipincubation platform in higher vocational colleges in curriculum development

The level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platform in higher vocational colleges in the area of curriculum development obtained the overall mean of 3.97, interpreted as "High Level." Moreover, item 3, "Budget constraints frequently hinder the incorporation of new content or technologies into the curriculum of innovation and entrepreneurship programs," obtained the highest mean of 4.02, interpreted as "High Level." In contrast, item 2, "There is a lack of up-to-date resources and materials that reflect the latest innovations and trends in the curriculum," obtained the lowest mean of 3.87, and was interpreted as "High Level". This implies that while vocational colleges encounter other curriculum challenges

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around alignment, budgets, and modifications, obtaining cutting-edge content appears to be the most problematic. Sourcing and integrating current innovations and technologies into lessons requires priority improvement. Possible steps include industry partnerships for the co-creation of content, incentivizing faculty to continually update materials, leveraging online repositories and digital tools, and establishing rapid-response teams to infuse emerging trends. Enhancing access to the latest developments promises to bridge curriculum with real-time advancements, equip students with in-demand skills, and strengthen venture ideas tied to future markets.

 Table 2. Level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platform in higher vocational colleges in mentoring and guidance

Items	Mean	Interpretation
1. Students encounter difficulties in finding suitable mentors or advisors for their entrepreneurial endeavors	4.00	High level
2. It is a regular occurrence for students to have difficulties in accessing resources or workshops that help them develop their entrepreneurial skills and mindset	3.98	High level
3. It is common for students to struggle with navigating the process of finding and securing mentorship or guidance for their entrepreneurial ventures	4.05	High level
4. Students encounter difficulties in balancing their academic coursework with their entrepreneurial pursuits due to a lack of guidance and support	4.01	High level
Mean	4.01	High level

The level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platform in higher vocational colleges in mentoring and guidance obtained the overall mean of 4.01, interpreted as "High Level." Moreover, item 3. Which states, "It is common for students to struggle with navigating the process of finding and securing mentorship or guidance for their entrepreneurial ventures," obtained the highest mean of 4.05, interpreted as "High Level." In contrast, item 2, which says, "A regular occurrence for students to have difficulties in accessing resources or workshops that help them develop their entrepreneurial skills and mindset," obtained the lowest mean of 3.98, interpreted as "High Level." It implies that while students may need help finding suitable mentors or balancing academics, accessing developmental resources appears most problematic. Providing workshops and tools to build entrepreneurial capabilities represents an area needing priority improvement. Possible steps include expanding online modules, incentivizing faculty to hold skill-building sessions, hosting a repository of self-paced courses, and integrating reflective exercises into the curriculum. Enhancing the availability of resources that cultivate the entrepreneurial mindset promises to equip more students with the critical abilities to recognize opportunities, tolerate uncertainty, and transform ideas into working ventures.

Table 3. Level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platform in higher vocational colleges in funding and financial support

Items	Mean	Interpretation
1. Innovation and entrepreneurship programs face challenges in securing adequate funding for student start-ups and initiatives	3.94	High level
2. It is common for students to encounter difficulties in accessing grants, scholarships, or funding opportunities to support their entrepreneurial ventures	3.96	High level

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3. There are limitations in the availability of financial resources for providing seed capital or investments to student-led start-ups	3.93	High level
4. There is a regular occurrence of budget constraints that hinder the expansion or improvement of innovation	3.98	High level
and entrepreneurship programs	3.90	nigii level
Mean	3.95	High level

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The level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platform in higher vocational colleges in the area of funding and financial support obtained the overall mean of 3.95, interpreted as "High Level." Moreover, item 4, which reads, "There is a regular occurrence for budget constraints to hinder the expansion or improvement of innovation and entrepreneurship programs," obtained the highest mean of 3.98, interpreted as "High Level." In contrast, item 3, which says, "There are limitations in the availability of financial resources for providing seed capital or investments to student-led start-ups," obtained the lowest mean of 3.93, interpreted as "High Level'. This implies that while innovation programs may face funding challenges, obtaining investment capital for student ventures is the most constrained process. Providing fledgling start-ups with adequate seed finances represents an area needing priority improvement. Possible steps include forging corporate partnerships for prototype development funds, designing voucher systems to access professional services, establishing angel investor groups, and instituting policies for equity participation. Enhancing available capital promises to resource better validating and launching student ventures, contributing to higher longterm viability and impact.

Table 4. Level of difficulties of connotation upgrading of innovation and entrepreneurshipincubation platform in higher vocational colleges in collaboration and networking

Items	M	ean I	nterpretation
 Students and faculty encounter difficulties in e collaborations with local 			<u>interpretation</u>
	4.00	High-le	vel
industries for practical projects and networking opp	ortunities	U	
2. Common obstacles in organizing and facilitati	ng networkin	g events an	ıd
interactions between students,	4.04	High lev	zel
faculty, and local entrepreneurs		-	
3. It is a regular occurrence for students to face of in external innovation and	lifficulties in j	participatir	ng
	3.98	High le	vel
entrepreneurship competitions and events to expand	l their networ	rks	
4. It is common for students to struggle with bui	lding their pr	ofessional	
online presence and networking	4.03	High le	vel
skills due to a lack of resources and support Mean	4.01	High le	vel

The level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platform in higher vocational colleges in collaboration and networking obtained the overall mean of 4.01, interpreted as "High Level." Moreover, item 2, "Common obstacles in organizing and facilitating networking events and interactions between students, faculty, and local entrepreneurs," obtained the highest mean of 4.04, interpreted as "High Level". In contrast, item 3, which reads, "A regular occurrence for students to face difficulties in participating in external innovation and entrepreneurship competitions and events to expand their networks," obtained the lowest mean of 3.98, interpreted as "High Level". This result suggests that while connecting with industries and building an online presence may prove challenging, accessing external start-up events appears most problematic for students. Enabling participation in competitions represents an area needing priority improvement. Some steps include an institutional calendar of relevant events,

sponsorship policies to alleviate costs, academic credit for top finishes, and virtual attendance options. Expanding access to external ecosystem happenings promises to provide students with pitching experience, industry exposure, peer networking, and feedback beyond the classroom walls.

Table 5. Level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platforms in higher vocational colleges in evaluation and assessment

	Items	Mean	Interpretation
1.	Encounter challenges in accurately measuring the entrepreneurship programs in preparing students f		
		4.04	High level
2.	There are obstacles in establishing clear and measu	rable learni	ng outcomes and
	objectives for innovation and entrepreneurship curricula	3.92	High level
3.	A regular occurrence for, there are issues with facu	lty members	having varying
	assessment practices making it challenging to maintain consistency	3.98	High level
4.	Difficulties in identifying appropriate assessment to	ools and met	thods to evaluate
	entrepreneurial skills and mindset development	4.04	High level
	Mean	3.99	High level

The level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platform in higher vocational colleges in evaluation and assessment obtained the overall mean of 3.99, interpreted as "High Level". When all items were analyzed closely, items 1 and 4 obtained the highest mean scores of 4.04, which was interpreted as a mean high level. Item 1 talked about how respondents experienced challenges in accurately measuring the effectiveness of innovation and entrepreneurship programs in preparing students for real-world ventures. In contrast, item 4 delved into the difficulties in identifying appropriate assessment tools and methods to evaluate entrepreneurial skills and mindset development. In contrast, item 2, which reads, "There are obstacles in establishing clear and measurable learning outcomes and objectives for innovation and entrepreneurship curricula," obtained the lowest mean of 3.92, which is also a high level. The preceding results imply that while assessing program effectiveness and student development poses challenges, defining concrete curriculum goals appears most problematic. Articulating targeted entrepreneurial competencies represents an area needing priority improvement. It could include convening faculty to map skills to industry needs, co-designing rubrics with start-up founders, setting benchmarks through employer surveys, and tracking student progress with e-portfolios. Clarifying expected outcomes promises to inform teaching methods, shape assessments, demonstrate credibility, and highlight growth opportunities.

Variable	Category	Ν	Mean Rank	Mann Whitney U	p- value	Sig. level	Interpretation
Age	Younger Older	108 145	118.75 133.14	6939.000	0.115		Not Significant
Sex at birth	Male Female	135 118 8	134.25 5 118.70	6986.000	0.086		Not Significant
Educational Attainment	Lower Higher	168	129.12 125.93	6960.000	0.739	0.05	Not Significant
Civil Status	Single Married	183 70	122.70 138.25	5617.500	0.124		Not Significant

Table 6. Difference in the level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platform in higher vocational colleges in curriculum development when grouped according to the aforementioned variables

Table 6 summarizes the analysis of the difference in the level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platforms in higher vocational colleges in curriculum and development when grouped according to demographics. The computed p-values of 0.115 for age, 0.086 for sex at birth, 0.739 for education, and 0.124 for civil status were all found higher than the significance level of 0.05 and are henceforth not significant. The null hypothesis is henceforth accepted. This result implies that faculty faces common curriculum design challenges in integrating innovation and entrepreneurship concepts, irrespective of demographic factors. The difficulties are widespread rather than concentrated in any particular subgroup. This indicates that a system-wide approach may be required to address gaps, one that upgrades frameworks, provides templates, shares best practices, and facilitates peer learning. Focused training for all faculties could help overcome obstacles in blending industry demands, new pedagogies, and experiential components into higher vocational curricula.

Table 7. Difference in the level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platform in higher vocational colleges in mentoring and guidance when grouped and compared according to the aforementioned variables

Variable	Category	N	Mean Rank	Mann Whitney U	p- value	Sig. level	Interpretation
	Younger	108	129.06	=(00,000	o (o -		Not
Age	Older	145	125.47	7608.000	0.695		Significant
	Male	135	126.23	0.4	0 (Not
Sex at Birth	Female	118 8	5 127.88	7861.500	0.856		Significant
Educational Attainment	Lower Higher	168	127.31 126.85	7114.000	0.962	0.05	Not Significant
Civil Status	Single Married	183 70	127.75 125.04	6268.000	0.789	Ū	Not Significant

Table 7 illustrates the result of the analysis of the difference in the level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platforms in higher vocational colleges in mentoring and guidance when grouped according to the very same demographics. The computed p-values of 0.695 for age, 0.856 for sex at birth, 0.962 for education, and 0.789 for civil status were all found higher than the significance level of 0.05 and are henceforth found not significant. The null hypothesis is henceforth accepted. This result implies that

institution-wide initiatives are imperative to augment mentoring channels. Some ideas include industry partnerships, incentivizing external experts, formalizing alumni networks, and retiring entrepreneur faculties. A concerted push could help bridge mentorship gaps for all students, irrespective of their faculty's profile.

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Table 8. Difference in the level of difficulties of connotation upgrading of innovation and
entrepreneurship incubation platform in higher vocational colleges in funding and financial
support when grouped and compared according to the aforementioned variables

Variable	Category	Ν	Mean Rank	Mann Whitney U	p- value	Sig. level	Interpretation
	Younger	108	120.77	5155 500	0.005		Not
Age	Older	145	131.64	7157.500	0.235		Significant
	Male	135	126.07	-0	- 0		Not
Sex at Birth	Female	118 8	5 128.07	7839.000	0.825		Significant
Educational Attainment	Lower Higher	168	122.09 129.48	6723.000	0.441	0.05	Not Significant
Civil Status	Single Married	183 70	125.92 129.83	6207.000	0.699		Not Significant

Table 6 shows the analysis of the difference in the level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platforms in higher vocational colleges in funding and financial support when grouped according to the same demographics earlier mentioned. The computed p-values of 0.236 for age, 0.825 for sex at birth, 0.441 for education, and 0.699 for civil status were all found higher than the significance level of 0.05 and are henceforth found not significant. The null hypothesis is henceforth accepted. This result implies that addressing financial barriers necessitates an ecosystem-wide approach - across government, industry, and academia. Some ideas could include public-private partnerships, corporate sponsorships, revolving credit lines, targeted grants, and addressing structural issues in accessing institutional funding. A coordinated push could drive consistency.

Table 9. Difference in the level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platform in higher vocational colleges in collaboration and networking when grouped and compared according to the aforementioned variables

Variable	Category N	N	^{Iean} Rank V	Whitney Mann	U value ^p	- level ^{sig}	Interpretation
Age	Younger Older	108 145	134.94 121.09	6972.500	0.130		Not Significant
Sex at Birth	Male Female	135 118	127.21 126.76	7936.500	0.960	0.05	Not Significant
Educational Attainment	Lower Higher	85 168	124.54 128.25	6930.500	0.698		Not Significant

Civil Status	Single	183	128.45			Not Significant
	Married	70	123.22	6140.500	0.605	Significant

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Table 9 summarizes the analysis of the difference in the level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platforms in higher vocational colleges in collaboration and networking when grouped according to the same demographics. The computed pvalues of 0.130 for age, 0.960 for sex at birth, 0.698 for educational attainment, and 0.605 for civil status were all found higher than the significance level of 0.05 and are henceforth found not significant, prompting the acceptance of the null hypothesis. This result implies that a coordinated push is needed to upgrade networking channels. Some ideas include having dedicated alliance teams, industry mentors-in-residence, sponsoring competitions jointly, and formalizing alumni channels. Bridging the collaboration gap necessitates an integrated approach.

Table 10. Difference in the level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platform in higher vocational colleges in the area evaluation and assessment when grouped and compared according to the aforementioned variables

Variable	Category	N	Mean Rank	Mann Whitney U	p- value	Sig. level	Interpretation
Age	Younger	108	120.58	7136.500	0.221		Not
	Older	145	131.78				Significant
	Male	135	123.20				Not
Sex at Birth	Female	118 8	5 131.34	7452.500	0.370		Significant
Educational Attainment	Lower Higher	168	120.60 130.24	6596.000	0.315	0.05	Not Significant
Civil Status	Single Married	183 70	127.92 124.60	6237.000	0.743		Not Significant

Table 10 shows the analysis of the difference in the level of difficulties of connotation upgrading of innovation and entrepreneurship incubation platforms in higher vocational colleges in evaluation and assessment when grouped according to demographics. The computed p-values of 0.221 for age, 0.370 for sex at birth, 0.315 for educational attainment, and 0.743 for civil status were all found higher than the significance level of 0.05 and are henceforth found not significant. The null hypothesis was henceforth accepted. A centralized framework may be needed to upgrade evaluation mechanisms across the institution. Some ideas include surveys to map competencies, setting standards based on industry demands, and longitudinal studies tracking student ventures. A coordinated approach could drive consistency in assessments.

CONCLUSION

Based on the analyzed and interpreted data presented in this study, teachers generally demonstrate a high level of difficulty in connotation upgrading of innovation and entrepreneurship incubation platforms in higher vocational colleges in the different areas covered in the study when grouped and compared according to the aforesaid variables such as difficulties in providing sufficient opportunities for hands-on experiences, difficulties in providing tailored support across all student ventures and field, difficulties in tapping external finances from corporate sponsors and partners; students struggles to find suitable mentors or balance academics, accessing developmental resources

appears most problematic, funding challenges, and accessing external startup events appear most problematic for students.

RECOMMENDATION

The researcher recommends the following course of action:

1. Expand experiential learning opportunities for students to validate ideas and test prototypes by establishing innovation labs, funding pilot projects, and formalizing partnerships with incubators.

2. Optimize the mentor network to provide tailored support for diverse student ventures by recruiting external experts, building a mentor-matching process, and training faculty to integrate advisory services.

3. Enhance external funding links by hiring dedicated partnership teams, designing sponsorship incentives, and strengthening the investor pipeline to scale student ventures.

4. Institute recurring student-entrepreneur networking programming like mentoring circles, guest lectures, and competitions to enable idea exchanges, market validation, and expert advice.

5. Establish centralized oversight for evaluating programs using impact metrics, data collection tools, and an iterative feedback process. This promises continual improvements through targeted assessments.

REFERENCES

Alshebami, Ali S. & Marri, S.H. (2022). The Impact of Financial Literacy on Entrepreneurial Intention: The Mediating Role of Saving Behavior

https://www.frontiersin.org/articles/10.3389/fpsyg.2022.911605/full

- Asian Development Bank (2021). People's Republic of China: Sharing ADB's Operational Knowledge in Technical and Vocational Education Training in the PRC with CAREC Member Countries https://rksi.adb.org/wp-content/uploads/2023/07/53101-001-tacr-en.pdf
- Baggen, Y. et al (2021). Making Entrepreneurship Education Available to All: Design Principles for Educational Programs Stimulating and Entrepreneurial Mindset https://edepot.wur.nl/558186
- Bluman, A.G. (2012). Elementary statistics: A step by step approach (9th ed.).
- Boldureanu, G. et al (2020). Entrepreneurship Education through Successful Entrepreneurial Models in Higher Education Institutions https://www.mdpi.com/2071-1050/12/3/1267
- Bryman, A. & Bell, E. (2019). Business research methods. Oxford University
- Creswell, J.W. (2013). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.
- DeVellis, R.F. (2017). Scale development: Theory and applications. Los Angeles: Sage
- Embretson, S.E. & Reise, S.P. (2013). Item response theory for psychologists.
- Entrepreneurship Ability: The Moderating Effect Test Based on Entrepreneurial Atmosphere https://www.mdpi.com/2071-1050/14/20/13020
- Flores, M.C. et al (2024). Entrepreneurial universities and intrapreneurship: A process model on the emergence of an intrapreneurial university

https://www.sciencedirect.com/science/article/pii/S0166497223002171

Gravetter, F.J. & Wallnau, L.B. (2016). Statistics for the behavioral sciences. Cengage

- Institutions on its Role in the Technology Business Incubation in the Visayas, Philippines https://scholarhub.ui.ac.id/cgi/viewcontent.cgi?article=1071&context=seam
- Jing, T. et al (2022). Vocational Education in China: Its History, Roles, Challenges and the Way Forward file:///C:/Users/STIWNU/Downloads/19.VocationaleducationinChina.pdf
- Johnson, D. et al (2019). Entrepreneurial Dynamism and the Built Environment in the Evolution of University Entrepreneurial Ecosytems

file:///C:/Users/STIWNU/Downloads/ICC_BuiltEnv.pdf

Polaris Global Journal of Scholarly Research and Trends

Kang, Y. (2020). A Study of Graduate Entrepreneurs in Urban China: The Case of Shenzhen https://commons.ln.edu.hk/cgi/viewcontent.cgi?article=1083&context=otd

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Kazhenov, S. & lamastra, C. (2022). University Business Incubators: Systematic Literature Review and Thematic Analysis.

file:///C:/Users/STIWNU/Downloads/Kazhenov_2022_UniversityBusinessIncuba torsSystematicLiteratureReviewandThematicAnalysis..pdf

- Liang, G. et al (2021). The Evaluation of College Students' Innovation and Entrepreneurship Ability Based on Nonlinear Model https://sciendo.com/article/10.2478/amns.2021.2.00101
- Lv, M. et al (2022), Improving Education for Innovation and Entrepreneurship in Chinese Technical Universities: A Quest for Building a Sustainable Framework https://www.mdpi.com/2071-1050/14/2/595
- Manconi, M. et al (2022). Attributes of Business Incubators: A Conjoint Analysis of
- Maritz, A. et al (2021). Entrepreneurship Education in Australia. file:///C:/Users/STIWNU/Downloads/EntrepreneurshipeducationinAustralia.pdf
- Morke, O. A. & Swensson, K.P.M. (2020). Exploration of Virtual incubators and Development of Incubator Services for Digital Entrepreneurship https://www.divaportal.org/smash/get/diva2:1451092/FULLTEXT01.pdf
- Pang, Z. (2022). Research on the Existing Problems and Strategies of Chinese College
- Patricio, L.D. & Ferreira, J.J. (2023). Aligning entrepreneurial universities' HEInnovate dimensions with entrepreneurs' needs: A graduate entrepreneur- centered perspective https://www.sciencedirect.com/science/article/pii/S1472811723001209
- Pugh, R. et al (2021). Developing Local Entrepreneurial Ecosystems through Integrated Learning Initiatives: The Lancaster Case. https://link.springer.com/article/10.1007/s11187-019-00271-5
- Silva, J. et al (2021). Entrepreneurial Ecosystem: Analysis of the contribution of universities in the creation of technology- based firms. https://www.redalyc.org/journal/5707/570765171012/html/
- Tomy, S. & Pardede, E. (2018), From Uncertainties to Successful Start Ups: A Data Analytic Approach to Predict Success in Technological Entrepreneurship. https://www.mdpi.com/2071-1050/10/3/602
- Yang, Y. et al (2022). The Influence Mechanism of Strategic Partnership on Enterprise.
- Ybañez, A.P. et al (2021). Perception and Challenges of Select Higher Educational York: McGraw-Hill.
- Zhang, Y. et al (2022). Understanding Incubated Start-ups' Continuance Intention towards Entrepreneurial Incubation Platforms: Empirical Evidence from China. https://www.mdpi.com/2071-1050/14/23/15802
- Zhao, L. et al (2022). Factors Influencing Chinese College Students' Innovation and and Entrepreneurship Ability: The Moderating Effect Test Based on Entrepreneurial Atmosphere. https://www.mdpi.com/2071-1050/14/20/13020