DOI: 10.53555/ks.v12i4.3691

# Entrepreneurial Competence in Academia: A Qualitative Study of Faculty Members' Views in Higher Education Institutions

## Hina Gul<sup>1\*</sup>, Dr. Ishrat Siddiqa Lodhi<sup>2</sup>, Dr. Salma Nazar Khan<sup>3</sup>

<sup>1</sup>P.hD Scholar, Department Of Education, Faculty of Education, Fatima Jinnah Women University, City Campus, Pakistan <sup>2</sup>Associate Professor, Department Of Education, Faculty of Education, Fatima Jinnah Women University, City Campus, Pakistan, Email: ishratsiddiqalodhi@gmail.com

<sup>3</sup>Adjunct Faculty, Department Of Education, Faculty of Education, Fatima Jinnah Women University, City Campus, Pakistan, Email: salmanazarkhan@gmail.Com

## \*Corresponding Author: Hina Gul \*Email: hinagul469@gmail.com

#### **Abstract**

This research explores faculty members' views on entrepreneurial competence in public sector Higher Education Institutions (HEIs) of Rawalpindi and Islamabad, Pakistan. The study utilizes an interpretivist paradigm to explore faculty views through face-to-face nine semi-structured interviews using a convenience sampling technique to collect data from nine faculty members. Subsequently interviews were transcribed, coded into key patterns representing entrepreneurial pedagogical practice. This research used thematic analysis in qualitative research approach (Simunaniemi & Muhos, 2017; Vaismoradi et al. 2019) to establish insights into entrepreneurial pedagogical practices of the faculty members in HEIs. The expansive learning theory has been used to describe the dynamics of entrepreneurial competence in teaching practices that emphasize innovation, collective change, and the transformation of educational approaches to entrepreneurship. This study explores opportunities in integrating entrepreneurial competence into the curriculum of HEIs, indicating that many faculty members are lacking the entrepreneurial teaching-learning practices; therefore, need proper training to build the capacity to organize entrepreneurial activities to better prepare students for the entrepreneurial challenges of the future. Further, emphasize on need to shift pedagogical practices toward more action-oriented, skills-based teaching, including industry-based practical workshops and interdisciplinary collaborations. The findings of the study provide practical insights into improving entrepreneurial capacity within HEIs.

Key Words: Entrepreneurial Competence, Faculty members, Higher Education Institutions (HEIs), Entrepreneurial Education

#### Introduction

Entrepreneurship is imperative for any country's socioeconomic growth and sustainability and is profoundly integral to the contemporary dynamics of business and teaching-learning practices (Bogdea et al., 2024). Similarly, HEIs are vital in advancing growth and economic development. The research conducted worldwide documented the importance of acquiring entrepreneurial competencies, transforming students' creativity and skills in problem-solving, and transforming them into more skilled individuals (UNESCO-UNEVOC, 2019). Teachers are changing agents of socioeconomic development in any society; it is expected that teachers provide knowledge and practical skills to young students to enhance their entrepreneurial competencies of creativity and self-resilient to create opportunities for themselves and others as well (Khanam, 2018), incorporating real-world teaching-learning entrepreneurial practices (ECOTEC, 2010). Morselli (2019) emphasized innovative pedagogical practices, including creativity, risk-taking ability, and practical ability to deal with uncertain situations to transform traditional teaching and learning theoretical practices.

Furthermore, HEIs provide entrepreneurial education through extramural activities like fairs, boot camps, and workshops. However, a holistic approach to promoting an entrepreneurial institutional culture of innovation and commercialization of research is needed to foster entrepreneurial competence among faculty members in HEIs. Similarly, entrepreneurial competencies need to be aligned with education to meet the needs of the industries and foster lifelong learning for sustainable economic growth (Kim & Park, 2020). Pakistan, 60% of its population is under 30 years of age, and an increasingly unemployment rate is a critical point in its socioeconomic path (Sheikh et al., 2019). HEIs in Pakistan are more focused on theoretical entrepreneurship education, limiting the practice-based training and support that ultimately impede young people's creative ideas and self-employment potential (Ahmed et al., 2022). In this situation, entrepreneurial education may foster creativity, innovation, and self-employment opportunities among graduates, aiding Pakistan's economic growth and development (Rashid, 2019). Higher Commission Education of Pakistan (HEC) has taken the initiative of establishing Business Incubation Centers (BICs) and Office of Research and Innovation, Commercialization (ORIC) in HEIs; however, Siegel and Wright (2015) these initiatives can only be sufficient if half of the faculty members would have entrepreneurial competence in teaching-learning practices. Entrepreneurial faculty in HEIs is the utmost requirement of the time as HEC has revamped the

undergraduate Education across HEIs of Pakistan by integrating Competence-Based Education (CBE) by 2021. Khalil and Belitski (2020) emphasized capacity building of entrepreneurial teaching and learning competencies.

## **Research Questions**

The following are the research questions formulated for this study:

- 1. How do higher education institutions faculty members view the need for Entrepreneurial Competence?
- 2. How do faculty members in higher education institutions view incorporating entrepreneurial learning into the existing curriculum?

## Literature Review

Any country's economic growth depends heavily on entrepreneurship. In this context, universities can emerge as a significant driver for economic growth and technological progress in the 21st century by incorporating entrepreneurship education into higher education (Boldureanu, 2020; Barba-Sáncheza et al., (2018). According to Tanveer et al. (2020), HEIs are accepted as the centre of promoting entrepreneurial culture to deliver entrepreneurial education to assist, facilitate, and provide opportunities for students to start their ventures and businesses. Jiatong et al. (2021) state that HEIs design innovative curricula involving young entrepreneurs in practical learning. Entrepreneurship education involves searching for opportunities, helping the individual be creative, and taking risks to bring ideas into action (Gautam & Manish, 2015). Teachers are one of the significant sources of entrepreneurial knowledge and skills and create an entrepreneurial mindset by employing different teaching methods (Yuan et al., 2020). However, the European Commission (2011) stated that teachers cannot teach entrepreneurship unless they become innovative and entrepreneurial. The faculty in HEIs should be entrepreneurial role models for their students to reach this objective (Ruskovaara & Pihkala, 2015; Peltonen, 2015). Canziani et al. (2015) mentioned that it is mainly observed that teachers are compelled to reflect upon what they teach and how they teach entrepreneurship. Faculty in HEIs still need to develop entrepreneurial competencies among learners using innovative entrepreneurial teaching and learning practices (Joensuu-Solo, 2020; Joensuu-Salo et al., 2020). HEIs are vital in promoting knowledge and skills by transferring the research into commercialized activity (Rubin et al. (2015). Doherty and Stephen (2020) state that entrepreneurial activities include case studies and practice-based learning rather than theory or lectures, as skill-based activities allow graduate students to participate in entrepreneurship and job creation (Mason et al., 2014). Bergmann et al. (2018) highlight that students who participate in entrepreneurial activities and courses become more inclined toward new ventures and entrepreneurship. Business Incubation Centers (BICs) in HE plays an important role in opening new opportunities for students through transferring academic research into commercializing activity and adding creative and innovative value to learning institutions (Kolympiris & Klein, 2017); providing the platform aiming to reduce unemployment by creating new ventures (Jamilet al., 2016).

Educational organizations are immensely working in entrepreneurship education through innovative programs and incubators to seed students and faculty to incorporate the entrepreneurial mindset, attitude, and teaching approaches, especially in course offerings (Ozen, et al., 2023). Audretsch (2015) emphasized developing an entrepreneurial mindset among students and teachers through designing new courses, curricula, activities, and programs in HEIs to promote innovation and entrepreneurship to contribute towards organizational, societal, and economic growth. Globally, entrepreneurship in academics is developing new models and missions to understand this discipline better. Thus, the challenging task is implementing entrepreneurship beyond business studies in HEIs (Hjortsø et al., 2017). The main goal of entrepreneurship education is to acquire entrepreneurial competencies (Lackeus, 2015); therefore, Neck and Greene (2011) propose teaching entrepreneurship as a method that requires using, applying, and acting entrepreneurship rather than only understanding and knowing it. Ontario report (2016) emphasized that the 21st-century educational system should incorporate competencies that explicitly integrate into curricula and improve pedagogical practices. Furthermore, competency development must be aligned with the programs of the HEI to contribute to social changes, fulfil market needs, and link markets with higher education institutions (Mir, 2023). According to the Bacigalupo et al., (2016), entrepreneurship is defined as a competence that can be applied to all aspects of life, including fostering personal growth, actively participating in society, (re)entering the job market as an employee or a self-employed person, as well as beginning ventures (that may be cultural, social, or commercial).

Entrepreneurship education and training help entrepreneurs develop the creativity, innovativeness, and agility needed to launch a firm (Ori & Theuri, 2016; Byun et al., 2018). Entrepreneurial perseverance (EP) has thus been hailed as one of the most important traits of successful entrepreneurs and business start-ups (Zhu et al., 2018); financial awareness (Forte, 2014); utilization of the resources and knowledge to develop or generate new business opportunities and managing the businesses (Bu & Cazurra, 2020). Furthermore, current education practices focus on academic standardized tests that reduce the creativity, risk-taking, and critical thinking vital for entrepreneurs (Altan, 2014); therefore, Hagg and Gabrielsson (2020) emphasize that practical learning experiences and opportunities should be part of entrepreneurial teaching techniques. Competency-based learning is an innovative paradigm shift that requires fundamental adjustments to existing structures, methods, and regulations underlying the conventional presumptions and attitudes in the educational system (Casey, 2018); focusing on the process of achieving learning outcomes that target individual performance where teachers play the role of the guide and need the training to teach CBE themselves (Açıkgöz et al., 2021). Takala and Korhonen-Yrjonheikki (2019) relate entrepreneurial competencies with Sustainable Development Goals (SDGs), including knowledge, understanding, creativity, collaboration, communication, cooperation, critical thinking, and innovative and reflective practices. Pakistan Vision 2025 and National Education Policy (2017) emphasized training opportunities and skill-based education for youth as well as the existing workforce and proposed the implementation of the National Qualification Framework (NVQF) and Competency-Based Training and Assessment (CBT&A). Likewise, they discussed gender disparity, business-industry-academia linkage, and skills and knowledge needed for entrepreneurship in the workplace.

#### **METHODOLOGY**

## Research Approach, Sampling, Instrument & Procedure

The current research aims to explore the views of faculty members regarding entrepreneurial competence in academia utilizing the theoretical underpinning of expansive learning theory. The interpretive paradigm using thematic analysis was employed to analyze the semi-structured interviews from the faculty members' teaching in public sector HEC-recognized HEIs of Rawalpindi and Islamabad. Qualitative analysis is the analysis that allows the researcher to get a deeper understanding of the entrepreneurial behaviour and their environment to achieve success (Simunaniemi & Muhos, 2017); thematic analysis is a technique to transcribe the interview data comprehensively (Vaismoradi et al., 2019) identifying patterns of the dataset and drawing meaning from the reported data (Xu & Zammit, 2020). The researcher designed the interview protocol using a convenience sampling technique to gather the data. All nine face-to-face interviews lasted 60-90 minutes to get a detailed view of entrepreneurial pedagogical practices in HEIs. Then, the researcher gave pseudonyms to the participants and transcribed all the audio recordings of interviews, and further Coding was done. The researcher used member checking for validation purposes and to ensure the participants confirm or deny the interpretation of their given data in the form of interviews; therefore, it is a valuable technique to add credibility to qualitative research (Guba & Lincoln, 1989).

## Theoretical Background

To better understand the entrepreneurship competence of faculty members' pedagogical practices in HEIs, the expansive learning theory provides the theoretical underpinning for the study. Expansive learning is a theory of innovation and collective change of practices where "learners learn something that is not yet there" (p.2). Expansive learning theory is about changing existing practices and bringing innovation to foster entrepreneurial Education (Morselli et al., 2019). It includes seven actions: questioning, analyzing, modelling, examining, implementing, reflecting, and consolidating any entrepreneurial activity.

## **RESULTS**

## Data analysis

The selected views from the nine interviews explain the emergent themes.

## Views regarding Entrepreneurial Competence

Participants discussed competence as skill, attitude, behaviour, and ability to do any task. Almost 80% of the participants elaborated on competence as having skills that can be enhanced with education and the ability to do something efficiently related to studies, jobs, or other activities.

- Competence is how a teacher engages his/her students in the learning process and transfers his/her knowledge; however, if we look at competence from the perspective of entrepreneurship, it would be different by enabling the students to prepare for the market.
- Nowadays, the need is to emphasize teachers' teaching and learning process and how they deliver their content, have the potential to engage students in order to achieve specific outcomes, and opt for different opportunities to enhance their teaching-learning practices.

Participants also discussed their views regarding "entrepreneurship" as an economic drive and growth factor for any individual and country. More than 80% of participants elaborated that an entrepreneur is an innovative person who tries to figure out new possibilities for improvement and has the business skills to turn his innovative idea into a business venture.

- Entrepreneurship is a driving force that positively contributes to Pakistan's economic development and growth.
- Entrepreneurship is a process that includes idea generation, budgeting, financing, execution, and management.
- Entrepreneurship is commercializing and generating funds to support structural operations, materialize people's identical contributions, and combine resources with one's competencies to allow people to create something that adds social value to the social environment.

Participants discussed further that HEC has initiated the policy document to promote entrepreneurial skills and competencies at the undergraduate level in universities of Pakistan, which is a practical program. However, it is highlighted that faculty members are not familiar with it nor taken on board before devising any policy document. Furthermore, it is shared that HEC has set criteria for regular promotion of the faculty members in HEIs to engage in research and publication; consequently, they do not have enough time for entrepreneurial activities. Though they engage their students in activities and practical experiences, these activities and practical work are not designed consciously to develop specific competence among students. Therefore, if faculty members want to promote action-oriented teaching-learning and develop specific skills among students, they need practical pieces of training.

• I reviewed the policy document's niche idea of integrating research with industries and the job market. This is about identifying the existing market problem and finding solutions through academic research. Subsequently, the student can market his/her research toward creative work or a business venture.

The participants highlighted that faculty members need training to teach the new Competency-Based Education; however, they must be inquisitive about learning new skills and competencies, hunting for opportunities for professional grooming, and value addition to learning for this purpose. In contrast, most of the time, departments nominate their faculty members to attend any specific training, seminar, or workshop without knowing their professional needs.

• HEC should provide massive need-based multidisciplinary training to HEI faculty who are eager and willing to be entrepreneurial teachers. Furthermore, proper outlines should be designed to integrate particular competence-based pedagogical skills and practical workshops in courses to improve teaching-learning practices.

Participants discussed their views regarding integrating Competence-Based Education (CBE) at the Undergraduate level in HEIs as a challenging task and attached it to faculty members' acceptance and pedagogical training.

Traditional practices must be replaced with practical knowledge to improve teaching and learning. This is challenging for our experienced faculty
members with strong beliefs and mindsets. We need to create readiness, as every change has slow acceptance. In developing countries, specific
policies and rules are imposed on institutions, teachers, and students without preparing them.

However, participants suggested arranging training for interested and trained faculty members to effectively integrate the entrepreneurship course or activities into their existing degree curriculum before initiating CBE in HEIs. CBE requires theory, practice, and mutual collaboration between HEIs and industries to develop students' entrepreneurial skills.

• Trainees should be well-prepared beforehand by collaborating with consultants, mentors, teachers, policymakers, and curriculum developers in planning, revising, and refining the curriculum to integrate into the existing education system.

Participants also shared that universities have already taken many initiatives to make academic activities like internships and community work mandatory for all students. However, first, we must further change the education system, organization, and organizational culture.

• Teachers do not have the authority to challenge or oppose any rule, policy, or legislation. However, it is essential to take them on board by developing their awareness, readiness, and willingness to adapt, follow, and implement specific new policies effectively rather than criticizing them.

## Provision of training opportunities within or outside the institution

Participants shared their views that ORICs and BICs support in their institutions in arranging training programs related to entrepreneurship, research, and commercialization within and outside the institution. However, these trainings are mostly not as per their professional needs and relevant disciplines. HEIs have a dilemma of the theory-practice gap, and the training programs offered are not goal-oriented nor related to the latest entrepreneurial trends in research and commercialization. Therefore, need assessment before arranging any particular training and workshops is necessary.

- I am starting to stagnate in the training offered at my institution. I would be eager to attend workshops and seminars on research publications, professional development, project grants, innovative teaching-learning methodologies, or teacher education.
- Faculty in HEIs lack a culture of sharing knowledge; therefore, it is important to promote this culture to train the trainees. However, the focus should be on practical experiences HEIs to refresh and familiarize ourselves with new techniques, strategies, and teaching-learning practices, including lectures, seminars, and practice-based teaching-learning strategies to upgrade our knowledge and skills rather than theory.

Majority of participants highlighted that ORICs must devise a multidisciplinary team with faculty members to generate ideas using their expertise and skill level. It will enable them to develop entrepreneurial competencies and enhance their pedagogical practices based on entrepreneurial activities like assignments, tasks, and projects to engage students in productive work and create social value.

- Our socioeconomic conditions are changing, and entrepreneurship has become a necessity beyond the disciplines. However, social science faculty still do not realize the need for entrepreneurship to grow in their teaching-learning profession.
- Faculty members in HEIs need training that can develop their entrepreneurial skills and knowledge for planning and executing projects and their technical aspects by including coaching, mentoring, and supervision as integral components of training programs.
- Faculty can promote entrepreneurial skills among students, encouraging them to start their own small business start-ups or entrepreneurial projects during their degree programs under the guidance and supervision of their mentor teachers and industry experts. This will develop positivity, productivity, motivation, confidence, self-esteem, and self-efficacy among students.
- Entrepreneurial activities across disciplines should be core to networking, social and communication skills, emotional intelligence, critical thinking, business plans, project-based activities, field trips, and practical experiences
- The need is to build strong liaison between industry and academia through refining the curriculum, taking feedback from faculty members, and identifying the gaps within the existing curriculum to devise the scope of industries and forecast career development, aiming to cast trends for students in the future.
- Working with industry can orient faculty members about the market need for a workforce and human resources from academia. At the same time, academia can take specific steps to design strategies incorporating entrepreneurial knowledge and skills into our existing curriculum.
- Apart from teaching-learning and research, teachers join industries to gain some practical experience. It is important to develop a certain mindset
  and competence level among faculty members by providing them with consultancy and advisory services and expert feedback from the industry to
  give practical and hands-on interventions.

It is highlighted that there is a need to carve space and locate relevant opportunities within existing courses in social sciences. Subsequently, the faculty in HEIs can integrate entrepreneurial skills among students by identifying the gaps and spaces in the existing curriculum to help them survive better in their vacuum after graduation.

- The curriculum should be revised by engaging faculty members, course developers, and entrepreneurial experts from industry and academia to integrate entrepreneurial activities and skills practically. This would include simulation, activity, project-based learning, and assignment of practical tasks to create space for innovation in particular degree programs.
- It is needed to adopt innovative pedagogical practices rather than delivering lecture monologues to turn the students' ideas into action by incorporating different action-based pedagogical practices, i.e., problem-based projects, seminars, case studies in teaching-learning practices, sessions with experts, discussion forums, and webinars; practical workshops can be arranged by inviting industry resource persons who share their experiences, including their failures, success stories, and challenges.

Discussing the conceptual understanding and promotion of financial literacy among their students to create value for society. Almost 90% of participants shared that financial literacy is a new term for most fact he guilty members of the social sciences discipline; they further familiarize themselves with it to guide their students in the right direction.

- Given the current situation, where we have a high unemployment rate, students are more inquisitive about the scope and job market of the respective degree. Faculty seriously lacks this competence; we produce labourers, not leaders.
- It is important to give all students the idea that whatever their skills are, they can build their capacity concerning their socioeconomic status and skills.
- This is a new concept for social sciences faculty; conventional thinking about the financial approach does not overcome the risk factors for entrepreneurial activity. It is important to train the faculty to guide their students in calculating the risks, utilizing human resources while executing ideas and assigning practical projects and assignments.
- I think ORIC should arrange task-specific training for faculty members regarding project funding, grants, budgeting, and managing time and resources, as financial literacy is crucial for creating an entrepreneurial university.

Discussing the importance of commercialization in the teaching-learning process; majority shared that many national and international organizations announce grants for research-oriented and social welfare-based innovative ideas. Institutions value faculty members who take on projects; however, the credit for commercializing and marketing the projects is still a dilemma due to the lack of collateral links between the institutions. Furthermore, participants discussed perseverance, motivation, teamwork, and creativity as important skills for entrepreneurs. However, 80% of participants shared that they cannot guide their students in dealing with uncertainty and coping mechanisms in entrepreneurial activities as the education, examination, and assessment systems are slowing down the creativity and critical thinking process among Pakistani learners.

- Design thinking can be used to identify and analyze different aspects of ideas and brainstorm solutions to problems.
- Interdisciplinary and multidisciplinary mutual team-teaching, interest-based projects, channelling human resources, motivating people to learn new skills, and being open-minded to sharing expertise while partnering with other disciplines are required.
- Mobilizing students and networking is strongly advocated through providing exposure and engaging them in different activities within and outside
  the institution to make professional connections. Teachers can motivate the students by sending them to industries to generate ideas and develop
  their products.

#### Discussion

The study brings essential insights into embedding practical, skills-based activities within higher education teaching-learning practices. The concern is that many faculty members remain unfamiliar with implementing CBE policy at the HEIs at the undergraduate level; therefore, they cannot integrate this using a traditional theory-based teaching-learning approach. Therefore, the findings highlighted the need for a competency-based training program for faculty members. The result is aligned with the study conducted by Ackgoz et al. (2021), which found that CBE is important in providing better career prospects for each student. Therefore, professional development is continuously needed to ensure the effective teaching of the new curriculum. Indeed, community work and internships are part of the curriculum; however, more action-oriented, hands-on workshops will be needed to develop such skills. CBE is also a paradigm shift that may change the teaching and learning practices, educational policies, and structure (Sturgis & Casey, 2018).

The study highlighted concerns that HEC emphasizes research and publication output, as there is a considerable gap between its research priorities and the skill set required for a job. Research conducted by Roth et al. (2014) identified that teachers face a theory-practice gap in general and need training in these fields to boost graduates' employability for bringing greater relevance to industrial requirements. Building the capacity of faculty members with multidisciplinary teams is also important for entrepreneurial teaching-learning activities. This approach would align teaching with industry demands, cultivate an entrepreneurial mindset among the students, and enable the graduates with the necessary skills to succeed in the competitive job market. To prepare for future entrepreneurial Education in Pakistan's National Universities, it is crucial to establish a system through which broad consensus may be established on entrepreneurs aligning teaching with industry demands; training is required for entrepreneurial pedagogical behaviour (Fayolle et al., 2006).

The findings reveal important insights into faculty development programs in HEIs that are not as per their professional needs. Most faculty members are interested in search and publication rather than entrepreneurial activities and teaching-learning practices. The findings also bring forth the need to do needs assessments to make such training initiatives goal-oriented and highlight the importance of hands-on workshops in improving pedagogical skills. The literature highlighted that entrepreneurial teachers need frequent modification in their pedagogical practices (Lackeus et al., 2016; Neck & Corbett, 2018). The findings confirmed the need for an innovative shift in social sciences pedagogical practices to effectively integrate entrepreneurship into these disciplines. This would enable students to initiate start-ups and execute projects after graduation. Nisar et al.'s (2024) study confirms that entrepreneurial learning should not be limited to business disciplines only. New educational programs should be designed to foster entrepreneurial skills among young learners in higher education institutions. Findings also highlighted that multidisciplinary activities break down the barriers of conventional boundaries; therefore, faculty members should collaborate and share their knowledge and expertise for entrepreneurial activities, events, training programs, and curriculum changes to create a more dynamic and collaborative teaching-learning environment. This will improve the effectiveness of faculty training initiatives by structuring a needs-driven approach to professional development coupled with a supportive knowledge-sharing culture. These findings underscore the importance of collaborative and inclusive teaching practices in fostering entrepreneurial competence among faculty. A study by Volkmann (2004) identified that HEIs might utilize a multidisciplinary approach to learn and teach entrepreneurship, professional training to foster an entrepreneurial culture, pedagogical practices, and behaviour to promote entrepreneurship among students and teachers (Tanveer et al., 2020). It is also found that the teaching-learning workload must be adequately managed to engage in national and international projects, consultancies, and beyond teaching, research, and administrative tasks. HE faculty need to familiarize themselves with the market and industry requirements, thereby helping students' network with industry experts. Hasanefendic et al. (2017) documented that universities should encourage their students and teachers to engage in entrepreneurial activities at the micromacro level by commercializing their research and liaising with industry and academia to bring transformative change in the teaching-learning process. Findings further underscored that most of the faculty members in HEIs do not understand financial literacy, which is of utmost need in guiding students towards generating finances and creating jobs in the fast-changing world. Moreover, no practical courses in social science emphasize financial, social, and cultural literacies except for assignments, projects, and seminars. The literature linked the financial teaching and learning process with practical experience and skills (Hogarth & Hilgert, 2002) to enable learners to plan their lives in a better way (Howlett et al., 2008). Here, industry experts and academic faculty should be involved in providing practical entrepreneurial pedagogical practices by utilizing discussions, case studies, problem-based learning, and group work to help students evaluate solutions to real-world problems. They may include critical thinking, creative project assignments, innovative and experiential activity-based teaching and learning, and incorporating workshop-type practical activities into the curriculum, thereby developing creativity and perseverance among students. Conferring to the findings, the World Economic Forum (2009) suggested developing the multidisciplinary collaboration of entrepreneurship across the disciplines through project-based activities, team teaching, networking with field experts, and designing innovative pedagogical practices to stimulate entrepreneurial mindset problem-solving, communication, leadership, and managing the business or start-up activity (Frank, 2007). Critical thinking, problem-solving, collaboration, networking, agility, adaptability, effective communication, curiosity, risk-taking ability, imagination, and accessing and analyzing information are documented as necessary skills in the 21st century (Wagner, 2010).

## Conclusion/Recommendation of the study

The study draws a few conclusions; first of all, the study concluded the need for a shift in pedagogical practices to incorporate entrepreneurship by recommending practical, skills-based activities and pedagogical practices to connect theory with practice. Furthermore, it is deliberated that the Higher Education Commission (HEC) primarily focuses on research and publication outputs, with less attention given to developing industry-relevant skills. Bridging this gap could enhance the employability of graduates and make research more applicable to real-world problems. The study concluded that interdisciplinary and multidisciplinary professional development could promote a culture of knowledge-sharing among faculty members. Therefore, it is recommended that a culture of collaboration among multidisciplinary faculty members in entrepreneurial activity, training programs, and curriculum development be fostered to uplift competencies in teaching and create a conducive entrepreneurial learning environment. Therefore, faculty members should be encouraged to participate in specific training programs to enhance entrepreneurial knowledge, skills and teaching-learning practices through industry collaboration and multidisciplinary work. Financial literacy, an essential concept for faculty members to guide their students to generate finances and create jobs, is seriously lacking; therefore, it is recommended to provide training to the faculty members in HEIs to develop particular competence, offering specific practical courses on financial, social, and cultural literacies within the social sciences disciplines.

## References

- 1. Ahmed, A.E., Ucbasaran, D., Cacciotti, G., & William, T.A. (2022). Integrating Psychological, Resilience, Stress, and Coping in Entrepreneurship: A Critical Review and Research Agenda. Entrepreneurship Theory and Practice 2022, Vol. 0(0) 1–42
- 2. Altan, M. Z., McMurtry, D., & McMurtry, S. (2014). Effective teachers as effective entrepreneurs: results of a tri-nation professional development project. International Journal of Social Entrepreneurship and Innovation, 3(3), 230–244.
- 3. Audretsch, D. B., Heger, D., & Veith, T. (2015). Infrastructure and entrepreneurship. Small Business Economics, 44, 219-230.
- 4. Açıkgöz, Tacettin & Babadoğan, M. (2021). COMPETENCY-BASED EDUCATION: THEORY AND PRACTICE. DOI: 10.52963/PERR Biruni V10.N3.06
- 5. Barba-Sáncheza, V.; Atienza-Sahuquillo, C. (2018). Entrepreneurial intention among engineering students: The role of entrepreneurship education. Eur. Res. Manag. Bus. Econ.24, 53–61
- 6. Bacigalupo, M., Kampylis, P., Punie, Y., & Van den Brande, G. (2016). EntreComp: The Entrepreneurship Competence Framework. Luxembourg: Publication Office of the European Union
- 7. Bolureanu, G., Mariuca, I. A., Maria, B.A., Bedrule-Grigorut, M. V. & Bolureanu, D. (2020). Entrepreneurship Education through SuccessfulEntrepreneurial Models in Higher Education Institutions. Sustainability 2020,12, 1267; doi:10.3390/su12031267
- 8. Bogdea, C.F., Rada, E.C., Boglut, G.I., G. D. Goloşie; M. Samfirescu, (2024) The Importance of Entrepreneurship and the Exploration of Future Development Directions. Published by Sciendo.
- 9. Bergmann, H., Geissler, M., Hundt, C., & Grave, B. (2018). The climate for entrepreneurship at higher education institutions. Research Policy, 47(4), 700-716.
- 10. Bu, J., & Cuervo-Cazurra, A. (2020). Informality costs: Informal entrepreneurship and innovation in emerging economies. Strategic Entrepreneurship Journal, 14(3), 329-368.
- 11. Byun, C. G., Sung, C. S., Park, J. Y., & Choi, D. S. (2018). A study on the effectiveness of entrepreneurship education programs in higher education institutions: A case study of Korean graduate programs. Journal of Open Innovation: Technology, Market, and Complexity, 4(3), 26.
- 12. Canziani, B., Welsh, D. H., Hsieh, Y. J., & Tullar, W. (2015). What pedagogical methods impact students' entrepreneurial propensity? Journal of Small Business Strategy, 25(2), 97-113.

- 13. Casey, Katherine. "Moving toward Mastery: Growing, Developing and Sustaining Educators for CompetencyBased Education. Competencyworks Report." iNACOL (2018). https://files.eric.ed.gov/fulltext/ED594174.pdf
- 14. Doherty, O. & Stephens, S. (2020). 'The cultural web, higher education, and work-based learning,' Industry and Higher Education, in press.
- 15. ECOTEC (2010), Towards Greater Cooperation and Coherence in entrepreneurship education, DG Enterprise and Industry.
- 16. European Commission. (2013). Entrepreneurship Education: A Guide for Educators. Brussels.
- 17. Forté, K. S. (2014). Sociocultural Issues in Adult Financial Education. In K. S. Forte, E. W. Taylor, & E. J. Tisdell (Eds.), Financial Literacy and Adult Education: New Directions for Adult and Continuing Education (pp. 5 13). San Francisco: John Wiley & Sons, Inc.
- 18. Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programs: a new methodology. Journal of European Industrial Training
- 19. Gautam, M. (2015). Entrepreneurship Education: Concept, Characteristics and Implications for Teacher Education. Shaikshik Parisamvad. 5. 21–35.
- 20. Guba, E. G., & Lincoln, Y. S. (1989). Fourth Generation Evaluation. Newbury Park: Sage Publications.
- 21. Hjortsø, C. N., Alexander, I. K., & Hernandez Chea, R. R. (2017). Experiences and lessons learned from the UniBRAIN agribusiness incubation program. Copenhagen: University of Copenhagen.
- 22. Hasanefendic, S., J. M. Birkholz, H. Horta, and P. van der Sijde. (2017). "Individuals in Action: Bringing about Innovation in Higher Education." European Journal of Higher Education 7 (2): 101–119.
- 23. Hägg, G., & Gabrielsson J. (2020). A systematic literature review of the evolution of pedagogy in entrepreneurial education research. International Journal of Entrepreneurial Behavior & Research, 26 (5) (2020), pp. 829-861,
- 24. Jiatong, W., Murad, M., Bajun, F., Tufail, M. S., Mirza, F., & Rafiq, M. (2021). Impact of entrepreneurial Education, mindset, and creativity on entrepreneurial intention: the mediating role of entrepreneurial self-efficacy. Frontiers in Psychology, 12, 724440.
- 25. Joensuu-Salo, S. (2020). The role of motivation and entrepreneurial role models in shaping entrepreneurship competence of higher education students
- 26. Joensuu-Salo, S., Anmari, V., Elina, V. (2020). The effect of entrepreneurial competence on perceived behavioural control and perspectivePerspectivePerspectivePerspectiveperspective of gender
- 27. Jamil, F., Ismail, K., Siddique, M., Khan, M. M., Kazi, A. G., & Qureshi, M. I. (2016). Business incubators in Asian developing countries. International Review of Management and Marketing, 6(4), 291–295.
- 28. Khanam, D., Mohiuddin, M., Hoque, A., & Weber, O. (2018). Financing micro-entrepreneurs for poverty alleviation: a performance analysis of microfinance services offered by BRAC, ASA, and Proshika from Bangladesh, Journal of Global Entrepreneurship Research Article. Volume 8, (27)
- 29. Kim, J., & Park, C. (2020). A review of education, skill training, and lifelong learning in the technological revolution era. Asian-Pacific Economic Literature.
- 30. Khalil, S., & Belitski, M. (2020). Dynamic capabilities for firm performance under the information technology governance framework. European Business Review ISSN: 0955-534X.
- 31. Kolympiris, C., & Klein, P. G. (2017). The effects of academic incubators on university innovation. Strategic Entrepreneurship Journal, 11(2), 145-170.
- 32. Lackéus, M. (2015). Entrepreneurship in Education. What, why, when, howEntrepreneurship360, Background paper. OECD and European Commission
- 33. Lackéus, M., Lundqvist, M., & Middleton, K. W. (2016). Bridging the traditional-progressive education rift through entrepreneurship. International Journal of Entrepreneurial Behavior & Research, 22(6), 777–803.
- 34. Muhos, M., Simunaniemi, A.M. (2017). Early stages of service business review and synthesis. Business International Journal of Management and Enterprise Development
- 35. Morselli, D., (2019). The Change Laboratory for Teacher Training in Entrepreneurship
- 36. Education, Springer Briefs in Education
- 37. Mason, C., & Brown, R. (2014). Entrepreneurial ecosystems and growth-oriented entrepreneurship. Final report to OECD, Paris, 30(1), 77–102.
- 38. Mir, N., Rahimikia, A., & Daraei, M. (2023). Ecosystem Entrepreneurship Model for University with a Knowledge-Oriented Approach. International Journal of Knowledge Processing Studies, 4(1), 107-119.
- 39. Neck, H. M., Greene, P.G., (2011). Entrepreneurship education: Known worlds and new frontiers. Journal of Small Business Management, Vol. 49(1), p. 55-70.
- 40. Neck, H., & Corbett, A. (2018). The scholarship of teaching and learning entrepreneurship. Entrepreneurship Education and Pedagogy, 1(1), 8–41.
- 41. Nisar, H. H., & Mushtaq, A. (2024). Perceived Challenges and the Role of Dispositional Factors in Achieving Professional Development among Successful Entrepreneurs. Human Nature Journal of Social Sciences, 5(2), 160–171.
- 42. Ontario Ministry of Education (2016). Towards Defining 21st Century Competencies for Ontario. 21ST CENTURY COMPETENCIES FO U N D A T I O N D O C U M E N T F O R D I S C U S S I O N. Queen's Printer for Ontario, 2015
- 43. Ozen, C., Owaishiz, A., Dabic, M., & Daim, T. (2023). Exploring entrepreneurship in the academic environment. Technology in society, 72, 102168.

- 44. Ori, G. N. K. &Theuri, F. S. (2016). The Role of Entrepreneurship Training and Education in Enhancing the Growth of Small and Medium Enterprises in Kenya: A Case Study of Mombasa County, IOSR Journal of Humanities and Social Sciences, 21(4), 97-107
- 45. Peltonen, K. (2015). How can teachers' entrepreneurial competencies be developed? A collaborative learning perspective. Education+ Training, 57(5), 492–511.
- 46. Rashid, L. (2019). Entrepreneurship Education and SustainableDevelopment Goals: A Literature Review and Closer Look at Fragile States and Technology-enabled Approaches Sustainability, 11, 5343; doi:10.3390/su11195343
- 47. Ruskovaara, E., & Pihkala, T. (2015). Entrepreneurship education in schools: Empirical evidence on the teacher's role. The Journal of Educational Research, 108(3), 236-249.
- 48. Rubin, T. H., Aas, T. H., & Stead, A. (2015). Knowledge flow in Technological Business Incubators: Evidence from Australia and Israel. Technovation, 41, 11–24. https://doi.org/10.1016/j.technovation.2015.03.002
- 49. Roth, M.W., Mavin, T. and Dekker, S. (2014). 'The theory-practice gap: epistemology, identity, and education,' education + Training, Vol. 56, No. 6, pp.521–536.
- 50. Sethi, M. (2023). National Education Policy 2017 https://www.scribd.com/document/4 0783 14 04/National-Education-Policy-2017. Retrieved on 3-01-2025
- 51. Sturgis, C., & Casey, K. (2018). Designing for Equity: Leveraging Competency-Based Education to Ensure All Students Succeed. CompetencyWorks Final Paper. iNACOL.
- 52. Siegel, D.S., & Wright, M. (2015). Academic Entrepreneurship: Time for a Rethink? British Journal Management
- 53. Tanveer, M., & Hassan, S. (2020). The role of new and creative ideas in developing Pakistan's education, software, and manufacturing industries. Journal of Entrepreneurship Education, 23(3), 1-11.
- 54. Takala, A., Korhonen-Yrjanheikki, K., (2019). A decade of Finnish engineering education for sustainable development. International Journal of Sustainability in Higher Education, Vol 20 (1)
- 55. Vaismoradi, Mojtaba & Snelgrove, S. (2019). Theme in Qualitative Content Analysis and Thematic Analysis [25 paragraphs]. Forum Qualitative Sozialforschung / Forum: Qualitative Sozial Research, 20(3), Art. 23
- 56. UNESCO-UNEVOC (2019). Advancing learning and innovation in TVET Key highlights of UNESCO-UNEVOC's Global Forum. https://unevoc.unesco.org/pub/2019\_alit\_key\_learning.pdf
- 57. Wagner, T. (2010). The global achievement gap: Why even our best schools do not teach the new survival skills our children need and what we can do about it. ReadHowYouWant. com.
- 58. Xu, W., & Zammit, K. (2020). Applying thematic analysis to Education: A hybrid approach to interpreting data in practitioner research. International journal of qualitative methods, 19, 1609406920918810.
- 59. Yuan, C. H., Wang, D., Mao, C., & Wu, F. (2020). An empirical comparison of graduate entrepreneurs and employees based on graduate entrepreneurship education and career development. Sustainability, 12(24), 10563.
- 60. Zhu, F., Hsu, D. K., Burmeister-Lamp, K., & Fan, S. X. (2018). An investigation of entrepreneurs' venture persistence decision: the contingency effect of psychological ownership and adversity. Applied Psychology, 67(1), 136-170.
- 61. ZHANG, S. L., & ZHENG, X. Q. (2017). Separation and Integration of Professional Education, Innovation Education, and Entrepreneurship Education——Based on the Perspective of "Triple Helix" Theory. Heilongjiang Researches on Higher Education, 06.