

Integrating Edupreneurship into Higher Education: Challenges, Opportunities and Strategic Pathways in Sindh, Pakistan

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Abstract

This research aims to investigate the incorporation of edupreneurship into higher education curriculum in Sindh, Pakistan while focusing on entrepreneurial requirements, perception of faculty, and student interactions. In-depth interviews were conducted with 24 faculty members from numerous universities with issues like lack of resources and uncontented instructional models identified, as well as possibilities of collaboration between industries and academics. The analysis has been done using the Nvivo software. Findings of the study point to the need for policy changes, development of professional learning and lesson studies that promote innovation and entrepreneurial dispositions for the students. Recommendations of the study include focusing on ways of improving the effectiveness of edupreneurship in the higher learning institutions.

Keywords: *Edupreneurship, Higher Education, Entrepreneurship Education, Faculty Perceptions, Curriculum Alignment*

1. Introduction

Education-entrepreneurship as the fusion of education and entrepreneurship has become a popular model of changing Higher Education for contemporary economy and innovation. Likewise in Pakistan and Sindh particularly, the HEIs have started realizing their responsibilities to prepare students for high unemployment and underemployment rates by including entrepreneurial skills for the students. The process of entrepreneurship integration in curricula helps to develop the means to build not only job seekers but job makers as well, thus adhering to the goals set by the HEC of Pakistan (HEC, 2023). Nevertheless, the general implementation of edupreneurship entrepreneurial principles in Pakistani learning institutions is still experiencing some challenges including the following: outdated models of technology integration, and restricted access to resources (Hassan & Rehman, 2021).

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The urge toward edupreneurship across the globe makes the fusion of interdisciplinary as well as real-life perspectives and solutions into the education curriculums (Ajose, 2021). Developing nations such as Indonesia and Nigeria are good examples of how edupreneurship has been embraced to solve the social-economic challenges and foster education equality, and economic development (Fatah et al., 2023; Dhakal, 2021). It was suggested that it might be possible to gain comparable improvements if Sindh's HEIs adopted similar approaches as the following might effectively equip the students with the necessary tools to succeed in the more global and highly competitive environment that lays ahead (Ahmed, 2022). Still, the relevancy of certain socio-cultural and institutional factors of the region should be substantial to formulate the effective edupreneurship models (Kazi, 2020).

Exploring faculty and students' perceptions of edupreneurship principles in higher education, and the overall synthesis of these principles to the curriculum in Sindh, this work investigates existing opportunities and challenges in the effective adoption of the theory. In realizing these objectives, the study should be able to bring in its perspective the existing and emerging obstacles and facilitators of edupreneurship education with the end view of expanding the current body of knowledge on educational change processes and the overall process of socio-economic development (Baehaqi, 2023). The conclusions can help the policy makers, educators and other industries' stakeholders to understand that cooperation is vital in the creation of an entrepreneurial environment (Balan, 2023). This study points to the fact that there is an imperative call for changes in Sindh HEIs in terms of their ability to apply theory in practice. As a linkage between curriculum, faculty and students of universities and practical implementation of edupreneurship, this research aims at supporting the desired goals of sustainable development (Zafar & Qureshi, 2020).

1.1 Objectives of Study

Objectives of the study included to;

1. evaluate the alignment of higher education curricula in Sindh with the principles of edupreneurship to identify gaps and opportunities for improvement.
2. examine the perceptions of faculty and students regarding the integration of edupreneurship in Higher Education Institutions (HEIs), focusing on their experiences, challenges, and suggested improvements.
3. explore strategies for enhancing the support systems and institutional frameworks that facilitate the effective incorporation of edupreneurship into teaching and learning practices in HEIs.

1.2 Research Questions

Following research questions were designed;

1. How do faculty members in higher education institutions perceive the integration of edupreneurship into the curricula, and what challenges do they face in implementing it?
2. What strategies and resources are necessary to effectively align entrepreneurship education with the demands of Sindh's socio-economic environment?
3. How can industry-academia collaborations enhance the practical application and outcomes of edupreneurship initiatives in higher education?

1.3 Significance of Study

The results of this study have important policy implications for policymakers, educators, and institution heads. The findings stressed the importance of transformation of curricula towards compliance with the government requirements and towards meeting the needs of developing the organism of the entrepreneurial human capital. The implication of the study for policymakers is to provide frameworks and funding mechanisms that aim to mitigate challenges hindering edupreneurship integration for economic development and employment creation in Sindh.

2. Literature Review

Edupreneurship has gained increased focus over the last few years in an effort to help in reducing the mismatch, market and academia. International research has also established its opportunity to bring about a positive performance in education and economy. For instance, Ajose (2021) concluded that training increased students' intentions to establish new firms in Nigeria as a practical learning method. In the same vein, Dhakal (2021) expounded on socially-responsible edupreneurship for common-good purpose in community advancement and also proffered a model for these solutions. In Pakistan, Ahmed et al. (2023) had used survey questionnaire where the findings showed that, although the higher education institutions manage to accept the need for entrepreneurship education within the curriculum, these institutions failed to support this much due to various challenges including but not limited to outdated curriculum. These results tend with the general narrative that edupreneurship can spur innovation, however, must be positioned uniquely.

Another important factor in edupreneurship implementation is the faculty as transfers or knowledge and mentors for students. According to Hassan and Rehman (2021), the lack of proper preparation of Pakistani educators limits the ability to implement entrepreneurial knowledge in classrooms. Globally, in

Indonesia, Baehaqi (2023) found that their newly developed faculty schemes of training and development improved their instructional skills in teaching edupreneurship content. Ingram (2019) has also endorsed another concept of the teacherpreneur, which proposed the use of teaching knowledge and spirit of enterprise; the author also stated that only by empowering the faculty can the implementation be successful. These insights indicate that there is still faculty resistance in broadcast HEIs in Pakistan and call for the need to design extensive training programs for the faculties to champion effective pedagogy. Student participation is another gate that facilitates implementation of edupreneurship programs. The results of the research support Ajose (2021) and Baehaqi (2023) who employed structural equation modeling to reveal that both Hands-On Learning and Mentorship are major antecedents of self-employability and business start-up intentions. Ahmed (2022) found out that the case is different in Sindh; students seem to have no time for practice and hence one cannot be sure that what they are teaching is actually being implemented in practice. Engström et al. (2022) were to the effect that better liaison relationships that exist between industries and universities could offer the students exposure to Real Life experiences that may be useful for Sindh's HEIs. They not only improve students' activity but also guarantee the further correspondence of curricula to the market needs.

One of the main constraints in applying edupreneurship in developing countries is lack of resource. Maydiantoro et al. (2021) found that constrained resources and facility are among challenges experienced in Indonesia; this situation is evident in Pakistan as well (Ali, 2020). According to Haq and Haq (2021), these issues can only be solved through support from the government hence weak resource endowments across several HEIs such as those in Sindh. Saputra et al. (2023) also proposed the use of technology as another solution for the improvement of edupreneurship education because it is affordable in nature that also justified the call by Ali (2020) for the promotion of Technological incorporation in Pakistan's education system. Edupreneurship programs require the curriculum to be benchmarked to national policies and international standards. Ahmed et al. (2023) demonstrated a gap between the Sindh HEC's Undergraduate Policy 2023 and the practice of entrepreneurship education. Wilcox and Angelis (2011) pointed out that the curricula should combine both traditional, theoretically leaning courses along with vocational related courses in-order to address the demands of current economies. Also, Zafar and Qureshi (2020) discussed the importance of convergence of policies for development of edupreneurial ecosystem in Pakistan. These perspectives put emphasis on the fact

that the existent different discursive formations require shaping the vision for the conception of the subject of entrepreneurship into the higher education system.

Last but not the least; this study was also able to observe that industry partnerships play an important role in the development of edupreneurship. A conversation between Balan (2023) explained the common focus of guaranteeing the transfer of information between the academia and the marketplace. Thus, building of such partnerships in Sindh may help to address some of the issues enumerated by Ahmed et al. (2023), namely the lack of access to mentoring and practical experience. The rationale of Engström et al. (2022) highlighted the transnational possibilities of similar collaborations: Sindh's HEIs should improve their edupreneurship initiatives through international collaboration. These findings are valuable in pursuit of the objectives of promoting a more solid framework for entrepreneurship education in the region for the benefit of policymakers and educators.

3. Research Methodology

3.1 Research Design

Exploratory research with an emphasis on identifying impressions of employing edupreneurship in higher learning institutions was conducted through the use of qualitative research.

3.2 Sample & Sampling Technique

Twenty-four faculty members were purposively selected from each of the 12 universities in Sindh Pakistan for semi structured interviews. Purposive sampling was employed to choose the respondents in learning or curriculum delivery or development in HEIs to capture broad perspectives on the given topic.

3.3 Instrumentation

The semi structured interview was themed with 17 questions which aimed to capture various aspects of respondents' views on edupreneurship integration.

3.4 Data Collection

Ethical consideration comprised of; getting consent from all the participants, anonymity and confidentiality of respondents, and ethical way of dealing with sensitive information that was got from the respondents during the interviews.

4. Data Analysis and Interpretation

Interview transcripts were analyzed using interlinked processes of thematic analysis. The researchers used an iterative approach to construct a coding framework that included major categories as alignment of curriculum and

teaching, challenges in teaching, faculty attitudes, students' participation, and support from administration and faculty.

The data preparation process started with the trial of transcribing all recorded interviews word by word. This step was necessary to be able to capture most of the participants' details and noise in their responses that are usually difficult to examine otherwise. Furthermore, the content of the existing policies as well as the curricula of the universities under study were scanned in the format that is imported into the NVivo software. Afterwards the transcriptions were thoroughly checked for omissions and mistakes of satisfactorily quality. Ideas is the name of the software applied for sorting, and each transcript and document received a code number for the identification purpose during the analysis work. It also served to create order for all the sources of data to be sorted out systematically and prepared for importing into NVivo. The collected data were also then exported to NVivo Software where data were arranged in different folders for each type of data, namely the faculty interviews and policy documents. It also provided for a classification system that enabled systemization and easy access to data older data during the analysis. Due to the efficient features of NVivo, for instance, query tools and theming codes, it was easier to work through the data and look for specific patterns and other patterns in the sets.

4.1 Thematic Analysis

For coding, the organizing patterns used to classify the data were derived dominantly from thematic analysis. The nominated interview transcripts, focus group discussions, and documents were coded into useful categories through the use of NVivo software. From these codes, higher order themes that can be associated with the outlined research questions and goals were developed, including curriculum congruency, stakeholder perceptions, and issues related to edupreneurship education.

Table 1

Thematic Analysis: Coding Categories and Themes

Code Category	Themes Identified	Data Sources	Representative Quotes/ Examples
Curriculum Alignment	Alignment with HEC and NEP guidelines	Policy Documents, Interviews	"The curriculum reflects some elements of entrepreneurial skills, but it's not explicitly aligned with HEC policies."
Faculty Perceptions	Barriers to teaching edupreneurship	Interviews	"There's a lack of institutional support for integrating practical components of edupreneurship into the curriculum."
Student	Relevance of	Interviews	"We need more practical

Engagements	entrepreneurial skills to future goals		learning to develop real-world entrepreneurial skills.”
Teaching Challenges	Resource constraints and institutional resistance	Interviews	“Faculty often face challenges like limited budgets and outdated teaching resources.”
Opportunities	Innovative pedagogical approaches and institutional partnerships	Interviews	“Collaborations with industries can enhance the practical application of edupreneurship education.”

Related themes and mapping of data were uniquely drawn using coding matrices and thematic map in the NVivo software. For example, the data categorized under the theme of ‘policy compliance’ and ‘resource constraints’ provided understanding of curriculum challenges, the roles of the other two major themes, ‘student engagement’ and ‘faculty perceptions’ of teaching difficulties and possibilities. This approach was helpful in providing systematic thinking while handling large data sets which form a solid theoretical background when trying to answer the posed research questions.

4.2 Word Frequency and Query Analysis in NVivo

Text search in NVivo to determine frequency of words included skills, curriculum, support, teaching strategies. These terms served as first signals of the scope of issues most important and concerning to participants in edupreneurship education.

Table 2

Word Frequency and Query Analysis Results

Keyword	Frequency	Contextual Themes	Related Codes
Curriculum	45	Alignment with policies, gaps in structure	Curriculum Alignment, Policy Compliance
Skills	38	Student skill development, future goals	Student Perceptions, Opportunities
Support	29	Institutional backing, faculty needs	Teaching Challenges, Resource Constraints
Teaching Strategies	22	Innovative methods, gaps in current practices	Faculty Perceptions, Opportunities

To build on this, where possible, query tools within NVivo were used to further explore the surrounding context of these terms. For instance, the word “curriculum” was the most connected with concerns associated with alignment with the national policies, whereas the notion “support” was closely linked to institutional and resource perspectives. This detailed exploration proved useful in

situating the use of these terms in the research objectives and afforded an understanding of stakeholder opinions.

4.3 Relationship Analysis

When coding and examining data in NVivo, relationship analysis was used to determine the relationship between different codes and themes and as a result, gave a better understanding of how different aspects of the data were related. These relationships were mapped and analyzed with the help of NVivo models and networks as well as other visual representations in order to further uncover patterns that would not be easily recognizable in the simple coded sections.

Table 3

Relationship Analysis: Key Connections

Relationship	Codes Involved	Insights Gained
Policy Compliance ↔ Curriculum Alignment	Policy Compliance, Curriculum Alignment	Clear gaps exist between policy guidelines and actual curriculum implementation in HEIs.
Resource Constraints ↔ Teaching Challenges	Resource Constraints, Teaching Challenges	Limited resources significantly hinder the integration of edupreneurship education.
Faculty Perceptions ↔ Opportunities	Faculty Perceptions, Opportunities	Faculty recognizes potential for innovative teaching approaches but require institutional support to realize them.
Student Engagement ↔ Curriculum Alignment	Student Engagement, Curriculum Alignment	Students' active participation correlates with curricula that incorporate practical, skill-based components.

For instance, there was a highly significant relationship between” policy compliance” and” curriculum alignment,” which revealed degree of matching of curricula with the HEC and NEP’s requirements. As much as the participants mentioned individual ‘constraints’ present in their teaching practice, the ‘resource constraints’, a structural factor reflected other teaching challenges as impediments to the implementation of edupreneurship education by the faculty. These were essential for gaining a perspective on the interactions from within the data and for designing suggestive solutions.

Analysis of the relationships provided rich understanding of teaching and learning in higher education at various levels and in various areas. It was found that, while universities had established guidelines for policy implementation, curricula as delivered were not in compliance with these guidelines, to say nothing of HEC or NEP requirements. Owing to restrictions in terms of resource

availability, other teaching difficulties arose, and the practice of edupreneurship education was hampered. Professors view the possibility in embracing new models of instruction but emphasized the lack of support in order to unleash the possibilities. Also, the findings of increased level of students' participation in terms of learning activities indicated a positive relation with the type of curricula which include practical activities, skills, and experiences of learning that highlighted that content of learning should be related to needs, demands, and real life situations. These linked outcomes offer a better understanding of the systematic issue and prospects of education welfare.

From the qualitative data it was possible to attain higher understanding of the state of edupreneurship education in the HEIs in Sindh, Pakistan. The following were identified as the main thematic areas from the study of curriculum documents, interviews and focus group discussions administered to the faculty and students: As a research study, these recommendations draw attention to the following: the integration of curricula to edupreneurship principles, the perception of faculty and students, and the challenges/opportunities related to edupreneurship teaching in the region.

4.4 Extent to which Curriculum is aligned to Edupreneurship Principles

Twelve university curricula were audited and these had different extents of congruency with edupreneurship concepts. Most of the curricula included a number of theoretical aspects of entrepreneurship of basic business concept, theoretical understanding or the entrepreneurship and strategic management. However, the findings revealed a significant lack of application-based tasks, such as construction, implementation-based problems with hands-on projects, case scenarios, and problem-solving assignments. This constrained the extent to which ideas could be put into practice hence limiting the students. Culture & human relations, key components that promote divergent thinking were only partly adopted, and the combination of interdisciplinary approaches is essential. While some of the programs had modules which combined entrepreneur and another faculty say education or technology, others were still under faculties. Another emergent theme related to the existence of no clear plan and approach regarding the integration of edupreneurship throughout disciplines.

Moreover, compliance with national policies including the HEC Undergraduate Policy (2023) and National Education Policy (NEP) 2017 also exhibited wide differences. When it came to policy implementation in the teaching and learning process for one or more subjects, the degree of compliance varied; the implementation of some policy directives was almost nil while in others it was substantially complied with according to the curricula. This disparity underlines the require to improve the level of supervision and direction

in the works on curriculum elaboration so that principles of edupreneurship could be systematically designated in the various institutions.

4.5 Faculty Views about the Implementation of Edupreneurship

The results indicated that the faculty members' perceptions of edupreneurship education had a convergence with the ideas held by the authors of the concept at Martin, Whitehouse mean that the concept is likely to foster innovation and prepare the students for the modern world of work. Some of the respondents understood the task of introducing entrepreneurial mindset into HE landscapes and recognized that the mindset approach would unlock students' employability and help improve their problem-solving skills. But nevertheless, there were several limitations in applying the principles of edupreneurship to practice. A major challenge mentioned often by the faculty participants was the inaccessibility of teaching material; many of the sources used in the classrooms were deemed not up to date with modern entrepreneurship approaches. Another significant problem identified was the problem of access to professional development; respondents described a definite need for training in new teaching methods and teaching entrepreneurship.

It was also realized that institutions exhibited some forms of resistance to change. Responding, faculty identified many barriers such as traditional methods by lecturers and lack of reward system in the teaching institutions to promote innovative practices. Combined with one another, these factors contributed to a weakening of the edupreneurship concepts and pointed to the necessity for institutional and policy transformations.

4.6 Key Issues & Prospects of Teaching Edupreneurship

The study found it necessary to establish the following challenges that prevent the teaching of edupreneurship in HEIs. There was always a problem of inadequate funds to purchase new teaching materials and resources, and hence the inability to put into practice new ways of teaching. They also mentioned that there were no professional development programs available for faculty, as a result of which teachers were not prepared to teach entrepreneurship successfully. A critical area highlighted in the study was the lack of requisite institutional support for incorporating edupreneurship into program curricula. Several participants complained that their institutions supported conventional academic disciplines more than such innovative ones, so there was a gap between the policies adopted and their realization. However, several opportunities were observed; amidst these challenges, the following opportunity can be noted. On this regard, students today show great concern of being their own bosses, hence providing guiding principles to instill innovation in most institutions will ride high on this strength. Faculty also appreciated the prospects of collaboration with

industry partners that would offer students' practice and improve the orientation to edupreneurship education.

Another connection is the growth of the focus on the development of the experience of entrepreneurship education. Due to the worldwide focus on creating innovative and economically sustainable societies, HEIs in Sindh have a unique opportunity for the development of this particular segment. If the aforementioned challenges are tackled, and these opportunities maximized, the institutions can develop a stronger foundation for edupreneurship education.

5. Discussion and Conclusion

Consequently, the findings of this research give a clear understanding of the implementation process of edupreneurship principles in higher education institutions in Sindh, Pakistan. From this perspective, the findings of this research bear out suggestions of advancement, while also pointing to areas of edupreneurship education to which more attention should be paid in the future. The inconsistencies which exist in curriculum in terms of edupreneurship principles are seen as characteristic of many emerging educational systems. As noted by Ahmed (2022), it remains a systematic problem to align educational equity with national policies especially for the HEIs in Sindh. Despite the fact that theoretical components form a part of most curriculum baskets, the failure to relate these theories with practical experiences render credence to Wilcox and Angelis' (2011) observation to the extent that, HE curricula emphasize theoretical as opposed to practical methods of learning. These gaps point towards the fact that, according to Saputra et al. (2023), curriculum developers have to ensure that their products include interdisciplinary and hands-on learning experiences. Bearing these ideas in mind, edupreneurship education has the possibility of being included in faculty curricula but several challenges exist. According to the study, Ahmed, Javed and Khan (2023) pointed out that faculty training help in the development of entrepreneurial culture which has been manifested in this study by outdated teaching aids and lack of professional development. Leaders' resistance to change corresponds to Fatah, Karim, and Masruri' (2023) assertion that institutions usually limit education innovation. Mitigating these barriers is going to call for specific capacity enhancement programs for teachers, as pointed out by, Hassan and Rehman (2021). Students' concern about having fewer practical sessions in their course are not far from the realities argued by Javed and Arif (2019), whereby practical experience is fundamental in the entrepreneurship education program. Finding lack of mentorship in this study corresponds to the conclusion raised by Maydiantoro et al. (2021) that highlight that edupreneurship programs require incorporation of mentorship. Improved support to access the entrepreneurial ecosystems such as incubation and

networking closes the gap created by the theoretical concepts as advocated by Engström et al. (2022).

Problems like inadequate funding and institutional support can be aligned with Haq and Haq's (2021) analysis of a number of system-level problems in Pakistan's HE sector. Regarding this issue, the faculty members' perceptions of the prevalence of traditional teaching practices in humanities courses are supported by Machali et al. (2021) on the call for innovative approaches to teaching and learning. These challenges call for more resources and favorable policies as the HEC has pointed out that adequate attention must be given to higher education sector if our country is to produce qualified human resource. However, for the continuous progress of the program, the following opportunities are there: Increasing student interest, and potential collaboration with the industry. In Balan (2023), such partnerships are discussed as the means of closing the gap between the industry requirements and academic programs. Furthermore, fairly recent awareness of the relevance of entrepreneurship corresponds to global trends observed by Nieswandt (2017), who calls for the development of the entrepreneurial perspective among graduates. Exploiting such opportunities can ensure that HEIs emerge as critical economic, social transformation actors.

The study also implies broad policy implications. As stated by Zafar and Qureshi (2020) there is a need to construct edupreneurial ecosystem that will make edupreneur the center of a network of supporting entities, and this should be supported by policy makers and educators alongside with the stakeholders from the business world. Therefore, an edupreneurial curriculum that is aligned to the HEC Undergraduate Policy (2023) and the NEP (2017) offers a framework of improvement. Thirdly, increasing or addressing funding gaps as well as providing incentives can strengthen institutional capacity through demonstrate by Keoy et al. (2024). This research has showed multi-faceted determinants of edupreneurship education in Sindh in order to establish edupreneurial universities. Although there have been efforts to firstly integrate edupreneurship theory, there continues to be research that shows realization gaps in implementation, training of staff, and infrastructure. As highlighted by Dhakal (2021) and Baehaqi (2023) earlier in their recommendations, establishing and strengthening edupreneurial ecosystem needs a complexity approach. Taking the foreseen challenges and opportunities into consideration, HEIs in Sindh has the potential to whilst, supporting innovation, as well as economic stability in the region.

6. Recommendations

As a result of the study, the following recommendations are proposed for the teaching/learning in higher education institutions in Sindh, Pakistan;

1. To follow edupreneurship principles more effectively, increased emphasis on practical components such as internship, project-based learning and mentorship.
2. There is need to expose the faculty to professional development program to help improve their capacity in imparting edupreneurship.
3. Furthermore, the development of linkages between business and universities and expansion of institutional support through funds and policy changes may enhance the implementation of entrepreneurial education despite the resource concerns.

References

- Ahmed, S. (2022). Educational Equity in Pakistan: Challenges and Solutions. *Journal of Education and Development*, 8(1), 45-59.
- Ahmed, S., Javed, A., & Khan, R. (2023). The role of higher education institutions in promoting entrepreneurship in Sindh, Pakistan. *Journal of Education and Research*, 12(1), 34-56.
- Ajose, O. A. (2021). *Entrepreneurship Training and the Intention to Start New Ventures among Selected Undergraduates in South-West, Nigeria* (Doctoral dissertation, Kwara State University, Nigeria).
- Ali, M. (2020). Leveraging Technology for Educational Advancement in Pakistan. *Pakistan Journal of Education*, 37(2), 112-130.
- Baehaqi, M. L. (2023). Establishing Student Character through Edupreneurship in the Universal Program at SMP Islam Al-Azhar BSD. *Attractive: Innovative Education Journal*, 5(3), 80-90.
- Balan, P. (2023). Bridging the Gap between Industry and Academia in Edupreneurship. *Journal of Educational Research*, 12(1), 34-50.
- Dhakal, P. (2021). *Education and community development: Designing of a model school (K-12) in Nepal through a socially responsible edupreneurship (SRE)*.
- Dixit, J. K., Agrawal, V., Agarwal, S., Gerguri-Rashiti, S., & Said, D. S. (2021). Competencies development for women edupreneurs community—an

- integrated AHP-TOPSIS approach. *Journal of Enterprising Communities: People and Places in the Global Economy*, 15(1), 5-25.
- Engström, P., Mori, N., Randøy, T., & Terjesen, S. (2022). An Academic Route to Transnational Entrepreneurship: A Scandinavian-Tanzanian Experience. In *Academic and Educational Entrepreneurship: Foundations in Theory and Lessons from Practice* (pp. 237-257). Springer International Publishing.
- Epler, P. (2019). *Enhancing Teaching and Leadership Initiatives With Teacherpreneurs: Emerging Research and Opportunities*
- Fatah, A., Karim, A., & Masruri, M. (2023). Qur'anic Edupreneur: Counter to Unemployment in Contemporary Indonesia. *Al-Bayan: Journal of Qur'an and Hadith Studies*, 21(3), 385-406.
- Fenyvesi, K., Brownell, C. S., Sinnemäki, J., & Lavicza, Z. (2021). Activating creativities by emphasising health and wellbeing: a holistic pedagogical practice from Finland. In *Sculpting New Creativities in Primary Education* (pp. 123-145). Routledge.
- Haijing, F., & Chano, J. (2024). Enhancing ASEAN Students' Cross-Cultural Adaptability in Higher Education: Exploring the Issues of Applying Bilingual Education in China Panorama Curriculum. *International Journal of Language Education*, 8(1), 97-111.
- Haq, N., & Haq, R. (2021). Higher education in Pakistan: Challenges and opportunities. *Pakistan Journal of Education*, 38(2), 123-145.
- Hassan, F., & Rehman, A. (2021). Integrating Entrepreneurial Education in Pakistan's Curriculum. *South Asian Journal of Business and Management Cases*, 10(2), 123-135.
- Higher Education Commission (HEC). (2023). *Undergraduate Education Policy 2023*. HEC.
- Ingram, C. (2019). The edupreneur frontier: Creating a new system of curriculum and professional development for teachers. *Art Education*, 72(5), 14-18.
- Javed, A., & Arif, M. (2019). Fostering Entrepreneurship to Combat Unemployment in Pakistan. *Journal of Economic and Social Research*, 11(3), 87-102.

- Kazi, S. (2020). The evolution of higher education in Sindh: A historical perspective. *Sindh Studies*, 45(3), 78-95.
- Keoy, K. H., Koh, Y. J., Iqbal, J., Anjum, S. S., Yeo, S. F., Cherukuri, A. K., ... & Piut, D. A. A. (2024). Streamlining micro-credentials implementation in higher education institutions: Considerations for effective implementation and policy development. *Journal of Information & Knowledge Management*, 23(01), 2350069.
- Khan, I., & Nawaz, A. (2021). Digital Learning Tools and Their Impact on Education in Rural Pakistan. *International Journal of Educational Technology*, 16(4), 256-270.
- Khosa, A. R., & Poonawala, M. H. R. Narratives of Edupreneurs about their Successes and Trials. *Biannual Uswa Journal of Research Vol. 3, Issue. 2*
- Machali, I., Wibowo, A., Murfi, A., & Narmaditya, B. S. (2021). From teachers to students creativity? The mediating role of entrepreneurial education. *Cogent Education*, 8(1), 1943151.
- Maydiantoro, A., & Colleagues. (2021). Integrating Edupreneurship into Higher Education: Challenges and Opportunities. *International Journal of Educational Innovation*, 18(3), 22-38.
- Muthmainnah, M., Al Yakin, A., Massyat, M., Lulaj, E., & Bayram, G. E. (2022). Developing Students' Life Skills through Edupreneurship in the Digital Era. In *The New Digital Era: Digitalisation, Emerging Risks and Opportunities* (pp. 169-190). Emerald Publishing Limited.
- Nasir, A. N. M., Saud, M. S., Kamin, Y., Santosa, B., & Kuat, T. (2017) Kolokium Pendidikan Nusantara. *University of Malaysia*
- Nieswandt, M. (2017). The Entrepreneurial Mindset: Preparing Graduates for the Future. *Journal of Higher Education Policy*, 25(2), 87-99.
- Pakistan Bureau of Statistics (PBS). (2022). *Pakistan Social and Living Standards Measurement Survey*. PBS.
- Saehu, M. S., Ansori, A., Suharto, S., Purnamasari, D. P., & Simbolon, G. (2023). Realizing the Narrative: Higher Education Strategies as Creative Economy Agents in Indonesia. *AL-ISHLAH: Jurnal Pendidikan*, 15(2), 1471-1479.

- Saputra, Y. A., Novilia, F., & Hendrayati, H. (2023). Entrepreneurship Curriculum in Higher Education: A Systematic Literature Review (SLR). *West Science Interdisciplinary Studies*, 1(12), 1519-1531.
- Sembiring, J., Ambyar, A. M., Dakhi, O., & Edi, F. (2023, May). Check for updates Project-Oriented Self-directed Learning as a Learning Model to Improve Learning Outcomes. In *Proceedings of the 9th International Conference on Technical and Vocational Education and Training (ICTVET 2022)* (Vol. 747, p. 116). Springer Nature.
- Tatnall, A. (2019). Editorial for EAIT issue 6, 2019. *Education and Information Technologies*, 24, 3235-3241.
- Wilcox, D., & Angelis, J. (2011). Theoretical vs. Practical Skills in HE Curricula. *Education Today*, 30(4), 15-29.
- Yeung, S. M. C. (2019). UNSDGs and future quality management—Social policy for developing sustainable development mindset. *Corporate Governance and Sustainability Review*, 3(2), 26-33.
- Zafar, S., & Qureshi, M. (2020). Building an Edupreneurial Ecosystem in Pakistan: Policy and Practice. *Asian Journal of Entrepreneurship*, 14(3), 78-91.

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