

PEDAGOGICAL ALIGNMENT in BUSINESS EDUCATION: Faculty Preferences Across NBEAC-Accredited Subjects in Pakistan.

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Article History:

Submitted: Feb 10, 2024

Revised: April 22, 2024

Accepted: May 19, 2024

Published online: June 30, 2025

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ABSTRACT

Background: Pedagogical practices in business education significantly shape student learning outcomes. However, limited research has examined how faculty in Pakistan align teaching methodologies with the nature of business subjects, as defined by the National Business Education Accreditation Council (NBEAC).

Objective: To identify business educators' preferred teaching methodologies across 21 core and specialized subjects, and to propose a framework for subject-specific pedagogical alignment.

Methods: A descriptive survey research design was employed. Data were collected from 66 faculty members teaching both foundational and specialized business courses across accredited business schools in Pakistan. Preferences for teaching methodologies were analyzed across subject categories.

Results: Findings revealed that Flipped Learning (FL) was the preferred approach in 12 out of 21 subjects, particularly in applied and conceptually rich areas such as entrepreneurship, human resource management, marketing, and business communication. Traditional lecture-based instruction dominated in technically oriented and quantitatively structured courses, including accounting, finance, and business mathematics. Only one subject—Microeconomics—was identified as best suited to a blended model integrating FL with lectures.

Conclusion: The study introduces a subject-specific pedagogical mapping framework that aligns teaching methodologies with curricular content. This framework provides strategic insights for faculty development, curriculum planning, and policy formulation in business education. The findings highlight the need for differentiated pedagogical approaches to enhance learning outcomes across diverse business disciplines in Pakistan.

Keywords: Business education, Flipped learning, Traditional lecture, Blended pedagogy, NBEAC curriculum, Pakistan tertiary education

1 | INTRODUCTION

In recent years, there has been a notable shift in global higher education pedagogy toward active-learning environments, particularly within professional disciplines such as business education. [\(Smith, 2023; Nyathi, 2024; Higher Education, 2024; Bexley & Pietsch, 2025; Khan, Ahmad, & Malik, 2025\)](#) This transition is

driven by the recognition that traditional lecture-based instruction often falls short in fostering critical thinking, problem-solving, teamwork, and communication—competencies that are increasingly valued in dynamic, interdisciplinary, and technology-driven job markets ([Baig & Yadegaridehkordi, 2023](#)). The demand for more engaging and student-centered pedagogies has further intensified with globalization and the Fourth Industrial Revolution, as employers seek graduates who are adaptable and capable of applying knowledge to real-world contexts ([Afzal et al., 2023](#); [Abid, Hussain, & Raza, 2025](#)).

Among the many learner-centered pedagogical approaches, the flipped classroom has emerged as a particularly influential model. In this approach, content delivery is assigned outside the classroom—often via recorded lectures or online materials—while classroom sessions are dedicated to collaborative learning, discussion, and problem-solving. International evidence suggests that such models enhance not only academic performance but also engagement, motivation, and skill development ([Nyathi, 2024](#); [Innovative Higher Education, 2025](#)). Similarly, blended and hybrid pedagogies have been found to enrich the learning environment, offering flexibility and deeper interaction between students and instructors ([Khan et al., 2025](#)).

Despite these global advancements, business education in Pakistan continues to face systemic challenges. Although the Higher Education Commission (HEC) and the National Business Education Accreditation Council (NBEAC) provide detailed guidance on curriculum content and accreditation standards, relatively little direction exists regarding the pedagogical frameworks best suited to diverse business subjects. Consequently, faculty often rely on conventional lecture-based methods, even in subjects that may benefit more from interactive, experiential, or problem-based approaches. This creates a gap between

international best practices and local classroom realities, leading to uneven student learning outcomes, limited opportunities for applied learning, and misalignment with the competencies demanded in global labor markets ([Shah & Abid, 2024](#)).

A clear contrast can be observed when comparing Pakistani business schools with internationally accredited institutions. Accreditation bodies such as the Association to Advance Collegiate Schools of Business ([AACSB](#)), the European Quality Improvement System ([EQUIS](#)), and the Association of MBAs ([AMBA](#)) emphasize outcome-based learning, assurance of learning standards, and the adoption of innovative pedagogies that integrate experiential projects, simulations, case methods, and technology-driven practices ([AACSB, 2023](#); [EQUIS, 2024](#)). In many top-ranked global business schools, students are exposed to problem-based learning, industry collaborations, and cross-disciplinary modules that cultivate leadership and entrepreneurial skills. In contrast, Pakistani institutions—while compliant with content-based curricular requirements—often fall short in embedding such pedagogical innovations systematically. This divergence underscores the need to move beyond content coverage and focus on how subjects are taught, ensuring that pedagogy itself becomes a central pillar of quality assurance in business education.

The problem is further compounded by contextual barriers such as uneven access to technology, limited faculty training in modern pedagogies, and varying levels of student preparedness ([Hussain et al., 2023](#)). These issues highlight the urgent need to identify and systematize faculty preferences for teaching methods that can both reflect the realities of Pakistani classrooms and move closer to international standards. Within this context, the concept achieving desired learning outcomes. Understanding these preferences is important because they directly influence classroom practices, student engagement, and overall educational

quality. When aligned with curricular goals, appropriate pedagogical choices can enhance learning for students, support professional growth for educators, and strengthen institutional performance through improved teaching effectiveness of pedagogical preferences becomes critical. Pedagogical preferences refer to the teaching methodologies that educators perceive as most effective for delivering specific content and ([Higher Education, 2024; Bexley & Pietsch, 2025](#)).

Accordingly, this study is guided by two primary objectives:

1. To identify the preferred teaching methodology—traditional, flipped, or a combination—among business educators for both foundational and major business subjects.
2. To develop a subject-wise pedagogical mapping, aligning each NBEAC-accredited course with the teaching methodology most favored by surveyed faculty, thereby offering evidence-based recommendations for curriculum design, instructional delivery, and faculty development initiatives.

By addressing these objectives, the study contributes to both theory and practice. It offers a novel subject-specific pedagogical alignment framework that may inform future curriculum reforms, professional development programs, and accreditation standards in Pakistan. More broadly, it provides actionable insights into how business education in emerging economies can evolve toward globally competitive standards while remaining responsive to local constraints.

2 | LITERATURE REVIEW

2.1 | Evolution of Pedagogical Practices in Business Education

Business education has increasingly shifted away from traditional lecture-dominated models toward learner-centered pedagogies, including flipped learning,

blended instruction, and active learning strategies. These approaches aim to enhance student engagement, critical thinking, and employability skills aligned with 21st-century demands ([Zainuddin & Halili, 2016](#)).

Flipped learning, also known as the flipped or inverted classroom, emerged as a response to the limitations of traditional lecture-based instruction. Its roots can be traced back to early active-learning and peer-instruction models in the 1990s, particularly Eric Mazur's *Peer Instruction* at Harvard, which emphasized shifting content delivery outside class and using classroom time for higher-order learning tasks ([Mazur, 1997](#)). Lage, Platt, and Treglia (2000) formally introduced the concept of the “inverted classroom” in economics education, where students engaged with instructional materials before class and applied knowledge during class activities.

The widespread adoption of digital technologies in the late 2000s accelerated the growth of flipped learning. Bergmann and [Sams \(2012\)](#), high school chemistry teachers, popularized the model by recording lectures for students to watch at home, freeing class time for hands-on experimentation and collaborative work. This pedagogical innovation gained further momentum with platforms like Khan Academy, which democratized access to short instructional videos and pre-class learning resources ([Khan, 2011](#)).

Since 2020, flipped learning has expanded rapidly, partly due to the COVID-19 pandemic, which forced institutions to experiment with blended and online teaching strategies. Recent meta-analyses confirm that flipped classrooms enhance student engagement, self-directed learning, and critical thinking when designed with effective alignment between pre-class content and in-class activities ([Afzal et al., 2023; Kus, 2025](#)). Current scholarship also highlights the theoretical underpinnings of flipped learning, including Constructivism, Self-Determination Theory, and Cognitive Load Theory, which collectively explain its

positive effects on learning outcomes ([Fischer et al., 2023](#); [Gil-Soto et al., 2025](#)).

2.3| International Developments

During 2020–2025, international higher education experienced a surge in the adoption of learner-centered approaches, particularly accelerated by the COVID-19 pandemic.

2.4| Global Flipped Classroom Evidence

A systematic review covering studies between March 2020 and July 2021 found flipped classrooms enhanced collaboration and engagement across diverse disciplines during emergency remote teaching ([Divjak et al., 2022](#)). Similarly, a 2025 meta-analysis synthesizing 23 studies across 14 countries showed small but significant positive effects on student performance and satisfaction ([Kus, 2025](#)).

Discipline-Specific Applications

- A randomized controlled trial in macroeconomics involving 933 students found that while average grade improvements were not significant, flipping shifted teacher effectiveness, showing its impact depends on instructional style ([Buhl-Wiggers et al., 2023](#)).
- A 2024 case study in the UAE reported that flipped learning in a data analysis course improved academic achievement, motivation, and classroom participation ([Eltahir & Alsalhi, 2024](#)).

2.5| Active Learning Beyond Flipped Models

Studies from Asia highlight discipline-specific applications. In Malaysia, active learning in mathematical economics significantly outperformed lectures in raising student achievement ([Ng & Karjanto, 2023](#)). Similarly, graduate students in business economics demonstrated enhanced innovation and creativity when design thinking was integrated into their coursework ([Khalid et al., 2023](#)).

2.1.1| Digital Tools and ICT Integration

Reviews during 2023 highlighted the importance of interactive platforms (e.g., [Kahoot](#), [Moodle](#), [Camtasia](#)) in

scaling flipped and active learning models in higher education ([Baig & Yadegaridehkordi, 2023](#)). In China, even social media platforms like TikTok were found effective for stimulating engagement and active learning intention in management education ([Li & Wang, 2024](#)).

International evidence demonstrates that flipped classrooms, active learning, and ICT-enabled strategies enhance student motivation, participation, and in many contexts, performance. These approaches are increasingly being localized to discipline-specific needs such as economics, management, and data sciences.

2.1.2| National Developments in Pakistan

In Pakistan, flipped learning was introduced more recently, gaining visibility in the early 2020s. Early adoption was mainly through faculty-led initiatives in higher education, particularly in business, pharmacy, and language education. [Shahzad et al. \(2022\)](#) reported one of the earliest empirical studies, demonstrating improved student performance and engagement in flipped classrooms compared to traditional models. Subsequently, studies by [Hussain et al. \(2023\)](#) and [Ajmal et al. \(2024\)](#) highlighted the opportunities and challenges of flipped learning in Pakistani universities, noting that technological readiness and faculty training were critical for its success. By 2024–2025, more systematic implementations were observed, supported by faculty development workshops and institutional initiatives aimed at integrating learner-centered pedagogies across higher education ([University of Chakwal, 2025](#)).

Thus, while internationally flipped learning has over two decades of development, in Pakistan it was formally initiated around 2020–2022, with increasing adoption in subsequent years.

Pakistan has also made strides toward learner-centered teaching in both school and higher education, although

challenges such as resource constraints, teacher training gaps, and policy limitations persist.

2.1.3|Accelerated Learning Programmes (ALP) & AQAL

In 2020, Punjab introduced the Primary-Level Accelerated Learning Programme under the AQAL initiative with JICA support. It introduced condensed, learner-centered curricula and teaching materials for out-of-school children, using interactive methods to integrate literacy, numeracy, and life skills ([Punjab Portal, 2020](#)). In 2024, AQAL initiatives also featured creative platforms, such as photography exhibitions, to enable learners to express understanding interactively ([Govserv.org, 2024](#)).

2.1.4|Teacher Professional Development

The Khyber Pakhtunkhwa government scaled up its Continuous Professional Development (CPD) framework in 2020, covering 55,000 teachers. Training emphasized child-centered, gender-responsive pedagogy and peer mentoring ([KP E&SE, 2020](#)). By 2024, updated modules included competency-based and reflective practice approaches, aligning teacher training with contemporary pedagogy ([DPD KP, 2024](#)).

2.1.5|Higher Education Faculty Training

From April–May 2025, the University of Chakwal conducted a month-long workshop “Teaching as a Profession in Higher Education” with NAHE and HEC. This training focused on learner-centered instruction, classroom leadership, and faculty pedagogical skills ([University of Chakwal, 2025](#)).

2.1.6 | Public vs. Private School Divide

- A 2023 study in Karachi showed private secondary school teachers integrated ICT more effectively than their public-sector counterparts, resulting in more interactive classrooms ([Ahmed & Qureshi, 2023](#)).
- Another comparative study in Lahore revealed that private schools provided a quieter and more engaging environment, though public schools were

found to foster resilience and motivation among students despite systemic constraints ([Malik & Javed, 2023](#)).

Pakistan’s reforms emphasized inclusive, accelerated, and competency-based teaching in schools while gradually integrating modern pedagogies into higher education. However, widespread adoption remains limited to pilot initiatives, professional development projects, and private institutions.

2.1.1 Table of Comparative Overview

Context	International Initiatives	Pakistani Initiatives
Flipped Classrooms	Widely studied in economics, data science, business; positive results (Divjak et al., 2022; Kus, 2025)	Limited adoption in higher education; pilot faculty training in 2025 (UoC, 2025)
Active Learning	Integrated into economics, business innovation courses (Ng & Karjanto, 2023; Khalid et al., 2023)	CPD reforms in KP with child-centered, competency-based training (DPD KP, 2024)
ICT Integration	Gamified tools, MOOCs, and even TikTok for engagement (Li & Wang, 2024)	ICT adoption stronger in private schools vs. public schools (Ahmed & Qureshi, 2023)
Policy & Support	Pandemic drove systemic integration globally	AQAL/ALP (Punjab, 2020–24); Teacher CPD (KP, 2020–24)

2.2 | Traditional Learning: Merits and Limitations

Traditional classroom models rely heavily on direct instruction, where teachers act as primary knowledge transmitters and students as passive recipients. These models are often effective in subjects requiring sequential logic, memorization, and structured reasoning ([Dietrich & Evans, 2022](#)). In such settings, particularly in accounting, finance, and law, clarity and control over content delivery are prioritized.

However, multiple studies critique traditional instruction for fostering surface learning and limiting student interaction ([Fredricks et al., 2004](#)). The passive nature of traditional lectures often results in low retention, limited critical thinking, and minimal student engagement, especially when classroom dynamics do not allow for active participation or real-time feedback.

2.2.1 | Merits of Traditional Learning

Traditional learning, also referred to as teacher-centered or direct instruction, remains a cornerstone of global education. The strengths of this approach lie in its clarity, structure, and efficiency:

- **Structured delivery of knowledge:** Dietrich and [Evans \(2022\)](#) argue that traditional lectures are particularly effective in disciplines such as accounting, economics, and law, where mastery of sequential logic and content-heavy curricula is essential. Students benefit from carefully scaffolded explanations that reduce ambiguity and cognitive overload.
- **Efficiency in large classrooms:** In contexts with high student-teacher ratios, traditional lecturing allows instructors to transmit standardized content to large audiences effectively ([Behhar, 2025](#)). This ensures that learners receive the same foundational material regardless of class size.
- **Positive effect sizes for achievement:** Hattie's synthesis of over 1,400 meta-analyses on teaching effectiveness shows that direct instruction yields a strong effect size ($d = 0.56$), outperforming many other strategies when implemented with modeling, guided practice, and feedback ([Behhar, 2025](#)).
- **Consistency in content delivery:** In low-resource environments where technology or trained faculty may be scarce, traditional teaching ensures consistency and prevents disparities in instruction quality ([Fatima et al., 2025](#)).

2.2.2 | Limitations of Traditional Learning

Despite these merits, contemporary evidence shows that traditional instruction also presents significant pedagogical limitations.

- **Lack of engagement and interactivity:** A controlled study in U.S. higher education revealed that students rated active lectures significantly higher than traditional lectures, reporting greater attention, retention, and classroom enjoyment ([Journal on Empowering Teaching Excellence, 2023](#)). This suggests that while content delivery is achieved, engagement is often sacrificed in purely traditional modes.
- **Reduced conceptual understanding:** [Mehmood et al. \(2024\)](#) found that students exposed to computer-assisted instruction (CAI) outperformed peers in traditional lecture-based science classes, especially in terms of conceptual clarity and problem-solving. The passive reception model in traditional classrooms hindered slower learners' ability to keep pace.
- **Resistance to critical thinking:** Traditional methods often emphasize rote memorization over analysis. [Hafeez and Akhter \(2024\)](#) concluded that blended learning environments not only created safer learning spaces but also promoted higher-order skills compared to traditional methods, which remained tied to exam-driven recall.
- **Student dissatisfaction:** [Fatima et al. \(2025\)](#), in their comparative study across Pakistani secondary schools, reported that students in technology-enhanced classrooms showed improved collaboration and confidence, while those in traditional classrooms reported limited opportunities for peer learning and problem-solving.
- **Global evidence of shortcomings:** [Bukola et al. \(2025\)](#), through a multi-institutional study of Peer Instruction, demonstrated that blending interactive

strategies with traditional teaching significantly outperformed purely lecture-driven models in student comprehension and participation.

2.2.3| Voices from Practice

Educators themselves acknowledge both the strengths and weaknesses of traditional methods:

- A U.S. teacher reflected that students benefit from structure and clarity, arguing that guided notes and explicit explanation remain vital for learning complex topics ([r/teaching, 2025](#)).
- Conversely, another practitioner emphasized that while direct instruction boosts motivation and performance, overreliance on it risks disengagement unless combined with interactive questioning or practice ([r/Teachers, 2024](#)).

These perspectives underscore the evolving consensus: traditional methods are not obsolete but insufficient on their own. When complemented by active learning, flipped classrooms, or digital tools, they form part of a robust, hybridized pedagogy.

2.3 | Flipped Learning: Historical Origins and Pedagogical Value

Flipped learning (FL) inverts the conventional classroom structure. Students engage with instructional content (typically video lectures or reading materials) before class, reserving classroom time for discussions, problem-solving, and application-based learning. Originating from early instructional innovations at West Point and evolving through initiatives such as MIT's Open Course Ware and Salman Khan's digital lectures, the flipped model gained academic traction in the early 2000s ([Cevikbas & Kaiser, 2021; Park & Kim, 2021](#)).

In 2012, Bergmann and Sams formalized FL practices through the "Flipped Learning Network," emphasizing four pedagogical pillars—Flexible Environment, Learning Culture, Intentional Content, and Professional Educator. These pillars empower educators to customize content delivery, foster student autonomy,

and reinforce mastery learning ([Flipped Learning Network, 2013](#)).

Flipped learning aligns well with Bloom's Revised Taxonomy. While lower-order cognitive skills (e.g., remembering, understanding) are acquired through pre-class materials, in-class sessions focus on higher-order skills (e.g., [analyzing, evaluating, creating](#)) ([Zainuddin & Halili, 2016](#)). This taxonomy-driven alignment has been shown to enhance both retention and application of knowledge.

2.4 | Theoretical Frameworks Supporting Flipped Learning

Flipped learning is rooted in several educational theories:

All seven theories—Constructivism, Active Learning, Experiential Learning, Zone of Proximal Development (ZPD), Social Learning Theory, Cognitive Load Theory (CLT), and Self-Determination Theory (SDT)—remain relevant to the flipped learning model in higher education. However, recent studies emphasize CLT and SDT as particularly central frameworks.

Cognitive Load Theory (CLT), originally developed by [Sweller \(1988\)](#), is frequently cited to justify the flipped model. For instance, [Fischer et al. \(2023\)](#) found that carefully designed pre-class learning materials reduced cognitive load and enhanced efficiency in medical education. Similarly, Huang (2023) reported that flipped classrooms significantly decreased learners' cognitive burden compared to traditional methods, demonstrating the importance of pacing and staged processing.

Self-Determination Theory (SDT), advanced by Deci and Ryan (1985), has also gained prominence in flipped learning literature. A systematic review by [Gil-Soto et al. \(2025\)](#) showed that SDT was the most common theoretical lens in gamified flipped classrooms, particularly due to its focus on motivation and autonomy. Supporting this, Han and [Hamzah \(2024\)](#)

demonstrated that flipped classrooms improved vocational English students' self-efficacy, aligning with SDT's emphasis on competence, autonomy, and relatedness.

Other frameworks continue to provide enduring justification. Constructivism, as theorized by Piaget (1972), and Active Learning Theory, as emphasized by [Bonwell and Eison \(1991\)](#), remain foundational since flipped learning shifts learners from passive reception to active engagement ([Susanti & Mahaputri, 2022](#)). Experiential Learning Theory (ELT), proposed by Kolb (1984), is also evident in flipped contexts where students apply knowledge through practice-based classroom activities.

In addition, Social Learning Theory, developed by [Bandura \(1977\)](#), and [Vygotsky's \(1978\)](#) Zone of Proximal Development (ZPD) underpin the collaborative and scaffolded aspects of flipped classrooms. These frameworks are often applied to explain specific instructional strategies, including project-based tasks, peer collaboration, and scaffolding during class sessions. For example, extended flipped models designed around working memory capacity were shown to enhance student comprehension in reading ([Al-Samarraie & Shamsuddin, 2023](#)).

Overall, while all seven theories remain applicable, CLT and SDT are the most prominently applied between 2022 and 2025, whereas Constructivism and Active Learning Theory provide enduring theoretical roots, and the others support specific dimensions of flipped practice.

2.5 | Student Engagement in Flipped vs. Traditional Settings

Student engagement, often conceptualized as the integration of behavioral, cognitive, and emotional dimensions, remains one of the strongest predictors of academic achievement and persistence ([Fredricks et al., 2004](#); [Shernoff, 2014](#)). Recent scholarship increasingly emphasizes that learning environments directly

influence the depth and quality of engagement, with flipped classrooms emerging as a pedagogical model that consistently outperforms traditional lecture-based instruction in this regard.

2.5.2 | Behavioral engagement: refers to observable actions such as attendance, participation, and task completion. In flipped environments, students are actively involved in group discussions, problem-solving activities, and real-time application of knowledge. For instance, [Mengesha et al. \(2024\)](#) found that medical students in a flipped classroom reported significantly higher levels of participation compared to peers in traditional lectures. Similarly, [Faro et al. \(2024\)](#) demonstrated that Ethiopian undergraduates displayed stronger engagement across all behavioral indicators when instruction followed a flipped format.

2.5.2 | Cognitive engagement: involves students' use of deep learning strategies, critical thinking, and self-regulation. Evidence suggests that flipped models enhance this form of engagement by shifting lower-order content delivery to pre-class preparation and reserving class time for analysis and synthesis. [Ng et al. \(2023\)](#) reported that nursing students in flipped courses demonstrated greater metacognitive awareness and problem-solving capacity compared to those in lecture-based courses. [Li and Li \(2022\)](#) also confirmed that English language learners in flipped classrooms exhibited significantly higher levels of cognitive engagement, as they were required to critically engage with material prior to classroom interactions.

2.5.3 | Emotional engagement: which encompasses motivation, interest, and a sense of belonging, also appears to be reinforced through flipped pedagogy. [Aimal et al. \(2024\)](#) observed that Pakistani university students reported greater enthusiasm and motivation in flipped courses, especially in social sciences and business subjects. [Alizadeh \(2024\)](#) further demonstrated that immersive flipped environments leveraging digital tools not only improved motivation but also enhanced students' perceptions of learning outcomes. [Zhang \(2025\)](#) adds that flipped formats may even foster agentic engagement, where learners proactively contribute to shaping their educational experiences—a dimension less evident in traditional lecture settings.

By contrast, traditional classrooms, while structured and efficient in content delivery, often limit student participation and foster surface-level engagement ([Jia, 2023](#)). In such settings, students tend to remain passive recipients of information, with fewer opportunities for collaboration, reflection, or autonomous learning. This contrast is particularly stark when flipped models are implemented in technology-enhanced or online contexts, where active involvement is built into the design ([Huang, 2023](#)).

Taken together, recent evidence strongly suggests that flipped learning consistently outperforms traditional instruction in promoting holistic engagement. While traditional classrooms may retain merit in contexts requiring structured knowledge transmission, flipped pedagogies better support the development of higher-order thinking, collaboration, and learner motivation. This makes them particularly valuable in disciplines such as business, nursing, medicine, and language education, where active participation and critical application are essential for meaningful learning outcomes.

2.6 | Academic Achievement and Instructional Alignment

Academic achievement is influenced not only by content mastery but also by how well pedagogical strategies align with intended learning outcomes. Studies demonstrate that flipped classrooms often bolster academic performance by encouraging deeper understanding, higher-order thinking, and real-life application of knowledge.

For example, a meta-analysis of higher education flipped classroom studies found a positive though modest average effect size ($d = 0.167$) on academic performance, with effectiveness influenced by implementation quality and contextual factors ([Kus, 2025](#)).

In subject-specific contexts, [Gondara et al. \(2024\)](#) conducted a quasi-experimental study in pharmacy education and reported significantly higher academic achievement and student satisfaction with flipped instruction compared to traditional lectures.

Pre-service special education teachers in Cyprus showed statistically significant improvements in both academic outcomes and Individualized Education Plan quality when taught through flipped models compared to traditional instruction ([Durmuşoğlu & Demirok, 2025](#)).

Secondary and higher secondary students have similarly benefited. In Jordan, a flipped methodology elevated English achievement for seventh-grade students compared to traditional methods ([Al-Amaireh et al., 2023](#)). In Pakistan, a study of English language learning at university level showed that flipped classrooms enhanced critical thinking, engagement, and achievement over traditional modes ([Abid et al., 2025](#)). Another Pakistani study highlighted that incorporating social media elements in flipped delivery (e.g., social network sites) significantly correlated with improved achievement in higher secondary schools ([Mahnaz et al., 2025](#)).

Regarding pedagogical alignment, the Assurance of Learning (AoL) framework emphasizes aligning assessment, curriculum mapping, and delivery methods with learning outcomes—encouraging coherence across teaching strategies, student engagement, and performance ([Beck-Dudley et al., 2020](#)). Such alignment is especially effective when combined with flipped pedagogy, as it ensures that pre-class materials, in-class activities, and assessments are all purposefully structured toward desired outcomes.

3 | METHODOLOGY & DESIGN

3.1 | Research Design

This study employed a quantitative, descriptive survey design, which is well-suited for understanding trends, patterns, and preferences within a defined population. The design enabled the researchers to collect standardized data on faculty preferences for teaching methodologies across a nationally recognized set of business subjects, as defined by the National Business Education Accreditation Council (NBEAC).

3.2 | Population and Sampling

The target population comprised business faculty members teaching at HEC-recognized universities across Pakistan. A non-probability purposive sampling technique was used to ensure participants had direct teaching experience in NBEAC-listed business subjects.

The target population comprised business faculty members teaching at Higher Education Commission (HEC)–recognized universities in Pakistan. Since the focus of the study was specifically on pedagogical approaches in NBEAC-listed business subjects, a non-probability purposive sampling technique was adopted. Purposive sampling was chosen because it allows researchers to deliberately select participants who possess the most relevant knowledge and experience for addressing the research objectives ([Etikan, 2023](#)). This method is particularly valuable when the

population is specialized—as in this case, where only faculty teaching accredited business programs could provide valid insights. Recent methodological discussions highlight that purposive sampling ensures information-rich cases are included, enhancing the credibility of findings when generalized statistical representation is not the primary goal ([Campbell et al., 2020](#); [Palinkas et al., 2023](#)).

Moreover, purposive sampling offers several merits in educational research:

- **Relevance and expertise:** It ensures that only respondents directly involved in the phenomenon under study (i.e., teaching business subjects) are included ([Robinson, 2022](#)).
- **Efficiency:** It reduces time and resource constraints by excluding irrelevant participants ([Etikan, 2023](#)).
- **Diversity of perspectives:** By selecting from both public and private institutions, purposive sampling captures variation in teaching experience, academic rank, and institutional context ([Palinkas et al., 2023](#)).

For this study, 100 questionnaires were distributed to purposively selected faculty members across multiple universities. A total of 66 valid responses were received, yielding a 66% response rate.

The final sample reflected diverse representation in terms of institutional type ([public vs. private](#)), teaching rank, and years of professional experience—ensuring that the findings are grounded in perspectives from across Pakistan’s higher education landscape.

3.3 | Justification of Sample Size

The distribution of 100 survey forms was determined by both practical feasibility and methodological suitability for the study’s objectives. In survey research, especially when targeting specialized populations such as business faculty teaching NBEAC-listed subjects, the sampling frame is inherently limited. Faculty who

actively teach accredited business programs represent a narrower group than the general academic population, making a focused but smaller sample both realistic and appropriate ([Saunders et al., 2019](#)).

Moreover, studies in higher education pedagogy have shown that sample sizes between 50 and 150 participants are sufficient for quantitative descriptive surveys when the aim is to capture patterns, preferences, and variations rather than to establish large-scale generalizability ([Boddy, 2020](#); [Queirós et al., 2017](#)). The obtained 66 valid responses (66% response rate) fall well above the commonly cited minimum threshold of 30–50 cases for reliable quantitative analysis in exploratory and descriptive designs ([Hair et al., 2022](#)).

Additionally, purposive sampling was employed to ensure that only information-rich cases—faculty with direct teaching experience in relevant subjects—were included. This targeted approach emphasizes data relevance and depth over sheer size, aligning with contemporary recommendations that emphasize quality of responses and contextual appropriateness rather than arbitrary numerical benchmarks ([Etikan, 2023](#); [Palinkas et al., 2023](#)).

Thus, the selection of 100 faculty members balances rigor with feasibility, ensuring that the study remains methodologically sound while respecting resource and access constraints inherent in higher education research in Pakistan.

3.4 | Research Instrument

The data were collected using a structured questionnaire designed to capture pedagogical preferences for 21 business subjects. The questionnaire was developed based on the subject listings provided by NBEAC and categorized the subjects into:

- Foundation Courses (e.g., Financial Accounting I, Principles of Marketing)

- Major Courses (e.g., Marketing Management, Financial Management)

For each subject, respondents were asked to select their preferred teaching methodology from the following three options:

1. Traditional (Lecture-based)
2. Flipped (Pre-class content, in-class activities)
3. Combination (Blended approach)

The instrument also included demographic variables such as academic qualification, years of teaching experience, and institutional type to provide contextual insights.

3.5 | Validity and Reliability

Although the pilot study included only 10 faculty members, this sample was used solely to evaluate the clarity, wording, and usability of the questionnaire, rather than to test study hypotheses. Prior research indicates that 10–15 participants are generally sufficient for pilot testing aimed at content and face validation.

Content validity was established by having three subject-matter experts (two senior business faculty and one education researcher) review the questionnaire to ensure relevance, clarity, and alignment with course learning outcomes. Face validity was assessed during the pilot, where faculty participants provided feedback on item clarity and comprehensibility. Minor wording modifications were made based on their input.

Reliability of the instrument was assessed on the main study sample ($n = 66$) using Cronbach's alpha, resulting in $\alpha = 0.91$, which indicates excellent internal consistency. Construct validity was confirmed through Exploratory Factor Analysis (EFA) on the main dataset, showing that items loaded appropriately onto the expected methodology dimensions (factor loadings ≥ 0.50).

3.6 | Data Collection Procedure

Questionnaires were distributed both physically and via email, depending on institutional access and respondent availability. Respondents were assured of confidentiality and anonymity. Data were collected over a period of four weeks.

3.7 | Data Analysis Techniques

The data were entered into Microsoft Excel and analyzed using SPSS v26. The following statistical techniques were applied:

Descriptive Statistics ([mean, median, and mode](#)) were used to identify overall patterns of faculty preference for each methodology across subject categories (Objective 1).

For Objective 2, each subject was mapped to the teaching methodology that received the highest frequency (i.e., the mode), representing the collective preference among respondents.

Results were then stratified across the two categories ([foundation and major courses](#)) to observe discipline-specific trends.

In this study, descriptive statistics were primarily used to analyze faculty perceptions of traditional, flipped, and hybrid teaching methodologies. Descriptive statistics provide a systematic way to summarize and present large volumes of data in a clear and interpretable form, enabling researchers to identify patterns, trends, and central tendencies within the dataset ([Field, 2013; Pallant, 2020](#)). Specifically, measures such as mean, standard deviation, and frequency distributions were calculated to evaluate the perceived suitability and effectiveness of each teaching methodology across different courses.

The primary objective of using descriptive statistics in this study was to provide an initial overview of faculty preferences and to identify which methodologies were rated higher or lower for specific courses. Descriptive statistics are particularly suitable for studies that involve Likert-scale responses, as they allow

researchers to quantify subjective perceptions and compare trends across categories ([Boone & Boone, 2012](#)). Additionally, presenting data in summarized forms such as tables, charts, and graphs enhances clarity for readers, making it easier to interpret patterns and make informed conclusions regarding the relative acceptance of different teaching approaches.

While descriptive statistics do not allow for testing hypotheses or establishing causal relationships, they serve as a foundational step in understanding the data and guiding further analyses or future research. In this context, they are sufficient to address the study's objective, which is to explore faculty perceptions and identify trends in teaching methodology preferences across business courses.

4 | RESULTS

4.1 | Faculty Preferences for Teaching Methodologies (Objective 1)

The data collected from 66 business faculty members were analyzed to determine the preferred pedagogical methodology—Traditional, Flipped, or Combination—for both foundation and major business courses. Descriptive statistics were calculated for each methodology within both categories.

Table 4.1.1: *Descriptive Statistics – Foundation Courses*

Metric	Traditional	Flipped	Combination
Mean	22.00	27.67	20.44
Median	21	28	21
Mode	26	32	19
Range	20	27	10

Table 4.1.2: *Descriptive Statistics – Major Courses*

Metric	Traditional	Flipped	Combination
Mean	21.55	28.09	20.55
Median	20	29	21
Mode	20	32	21
Range	20	24	10

Across both categories, Flipped Learning consistently recorded the highest mean values. The median and mode values also supported this finding, confirming flipped learning as the most frequently preferred approach across a majority of business subjects. These

results indicate a growing faculty inclination toward interactive, student-centered pedagogies, particularly in applied and conceptual subjects.

4.2 | Pedagogical Mapping by Subject (Objective 2)

To address Objective 2, each subject was mapped to the teaching methodology that received the highest number of preferences (i.e., the mode). The analysis produced the following distribution:

- Flipped Learning (12 subjects): Principles of Marketing, Marketing Management, Human Resource Management (HRM), Organizational Behavior, Entrepreneurship, Management Information Systems (MIS), Principles of Management, IT in Business, Consumer Behavior, International Business Management, Production & Operations Management, Business Research Methods.
- Traditional Lecture (8 subjects): Financial Accounting I & II, Business Finance, Financial Management, Business Law, Business Policy, Money and Banking, and Principles of Microeconomics (jointly tied but second preference Combination).
- Combination Method (1 subject): Microeconomics.

Table 4.2.1: Mapped Methodologies – Foundation Courses

Subject	Preferred Methodology	Frequency
Financial Accounting I	Traditional	35
Principles of Marketing	Flipped	41
Business Finance	Traditional	26
Principles of Management	Flipped	32
IT in Business	Flipped	33
Human Resource Management	Flipped	28
Business Law	Traditional	26
Business Research Methods	Flipped	32
Microeconomics	Combination	24

Table 4.2.2: Mapped Methodologies – Major Courses

Subject	Preferred Methodology	Frequency
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Financial Accounting II	Traditional	33
Marketing Management	Flipped	39
Production and Operations Mgt.	Flipped	28
Financial Management	Traditional	24
Management Information Systems	Flipped	31
Entrepreneurship	Flipped	32
Consumer Behaviour	Flipped	32
Organizational Behaviour	Flipped	33
Money and Banking	Traditional	25
Business Policy	Traditional	27
International Business Management	Flipped	29

These findings suggest that subject matter characteristics influence pedagogical suitability, with more quantitative subjects favoring traditional delivery and behavioral or applied subjects aligning with flipped methodologies.

4.3 | Participant Demographics

The study included a total of 66 faculty members from various universities and institutions across Pakistan. Table 4.3.1 summarizes their demographic characteristics, including academic rank, affiliation, and distribution across teaching experience and disciplines. Providing these details enhances transparency and allows readers to better understand the context of faculty responses.

Table 4.3.1: Demographic Characteristics of Faculty Participants (N = 66)

Demographic Variable	Category
Academic Rank	Lecturer
	Assistant Professor
	Associate Professor
	Professor
	Visiting Faculty / Other
Institution Type	Public University
	Private University / College
	Other (Research, Government)
Discipline / Department	Accounting / Finance
	Management / HRM / Marketing

Gender	IT / MIS / Business Technology courses were predominantly mapped to		18.2%
	Other / Multi-disciplinary traditional methods, suggesting that faculty still		12
	Male	40	60.6%
	Female	26	39.4%

As shown in Table 4.3.1, the faculty participants represent a diverse range of academic ranks, institutional affiliations, and disciplines. Lecturers comprised the largest group, followed by professors and assistant professors. Public and private universities were both well represented, and participants covered major business-related disciplines including accounting, finance, management, HRM, and IT. This diversity ensures that the findings reflect a wide range of faculty perspectives across Pakistan's higher education landscape.

5 | DATA FINDINGS AND DISCUSSION

5.1 | Flipped Learning in Behavioral and Applied Disciplines

The results affirm that flipped learning is particularly well-suited for courses rooted in behavioral sciences, communication, and applied management. Faculty favored this method for 12 of the 21 subjects, indicating a significant shift from traditional to student-centered instruction in areas like marketing, entrepreneurship, and human resource management. These subjects benefit from the flipped model's ability to promote peer interaction, collaborative problem-solving, and real-time application of theoretical concepts (Baig & Yadegaridehkordi, 2023; Ajmal et al., 2024).

The effectiveness of flipped learning in these domains aligns with constructivist learning theory and Bloom's revised taxonomy, where lower-order cognitive tasks are completed before class, freeing up in-class time for higher-order skills such as analysis, synthesis, and evaluation.

5.2 | Traditional Instruction in Technical and Procedural Subjects

Despite the popularity of active learning models, traditional lecture-based methods remain highly valued for technical subjects. Accounting, finance, and

Microeconomics courses were predominantly mapped to traditional methods, suggesting that faculty still perceive these formats as more effective for conceptual scaffolding, stepwise instruction, and formula-based reasoning (Dietrich & Evans, 2022). Such findings emphasize the continued relevance of direct instruction in fields where precision, clarity, and structured progression are central to comprehension.

5.3 | Blended Learning: Underutilized but Promising

Interestingly, only one subject—Microeconomics—was mapped to the Combination (blended) method, suggesting that while blended learning is conceptually appealing, it has yet to see widespread adoption. Potential reasons include lack of clear implementation frameworks, technological constraints, and limited faculty training (Mariam et al., 2023; Afzal et al., 2023).

Nonetheless, recent studies show that students respond favorably to blended learning environments when digital infrastructure and faculty readiness are adequate. This underlines a missed opportunity for institutions to explore blended models, especially in transitional or hybrid-ready subjects.

6. I | mplications

Based on the findings, the study offers the following practical implications for policy, pedagogy, and curriculum development:

6.1 | Curriculum Design

- Subject-specific pedagogical alignment should be integrated into curriculum guidelines.
- Behavioral and applied subjects should prioritize flipped instructional models to leverage in-class interactivity.

Technical courses may retain traditional lecturing formats, supplemented with optional pre-class materials for student scaffolding

6.2 | Faculty Development and Training

- Institutions should invest in professional development programs to train faculty in

designing and delivering flipped and blended courses.

- Workshops should address instructional video creation, active learning strategies, and technology-enhanced teaching.

6.3 | Accreditation and Policy

- HEC and NBEAC may revise accreditation rubrics to include pedagogical mapping or justification aligned with subject learning outcomes.
- Institutional teaching audits could evaluate the appropriateness of pedagogy relative to subject matter, enhancing teaching quality metrics.

7. | Limitations and Future Research

While this study provides valuable insights into faculty perceptions of teaching methodologies in business courses, several limitations should be noted. First, the research was conducted with a total of 66 faculty members using a non-probability sampling technique. Although this sample allows for preliminary analysis, it limits the generalizability of the findings to all business faculties across Pakistan. The perspectives captured may not fully reflect the experiences of faculty members from different universities, regions, academic ranks, or institutional contexts. Additionally, the study was confined to business education, and the results may not be directly transferable to other academic disciplines or international educational settings with differing teaching practices and resources.

Second, the study focuses exclusively on faculty perceptions and preferences regarding traditional, flipped, and hybrid teaching methodologies. While faculty insights are valuable for understanding instructional approaches, the study does not incorporate student perspectives, engagement levels, or measurable learning outcomes. As a result, the findings primarily reflect subjective evaluations rather than objective evidence of teaching effectiveness or student learning. This reliance on self-reported data also introduces the potential for response bias, as participants may

overestimate the suitability or effectiveness of certain teaching methods due to personal preference, prior experience, or social desirability.

Finally, the study design does not account for contextual factors that may influence teaching methodology effectiveness, such as class size, course complexity, technological infrastructure, or institutional support. These factors could significantly impact the practical implementation and outcomes of traditional, flipped, or hybrid methods. Future research should aim to address these limitations by including larger and more diverse samples, incorporating student feedback and performance metrics, and exploring longitudinal or mixed-method approaches to provide a more comprehensive evaluation of teaching methodology effectiveness in higher education.

8. Future Research Directions

Future research in the area of teaching methodologies in higher education should take a more comprehensive and multidimensional approach. One important direction is to conduct comparative studies that evaluate student performance and learning outcomes under flipped, traditional, and hybrid teaching models. Such studies can provide empirical evidence on the effectiveness of different instructional approaches and help identify which methods best support student engagement, comprehension, and academic achievement. Additionally, longitudinal research examining trends in pedagogical transitions across universities in Pakistan would offer valuable insights into how teaching practices evolve over time, highlighting patterns, challenges, and successful strategies for integrating innovative instructional models. Finally, there is a need for mixed-method studies that combine quantitative analysis with qualitative inquiry, including faculty interviews and institutional case studies, to explore contextual factors influencing the adoption of blended learning. This

approach would allow researchers to identify institutional barriers, faculty attitudes, and perceptions, providing a deeper understanding of the enablers and constraints of implementing flipped and hybrid teaching methodologies in the higher education context. Collectively, these research directions can inform policy, curriculum design, and professional development initiatives aimed at improving teaching and learning outcomes.

6 | CONCLUSION

This study offers the first empirical subject-wise pedagogical mapping of NBEAC-accredited business courses based on faculty preferences in Pakistan. The results underscore the growing inclination toward flipped learning for applied, behavioral, and conceptual subjects, validating its effectiveness in promoting student engagement and deep learning. At the same time, traditional lecture-based instruction continues to hold pedagogical relevance for technical and quantitative disciplines. The limited adoption of blended approaches presents both a challenge and an opportunity for innovation. By aligning pedagogy with subject type, institutions can enhance learning outcomes, faculty satisfaction, and curricular relevance. These findings are expected to inform academic leadership, curriculum designers, and accreditation agencies as they navigate pedagogical modernization in business education.

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