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Faculty Perspectives on Teaching Challenges and Professional Development Needs in Higher Education Institutions in Pakistan: A Qualitative Study

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Abstract

Teachers in Pakistan's higher education system face a wide range of expectations and obstacles within its intricate ecosystem. It is essential to comprehend their viewpoints and experiences in order to address problems and raise the standard of education. In this area, the study "Faculty Perspectives on Teaching Challenges and Professional Development Needs in Higher Education Institutions in Pakistan: A Qualitative Study" explores the complex experiences and points of view of academic staff members in a range of disciplines and institutions. Through an emphasis on professional development requirements and teaching obstacles, the study aims to offer significant insights for improving higher education in Pakistan. In order to guarantee a thorough representation of faculty perspectives, purposeful sampling was used, taking into account elements including teaching experience, academic rank, and institutional affiliation. This approach made it easier to include different viewpoints, which allowed for a more complex comprehension of the research topic. Themes pertaining to resource scarcity, instructional innovation, and infrastructure inadequacies were identified through qualitative analysis. The survey also found that there is an urgent need for professional development, notably in the areas of pedagogy and technological integration. The examination revealed important themes that brought to light the major obstacles that faculty members must overcome, such as outmoded lab equipment, restricted access to research databases, and the requirement for creative teaching strategies. Innovative teaching strategies have become essential, with a focus on student-centered, interactive approaches that develop critical thinking and problem-solving abilities. The report also emphasized how critical it is to provide training in technology integration so that people can successfully use digital tools. The study's findings highlight how crucial it is to make infrastructure investments, instructional innovations, and continual professional development in order to improve the quality of education. Infrastructure improvements, creative teaching methods, technological integration, and inter-institutional cooperation are given top priority in the recommendations. By putting these suggestions into practice, higher education institutions in Pakistan would be able to develop a culture of excellence, creativity, and constant growth while also empowering staff members and assisting students in succeeding.

Keywords: Higher education system, standard of education, teaching challenges, professional development, faculty perspectives.

Introduction

For every country to survive, thrive, and advance, teachers are essential. They are the main basis of the educational pyramid in every nation. Countries with capable, accountable educators quickly achieve sublimity and consolidation. Scholars and experts in education concur that instructors, through their teaching methods, have a remarkable impact on pupils. Because of this, teachers have always been held in high regard and devotion throughout history and in nearly all religions, historical customs, ancient civilizations, and philosophical viewpoints. The teacher of today plays more of a mentor and facilitator than a controlling and authoritarian role. The job of the teacher has evolved along with pedagogical techniques due to the rapid evolution of learning outcomes, material selection, and educational goals (Sharma, 2022). In the modern era, higher education is navigating a new terrain and taking on exciting challenges such as increased stakeholder expectations, globalization, and the

information technology revolution, growing domestic and international competition, and changing instructional strategies. The less encouraging part of the picture is that the higher education systems in developing and developing nations are falling short of expectations (Dewey, 2024).

In Pakistani higher education, faculty members are the key to academic achievement since they guide students through their academic journeys and contribute to research and intellectual discourse. However, within this complex ecology, faculty members encounter a wide range of challenges and expectations that mold their professional experiences and growth requirements. It is crucial to comprehend these challenges and requirements in order to establish a teaching and learning atmosphere that will ultimately raise the country's higher education standards (Rasool, Hussain, Ferdous, et al., 2024). Pakistan's higher education system offers a wide range of academic disciplines, institutions, and traditions. Every school offers a unique set of opportunities and challenges, from big, urban institutions to smaller, rural colleges. Furthermore, Pakistan's educational system is fast changing as a result of global trends in pedagogy and research, technology advancements, and changing societal expectations. Faculty members operate in this dynamic context, negotiating a difficult terrain in an effort to meet students' evolving needs while balancing institutional mandates and professional aspirations (M. Akram, Ahmad, Ishaq, & Javed, 2021). The intricate and multifaceted challenges encountered by academic personnel in Pakistan's institutions reflect the broader complexities of the educational domain. Infrastructure deficiencies, such as outdated lab equipment, inadequate funding, and limited access to research supplies, obstruct academic endeavors. Pedagogical approaches and teaching practices are also being closely examined as educators search for innovative ways to include students and foster critical thinking skills. In addition, there are advantages and disadvantages of using technology in teaching methods. Teachers need to be proficient in using digital technology and navigating digital platforms (Ahmad, Akram, & Ali, 2021). By facing challenges, professional development for faculty members becomes essential, offering opportunities for growth, learning, and adaptability. In order to better meet the diverse needs of students and enhance the quality of education, teachers must continue to acquire training in research methodology, technological integration, and pedagogical tactics. Furthermore, faculty collaboration and knowledge exchange play a major role in fostering an innovative and high-achieving culture in higher education institutions (Ramírez-Montoya, Andrade-Vargas, Rivera-Rogel, & Portuguez-Castro, 2021).

In Pakistan's vibrant higher education system, faculty members constitute the backbone of academic institutions, shaping students' educational experiences and encouraging innovation and research. But faculty members must constantly evolve and alter to suit the changing requirements of students and deal with the challenges of teaching. This qualitative research examines the varied experiences and perspectives of Pakistani faculty members employed in diverse fields and establishments to shed light on the challenges faced by educators in the classroom and the domains where they need further training (Rasool, Hussain, Janjua, et al., 2024). Pakistan's higher education system is distinguished by its diversity, encompassing a wide array of academic traditions, institutions, and subjects. Faculty members have varying opportunities and problems depending on the type of institution they work for, from large, metropolitan universities to small, rural colleges. Furthermore, the higher education system in Pakistan is evolving quickly as a result of global trends in pedagogy and research, technological advancements, and changing social expectations (Shahjahan, Estera, Surla, & Edwards, 2022). Within this complex ecosystem, faculty members encounter many challenges related to infrastructure, resources, and education. Inadequate facilities, outdated laboratory equipment, and limited access to research materials limit faculty members' ability to conduct experiments and deliver excellent instruction. In addition, more and more academics are opposing traditional lecture-based teaching methods and in favor of interactive, student-centered learning settings that foster critical thinking and problem-solving skills (Hinduja, Mohammad, Siddiqui, Noor, & Hussain, 2023). Teachers are talking more and more about pedagogical innovation in their talks, which suggests that they are realizing how important it is to adapt their lessons to better meet the changing needs of their pupils. Using cutting-edge techniques like project-based learning, flipped classrooms, and active learning strategies is necessary to create dynamic, interactive learning environments that support a variety of learning styles and skill levels (Adil, Ali, Sultan, Ashiq, & Rafiq, 2024).

An important area that is seen to require support with professional development is technology integration. Despite the promise for improved teaching and learning, many faculty members feel unprepared to take full advantage of digital platforms and tools. It is thought that training and support in technology-enhanced learning approaches are necessary to close the gap between the potential of technology and its practical deployment in the classroom (Asad, Rind, & Abdulmuhsin, 2022). To addressing pedagogical challenges, the study highlights the pressing need for chances for ongoing professional development that are tailored to the changing needs of faculty members. In order to better meet the diverse needs of students and enhance the quality of instruction, teachers must continue to acquire training in research methodology, technological integration, and pedagogy. Furthermore, faculty collaboration and knowledge exchange play a major role in fostering an innovative and high-achieving culture in higher education institutions (Guàrdia, Clougher, Anderson, & Maina, 2021).

This qualitative study offers valuable insights into the challenges faced by Pakistani university faculty members and their aspirations for professional development. By giving faculty voices a forum and shedding light on their experiences and viewpoints, the study seeks to inform practice and policy initiatives targeted at enhancing the caliber of higher education in Pakistan. By implementing targeted interventions that focus on infrastructure investment, pedagogical innovation, technology integration, and ongoing professional development, higher education institutions can empower faculty members to deliver high-quality instruction and prepare students for success in a rapidly changing global landscape.

Literature Review

Improving the standard of instruction and promoting academic excellence require an understanding of the difficulties and demands for professional development faced by faculty members in Pakistani higher education institutions. A thorough analysis of the literature reveals this research topic's many facets. The complex issues that faculty members in Pakistani higher education institutions encounter have been the subject of numerous studies. These difficulties include a lack of resources, obsolete infrastructure, and restricted access to resources and facilities for study. These difficulties have a big effect on the standard of research, instruction, and the academic environment as a whole (Saqib et al., 2020). Faculty members in Pakistan are placing an increasing emphasis on implementing creative teaching techniques in response to these difficulties. It is becoming more widely acknowledged that pedagogical strategies that place a high priority on problem-solving, critical thinking, and student-centered learning are necessary to enhance academic results (Shaukat & Chowdhury, 2020). In Pakistani higher education, technology integration has become a crucial topic for faculty development. Academics understand how important it is to improve student engagement, learning outcomes, and overall instructional efficacy by integrating digital tools and platforms into their teaching practices (Parveen & Tran, 2020). The needs of Pakistani academic members in terms of professional development are varied and complex. Training in pedagogy, technology integration, research methodology, academic leadership, and career progression are some of these needs. Improving teacher competency and work satisfaction requires attending to these needs (Iftikhar, Fu, Naureen, Cao, & Zhou, 2022). Even though the need of professional development is acknowledged, faculty members in Pakistan still have difficulty finding opportunities for pertinent training. Time restraints, institutional support, a lack of resources, and a poor infrastructure for professional development activities are some of these difficulties (Sahito, Shah, & Pelser, 2022).

Faculty professional development at Pakistani higher education institutions is greatly aided by institutional support. For institutions to promote a culture of ongoing learning and development, they must offer the infrastructure, resources, incentives, and chances for faculty development (Saleem & Ashiq, 2020). Peer mentorship programs and interdisciplinary collaborations are two examples of collaborative learning communities that work well for improving teacher professional development. These communities offer forums for academic members to network, exchange expertise, and support one another (Carvalho & Santos, 2022). In Pakistan, national policies and programs have a big influence on the professional growth of professors. Enhancing faculty competency and institutional capacity can be facilitated by policies that place a high priority on investments in education, faculty training, research facilities, and academic quality (Shaukat & Chowdhury, 2020). Studies that compare the methods of teacher development in different nations provide insightful information that may be used to enhance professional development programs in Pakistani higher education. Pakistan's policymaking and execution can benefit from understanding global best practices (H. Akram & Yang, 2021). Programs for developing faculty leaders are becoming more and more popular in Pakistani universities. The goal of these programs is to help faculty members become more capable leaders and ready them for positions in academic administration (Asif, Asad, Bhutta, & Khan, 2021).

A key element affecting the performance of professional development programs in Pakistani higher education is faculty motivation and involvement. To create development programs that are effective, institutions must identify and meet the needs, interests, and motivations of their faculty (Chakraborty & Biswas, 2020). Work-life balance and faculty well-being are crucial factors to take into account while planning for professional growth. Encouraging the health, wellbeing, and work-life balance of faculty members is essential for improving their general well-being, productivity, and job satisfaction (Mustafa, Alzubi, & Bashayreh, 2021). Professional development programs must be evaluated and assessed in order to determine their impact and efficacy. Thriving assessment frameworks have to encompass faculty input, learning objectives, institutional enhancements, and enduring effects on education and research (Javaid, Soroya, & Mahmood, 2020). Peer support, advocacy, and professional development opportunities are made possible in large part by faculty associations and professional networks. These networks give faculty members a forum for cooperation, knowledge exchange, and group projects (Maryam, Ali, Rizvi, & Farooq, 2021). Higher education in Pakistan should incorporate ethical issues into its faculty development programs, such as equity, research ethics, and academic integrity. Encouraging a culture of moral behavior and conscientious scholarship is crucial to preserving academic success and integrity (Haider, Munawar, & Ali, 2020). Faculty development initiatives should prioritize diversity, equity, and inclusion. Encouraging diversity, tackling structural obstacles, and cultivating welcoming surroundings are essential in establishing fair opportunities for educators with varied experiences (Laursen & Austin, 2020).

In order to better address faculty needs and improve teaching and learning results, future research on faculty development in Pakistani higher education should examine cutting edge techniques, new trends, and creative ways. Interdisciplinary, cooperative research projects have the potential to advance knowledge and influence faculty development policy and practice. Cultivating a culture of quality, innovation, and continual improvement in Pakistani higher education institutions requires a knowledge of faculty perspectives on professional development needs and teaching issues. Improving education quality and developing Pakistan's educational landscape need addressing these issues and bolstering faculty development programs.

Research Methodology

In order to ensure a diverse representation of faculty members from a range of disciplines across multiple higher education institutions in Pakistan, a purposive sampling technique was used as part of the research methodology for the study "Faculty Perspectives on Teaching Challenges and Professional Development Needs in Higher Education Institutions in Pakistan: A Qualitative Study". In order to ensure a thorough understanding of teaching challenges and professional development needs, the sampling criteria included individuals with varying levels of teaching experience, academic ranks, and institutional affiliations from the population of faculty members in Pakistani higher education institutions. Based on saturation, the sample size was chosen with the goal of having enough participants for both topic richness and data saturation in the qualitative analysis. Purposive sampling ensured a nuanced investigation of the research issue by selecting individuals based on their competence and desire to participate.

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Data Analysis

Pakistan's higher education system is a complex ecosystem with a wide range of obstacles and changing demands. This qualitative study seeks to explore the complex experiences and perspectives of academic staff members in a range of fields and settings. This study makes use of a purposive sample technique to guarantee a thorough representation of faculty voices while taking institutional affiliation, academic rank, and teaching experience into account. Through the viewpoint of faculty members, this study aims to provide important insights for improving the quality of higher education in Pakistan by assessing professional development needs and teaching issues.

1. Teaching Challenges

1.1. Infrastructure and Resources

Extending participants' worries about the inadequate facilities and resources of Pakistani higher education institutions reveals that these challenges have wide implications across academic levels and disciplines. The broad nature of this issue highlights the significance of impeding research initiatives and the delivery of top-notch instruction. 80% Faculty members have expressed their discontent with the lack of modern laboratory facilities, regardless of their position in the academic hierarchy or field of specialization. This flaw not only makes it harder for them to conduct experiments successfully, but it also limits the opportunities for experiential learning that students can take advantage of, which is essential for their general academic development. Teaching materials that are out of date make the problem worse by making it harder for teachers to engage students with content that doesn't reflect current knowledge and pedagogical practices. One important aspect of the resource problem is the restricted availability of research databases and scholarly journals. Many faculty members heavily rely on these resources to assist their teaching and research initiatives as well as to stay current with the latest developments in their fields. However, their ability to get cutting-edge research findings and incorporate them into their curricula is limited by the lack of these resources. This hinders both the quality of education and the expansion of knowledge within the academic community. Because they contradict the fundamental goal of higher education institutions, which is to foster innovation and intellectual growth, these resource limitations have a big influence. Lack of infrastructure and resources forces faculty members to make do with subpar materials and facilities, which affects the quality of instruction they can provide. These difficulties also cause faculty members, who are enthusiastic about their roles as researchers and instructors but are constrained by institutional flaws, to become angry and demoralized.

To overcome these physical and resource concerns, higher education stakeholders, legislators, and institutional leadership must work together in concert. Modernizing laboratory facilities, updating teaching materials, and expanding access to academic resources are all necessary investments to ensure that faculty members have the tools and support they need to do their jobs properly. Lessening resource disparities and fostering an excellence-focused culture in the higher education sector are two more benefits of initiatives that foster collaboration and knowledge exchange amongst schools. The participants' concerns on the inadequate facilities and resources of Pakistani higher education institutions emphasize the necessity of acting quickly to resolve these problems. Stakeholders can enable faculty members to advance research initiatives and deliver high-quality instruction by prioritizing resource expansion and infrastructure enhancements. This will help with the general growth and prosperity of the nation.

1.2. Pedagogical Approaches

The fact that pedagogical issues emerged as a major theme in the conversations highlights how important they are, as evidenced by the fact that a significant majority of participants 85% emphasized the need for creative teaching approaches. Teachers expressed their displeasure with traditional lecture-based teaching strategies and argued in favor of student-centered, interactive techniques. They emphasized how urgent it is to move children away from rote memorizing and toward developing their critical thinking and problem-solving skills. This general opinion highlights how important pedagogical innovation is to improving the quality of education in Pakistani universities. Examining these pedagogical issues more closely reveals that the demand for innovation originates from an understanding of how students' learning needs are changing in the fast-paced world of today. Academics are aware of how ineffective traditional teaching strategies are at involving pupils and preparing them for problems they may face in the real world. In order to create more dynamic and participative learning environments that accommodate a range of learning styles and abilities, educators are embracing novel approaches including project-based learning, flipped classrooms, and active learning strategies.

Furthermore, the emphasis on critical thinking and problem-solving techniques is indicative of a larger movement in education toward competency-based learning, which places equal emphasis on imparting knowledge and on giving students the tools they need to succeed in a world that is becoming more interconnected and complex. Teachers understand how critical it is to develop these higher-order thinking abilities in their students so they can become lifelong learners and engaged members of society. Encouraging pedagogical innovation essentially signifies a dedication to teaching excellence and an understanding of the transformational power of education. Pakistani higher education institutions can better prepare students for success in the twenty-first century and beyond by adopting innovative ways and placing a strong priority on the development of critical thinking and problem-solving skills. This group effort to innovate pedagogy highlights the dedication of faculty members to provide excellent instruction and foster an environment of ongoing development within the academic community.

Professional Development Needs

1.1. Technology Integration

The study's findings indicate that 75% of participants strongly agree that professional development on the use of technology in the classroom is essential. Even though using digital tools and platforms is becoming more and more common, many faculty members felt that their use of technology in the classroom was inadequate. This emphasizes how urgently training and assistance in this area are needed to close the gap between the promise of technology and its actual use. The need for workshops, seminars, and online courses that are especially focused on technology-enhanced learning methodologies was made evident by the participants. They underlined the value of customized training courses that offer helpful advice on incorporating different digital technologies into teaching strategies. Faculty members think they can use technology to alter teaching techniques and improve learning outcomes if they have the requisite knowledge and skills. This shared desire for technological expertise is summed up in the attitude that one participant, who was echoed by many others, expressed: "I believe technology can revolutionize the way we teach, but we need proper training to harness its full potential." This recognition of how technology might change the way that we think about education emphasizes how important it is to fund professional development programs that provide teachers the knowledge and self-assurance they need to embrace digital innovation.

Moreover, the understanding of technology's potential goes beyond the digitization of content to include more dynamic and captivating educational opportunities. Faculty members want to use technology to help students collaborate, be creative, and think critically in addition to using it to convey knowledge. Teachers hope to create a dynamic, inclusive learning environment that meets the many needs and interests of today's students by implementing technology-enhanced learning practices. The faculty members' acknowledgment of technology's revolutionary potential in education is demonstrated by the urgent need for training and support in technology integration. Higher education institutions can empower faculty members to use digital tools successfully and improve the caliber and impact of teaching and learning experiences by giving priority to professional development programs designed for technology-enhanced learning.

2.2. Pedagogical Training

Another essential professional development necessity that has come to light is pedagogical training, which struck a deep chord with 90% of study participants. Academic staff emphasized how important it is to provide continuous training and assistance in cutting-edge teaching approaches in order to adjust to students' changing demands and the changing nature of education. A variety of professional development opportunities, such as seminars, workshops, and peer mentorship programs, all centered on pedagogical innovation and best practices, were clearly preferred by the participants. These programs are thought to be crucial channels for raising student involvement and instructional efficacy. The general consensus was expressed by one participant in this concise way: "As educators, we must continuously update our teaching strategies to meet the changing needs of our students." This sentiment emphasizes how faculty members understand how important it is to change with the always shifting world of education. The demand for innovative pedagogy is a reflection of a dedication to teaching excellence and an understanding of its critical role in determining the caliber of educational experiences. Higher education institutions can enable instructors to deliver efficient teaching strategies that meet the varied requirements and preferences of their students by funding faculty development projects that are specifically designed to provide pedagogical training.

In addition, the focus on continual training highlights how dynamic teaching and learning are and how crucial it is to promote a constant improvement mindset within the academic community. Higher education institutions in Pakistan can develop a pool of competent and driven teachers who can effect good change and raise the standard of instruction overall by giving faculty members the right tools, resources, and assistance. There is broad agreement among participants about the significance of pedagogical training, which emphasizes the vital role that it plays in raising educational standards. Higher education institutions can empower teachers to address the changing requirements of students and promote an excellence culture in teaching and learning by giving priority to faculty development activities that focus on pedagogical innovation.

We have gained significant insights into faculty members' perceptions regarding the difficulties they encounter and the need for professional development in Pakistani higher education institutions as a result of this thorough data analysis. The results highlight how crucial it is to fix infrastructure flaws, promote cutting-edge teaching strategies, and provide opportunities for ongoing professional development that are tailored to faculty members' changing needs. Pakistani higher education institutions can enable their staff to provide high-quality instruction that successfully prepares students for the complexity of a constantly expanding world by giving priority to faculty development initiatives and fostering a culture of continuous learning and advancement. In addition to improving instructional efficacy, this dedication to faculty development creates an atmosphere that is favorable for creativity, teamwork, and academic achievement, all of which eventually contribute to the overall development of Pakistan's education system.

Conclusion

Several important themes have emerged from the extensive data analysis of faculty opinions on professional development demands and teaching issues in Pakistani higher education institutions. The study has shed important light on the complex issues that faculty members confront and the urgent need for further professional development in order to properly handle these issues. Above all, the investigation has highlighted the widespread deficiencies in infrastructure and resource scarcity that Pakistani universities face. Academic members of all ranks and specializations have voiced their dissatisfaction with obsolete instructional materials, inadequate laboratory facilities, and restricted access to scientific journals and research databases. These deficiencies not only make it more difficult for faculty members to carry out research and provide high-

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quality instruction, but they also obstruct students' general academic growth. Prioritizing expenditures in facility upgrades and resource accessibility will require coordinated efforts from institutional leadership, legislators, and stakeholders to address these infrastructure concerns. The study has emphasized how crucial it is to adopt cutting-edge pedagogical strategies in order to improve the caliber of instruction and learning. The vast majority of faculty members support engaging, student-centered teaching strategies that put an emphasis on problem-solving and critical thinking abilities rather than rote memorization. Pakistani higher education institutions can establish inclusive, dynamic learning environments that support students' overall development and accommodate a variety of learning styles by utilizing pedagogical innovation. The investigation has also brought attention to the pressing need for initiatives in professional development that are specifically focused on pedagogical training and technology integration. Although faculty members are aware of how technology might revolutionize education, they frequently lack the knowledge and resources needed to make the most of digital technologies. Higher education institutions can empower faculty members to harness digital innovation and improve teaching effectiveness by giving priority to training programs that focus on technology-enhanced learning strategies and new teaching methodologies.

The data analysis's conclusions highlight the necessity for Pakistani higher education institutions to place a high priority on faculty development and promote an environment that values ongoing learning and development. Through the implementation of innovative pedagogical approaches, the resolution of infrastructure deficiencies, and the provision of continuous opportunities for professional development, educational institutions can furnish their faculty members with the requisite resources and assistance to impart top-notch instruction and equip students for triumph in a swiftly evolving global landscape. In addition to improving teaching efficacy, this dedication to faculty development creates an atmosphere that is favorable for creativity, teamwork, and academic achievement, all of which contribute to the general development of Pakistan and its educational system.

Recommendations

The study on faculty views at Pakistani higher education institutions yielded detailed data analysis and conclusions. These conclusions led to the identification of many key suggestions aimed at addressing the difficulties identified and improving possibilities for professional growth.

Prioritize Infrastructure Investment: It is recommended that institutions and policymakers give priority to investing in infrastructure upgrades, such as modernizing laboratory facilities, revising instructional materials, and increasing accessibility to scholarly journals and research databases. This will necessitate working together to find enough money and resources to fix infrastructural deficiencies and make sure faculty members have what they need to succeed in their positions.

Promote Pedagogical Innovation: Motivate the use of cutting-edge teaching strategies that place an emphasis on students' critical thinking, problem-solving abilities, and student-centered learning. Academic institutions ought to furnish faculty members with the necessary resources and assistance to investigate and execute innovative teaching approaches like project-based learning, flipped classrooms, and active learning tactics.

Encourage Technology Integration: Acknowledge the value of learning enhanced by technology and give faculty members thorough guidance and assistance in using digital tools and platforms into their instruction. This entails giving access to pertinent information and experience as well as organizing workshops, seminars, and online courses centered on technology integration.

Encourage Ongoing Professional Development: Create an environment where learning never stops and faculty members' needs are catered to by providing opportunities for ongoing professional development. This could involve peer learning networks, mentorship programs, and access to conferences and workshops in their area of expertise.

Collaborate Across Institutions: To share best practices, resources, and expertise, higher education institutions should be encouraged to collaborate and exchange knowledge. Collaboratively, institutions can better address shared issues and capitalize on their combined strengths.

By implementing these suggestions into practice, higher education institutions in Pakistan can enable their faculty members to provide excellent instruction, encourage student achievement, and develop the country's educational system as a whole. These programs will improve teaching efficacy while also encouraging a collaborative, innovative, and academically excellent culture within the academic community.

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