

Faculty Development in Pakistan: Effects on Teaching, Research, and Institutional Performance

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Received: 16-10-2025

Revised: 07-11-2025

Accepted: 02-12-2025

Published: 21-12-2025

ABSTRACT

This qualitative study investigates the effectiveness of faculty development and training programs initiated by the Higher Education Commission of Pakistan. Through semi-structured interviews with 15 university faculty members from diverse disciplines and institutions, the study examines the impact of these programs on teaching, research engagement, and professional growth. Thematic analysis revealed that HEC training positively influenced pedagogical skills, research productivity, and professional confidence. Participants reported adopting student-centered teaching strategies, improved course design, and increased engagement in academic publishing and grant writing. However, the application of acquired skills was constrained by institutional resistance, limited administrative and peer support, and inadequate technological infrastructure. Faculty recommended discipline-specific content, structured follow-up and mentorship, and stronger HEC-university collaboration to enhance the sustained impact of training outcomes. However, the implementation of these skills faced significant challenges, such as institutional resistance, insufficient administrative and peer support, and inadequate technological infrastructure. Faculty respondents suggested the need for more discipline-specific content, structured follow-up and mentorship, and stronger collaboration between HEC and universities to facilitate the application of training outcomes.

Keywords: Faculty Development, Training Programs, Pedagogical Practices, Institutional Challenges.

BACKGROUND AND CONTEXT OF THE STUDY

HEC is a pivotal institution in Pakistan for faculty development. HEC has established a set of specialized projects and training programs that primarily base the professional development of educators on the objective to enhance university educational standards in our country (Shakoor & Hassan, 2021). The HEC faculty development program designates an intensity that elevates research productivity, teaching quality, and administrative efficiency and adds tremendous value to faculty performance (Inayat, 2022). Research based evidence indicated that future faculty development programs should emphasize module and material developing skills for faculty as well as student evaluation skills (Steinert et al., 2026). In institutions of higher learning all around, the caliber of teaching and research has a great effect on student achievement, institutional reputation, and society development. One of the most important elements influencing faculty members' effectiveness as teachers is ongoing professional development (Nawab & Bissaker, 2021). Programs of Faculty Development (FDPs) are a basic approach to improve the abilities, knowledge, and productivity of academic staff. Aside from making sure faculty members keep up with the most current

educational techniques, research methods, and technical developments, these programs also help to promote academic excellence (Ansari et al., 2024). Achieving educational objectives depends mostly on educators (Makumane & Khoza, 2020), and faculty development programs are instrumental in fostering academic excellence and innovation among faculty (Carney & Cooper, 2016). Furthermore, technology has changed almost every part of life, including higher education, by allowing online rather than in-person learning (McHaney, 2023). The Higher Education Commission of Pakistan has recognized the need for faculty development (Kulal et al., 2024).

These programs focus on both technical (research methodology, academic writing, etc.) and soft skills (communication, leadership, etc.) and include workshops, seminars, online courses, conferences, and mentorship initiatives (Zamiri & Esmaeili, 2024). This is designed to equip teachers with the key competencies necessary to succeed in the challenge of teaching. The faculty development programs of HEC have played a considerable role in changing the academic landscape of Pakistan. Another example is how training in digital learning tools has been implemented and enabled faculty to harness blended learning strategies and online resources in their courses (Kumar et al., 2021). Moreover, the research-oriented program has significantly enhanced research productivity, improved research quality, and fostered international linkages, thereby establishing Pakistani universities in the competitive marketplace of ideas, knowledge, and education worldwide (Zaheer et al., 2024). While the benefits of these programs are clear, there are still challenges to address. Challenges for faculty can pursue development opportunities, they also face challenges, including resistance, teaching/admin responsibilities, and infrastructure that can support some development efforts (Ward & Miller, 2023). This chapter explores how such development programs, especially the ones conducted by the HEC, improve faculty performance. It will examine the extent to which these programs have led to improvements in teaching methods, research productivity, academic governance, and the overall satisfaction of the faculty. Faculty development is not a supplemental activity but rather a strategic instrument for institutional reform and national educational advancement. These initiatives not only ensure that the educators are prepared to tackle the challenges of an ever-evolving global academic landscape but also ensure that the professional development of the faculty is at the helm (Anis, 2024). This study needs to seek the importance of continued investment in teacher training as a crucial component of improving the overall quality and productivity of higher education in Pakistan.

Statement of the Problem

The problem addressed by this study is the need for an evaluation of HEC's faculty development programs on faculty performance. In particular, this analysis will focus on finding enabling or disabling factors of their effectiveness. Understanding these dynamics is important, at this moment in history, for planning future faculty development approaches that are harder- and higher-education needs-based. This ambiguity is a significant barrier to the effective use of faculty development as a tool to enhance the quality of higher education in Pakistan.

Rationale of the Study

Faculty performance in higher education influences academic quality, student success, and institutional reputation in the two most high-profile indicators. Aware of this, the Higher Education Commission of Pakistan has launched several faculties' development and training programs to enhance teaching, research, and leadership capabilities. But notwithstanding the breadth of these initiatives, there has been little qualitative understanding of their effect on faculty behavior—for many, a black box from the faculty perspective. This body of work is important because it fills this gap by giving an understanding of how these programs are experienced, understood, and implemented by the faculty at different Pakistani universities. This investigates both the advantages and the drawbacks and contextual issues faced by participants. Based on the actuality of these lived experiences, it can inform the development and future

courses of action of the Faculty Development Initiatives in Pakistan, making them more real-world oriented.

Objectives of the Study

The primary objectives of this study are

- To explore the faculty development and training programs initiated by the Higher Education Commission of Pakistan.
- To investigate the perceived effects of faculty development and training programs on faculty members' performance.
- To examine the challenges faced by faculty members in implementing the skills acquired through training programs

Research Questions

Based on the above objectives, the study seeks to answer the following research questions:

- What faculty development and training programs have been initiated by the Higher Education Commission of Pakistan?
- What are the perceived effects of faculty development and training programs on faculty members' performance?
- What challenges do faculty members face in implementing the skills acquired through training programs?

Significance of the Study

This is research of substantial importance to higher education, educators, and policymakers. This study aims to provide practical insights pertaining to the impact of faculty development programs focusing on faculty performance that can help universities and colleges inform their strategic decision-making. By improving their faculty development initiatives, these domains can help improve the quality of teachers, research productivity, and faculty job satisfaction. This study also can help to develop evidence-based policies and programs that enhance faculty growth and development to promote academic excellence and institutional effectiveness.

Delimitations of the Study

The present study was delimited due to the scarcity of time and other resources to only university faculty under 40 age those were participant o HEC training program.

REVIEW OF THE RELATED LITERATURE

Faculty development is a process that is orderly and ongoing to improve the professional performance, knowledge, and skills of the academic staff at universities and colleges (Pham, 2021). This includes, but not limited to, training in pedagogical training, research skill improvement, leadership, curriculum design, and educational technology. The expected results of the faculty development are more effective teaching,

an innovative practice in teaching, the conformity of academic procedures to institutional, societal, or other aims, and the transformation of the postsecondary education environment (Steinert et al., 2016). All these initiatives play critical roles in quality assurance in post-secondary education, and maintenance of academic integrity and learning outcomes and career development of faculty. Programs of faculty development that address the needs of the teachers and the institutions are usually successful. Faculty development is considered to be one of the most significant investments in human capital, which leads to academic excellence, institutional growth, and scholarly enterprise in a world of ever-increasing and changing educational settings (Shan and Wang, 2024). A major purpose of faculty development is to be strategic in giving teachers modern pedagogical practices that can be used to meet set educational standards. Effective teaching strategies, curriculum development and assessment methodologies are some areas of focus that facilitate the development of an impactful learning environment (Aithal and Aithal, 2023).

The HEC works on improving the conditions of the current faculty training to guarantee the effective implementation of academic and research processes in the institutions of higher learning (Manzoor et al., 2024). Having realized the fact that trained instructors are the requirements to the attainment of these goals, HEC has taken steps to enhance professional practices, research performance, and development of university faculty. These initiatives are mainly organized to empower educators with the right knowledge, skills and technologies, which can transform them into being pedagogy-based society. Among the most significant programs, there is the Faculty Development Program (FDP) (Rashid et al., 2021), which is open to all faculty members willing to attend national and international training programs, workshops, and degree programs. The FDP focal point access to international scholarships, research grants and fellowships has significant impacts in increasing the knowledge and exposure of teachers to international best practices. Higher Education Commission of Pakistan has over the years been systematic in developing various training modules, workshops and faculty development programs as a way of building capacity both at academic and institutional levels. The first concerted initiative was created in 2004 and it was Faculty Professional Development Program (FPDP) aimed at improving teaching and research capacities among university faculty (Saleem et al, 2014).

In 2021-23, HEC also launched thematic workshops in every province, such as:

- Punjab (2022) workshops Curriculum and semester system workshops in Punjab.
- Undergraduate policies education in Islamabad Capital Territory (2023).
- Sindh quality assurance and self-assessment workshops (2023).
- Research capacity Education under HEDP (2023-2024): Grant-writing.

In 2023, HEC institutional training was also extended to non-teaching employees including university registration holders, examination controllers, and finance officers, which facilitated efficiency in operations and academic governing (Shah, 2023). Also, with the help of HEDP Component 5, HEC enhanced the performance of quality enhancement cells (QECs) by organizing workshops in 2021-24. More than 750 academic and quality assurance professionals were trained at these workshops on the standards of institutional accreditation, self-assessment instrument, and outcomes-based education. Collectively, these training programs, including FPDP in 2004, NFDP and HEDP programs until 2024 reflect the efforts of HEC to improve the performance of the faculty and the strength and health of the institution based on systematic and continuous professional development. Ghani (2009) also discovered that the relationship between teacher training and student achievement was less strong and teaching skills and teacher responsibility proved to be more predictive. The findings of research at different periods provide evidence of slight positive impact of teacher training on student performance. Researchers discovered that teacher

training is more beneficial when compared with teacher qualifications alone. In the U.S. small training effects were found on student achievement, whilst in France training had a large effect. Therefore, the role of experienced teachers in education cannot be denied since the quality of instruction correlates directly with the quality of classroom teaching.

The integration of technology in training has radically changed the process of development of competencies and skills in organizations and learning institutions. Online technology and advanced learning environments make training programs effective, convenient, and entertaining. Technology allows the trainers to create interactive, customized and scaled lessons to suit various learning preferences. E-learning platforms have emerged as the pillars of the modern training programs in the digital age (Goyal, 2023). The introduction of repository provision will make it very easy, with no physical limitations and enrollees can take online courses, seminars and virtual classes at any location. The learning management systems (LMS) are effective at improving the productivity of training by administration, documentation, track and delivery, enabling the acquisition of knowledge and core skills (Andrews et al., 2025).

Data analytics and artificial intelligence are significant in the personalization of learning. Predictive analytics enable trainers to understand the effectiveness of training by tracking the learning habits of employees and analyzing obstacles. Virtual assistants and AI Chabot's support learners by answering questions and giving them instructions during their courses (Davar et al., 2025). The application of the gamification components, including the leaderboards, rewards, and interactive simulations, enhances the involvement, especially at the initial stages of training (Kapp, 2012). The problem solving, collaboration, decision making skills are developed in an enjoyable, stimulating format through gamification. AR and VR are experiences that enhance experiential learning, enabling users to explore realistic environments, train, and to explore virtual spaces which closely resemble real life (Crogman et al., 2025).

The use of collaborative interactions with peers and group work has a significant impact on performance (Chen et al., 2022). It has been proven that peer facilitation enhances communicative competence, teamwork, and conceptual understanding multi-fold. Group learning helps in sharing knowledge, arguing out, and putting ideas into practice in different circumstances. The educational trends currently lean towards the idea of peer tutoring and mentoring that enables students to learn alongside their colleagues in a positive environment (Reeve, 2013). Student outcomes are important to be supported by institutional means. Tutoring, counseling and mentorship services allow students to cope with both academic and personal issues. Faculty development programs help an educator to use instructional strategies (Felder and Brent, 2010). These positive effects of a supportive and inclusive campus mean that the life experience adds up and positively impacts academic performance. The level of motivation among students plays a big role in determining learning. The solution to inequalities is to address the digital divide, offer equitable opportunities using scholarships, foster care, and community-based programs (Roksa & Kinsley, 2019). The methodologies used in evaluation have a direct impact. Learning is assessed in performance measures, project focused evaluation and real application skills. Specifically, formative assessments enable students to be able to demonstrate knowledge (Irons & Elkington, 2021).

Other issues like psychological health and well-being also affect results. High levels of work and stress require proper support that, in turn, influences the achievement and personal development (Gustems-Carnicer et al., 2019). There is also an influence of parents and communities; families that support a child with their academic efforts contribute to the success of the student. Employability is improved through institutional outreach programs, workshops and industry connections. Altogether, student performance is a product of various interacting factors: quality of instructions, use of technology, socialization, institutional support, motivation, social economic status, assessment practices, mental health and community engagement. To learn how to deal with these aspects, stakeholders should be involved in collaboration (Hitt & Tucker, 2016). Incidentally, creating an inclusive, involving, and supportive climate

promotes self-efficacy and significant engagement in societal life with the help of teachers (Sokmen, 2021). HEC Training Programs can be evaluated by examining the training's effectiveness and communicating the results through a report distributed to the relevant stakeholders. Faculty development programs have been established by the Higher Education Commission of Pakistan according to the instructional needs of academic employees (Khan et al., 2021). These programs generally take up the format of multi-day programs involving a combination of both practical exposure and theoretical knowledge. One of the brightest examples is the Faculty Development Program of the Sindh HEC and the National Faculty Development Program (NFDP) which are conducted by the HEC National Academy of Higher Education. Common faculty development training sessions take multiple days and involve a variety of interactive activities including the main academic skills- pedagogy, microteaching, and communication, presentation ability, and ICT integration (Popat, 2020). Academic ethics, quality assurance, and professional behavior are also given emphasis and thus, a competence base is set across institutions.

The faculty development programs of HEC involve the participation of academics of a wide range of institutions and geographical location (Khan et al., 2021). They specifically address faculty in the early and mid-career in both the state and private universities. Programmed convened over the past years in all provinces Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan, and Azad Jammu & Kashmir show the interest of HEC to providing equitable access (Rehman & Huma, 2024). An example is that more than 300 faculty members took training courses which were organized in different provincial centers. These meetings were meant to provide the basic training in teaching, communication, and academic ethics which was part of the capacity building, not limited to the large urban centers (Sorcinielli, 2002).

The NFDP is an initiative of HEC that began in 2020 and has registered consistent entries of recruited PhD faculty nationwide (Chidawa, 2022). By the beginning of 2023, four cohorts were implemented, and almost 100 faculty members went through an intense training program in the area of pedagogy, research writing, and classroom management. The sample population includes big urban universities and small colleges in low-density regions. However, there is still a problem of accessibility and attendance. Logistical barriers such as travel restrictions, institutional incentives, and time conflicts prevent faculty of remote and resource-intensive universities from participating (Ravi et al., 2021). The access to online modules is limited by poor digital infrastructure, especially in the times of prolonged remote learning (Ferri et al. 2020). The historical assessments indicate that despite the existence of the extensive programs, there are gaps in participation; lack of adequate follow-up mechanisms to determine the impact of training worsens the situation (Martin, 2010). Even with these concerns, the overall trend points to increased awareness and readiness of the faculty to participate in the lifelong professional development. HEC is increasing its distance to the institution and uses hybrid or remote solutions to reduce commuting needs (LeBlanc, 2021).

Trained faculty become more likely to approach pedagogy student-centered, use technology in instruction and adjust their teaching methods to student learning outcomes. Such improvements produce an improvement in student satisfaction and academic performance in the end (Tang, 2023). Investigated trained faculty members, as indicated by survey and pre/post-training assessment, had gained confidence in handling classrooms of heterogeneous demographics, creating outcome-based curriculum and utilizing modern pedagogies. Likewise, cohort studies of the National Faculty Development Program (NFDP) of 2020, 2021, and 2022 reveal that novice PhD faculty, who, in most cases, were recently introduced to the world of academia, received benefits significantly when taking well-organized modules on topics of digital pedagogy, grant writing, and reflective practices in practice. Collins et al., (2014) gathered longitudinal outcomes of faculty development on research outputs. The results of faculty training are more frequent publication in peer-reviewed journals, interdisciplinary collaboration, and the acquisition of more external research funds. This is especially dramatic in those universities that promote the idea of constant professional growth through incentives and institutional assistance (Masoumi *et al.*, 2019). The need of context-specific training, based on needs, at local and international levels is highlighted through cross-

national studies. Faculty members become more successful when they have their development opportunities designed in accordance with their particular academic fields, institutional objectives, and cultures. Such trends are represented in HEC initiatives through customized workshops related to the academic areas and regional bases (Agarwal, 2008). The empirical studies concur overwhelmingly with the claim that the faculty training and development programs are beneficial to the faculty performance. It can be noted that These programs are inseparable elements of sustainable higher education system that fosters professional development, academic custodianship and institutional competence.

RESEARCH METHODS

The faculty members of the University of Okara were interviewed in semi-structured form. The semi-structured format enabled the researcher to dig deeper on some points (e.g., the effectiveness of training, barriers to implementation, perceived impact, etc.) and at the same time, provide the possibility of new themes and perspectives to come out. The interviews were face-to-face that took a period of up to 20 minutes. The interviews were recorded (with permission) on tape and subsequently transcribed to undergo thematic analysis. In order to examine the content validity, the items of the interview questions were strictly formulated and analyzed in the context of the study objectives and study questions. The questions were confirmed by the academic specialists in education to make sure that they are clear, suitable, and relevant to the purpose of the study. Pilot interview was also done, however, the two faculty members failed to satisfy the sampling criterion; they did not form the sample in the actual study. We were given valuable feedback on how we phrased, sequenced and phrased questions so that this was done without ambiguity and bias. The faculty members were interviewed semi-structured and analyzed using thematic analysis on example data. Since the list of faculty development experiences differs significantly across institutions, thematic analysis was identified as a tool that offered a flexible and all-encompassing mechanism within which to acquire an insight of participant perceptions towards the HEC training programs. Using this approach, the researcher could develop meaning using these faculty narratives and give an interpretation on the way different development programs affected their academic roles, teaching dynamics and plight in their institutions. The participants in the research were the members of the faculty of different departments in universities; they were well represented in terms of the diverse institutions and professional backgrounds. Overall, 10 Male and 5 Female were participated and reflected gender in interview. This research involved in-depth data qualitative analysis and ethical practices dealing with six ethical principles, including informed consent, confidentiality, right to privacy, minimizing harm, and transparency of research. All the faculty members were clearly informed on the purpose, scope and conduct of the research. Every participant had a signature of a consent form and was informed that their participation in the project was voluntary, and that they could at any time discontinue without any adverse effects. None of the personal or sensitive information irrelevant to the area of the research was obtained. Interviews were held in a semi- private environment to promote comfort and freedom.

DATA ANALYSIS OF THEMES EMERGED FROM THE INTERVIEW DATA

Theme 1: HEC Faculty Development Programs

Responses gathered from 15 university faculty members (10 males and 5 female) revealed three key subthemes under the broader theme of participation in HEC faculty development initiatives: (1) Exposure to Diverse Training Formats, (2) Emphasis on Modern Pedagogical Skills and Academic Professionalism, and (3) Preference for Hands-On and Interactive Learning Activities. These themes were consistently observed across faculty from various disciplines and levels of teaching experience.

Respondent 2 (Male) shared, “I have attended three different programs—one residential, one online, and a hybrid course. The hybrid training was the most practical, as it allowed for flexibility and follow-up discussions after the initial sessions.

Respondent 5 (Female) stated, the range of formats has helped me fit training into my academic schedule. Online modules, especially those with downloadable resources, are very effective for self-paced learning.

Respondent 7 (Male) reflected,

Across responses from both male and female faculty, there was consistent appreciation for the diversity in training formats. Many participants noted that the option to choose between residential, hybrid, or fully online sessions allowed them to balance their teaching commitments with professional development. This sub theme entails faculty experiences in terms of content focus of HEC training programs. The overall response of the respondents was that HEC workshops and courses focused on innovation in teaching, learning that was student-centered, assessment, curriculum planning, and academic ethics. Faculty attested that the training exposed them to modern pedagogical models that a lot were novel or were not used in their pedagogical situations.

Respondent 1 (Male) explained,

One of the most valuable training experiences was to learn about outcome-based education (OBE). I had heard it in the past but I did not know how to design learning outcomes and assessment.

Respondent 4 (Female) noted,

The lessons about classroom management, technology application in instruction and format assessment strategies were quite beneficial. And these are not an ordinary occurrence of our faculty meetings.

Respondent 6 (Male) commented,

We were offered the concepts of the flipped classes, grading rubrics, and the application of such digital tools as Moodle. It was so refreshing since we tend to stick to old forms of lectures.

The participants noted that HEC programs transcend the delivery of technical content through professionalization of teaching. One of the recurring opinions was that the majority of the faculty members had not been trained into instructional design, interactive teaching, or educational technology previously and these programs closed a significant gap. On the whole, this sub theme depicts that faculty development programs are effective in raising the perception of teaching as a scholarly discipline as well as closing the gap between the conventional practices and the global best practices.

This sub theme addresses the preferences of the faculty members in terms of the delivery methods they have when they are undertaking HEC training programs. Most of the interviewees said interactive sessions, which included group discussions, microteaching, role plays, and group workshops, were highly effective in contrast to the traditional presentation of content through lectures. These interactive models enabled faculty to be active participants, exchange experience and put into practice the new introduced strategies.

Respondent 3 (Male) stated,

I am more benefitted by the group activities in comparison to the lectures. It was an exciting experience, and we were able to connect with various colleagues that belonged to other universities.

Respondent 8 (Female) said,

Respondent 12 (Male) explained,

I enjoyed the case study method. It was practical. We did not only view the theory, we also examined real problems that happened in the classroom and discussed how it could be solved.

Respondent 15 (Female) added,

The microteaching sessions were demanding and yet helpful. Performing before colleagues and being provided with feedback had facilitated confidence in me.

On the responses it was clear that interactive and experiential learning techniques were the best things on the HEC training. The preferred methodology in faculty consisted of approaches that enabled them to practice, collaborate and reflect on the moment instead of sitting and passively listening to presentations.

Theme 2: The Effect on Teaching and Professional Performance

The faculty members gave a narrative on how they were able to contribute teaching, research and general professional development due to their involvement in the HEC development and training programs. Their answers brought out three significant sub themes namely: (1) Classroom Instructional Strategies, (2) Research Productivity and Grant Application Skills, and (3) Professional Confidence and Motivation. This subtopic is based on the idea of how HEC training can assist faculty to incorporate more interesting student-centered methods of teaching. They reported a lot of integration of techniques including active learning, multimedia and formative assessments which resulted into more dynamic classroom settings.

Respondent 6 (Male) shared,

I stopped delivering only lectures. Now I use case studies and real life examples in my lessons.

Respondent 10 (Female) added,

I learned how to design the lesson objectives with the help of the Bloom taxonomy. That was the only thing which changed my course planning.

Respondent 13 (Female) noted,

The faculty respondents repeatedly mentioned that HEC training led to the change in pedagogy pattern where the teacher was the center of attention to the student-centered pattern. The training produced direct results, including such strategies as the group work, interactive teaching, and outcome-based lesson planning. This change increased the classroom interaction and made the learning of students better. The answers indicate a practical influence of teaching methods and quality of instructions in different departments. This sub theme touches on how the HEC training programs assisted the faculty to improve their research ability, especially in fields like academic writing, publishing, and research design and grant application procedures. Faculty members also said that they were more aware of funding opportunities and became better at creating research proposals.

Respondent 2 (Male) shared,

One of the most helpful things was the training of writing research proposals and publishing them in impact factor journals. It assisted me in the publication of two papers last year.

Respondent 4 (Female) stated,

I had never applied to a grant before being attending the HEC workshop. Several months following the training, I wrote a proposal and received a small research project as a result of it.

Respondent 8 (Male) added,

They have shown us databases of research and citation management applications. That saved a lot of time, and made my writing better, indeed.

According to the respondent 14 (Female),

The training focused on the consideration of ethics and plagiarism check. It taught me to be more cautious and professional in approaching research in the future.

Board-wide faculty was vocal in their opinion that HEC training did have an effect on their research activity. Hands on experience of the use of tools such as EndNote, Turnitin, and Scopus databases and step-by-step mentoring on grant writing facilitate increase in academic output.

This sub theme shows how HEC training programs led to faculty confidence, identity development, and motivation. The respondents reported that they felt more empowered, respected, and professionally validated once they had done the programs. The training served as a boost to renewed interest in teaching and academic participation to many.

Respondent 3 (Male) explained,

I began to view myself as not only a lecturer but a professional in academics after the training. It provided me with a new purpose in my position.

Respondent 5 (Female) shared,

I had been working as a teacher for years, and the training gave me more confidence to experiment. It impressed me that you should never quit learning.

Respondent 15 (Female) observed,

It made me feel that I was a part of a bigger academic community, which was encouraging.

This sub theme indicates that in addition to technical competence, HEC training has changed the faculty self-perception and morale in a transformational manner. Various respondents pointed out that the programs brought a new meaning of identity as educators and researchers. At the national level was seen as a way of professional acknowledgment, and this aspect had a positive impact on their self-confidence and interaction with their institutional responsibilities.

Theme 3: Difficulties in the Application of skill Development

Although the subjects acknowledged the importance of the faculty development programs offered by HEC, a great number of them noted that they did not experience any restrictions in applying the skills and strategies they gained throughout the training. This theme produced three important subthemes (1) Institutional Constraints and Lack of Administrative Support, (2) Limited Technological or Material Resources, and (3) Resistance to Change among Faculty.

The members of the faculty reported a deficiency of follow-up, encouragement, and facilitation by their universities as one of the main factors limiting the implementation of recently received methods. Faculty members complained that their ideas were not supported and prioritized at the departmental level. Respondent 1 (Male) shared,

We are taught to employ new innovative strategies and when we go back to our departments, we have no platform to apply these ideas. Everything goes on the same way.

Respondent 4 (Female) remarked,

There is lack of a linkage between the training and the university structure. As an illustration, I would have liked to start with a peer assessment model, but it was not accepted.

Respondent 8 (Male) stated,

I proposed a seminar to communicate the tools that we learned with other colleagues, but the administration showed no interest. That was demotivating."

This sub theme focuses on the unavailability of the physical infrastructure, digital tools and teaching resources that faculty must adopt in modern strategies brought about during HEC training. Faculty was motivated by the practices taught but, in most cases, they were poorly equipped by their institutional settings. Respondent 2 (Male) stated,

Projectors, learning management systems and online tests were used during training. But, in my department, we do not have a good internet connection and working multimedia facilities.

Respondent 6 (Male) added,

I was also eager to use the method of a flipped classroom, and students do not have access to online platforms or devices. It simply does not make sense without the infrastructure.

Respondent 13 (Female) noted,

I would like to begin using Turnitin in the context of student homework, but we do not subscribe to it or have the institutional support to perform the implementation.

Both the faculty of the state colleges and the privates indicated that the unavailability of technology was a major deterrent to their success in translating training into practice. Such lack of connection between the expectations of training and classroom realities was a significant point of frustration.

This subtheme deals with cultural and interpersonal obstacles that the faculty members experience when attempting to introduce new strategies to the change-resistant environment. Although it created excitement

during the training, some respondents talked of encountering skepticism or passive opposition of colleagues, particularly of those who were more familiar with the traditional approaches.

Respondent 3 (Male) shared,

I attempted to implement collaborative grading and peer feedback, yet some my colleagues refused it as a waste of time.

Respondent 5 (Female) stated,

There's a mindset problem. Human beings have the tendency to be nervous when they are trying something new. They say, it is not what we have taught 20 years).

Respondents pointed out that the old norms of teaching and hierarchical departmental organization and absence of collaboration were some of the factors that boosted the implementation of new practices. To make the change sustainable, not only individual training should be conducted, but also the development of the whole faculty and changes in the culture inside the departments.

Theme 4: Future Training Programs

The faculty participants provided a variety of useful recommendations on how to make HEC training programs more organized, delivered, and relevant. Their observations resulted in the emergence of three sub-themes namely: (1) Need for Discipline-Specific Training Modules, (2) More Follow-Up and Mentorship Opportunities, as well as, (3) Institutional Collaboration and Resource Provision.

This sub theme indicates the wish of the faculty members to be offered training programs that are specific to their fields of study. Even though the value of general pedagogy was appreciated, most faculty members stated that one-size-fits-all sessions were not relevant to their subject matter as respondent 1 (Male) shared,

The majority of the instruction techniques depended on the social sciences. The classroom interaction and teaching are quite different in engineering.

Respondent 4 (Female) noted,

The training on the methods of research should not be the same in humanities and natural sciences. The existing model is an attempt to cover everything simultaneously.

The participants supported content-based on discipline in teaching and research courses. . The respondents believed that although the primary training sessions were effective, they had no guidance after training, which restricted their effectiveness in the long run.

Respondent 5 (Female) added, *we need academic mentoring circles in which we will still meet, share progress and get expert feedback once the training.*

Respondent 9 (Male) commented, assuming that HEC could allocate a mentor or resource individual to work with a trainee a few months after the training would assist in overcoming the gap between learning and implementation. Respondent 12 (Male) explained,

This sub theme supports the continuity of professional development. Faculty realized that change cannot occur after the training program alone but it should be supported, reflected on and feed backed continuously.

The presence of institutional support, such as infrastructure, academic incentives, and recognition, was cited by several performers as being the cause of the underuse of much of the training knowledge.

Respondent 7 (Male) commented,

I would want HEC to carry out institutional audits to ensure that the universities are facilitating trained teachers to make a change.

Respondent 10 (Female) noted,

It would be good to have the basic facilities such as internet, smart classrooms, access to plagiarism tools in the universities as supplementary to our training.

Respondent 13 (Female) shared,

The transcripts of interviews with faculty on their involvement in HEC sponsored development programs demonstrated important perspectives on the relations between faculty and the programs as well as the ways faculty experience these programs. Despite the faculty members appreciating the importance of HEC training programs, they also found in few institutional, infrastructural and cultural barriers that curtailed the real practice of the acquired knowledge and skills to a large extent. It was found that three significant issues exist; they are (1) Lack of Administrative Support., (2) Scarcity of Technological Resources or Material Resources and (3) Faculty Resistance amongst Peers. Respondents said that after the training sessions, they came back with a lot of enthusiasm and innovative ideas, and they were not met with much support or structure, even in their departments. The processes of authorizing new teaching methods or research projects were generally bureaucratic or receptive, particularly in those departments that were not so amenable to experimentation.

Academic departmental cultural inertia became one of the obstacles. Faculty members noted that sometimes their colleagues (senior or traditional educators in particular) were not always willing to adopt new approaches as they thought that they were either unrealistic or unnecessary. In other instances, staff members who tried to take new approaches were isolated by peers, suspected, or non-cooperatively discouraged. This discouraged innovation especially amongst young faculty.

Theme 5: Future Training Recommendations

The faculty members made insightful and experience-based suggestions on how the future of the HEC faculty development initiatives could be better designed and delivered. These recommendations were based on their lived experiences aimed at making training more relevant, sustainable and impactful. Three main suggestions were identified in the analysis: (1) Necessary Discipline-Specific Training Modules, (2) More Follow-Up and Mentorship Opportunities, and (3) Providing Institutional Collaboration and Resources.

The members of the faculty of different fields reported a high preference towards training content that would be specific to their academic disciplines. Although general pedagogical strategies proved to be valued, the respondents pointed out that most of the teaching and research methodologies were specific to the field but served poorly. They suggested that they should include tailor-made sessions because of subject-related pedagogy, applied research practices, and curriculum alignment. This observation is indicative of an increasing requirement in contextualized professional development that acknowledges the diversity of teaching and research requirement in the academic disciplines. Faculty noted that the effects of training fade away with time without some systematic follow-up or support. Some of the respondents proposed that HEC should incorporate post-training mentorship programs, peer networks, or progress reviews in the

development model. The mechanisms would enable faculty to exchange experiences of implementation, get expert feedback and be held accountable towards implementing the learnt. The mentorship was also found to be critical to faculty in the early stages of their careers since these faculties usually do not receive institutional mentoring. This sub theme indicates the need to engage in lifelong learning as a professional, as opposed to workshops or occasional events.

DISCUSSION

The results show that the programs are mostly well-organized, and appreciated in terms of the variety of their format, and perceived as a significant move toward professionalization of teaching in a higher education institution. They however, also point out the importance of making training more faculty-specific and more institutionally real. The participants of the faculty were highly convinced on the usefulness of the diverse training formats offered by HEC such as face-to-face workshops, online courses, webinars, and hybrid formats. This diversity gave flexibility and added accessibility especially to individuals with tight teaching schedules or those unable to access large training centers. Moreover, one of the discoveries is that HEC programs have exposed faculty to new pedagogical practices, including outcome-based education, flipped classes, learning centered and digital assessment tools. These are concepts that most of the people were not familiar with before training. According to the respondents, this kind of exposure prompted them to reconsider their teaching professions and to have more outcome-focused course designs. Moreover, academic writing, research ethics and curriculum development helped them build their professional identity. The research problem was to evaluate the impact of such programs on faculty performance, discover obstacles to their implementation, and obtain faculty opinions on the ways of facilitating training. The results, which were based on the thematic analysis of the interviews with 15 university faculty members, show that there were strengths and limitations connected to the existing structure and provision of HEC programs. Those findings, as discussed here, are placed into the context of the development of higher education and the literature on research.

The researchers identified that the faculty valued the utilization of various training formats at HEC such as face-to-face workshops, hybrid and online courses. The results of the research endeavor are same as the best practices in the world of professional development which promote flexible modular training that will support diverse learning needs (Darling-Hammond *et al.*, 2017). Participants among the faculty reported that the formats enabled them to juggle teaching activities with professional learning. Nevertheless, a lack of discipline-related material is indicative of a gap that has also been identified in other research sources as Załoga (2024) explored in which he found that generic training cannot address the requirements of various academic disciplines which are too fine-grained. The present study is congruent with the research evidence of who found that the improvement of work productivity is essential to the career path, professional goals, innovative activities, and knowledge creation of a person and results of study at hand aligns with (Steinert *et al.*, 2026) that future faculty development programs should be focused for the development of training modules and material to develop skills of faculty along with student evaluation skills. Student outcomes are important to be supported by institutional means. Tutoring, counseling and mentorship services allow students to cope with both academic and personal issues. Faculty development programs help an educator to use instructional strategies are similar to the (Felder and Brent, 2010). These positive effects of a supportive and inclusive campus mean that the life experience adds up and positively impacts academic performance. The level of motivation among students plays a big role in determining learning. Success is achieved through goal setting, self-regulation and self-motivation. The educators can learn to motivate students through presenting the content which is relevant, setting the attainable goals and giving timely feedback. There is a higher possibility of achievement motivation when students have their own goals and carry out self-reflection is likewise to (Travers *et al.*, 2015).

Student outcomes are influenced either positively or negatively by the larger social environment such as demographics and availability of resources. Low-income students are not exposed to technology and financial resources, which makes it hard to achieve success in school (Roksa & Kinsley, 2019). The solution to inequalities is to address the digital divide, offer equitable opportunities using scholarships, foster care, and community-based programs are similar to (Roksa & Kinsley, 2019). The methodologies used in evaluation have a direct impact. Learning is assessed in performance measures, project focused evaluation and real application skills. Specifically, formative assessments enable students to be able to demonstrate knowledge (Irons & Elkington, 2021). The present research is corresponding with HEC faculty development program that designates intensity that elevates research productivity, teaching quality, and administrative efficiency and adds tremendous value to faculty performance (Inayat, 2022). Similarly, the results of research are showing that faculty development programs should emphasize module and material developer skills for faculty along with student evaluation skills (Steinert et al., 2026). In the same vein, the caliber of teaching and research has a great effect on student achievement, institutional reputation, and society development. One of the most important elements influencing faculty members' effectiveness as teachers is ongoing professional development (Nawab & Bissaker, 2021). As (Carney & Cooper, 2016) researched that educational objectives depend mostly on educators is likewise to the (Makumane & Khoza, 2020) and faculty development programs are instrumental in fostering academic excellence and innovation among faculty

Faculty was suggested a favorable change in instructional practices, such as the spread of student-centered learning, active classroom methods, and digital practices. These findings are aligned with the previous studies which show that a well-organized faculty development contributes to the improvement of the quality of instruction, student involvement, and self-efficacy. The training programs also helped to enhance more research involvement particularly among young faculty members as processes such as writing grants and publication have been demystified. The study however supports the argument that these gains might not be sustained or have a long-term effect unless there are institutional incentives and peer collaboration. The problems with the implementation of acquired skills is similar everywhere (Barton, Lackie, & Miller (2023). The most significant was that there was a lack of relation between the individual training and institutional readiness. The respondents pinpointed bureaucratic indifference, lack of resources, and unwillingness to adopt innovation as some of the major challenges. These difficulties represent more general problems of the organizational change theory, which states that systemic change involves the coordination of individual, institutional, and policy levels (Fullan, 2007). The same picture is observed in the context of the other situations where the professional development is undermined by the absence of the institutional follow-through likewise to (Anlimachie & Avoada, 2020). In addition, peer resistance, particularly of the senior faculty was also found to be an obstacle to change. This theory is in line with the theory of organizational culture proposed by Schein (2010), which implies that many beliefs and traditions underlie the obstacle to reform, unless the leadership promotes innovation and growth among people.

CONCLUSION

This qualitative study examined the effectiveness of HEC faculty development programs through thematic analysis of interviews with 15 university faculty members. Findings indicate that while participants perceived the programs as transformative for teaching, research, and professional confidence, systemic challenges including institutional resistance, infrastructural deficits, and inadequate administrative support hinder sustained impact. The study underscores that long-term success requires institutional alignment, resource allocation, and a supportive academic culture. These insights are critical for policymakers and university leaders seeking to strengthen faculty development in Pakistan mentorship, and enhanced collaboration between HEC and universities were also prescribed by the participants of the faculty. To conclude, although training programs of HEC are a positive move, their long-term success will rely on the capability of institutional systems, culture and policies to facilitate trained faculty to bring knowledge to

action. It is recommended that the development of the faculty should be a part of the larger plan of institutional backing, life-long learning, and academic empowerment. In the findings and analysis, delivery and the impact of HEC faculty development programs on the Training Modules to develop specific courses in various academic disciplines to support the special needs in pedagogy and research in the different disciplines. The training may generate more relevant and effective by incorporating subject-specific sessions about the teaching strategies, curriculum development, and applied research.

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