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EXPLORATORY STUDY ON THE PROFESSIONAL DEVELOPMENT OF UNIVERSITY TEACHERS IN THE PROVINCE BALUCHISTAN, PAKISTAN

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ABSTRACT

Professional development refers to a set of activities that enhance a teacher's knowledge, skills, performance, and understanding. The study aimed to investigate the influence of training on the professional development of university teachers who underwent training through the National Academy of Higher Education (NAHE) Phase II. The study was mixed methods in nature by employing a concurrent triangulation design. A multistage sampling technique was used; in the first stage, the province of Baluchistan was selected conveniently; in the second stage, the trainees of training centres in the province of Baluchistan were selected universally to collect quantitative data; in the final stage, 60% of course coordinators and 25% of resource persons were selected conveniently for qualitative data to triangulate the responses obtained from trainees. The study utilized two instruments - a questionnaire and an interview schedule. The first instrument, a self-developed questionnaire based on 08 subscales consisting of 55 items, indicated high reliability ($\alpha = .937$) was used; the second tool was an interview schedule consisting of 09 questions validated by experts. Qualitative data were analysed by thematic analysis. According to the analyzed data, it has been found that training has a positive impact on the professional development of university faculty. However, the trainees are not satisfied with the research sessions. Overall, the training has a significant positive impact on the professional development of university teachers.

Keywords: Exploratory study; Professional development; University teachers.

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INTRODUCTION

Professional development comprises various kinds of educational skills and experiences related to an individual's work. Teachers participate in different formal and informal professional activities to acquire new knowledge and skills to enhance their performance in the workplace (de Carvalho-Filho et al., 2019). There are many modes of professional development, such as individual reading, university and college courses, online courses, workshops, conferences, mentoring, seminars, observations, coaching, etc. Professional development programs are conducted to improve the working ability of university teachers (Mitrukina, 2021). According to Tikhonov (2019), professional development is a scheme designed to generate an atmosphere for the motivation towards improvement of instruction skills. Therefore, university faculty are trained in different professional development training programs. According to Sharma et al. (2020), the term "faculty" refers to anyone who is involved in teaching and training learners across all levels of education, including undergraduate, graduate, postgraduate, and continuing professional development. On the other hand, faculty development is described as any deliberate activity aimed at enhancing an individual's knowledge and skills in areas deemed necessary for faculty members to perform their duties effectively. It aimed to improve faculty members' skills as teachers and scholars. So,

colleges and universities try to modernize and sustain the vitality of their teaching faculty. However, Miller et al. (2019) divided faculty development into three kinds of activities: instructional, professional, and organizational development. Instructional or teaching development comprises scientific skills dealing with academic content for promoting efficient teaching and learning practices through peer coaching, instructional technology, micro-teaching, conferences, and workshops on teaching strategies. Professional or scholarship development engages the faculty members, raising capacity in their academic discipline, reinforcing their scholarship, and advancing their professional development. Organizational or service development supports the increase of faculty as parts of an academic village at a specific organization and is directed towards the overall fitness and betterment of the organization. According to Golsha et al. (2020), the performance of an educational organization is calculated in terms of input, process, and output, which denotes the performance of both faculty members and the university. Higher education is viewed as a crucial tool for the development of resources and for bettering the lives of individuals in developing countries. Meanwhile, Kohoutek et al. (2017) stated that it plays a key role in promoting the professional development of university teachers, which has a vital role in the socio-economic development of the people.

To meet international academic standards, it is important to equip faculty with the necessary skills. The National Academy of Higher Education (NAHE) has been providing professional development training since 2004 to enhance teaching competencies. Phase 1 of the training improved English language teaching and trained 3564 university teachers through 38 HRD centers in public sector universities. NAHE's "Professional Competency Enhancement Program for University Teachers" (PCEPT) is a one-month in-service program designed to train 2100 teachers. Seven modules include teaching as a profession, academic planning and management, curriculum development, assessment and evaluation, learner's psychology, andragogical skills, communication skills, and research methods and skills. After the successful completion of Phase 1, the NAHE started Phase 2 to train 2,500 university faculty members. It was a scheme of the Learning Innovation Division (LID) for the continuous professional development of faculty (CPD) to improve pedagogical and research skills through the PCEPT for university teachers (Chuudary & Imran, 2012).

This study examines the impact of a faculty development program for university teachers at the universities of Baluchistan. The program is aimed at improving pedagogical approaches, teaching methodologies, and professional growth within academia and is administered by the NAHE. The objective of the study was to explore how and to what extent training programs enhance university teachers' professional competency.

Research Questions

The following are the research questions of the study:

1. Did the training improve the understanding of teachers regarding the role of teaching as a profession?
2. Did the training improve the competency of teachers regarding academic planning and management?
3. Did the training improve the skills of teachers regarding curriculum development?
4. Did the training improve the skills of teachers regarding assessment and evaluation?
5. Did the training improve the understanding of teachers regarding learner psychology?
6. Was the training improving the competency of the teachers regarding andragogical skills and abilities?
7. Did the training improve the communication skills of the teachers?
8. Did the training improve the competencies of teachers regarding research methods and skills?

LITERATURE REVIEW

Higher education is a valuable asset recognized around the world. It is primarily provided by universities and colleges and encompasses a wide range of subjects, including both sciences and social sciences.

Scientific development is essential for material progress, while education in humanities and social sciences is crucial for cultural advancement and fostering interpersonal relationships. Higher education is a form of post-secondary education that offers degrees, diplomas, and certificates upon completion of coursework. Higher education institutions include universities, colleges, and professional schools that provide specialized training in fields such as law, medicine, business, art, music, and engineering.

The University Grants Commission was created in July 1973 and granted a charter on April 27, 1974, by an act of parliament. The Higher Education Commission (HEC) was established on September 11, 2002, by an ordinance of the government of Pakistan (Ordinance No. LIII, 2002) to enhance higher education and research activities in Pakistan. Higher education is a valuable asset recognized around the world. It is primarily provided by universities and colleges and encompasses a wide range of subjects, including both sciences and social sciences. Scientific development is essential for material progress, while education in humanities and social sciences is crucial for cultural advancement and fostering interpersonal relationships. According to Sain (2022), the purpose of Higher Education is multiple as given below:

1. To enhance and support the process of Socio-Economic development.
2. To facilitate persons to attain excellence.
3. To generate specialized proficiency in Agriculture, Medicine, Nuclear, space, Chemical, and Energy fields.
4. To arouse education at different levels.
5. To synchronize at the national level.
6. To develop human resources

The NAHE began operations in 1976 under the supervision of the University Grants Commission (UGC). It aimed to provide pre-service and in-service training to university teachers and organize seminars, conferences, and workshops on various educational topics. In 1983, it became an independent autonomous body. In 1989, the UGC transferred the Centre of Fundamental Sciences and Centre of Social Sciences and Humanities to NAHE. A separate section, the Department of Learning Innovation, was established in July 2003 to expand educational activities to meet the growing number of higher education institutions and equip the faculty with the necessary instructional skills to maintain academic standards in line with international standards. The department is currently engaged in several activities, including:

1. Curriculum-Based Training
2. English Language Teaching (ELT) Course
3. In-Service Training Programs
4. three-month training programs on University Teaching
5. Developing competencies in computer skills (Hussain et al., 2010)

NAHE Phase-II Objectives

1. Evaluate the relevance of training modules.
2. Analyse the delivery system.
3. Assess the impact of training on classroom management and teaching methods.

Standard Operating Procedure (Sop) for Conducting the PCEPT Program

The PCEPT program aims to achieve the following objectives:

1. Introduce innovative teaching strategies to the faculty.
2. Enhance the communication skills of the faculty members.
3. Increase knowledge about research and its various aspects.

4. Improve the competency of the faculty in academic planning and management skills.
5. Enhance the testing and evaluation skills of the teachers by providing proper assessment tools for the students.
6. Provision of Audio Visual aids like Multimedia, Digital cameras, and Movie Cameras for recording the Micro Teaching sessions, overhead projectors, whiteboards, flip charts, etc. will be essential.
7. It will be the responsibility of the concerned university to provide accommodation and transport facilities for the Resource Persons and HEC representatives.

Teacher Training: Teacher education involves policies, activities, and experiences that prepare teachers for their duties. It aims to provide useful knowledge to transform teachers' attitudes and behavior towards education. The fundamental theory is to aid the transmission of information to learners while building their character. There are two categories of training methods: traditional and new.

Traditional Training Method: There are three types of traditional training methods: presentation, hands-on, and group building. Presentation methods allow for effective knowledge transmission, but it is important to allow for practice and feedback. Hands-on methods engage the learner directly and are ideal for building skills and behavior. Group-building methods are useful for teamwork and coordination. Newer methods include the web, distance learning, and virtual reality. To choose a method, identify the desired learning outcome and consider facilitation, cost, and effectiveness (Noe et al., 2000).

Pre-Designed Formal Training: One of the most common types of formal training is presented through various pre-packaged learning modules for interested and qualified participants.

Custom-Tailored Formal Training: The training programs that are already designed offer the most up-to-date knowledge and skills that closely match the requirements of the participant's occupation and job performance. However, sometimes, it is necessary to customize the contents of the training to meet the specific requirements of individual trainees, their training, and development goals. This is achieved by adjusting the contents and methods of training to suit the specific situations in which it is delivered.

Distance Training: Distance education is self-instruction, using structured materials delivered in various media formats. It eliminates time and place constraints, reaching many individuals and reducing information loss (Hakimian & Teshome, 1993).

Need for In-Service Training: In-service teacher training is essential for teachers to update their knowledge and skills in innovative pedagogy practices, the latest educational policies, and changes in teaching materials. It helps teachers create and use audio-video aids effectively, equips them with essential skills to manage diverse student needs, and enables them to continue learning throughout their careers. There are two main types of training: internal and external. Internal training is suggested by the organization where employees work, while external training is offered by outside agencies and institutions. Pre-service training is recommended for new employees or existing employees who are being promoted to prepare them for their new positions. In-service training is provided to working employees to enhance their professional development.

Training can take different forms:

- (1) In-country training is offered to trainees at their current location.
- (2) Overseas training is mostly offered to trainees at their institution's location.
- (3) Third-country training is offered to trainees from different countries for environmental reasons.

In summary, there are three main forms of training that are outlined and discussed in the text.

Meaning of In-Service Teacher Training: In-service teacher education involves a series of activities planned by organizations to help educational employees grow as professionals. It includes all the experiences

contributed by personnel during their service. The aim is to enhance the skills, knowledge, and interests of in-service teachers.

Aspects of in-Service Education: OECD initiated a project on 7 INSET aspects: educator training, trainer training, school & teacher-centered INSET, material, evaluation, cost, resources, & teacher involvement (Singh & Sudarshan, 2005).

Teacher Education in the 21st Century: Teachers are important in society, but with many trained teachers, it is a challenge for programs to meet the demands of the 21st century. Teacher education needs to change to cater to changing needs such as learning styles, disabilities, and cultural differences. Computer learning should be integrated into all teacher training programs. Regular refresher courses should be mandatory every 3-5 years and linked to promotion. An effective follow-up system should be established to maximize results (Archambault et al., 2010; Liu & Low, 2015).

METHODOLOGY

The study utilized a mixed methods research design, which involves combining qualitative and quantitative research methods to gain a more in-depth understanding and confirmation. The researcher used the concurrent triangulation approach to answer the research questions and obtain comprehensive insight. The population under study included all trainees, course coordinators, and resource persons from 38 HRD centres organized by NAHE in public sector universities in Pakistan. The accessible population of the study was limited to trainees, course coordinators, and resource persons from five HRD centres in the province of Baluchistan. The study used a multistage sampling technique, starting with the selection of the province of Baluchistan, followed by the selection of all five HRD centres, and finally, the selection of 178 trainees. Additionally, qualitative data were collected through interviews with 60% of course coordinators and 25% of resource persons.

Research Instruments

A self-developed questionnaire was used as the primary instrument in the study to collect the responses of the trainees. The questionnaire was developed under the guidance of field experts and comprised of 8 indicators with a total of 55 items. The first indicator, "Teaching as a Profession," consisted of 7 items. The second indicator, "Academic Planning and Management," had 6 items. The third indicator, "Curriculum Development," had 6 items. The fourth indicator, "Assessment and Evaluation," had 6 items. The fifth indicator, "Learner's Psychology," had 8 items. The sixth indicator, "Andragogical Skills and Abilities," had 8 items. The seventh indicator, "Communication Skills," had 6 items. The eighth indicator, "Research Methods and Skills," had 8 items. The questionnaire utilized a five-point Likert scale.

RESULTS AND DISCUSSION

Table 1 shows the percentages of trainees regarding indicator-wise detail that is explained as follows:

Teaching as Profession: Of the total number of trainees, 78.17% responded that the training they received improved their competency in the teaching profession. A mere 4.75% of trainees reported that the training did not enhance their skills, while 17.02% did not provide any comments regarding the statement.

Academic Planning and Management: According to the survey, 79.49% of trainees found the training helpful in enhancing their academic planning and management skills. However, only 5.7% of trainees did not find the training useful in this regard. Meanwhile, 14.73% of respondents did not comment on the statement.

Curriculum Development: Out of all the trainees, 76.03% said that the training they received improved their skills in curriculum development. Only 6.46% of trainees said that the training did not improve their skills, while the remaining 17.41% did not comment on the statement.

Table 1. Trainees' responses (in percentage) regarding the training program.

No.	Indicators	SA	A	SA+A	Neutral	DA	SDA	SDA+DA
1	Teaching as Profession	24.7	53.46	78.2	17.02	4.39	0.38	4.77
2	Academic Planning and Management	28.9	50.59	79.49	14.77	5.51	0.18	5.7
3	Curriculum Development	21.25	54.78	76.03	17.46	5.92	0.55	6.46
4	Assessment and Evaluation	14.33	50.58	64.92	26.09	7.65	1.32	8.97
5	Learner's Psychology	22.68	54.6	77.28	17.8	4.55	0.28	4.82
6	Andragogical Skills and Abilities	28.0	54.03	82.03	15.27	2.46	0.28	2.7
7	Communication Skills	21.38	58.08	80.46	14.93	2.94	1.58	4.52
8	Research Methods	14.5	39.66	54.16	26.48	11.46	7.88	19.35
	Total	21.78%	52.14%	74.01%	18.43%	6.15%	1.48%	7.55%

Assessment and Evaluation: Out of all the trainees, 64.92% reported that the training improved their understanding of the assessment and evaluation process. Only 8.97% of trainees disagreed with this statement, saying that the training did not increase their understanding. However, 26.05% of respondents did not provide any comment on the matter.

Learner's Psychology: However, 77.28% of trainees reported that training improved their understanding of learner psychology. Only 4.82% of trainees felt that their competencies were not improved, while the remaining 17.8% were neutral.

Andragogical Skills and Abilities: The results of a survey showed that 82.03% of trainees found the training to be useful in improving their andragogical skills and abilities. Only 2.7% of trainees felt that the training did not improve their skills, while 15.23% of respondents remained neutral about the statement.

Communication Skills: Overall, 54.16% of trainees confessed that training was helpful in increasing their knowledge of research methods and skills. Only 19.35% of trainees responded that training was not useful in enhancing their research methods and skills. The remaining 26.42% were neutral about the statement.

Research Methods and Skills: Out of all the trainees, 54.16% admitted that the training was beneficial for improving their research methods and skills. Only 19.35% of trainees reported that the training did not help them enhance their research methods and skills. The remaining 26.42% of the trainees expressed neutrality towards the statement.

Overall Response of the Trainees: The following is a summary of the PCEPT training program's evaluation results. According to Table 4.1, 74.01% of participants reported being satisfied with the entire Faculty Development program organized by the National Academy of Higher Education (NAHE). Only 7.55% of trainees expressed dissatisfaction with the program, and 18.43% of respondents remained neutral.

Qualitative Data Analysis and Findings

Results of Interview Schedule with Course Coordinators: The researchers conducted interviews with course coordinators using a semi-structured interview schedule based on the Guidelines for the Course Coordinators of the PCEPT developed by the NAHE. The researchers used a thematic analysis technique and identified the following results:

Selection Criteria: According to responses gathered from course coordinators, the selection criteria for the position is determined by the Vice-chancellor. Eligible candidates must have relevant experience in running training programs at the university level, with preference given to those who belong to the Institutes of Education and Research (IER) or Education departments of universities. The final selection authority lies with the Higher Education Commission. Once selected, the course coordinator must work under the direction of NAHE, HEC, and the Vice-chancellor.

Orientation from HEC: Interviewees responded that HEC had provided them with orientation sessions for the training program, but one respondent reported not receiving any orientation session regarding training.

Major points of the orientation: A training program will last for 24 working days. Each batch will consist of 35 trainees, with 25 participants being selected from the same university and 10 from surrounding universities and colleges. The PCEPT program will have a total of 70 sessions, with 3 sessions conducted daily and each lasting for 1.5 hours. The teaching approach will be learner-based and activity-based only. HEC will provide content booklets and course outlines to the trainees.

Provided Facilities: During the training program, all of the resource persons reported that they were provided with several facilities such as an air-conditioned training hall, AV aids like multimedia, overhead projector, whiteboard, and more. Additionally, a digital camera was available to take photos of the sessions, and in case of load shedding, a generator was provided as a backup power source.

An effective training program: According to the interviewees, the training program was highly effective for the trainees for several reasons. Firstly, the trainees were evaluated daily using a prescribed evaluation form throughout the entire training sessions. This helped to identify any issues faced by the trainees, and efforts were made to minimize these problems and ensure that the trainees were satisfied. Additionally, course coordinators carefully monitored the sessions to ensure that everything was running smoothly.

HEC Funding: All interviewees confirmed that a budget was allocated to pay for resource persons, trainees' remuneration, and refreshments and to ensure smooth training program execution.

Availability of the Resource Persons: The coordinators of the course mentioned that they had no difficulty in choosing the resource persons for the training program. This was because they had access to a list of master trainers who had already received two months of training from HEC as resource persons/master trainers, and some of them had even received training from abroad.

Problems Faced During Training: All of the interviewees expressed that their extensive experience in conducting numerous training programs had helped them avoid any major issues. However, we made efforts to address minor problems, such as power outages and low attendance, by allowing trainees to be relieved from their parent departments.

Training's Duration: Respondents reported complete satisfaction with the program's 24-day duration, 90-minute sessions, and three sessions per day.

The general opinion about training: The researcher asked if there were any questions they had forgotten to ask regarding training. The response was that training would be conducted periodically and would be compulsory for all new faculty members to take a one-month professional development course before beginning classes. Refresher courses would also be offered regularly, and records of trainees would be properly maintained to ensure everyone receives training. It will be mandatory for new lecturers to have a diploma in pedagogical and research skills in the future. Training will be department/discipline-specific.

Results of Interview Schedule with Resource Persons: During the study, resource persons were interviewed using a semi-structured interview schedule based on the guidelines for the course coordinators of the PCEPT by the NAHE.

Support from the Course Coordinator: According to the resource persons, the course coordinator provided them with proper support to comfortably deliver their lectures in a peaceful environment.

Faced Problems: The resource persons mentioned that they did not face any difficulties while delivering their lectures. This was because they had received proper training from the HEC. They underwent a two-month training program, and some participants even received training overseas.

Participants' Willingness: According to the respondent, most trainees were active during the training sessions; however, a few participants lacked motivation and were not serious. After the resource persons explained the importance of the training, the participants became satisfied.

Participants Involvement: During the training, the trainees actively participated in activity-based and practical learning. They also engaged in asking questions and participating in discussions.

Lecture Time Duration: Resource persons were able to deliver their lessons without any problem within 1.5 hours.

Remuneration: The majority of the respondents expressed satisfaction with the amount of remuneration they received.

General opinion: The researcher inquired about the overall opinion of Resource Persons regarding the training program. Respondents put forward the following suggestions: the program should be continued in the future, it could be made compulsory for all the lecturers and declared as obligatory and linked with future promotions. Additionally, it was suggested that fresh faculty should be trained before taking up their respective classes.

Discussion

The aim of this study was to evaluate the effect of the faculty development program organized by the NAHE on university teachers. The main focus of this research was to investigate how these courses impacted the teachers' professional growth. The results indicated that the majority of the respondents were content with the training program as it had improved their professional skills. The program was found to be effective, and the course coordinators managed it well. The resource persons were also competent, according to most respondents. The findings of previous research on the impact of teachers' training were mixed, with some supporting this study and others not. However, the results of the NAHE (Phase-I) project demonstrated that faculty development courses had significantly advanced the teaching abilities of university teachers across Pakistan (Sarwar et al., 2017). The findings of a study conducted in Korea back in 2005, which evaluated the effectiveness of coaching on the leadership competency of teachers, are consistent with the results of the current study. Additionally, a study conducted by Hwang and Kang (2017) on the professional development of teachers also aligns with the current study. Moreover, the outcomes are in line with Siripeeri et al. (2023) report on the program development aimed at enhancing teachers' supervisory competency of the dual educational system under the Vocational Education Commission (VEC) in Thailand. According to HEC's report, it is evident that training programs can significantly impact teachers' development. The report was compiled by the Learning Innovation Division (LID) after successfully completing each course in 2005 at the HEC. The study found that teacher professional development had a positive impact on the knowledge, working efficiency, professional attitude, motivation, and overall performance of science teachers. The results of the studies conducted by Baldan and Guven (2018) and Murzalinova et al. (2022) also align with and support the findings of this study that trainees who got training through professional development programs had improved their pedagogical and research skills. However, the results are not consistent with the findings of Ferreira's (2015) study that there is a gap between the theory taught during the faculty development program and its implementation in the real classroom setting.

In conclusion, all the studies conducted earlier showed that training programs play a crucial role in enhancing the professional development of university teachers. The current study further confirms that such training programs have a significant positive impact on the professional development of university faculty. Therefore, it is important to conduct such training programs regularly so that teachers can acquire the latest knowledge and information in their specific fields and areas. This will not only enhance their knowledge and understanding but also improve their performance in the classroom, ultimately fostering the teaching-learning process in a better way.

CONCLUSIONS AND RECOMMENDATIONS

The study found that training had a significant impact on the professional development of university teachers. This was because the training modules were tailored to meet the needs of the university teachers. Most of the resource persons who provided the training were competent enough to teach university faculty. Overall, the training enhanced the skills, competencies, and understanding of the trainees in areas such as teaching as a profession, academic planning and management, curriculum development, assessment and evaluation, learner psychology, pedagogical skills and abilities, and communication skills. However, many trainees expressed dissatisfaction with their understanding of research methods and skills. Therefore, it was recommended that future training sessions should include competent resource persons from the education departments of universities to enhance the research competencies and skills of all teachers from different disciplines. It was also recommended that there should be a continuous professional development (CPD) program for the professional development of university teachers. During a recent analysis of NAHE training programs, it was discovered that trainings were conducted collectively for different disciplines. Based on feedback from trainees, it was recommended that future training should be conducted separately for each discipline or department. The analysis also revealed that in-service training was not linked with the promotion of the faculty. Therefore, it was suggested that in-service teacher training should be considered as a criterion for promotion. Additionally, it was noted that most teacher training programs were launched without prior surveys to identify the problems that faculty members were facing. As a result, it was recommended that pre-surveys should be conducted before commencing any training program.

On the basis of the findings and discussion, the following suggestions were made:

1. In-service induction training courses should be arranged periodically by the Higher Education Commission or by any other authority to introduce the latest teaching and research techniques for all university teachers.
2. Such type of Induction Training Courses must be compulsory for newly inducted teachers in the institutions of the Higher Education Commission.
3. A genuine research culture must be promoted in the institutions of the Higher Education Commission.

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