

Assessing the Impact of Faculty Development Programs (FDPs) in Bangladesh: A Case Study on Bangladesh University of Professionals (BUP)

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Abstract:

Faculty Development Programs (FDPs) are organized efforts to improve the teaching, research, and counselling abilities of faculty members. These programs are crucial for filling up teaching quality gaps and adjusting to changing academic expectations, especially in Bangladesh where there are few systematic FDPs. This study assesses how FDPs affect faculty competencies and institutional progress at Bangladesh University of Professionals (BUP). A mixed-methods approach was utilized, which includes surveys with a total of 178 participants, including students and faculty members. Purposive and random sampling techniques both guaranteed thorough data gathering. SPSS was used for data analysis, and the Shapiro-Wilk and Kolmogorov-Smirnov tests verified that the data were normal ($p > 0.05$). The results show that FDPs greatly enhance ethical behavior, content creation, and teaching abilities. Nonetheless, few participants reported little advancement in their research understanding, indicating deficiencies in advanced research training. The study suggests more emphasis should be placed on developing research skills in shorter, interactive FDPs that are customized to meet particular requirements. By encouraging professional development and raising the standard of higher education in Bangladesh, these enhancements may increase the effect of FDPs even more.

Key Words: FDPs, Research, Skills, Teaching, Ethics

1. Introduction:

Faculty Development Programs (FDPs) play a pivotal role in enhancing the teaching, research, and counseling abilities of young faculty members. These programs are designed to improve faculty skills and knowledge, ensuring they can adapt to the ever-evolving demands of academia. FDPs not only provide faculty with essential expertise but also foster continuous improvement in their strategies and competencies, creating a positive and respectful workplace environment (Bilal et al., 2019). Evaluating how these programs contribute to teaching effectiveness, research productivity,

technology adoption, student counseling self-efficacy, and course design is vital for determining their overall impact (Rahman, 2023).

FDPs are critical for keeping faculty members updated with the latest trends and developments in their fields. They help faculty meet institutional roles effectively by equipping them with essential skills and knowledge (Handelsman et al., 2004). However, in Bangladesh, prior teaching training is not a prerequisite for faculty in higher education, although policies do exist to provide training (Mahmuda, 2017). Developing human potential defined as the motivation, organization, and agency to achieve individual and societal goals is essential

for improving both individual faculty members and broader academic communities (Krnac, 2012). Faculty members must be adaptable, particularly in course design and student assessment, to meet international academic standards (Blaskova et al., 2015). Despite the importance of FDPs, few studies have examined their impact on faculty in Bangladesh, particularly in areas like counseling self-efficacy or research effectiveness. For instance, while some institutions such as the Bangladesh University of Professionals (BUP) and a few private universities like BRAC and IUBAT implement FDPs, public universities largely lack systematic faculty development initiatives (Raja & Mynavathi, 2018; Sarker et al., 2018). This gap highlights the urgency for comprehensive research and broader implementation of FDPs to address the needs of faculty and students. Effective teaching has a lasting impact on student learning outcomes. The cumulative effect of ineffective instructors can negatively affect students' academic achievements, even if they later encounter good teachers (Wright et al., 1997). Self-efficacy defined as the motivation and perseverance to achieve goals is a critical factor in teacher performance and has been shown to enhance persistence, dedication, and instructional practices (Steinert, 2019). However, a lack of professional development opportunities can lead to demotivation among faculty and higher turnover rates, ultimately affecting institutional stability and continuity (Bilal et al., 2017).

The COVID-19 pandemic underscored the importance of FDPs as institutions transitioned to online learning. Faculty had to quickly adapt to virtual teaching environments, and FDPs played a crucial role in providing the necessary training for this shift (Yilmaz et al., 2021). A supportive academic environment that encourages creativity and intellectual growth is essential for boosting faculty potential and motivation. This involves not only improving individual skills but also fostering teamwork, accountability, and innovation (Blaskova et al., 2015). Research indicates that teacher effectiveness is a key driver of student achievement, surpassing factors like class size or socioeconomic status (Dury et al., 2011). FDPs provide an inclusive approach to professional

development, encompassing teaching strategies, curriculum development, student engagement, and research skills (Welch & Plaxton-Moore, 2017). In Bangladesh, however, the quality of education is often questioned due to outdated teaching practices and inadequate resources (Kamel, 2016). FDPs are particularly relevant for addressing these challenges. By introducing innovative teaching methods, improving faculty communication skills, and integrating new technologies, these programs can significantly enhance the quality of higher education (Vidyakar, 2021). For example, workshops on classroom management, student engagement strategies, and research methodologies help faculty refine their professional practices. Participants evaluate and integrate new knowledge and skills into their teaching, ultimately leading to improved academic outcomes (Welch & Plaxton-Moore, 2017).

In conclusion, FDPs hold immense potential for improving the quality of education in Bangladesh. Programs like those implemented at BUP provide a model for other institutions to follow. Expanding and refining these initiatives could address critical gaps in faculty training, benefiting both educators and students. Policymakers and educational administrators must prioritize FDPs as a means of enhancing teaching and research quality, thereby strengthening the overall higher education system in Bangladesh.

2. Research Objectives:

The main objective of this study is to assess the impact of Faculty Development Programs (FDPs) in Bangladesh, with a special focus on the Bangladesh University of Professionals (BUP). To attain the main objective this study has the following sub-objectives:

1. To assess the extent to which participants have applied the knowledge and skills gained from the FDPs to their teaching practices.
2. To evaluate the effectiveness of Faculty Development Programs at BUP in enhancing faculty members' teaching capabilities.
3. To analyze the effectiveness of the Faculty Development Program (FDP) on BUP

students' academic learning.

3. Literature Review:

Faculty development refers to various activities aimed at helping academics enhance their professional skills in teaching, research, and administration in higher education (**Deball, 2023**). It is essential for improving the educational vitality of institutions, contributing to skills development in teaching, assessment, leadership, and mentoring (**Carini, 2016**). By engaging in research, seminars, and workshops, faculty members can refine their abilities. Structured programs tailored to individual needs have been shown to enhance both teaching effectiveness and inter-professional education (**Buckley, 2023**).

Ali and Mazhar (2018) emphasize that FDPs enhance teaching quality, research, faculty satisfaction, and retention while promoting a culture of continuous learning. However, challenges like limited support, resources, and resistance to change can hinder their success. To be effective, FDPs should align with institutional goals and use evidence-based practices. **Ortlieb et al. (2010)** stress the need for faculty support communities that encourage collaboration, research partnerships, and personal development. **Eddy et al. (2015)** found that faculty who engaged in learning communities gained confidence in teaching and improved student outcomes. Course redesign is another effective approach to enhance teaching methods (**Parks & Guenther, 2011**). **Raja and Mynavathi (2018)** suggest updating hiring practices, training, and curriculum to support both faculty and student development.

Bangladesh faces a shortage of professors due to gaps in practical education and outdated curricula that do not meet international standards (**Bhat, 2023**). More attention is needed on FDPs' overall impact on faculty's academic activities (**Bilal et al., 2019**). Bangladesh also struggles to create innovation clusters due to limited collaboration between universities and the private sector, and insufficient funding for research (**aspers & Corte, 2019**). FDPs promote ongoing professional development by encouraging self-assessment, identifying personal and job-related needs, and

guiding decision-making (**Carini, 2016**). Effective teachers adapt their methods to different learning needs and use varied strategies to foster student engagement (**Rafaghelli & Stewart, 2020**).

FDPs support well-planned educational innovations, and institutions must identify their specific needs when organizing these programs. Social science disciplines, in particular, may require stricter guidelines and strategic planning for successful FDPs (**Raja & Mynavathi, 2018**).

4. Research Gap:

Most research on Faculty Development Programs (FDPs) focuses on medical and engineering fields, with minimal attention to social sciences, particularly in Bangladesh. While foreign studies exist, none address FDP in Bangladeshi higher education institutions. No empirical evaluations detail its impact on student or faculty outcomes. This study aims to address these gaps by examining the impact of FDP at Bangladesh University of Professionals (BUP).

5. Methodology:

This study used a mixed methods approach. The research utilized surveys and Key Informant Interviews (KII) for primary data collection, while secondary sources like online journals, reports, and articles provided additional information on the research topics. With a sample size of 178, selected to ensure comprehensive data collection. This study used both Probability (Simple Random Sampling) and Non-Probability (Purposive Sampling) methods. Simple Random Sampling was employed to collect data from students, while Purposive Sampling was used for Key Informant Interviews (KII). All the data were collected from Bangladesh University of professionals (BUP). The Survey Method ensured respondent anonymity, while KII supported analysis to meet the research objectives, allowing for a critical assessment of FDPs at Bangladesh University of Professionals (BUP).

Table 1: Number of Respondents for Data Collection.

Survey Questionnaire	Students	161
Survey Questionnaire (Face to face)	Faculties	17
Total= 178		

Data analysis involves gathering, cleansing, and organizing data to support objectives, often using data analysis software. The Statistical Package for Social Science (SPSS) version 25 was used to analyze the data. According to Shapiro-Wilk and Kolmogorov-Smirnov test, ($p < 0.05$) is the condition for data normality. The study used non-parametric test (Chi-Square test) to check the normality of data and proved the assumptions of the study.

6. Theoretical Framework of The Study:

This research focuses on evaluating the effectiveness of Faculty Development Programs (FDPs) in higher education in Bangladesh, specifically at Bangladesh University of Professionals (BUP), where FDPs began in 2015. The study uses the Kirkpatrick Model (1950), a widely applied framework for assessing training success. This model evaluates training outcomes across four levels: reaction (environmental adaptation), learning (program knowledge gained), behavior (changes inside and outside the classroom), and results (measured through assessments like APA). It provides a structured approach to understanding the impact of training and education initiatives. These levels explain:

Level: 1: Reaction

"Reaction," the first set of criteria, gauges how well-liked, relevant, and engaging the training is to learners' work. This level is most frequently measured via a post-training survey that asks students to review their experience (sometimes referred to as a "smile sheet" (Alsalamah & Callinan, 2021).

5.2 Level: 2: Learning

Level 2 evaluates each participant's learning based on whether they develop the desired attitudes, knowledge, abilities, and commitment to the course. Pre- and post- assessments should be used to determine accuracy and comprehension while evaluating learning, which can be done both formally and informally (Alsalamah & Callinan, 2021)

5.3 Level: 3: Behavior

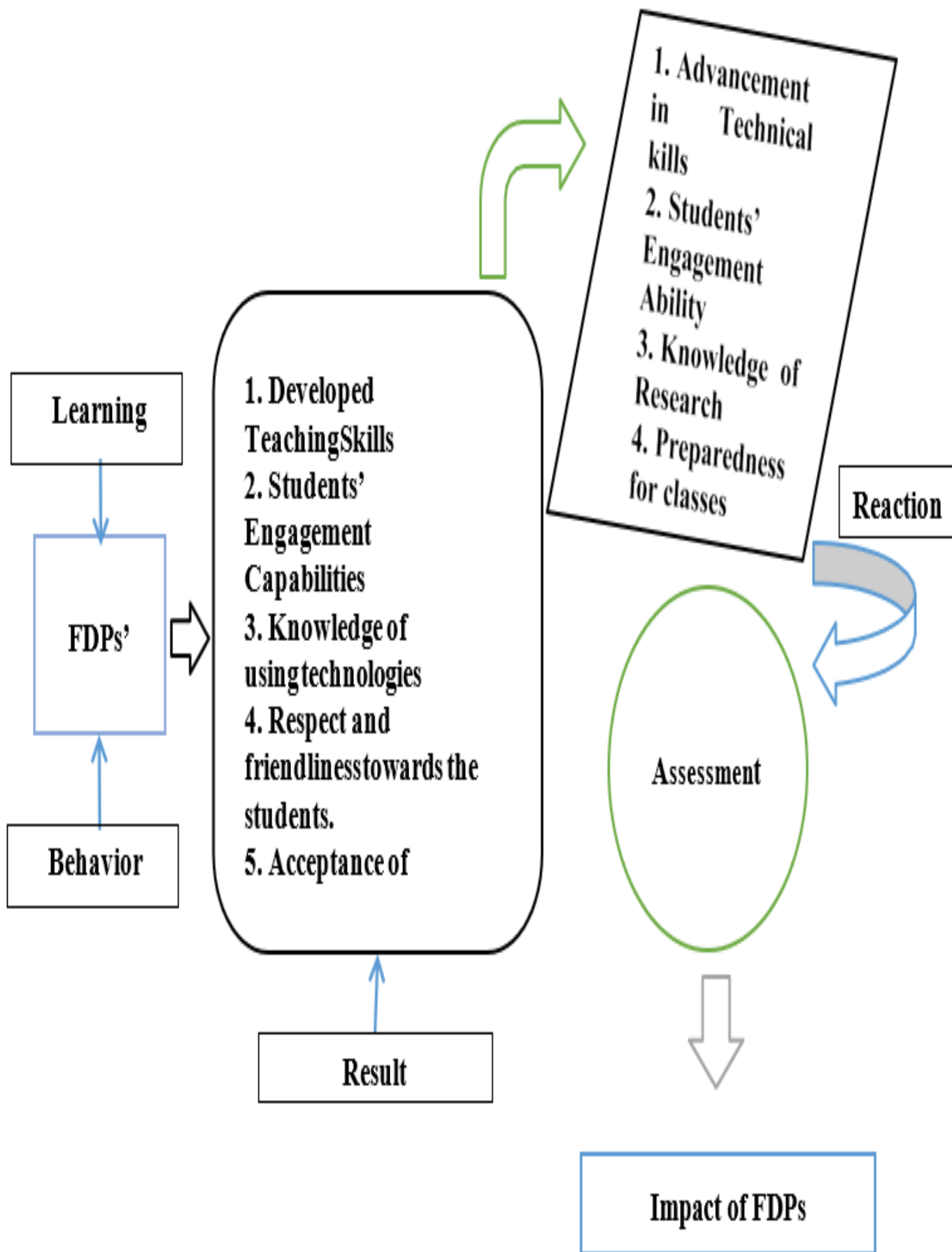
Level 3 of the Kirkpatrick Model is one of the most significant levels since it assesses how much the participants' learning has affected them and how much they are using it. In addition to determining if the skills were understood, assessing behavioral changes enables one to determine whether applying the skills in the workplace is logistically feasible (DeBell, 2023).

5.4 Level: 4: Results

Direct results are measured at the fourth and final level, Level 4. Level Four assesses learning in relation to the organizational business outcomes, or the Key Performance Indicators, which were set before the start of the learning process (DeBell, 2023).

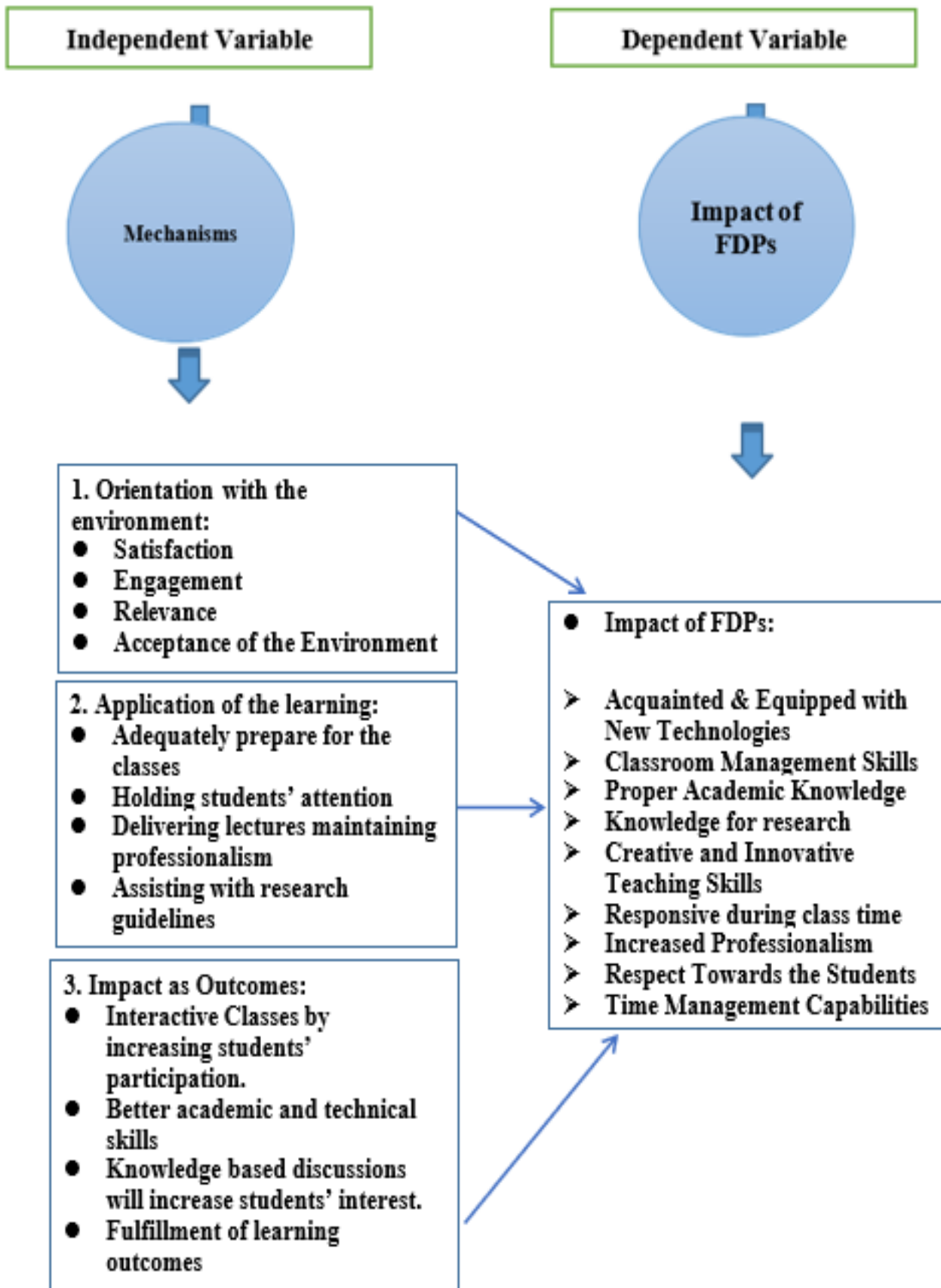
7. Conceptual Framework of The Study

Fig:1 Kirkpatrick Model (1950)



8. Analytical Framework Of The Study

Fig 2:



9. Findings:

9.1. Knowledge and skills gained from the FDPs through their teaching practices:

Table 2 shows faculty responses to FDPs. The majority (82.47%) think FDPs offer adequate timeframe, whereas 17.6% disagree. Most faculty members agree that FDPs provide sufficient and

appropriate content. A 100% favorable response demonstrates a high level of regard for instructors. With 76.5% recognizing gains in critical thinking and problem-solving abilities, FDPs are seen as skill-building. However, 23.5% believe there is still need for growth. Faculty think FDPs useful overall, however there is room for improvement.

Table 2: Reaction on Faculty Development Programs (FDPs)

Particular (n-17)	Yes		No	
	Num	%	Num	%
DO you think FDPs timeframe is adequate to successfully complete the program?	14	82.47	3	17.6
Does FDP include content that is relevant to improving teaching method?	17	100	0	0
Does FDP provide sufficient content?	16	94.1	1	5.9
Do you think the trainers of FDP were knowledgeable?	17	100	0	0
Does FDP offer challenges or problem-solving tasks to stimulate critical thinking and creativity?	13	76.5	4	23.5

(Source- Survey data)

Table 3 highlights that before attending the FDP, faculty members evaluated their own knowledge and abilities in the areas of teaching, content development, evaluation techniques, and research. While 23.5% did not indicate prior teaching skills, roughly 76.5% did. Half of the respondents were unaware of content development. The necessity for

training in this area is further shown by the fact that 52.9% of respondents had no prior experience of assessment techniques. Finally, 82% of faculty members reported having prior research knowledge, indicating that the majority of them were already involved in research.

Table 3: Perception of pre-training learning of faculty

Particular (n-17)	Yes		No	
	Num	%	Num	%
Did you have any prior teaching skills before attending FDP?		76.5	4	23.5

Did you have any prior knowledge in content/ syllabus development before attending FDP?	9	52.9	8	47.1
Did you have any prior understanding of assessment method?	8	47.1	9	52.9
Did you have any prior research knowledge before attending FDP?	14	82.35	3	17.65

(Source- Survey data)

Table 4 shows that The Faculty Development Programs (FDPs) helped faculty members boost key skills, including teaching, content development, assessment method, new job responsibility, and ethical teaching. While 82.35% ensured improved research knowledge, 17.65% reported minimal progress, suggesting the FDP could expand its research content to better support all participants.

Table 4: Obtaining learning through Faculty development Program (post -learning)

Particular (n-17)	Yes		NO	
	Num	%	Num	%
Have your teaching skills improved after attending FDP?	17	100	0	0
Have you got a better understanding of content development after attending FDP?	17	100	0	0
Have you gained proper understanding of the assessment method from FDP?	17	100	0	0
Have you gained better research knowledge from FDP?	14	82.35	3	17.6
Does FDP deliver a proper understanding of your new job responsibilities?	17	100	0	0
Does FDP give learning of ethical teaching?	17	100	0	0

(Source- Survey data)

9.2. Enhancing faculty members' teaching capabilities:

Table 5 shows the faculty member’s perception about Faculty Development Programs (FDPs) in various important training areas. More than 90% think that FDPs improve content development and teaching abilities. The majority of faculty value the influence of FDPs on current research knowledge

and assessment techniques, despite a small minority who maintain their neutrality. While 80% believe FDPs are vital for performance improvement, a small minority (less than 10%) believe they lack job responsibility guidelines. Furthermore, more than 80% agree that FDPs encourage ethical instruction. All things considered; the feedback shows a positive impact with room for improvement in training.

Table 5: Faculties Perception on FDP on different basis

Particular (n=17)	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Num	%	Num	%	Num	%	Num	%	Num	%
FDP assesses improved teaching skills.	5	29.4	11	64.7	1	5.9	0	0	0	0
FDP assesses proper knowledge of content development.	3	17.6	13	76.5	1	5.9	0	0	0	0
FDP delivers updated assessment method.	5	29.4	10	58.8	2	11.8	0	0	0	0
FDP create opportunities to improve research knowledge.	3	17.6	9	52.9	4	23.5	1	5.9	0	0
FDP delivers proper guidelines of job responsibilities	6	35.3	8	47.1	2	11.8	1	5.9	0	0
FDP promotes ethical teaching.	4	23.5	10	58.8	3	17.6	0	0	0	0

(Source- Survey data)

9.3 Effectiveness of student’s academic learning:

Table 6 highlights different aspects of teaching quality based on feedback from 161 participants. It shows that 48.7% of students think faculty have good preparation for classes. 18.4% rated it as excellent, 22.7% rated it as moderate, and 10.1% as

average. For classroom management skills, 44.9% considered it good, 21.5% as excellent, 22.2% as moderate, and 11.4% as average. Additionally, 44.9% of students think faculty are capable of engaging students in class, 23.7% evaluated it as excellent, while 23.7% and 5.7% classified it as moderate and average, respectively. Similarly, the same number of students believe faculty provide

opportunities for critical thinking, with 13.9% viewing it as excellent, 24.7% as moderate, 13.3% as average, and 3.2% as poor. The assessment quality of faculty is considered good by 41.8%, and excellent by 14.6%, while other responses were 29.1% moderate, 11.4% average, and 3.1% poor. The alignment of assessments with learning is regarded as good by 54.1%, excellent by 14%, 26.1% as moderate, 4.8% as average, and 1.2% as poor. For support outside the classroom, 27.4% and 36.3% of students believe faculty are excellent and good, respectively, while 31.2% think it is

moderate, 3.1% average, and 2.1% poor. Additionally, 25.3% of participants strongly agree that faculty are supportive in academic research, 38% agree, 31.6% are neutral, 3% disagree, and 2.1% strongly disagree. Regarding technology use, 41.8% believe it aligns well with study, 14.6% strongly agree, 29.1% are neutral, 11.4% disagree, and 3.1% strongly disagree. Lastly, 19.9% and 44.9% of students either strongly agree or agree that faculty maintain ethical standards, while 24.4% are neutral, 8.3% disagree, and 2.5% strongly disagree.

Table 6: Students’ perceptions of different aspects of teaching quality

	Excellent		Good		Moderate		Average		Poor		Total	
	Frequ ency	%	Frequ ency	%	Frequ ency	%	Frequ ency	%	Frequ ency	%	Frequ ency	%
Prepared for classes	30	18.4	78	48.7	37	22.8	16	10.1	-	-	161	100
Classroom management skills	35	21.5	72	44.9	36	22.2	18	11.4	-	-	161	100
Capability of students’ engagement in the class	38	23.7	72	44.9	38	23.7	9	5.7	3	2	161	100
Providing scope for critical thinking	22	13.9	72	44.9	40	24.7	21	13.3	5	3.2	161	100
Assessment of quality of faculties	24	14.6	67	41.8	47	29.1	18	11.4	5	3.1	161	100
Alignment of the assessments with learning	23	14	87	54.1	42	26.1	8	4.8	2	1	161	100
Supportive nature in outside classroom	44	27.4	58	36.3	50	31.2	5	3	3	2.1	161	100
	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Total	
	Frequ ncy	%	Frequ ency	%	Frequ ency	%	Frequ ency	%	Frequ ency	%	Frequ ency	%
Supportive nature in academics (Research)	41	25.3	61	38	51	31.6	5	3	3	2.1	161	100

Alignment of the technologies used with study	24	14.6	67	41.8	47	29.1	18	11.4	5	3.1	161	100
The faculties maintain ethical standards	32	19.9	72	44.9	39	24.4	13	8.3	4	2.5	161	100

(Source- Survey data)

In table 7 the calculation reflects the fact that the value for P in Chi-Square Test is greater than 0.05. Such findings reflect that the null hypothesis is accepted & the alternative hypothesis is rejected. Therefore, it can be stated that the first assumption – ‘The FDPs significantly enhance faculty understanding of content development and assessment methods’ is a positive assumption.

The table demonstrates that the value for P in Chi-Square Test is greater than 0.05. Which clearly indicates that the null hypothesis is accepted & the alternative hypothesis is rejected. Therefore, the

second assumption – ‘Faculty Development Programs (FDPs) encourage faculty to adopt ethical teaching practices in their professional roles’ is a positive assumption.

In third assumption from the table which has shown Chi-Square test results, the value for P in Chi-Square Test is greater than 0.05. Such findings reflect that the null hypothesis is accepted & the alternative hypothesis is rejected. Therefore, it can be said that the third assumption – ‘Students’ engagement depends on classroom management skills’ is a positive assumption.

Table 7:

Assumption	P-value	Result
FDPs significantly enhance faculty understanding of content development and assessment methods.	0.537 P>0.05	Assumption is proved right.
Faculty Development Programs (FDPs) encourage faculty to adopt ethical teaching practices in their professional roles	0.985 P>0.05	Assumption is proved right.
Students’ engagement depends on classroom management skills.	0.887 P>0.05	Assumption is proved right.

10. Discussion:

The data shows that most of the faculty view FDPs positively in terms of teaching improvement and skill building. Here, 100% of respondents agreed that the FDP program improved their teaching skills and understanding of content development, which aligns with studies by **Ali and Mazhar (2018)**. They found that FDPs enhance teaching quality and job satisfaction. It also suggests that FDPs in Bangladesh are effective in providing reliable content and practical skills, as noted by **Buckley (2020)**, who emphasized the role of structured training programs in boosting teaching

effectiveness.

Literature underscores the need to tailor FDPs to meet specific faculty needs (**Ortlieb et al., 2010**). In the study, 76.5% of faculty found that the FDP encouraged critical thinking and problem-solving, which supports findings by **Eddy et al. (2015)**. In her paper, she mentioned that the main focus of FDP is collaborative learning to build confidence in teaching and ensure better student outcomes. However, 23.5% of faculty felt that it was possible to improve the critical thinking activities within FDPs. This indicates room for program enhancement to fully meet faculty needs.

The data also highlights a gap in pre-training knowledge, particularly in assessment techniques, where 52.9% of faculty lacked experience. This aligns with **Aspers & Corte (2019)** observation that, in Bangladesh, the curriculum and assessment methods are outdated, so teachers rely on FDPs to enhance their teaching skills. The post-training results show that 100% of participants reported an enhanced understanding of assessment methods after the FDP training. This result aligns with **Parks and Guenther (2011)**, who suggested a new design in FDPs to promote innovative teaching approaches. Overall, the discussion suggests that FDPs are crucial for effective assessment practices.

The study also reveals that 82.35% of faculty reported improved research skills after the FDP, while 17.65% saw minimal progress. This can be compared to findings by **Bilal et al. (2019)**, who reported that FDPs mainly focus on participant feedback and may lack an approach to research skills. The study suggests that faculty believe FDPs could further expand their research training components to fully support all participants in developing better research capabilities, as highlighted by **(Bhat, 2023)**, who discussed the insufficient research culture in Bangladeshi institutions.

The data shows that FDPs had great effectiveness regarding ethical teaching and job responsibilities. This aligns with **Carini (2016)** findings, which emphasized the importance of FDPs in ensuring values and ethics in faculty decision-making. The current study also shows that FDPs provide guidelines for new responsibilities. The study by **Raja and Mynavathi (2018)** also found similar results, indicating that well-designed FDPs ensure both teaching and administrative duties.

Even though the current study shows positive results of FDPs, there are still some areas that can be improved. Some of the respondents believe that there is a lack of depth in research skill training. **Bilal et al. (2019)** suggested that emphasizing advanced research skill training in FDPs can create more value, enabling faculty members to extend their research knowledge and advance their research activities.

11. Recommendation:

FDPs should reduce their length to avoid repetition of topics and address challenges highlighted by respondents, such as redundant content. Emphasis should shift from lecture-based classes to interactive training sessions, enabling better engagement and professional outcomes. A flexible environment between faculty members and administrative centers is essential for detailed planning and improved results. Repetition of the same topics can hinder attentiveness and create boredom. Reducing class time and introducing new, engaging content can address this issue. FDPs should include training in research and publication processes. Establishing a public policy lab would support research expertise and improve facilities wisdom. Allocating a larger budget would enable the addition of necessary resources to enhance the success of FDP's. These recommendations aim to make FDP's more efficient, and engaging for faculty members, fostering professional growth and academic excellence.

12. Conclusion:

Teacher education equips educators with the knowledge, skills, and attitudes needed for effective classroom performance, encompassing teaching techniques, pedagogical concepts, and professional development (Sileyew, 2020). Faculty Development Programs (FDPs) at Bangladesh University of Professionals (BUP), initiated in 2015, have significantly enhanced faculty capabilities, particularly in classroom management and innovative teaching (Rahman, 2023). While not all universities in Bangladesh offer FDPs, Bangladesh University of Professionals (BUP) initiative demonstrates the value of such programs in fostering professional growth. The positive impact of FDPs at BUP highlights the need for broader implementation to elevate faculty professionalism and meet evolving educational demands.

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