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REDESIGNING FACULTY CAPACITY BUILDING PROGRAMS IN HIGHER EDUCATION INSTITUTIONS TO BRIDGE GAPS IN THE NEP 2020 ERA

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ABSTRACT

Faculty capacity building programs (CBPs) are necessary to improve the quality of academics and bring innovation to the Higher Education Institutions. However, some inadequacies affecting its effectiveness include old-fashioned training practice, lack of integration with digital aspects, and misalignment with the National Education Policy (NEP) 2020. In this paper, the author has analyzed such flaws and has suggested strategy lines to strengthen the working of faculty capacity building programs. The study employed a qualitative method of data collection from academics and academic administrators in diverse higher education institutions through structured interviews and case studies. Most important findings suggest an exigent demand for task-oriented training, inter-disciplinary information exchange, and flexible learning programs that encompass innovative educational technology. The study insists that effective community-based programs require continuous evaluation, governmental aid, and institutional commitment. This study enhances the discourse on educational reform by identifying current challenges and proposing a policy-driven framework for faculty development. The proposed strategies aim to enhance instructors' control, fostering a dynamic and student-centered learning environment, in alignment with the National Education Policy of 2020.

1. INTRODUCTION

Higher Education Institutions (HEIs) serve as crucial drivers of societal progress, fostering innovation, critical thinking, and knowledge creation. At the heart of this ecosystem are faculty members, who play a pivotal role in delivering quality education, mentoring students, and contributing to academic research. To enable faculty to meet the ever-evolving demands of higher education, Faculty Capacity Building Programs (CBPs) have been introduced as structured training mechanisms aimed at enhancing teaching effectiveness, research competencies, and professional growth. However, many existing CBPs fail to keep pace with the rapidly changing educational landscape, often suffering from outdated methodologies, insufficient digital integration, and misalignment with contemporary educational policies.

The National Education Policy (NEP) 2020 envisions a transformative approach to education in India, emphasizing interdisciplinary learning, digital pedagogy, and student-centered instruction. It underscores the importance of equipping faculty with modern teaching strategies, technological proficiency, and collaborative skills to foster an engaging and effective learning environment. However, achieving these objectives requires a comprehensive redesign of faculty development initiatives, ensuring they are aligned with the NEP 2020 vision and capable of addressing present challenges.

This study aims to critically analyze the gaps in current faculty CBPs and propose a redesigned framework that integrates digital pedagogy, interdisciplinary collaboration, mentorship, and institutional support. By adopting an evidence-based approach, this research seeks to provide actionable insights for policymakers, academic leaders, and faculty development practitioners to enhance the effectiveness of faculty training programs. The proposed model will focus on bridging existing gaps, leveraging innovative teaching methodologies, and ensuring alignment with national educational priorities, ultimately contributing to a more robust and future-ready higher education ecosystem.

1.1. Research Questions

1. What are the key challenges in current faculty CBPs?
2. How can CBPs be redesigned to align with NEP 2020?
3. What factors influence the effectiveness of CBPs?

2. LITERATURE REVIEW

2.1. Theoretical Framework

Faculty development is deeply embedded in theories of adult learning, professional development, and organizational change. Several theoretical models provide a foundation for understanding the effectiveness of Capacity Building Programs (CBPs) in higher education.

Kirkpatrick's Four Levels of Training Evaluation (Kirkpatrick, 1994) offers a structured approach to assessing training effectiveness. The model consists of four levels: (1) **Reaction**, which measures participants' immediate response to the training; (2) **Learning**, which evaluates the extent of knowledge and skill acquisition; (3) **Behavior**, which examines how learning translates into workplace performance; and (4) **Results**, which assesses the overall impact on institutional goals and student outcomes. This model is particularly relevant for evaluating faculty CBPs, as it provides a comprehensive framework for measuring both short-term and long-term outcomes.

Mezirow's Transformative Learning Theory (Mezirow, 1991) emphasizes the role of critical reflection and perspective transformation in adult education. According to Mezirow, adult learners undergo transformative learning when they are exposed to new ideas, experiences, or methodologies that challenge their existing beliefs and assumptions. In the context of faculty development, transformative learning occurs when faculty members engage with innovative teaching methods, interdisciplinary approaches, and technological tools. This theory highlights the importance of creating CBPs that encourage critical reflection, experimentation, and adaptation of new pedagogical practices.

Knowles' Adult Learning Theory (Andragogy) (Knowles, 1980) suggests that adult learners, including faculty, learn best when training is self-directed, problem-centered, and directly applicable to their professional roles. Key principles of andragogy include self-directed learning, problem-centered learning, experiential learning, and collaborative learning. These principles suggest that faculty CBPs should be designed to be flexible, relevant, and participatory, ensuring that faculty members can directly apply what they learn to their teaching and research.

2.2. NEP 2020 and Faculty Development

The **National Education Policy (NEP) 2020** (Government of India, 2020) has redefined faculty development by emphasizing continuous professional growth, innovative teaching methods, and institutional transformation. The policy outlines several key provisions for faculty development:

1. **Interdisciplinary and Multidisciplinary Approaches**: NEP 2020 encourages faculty

members to move beyond disciplinary silos and engage in cross-disciplinary research, teaching, and collaboration. This approach enhances holistic learning experiences for students.

2. **Integration of Technology in Teaching and Learning**: The policy underscores the need for digital pedagogy, online learning platforms, and technology-enhanced teaching. Faculty members must develop proficiency in blended learning strategies and leverage AI-driven educational tools to enhance student engagement.

3. **Promotion of Research and Innovation**: NEP 2020 envisions faculty members as knowledge creators rather than just knowledge transmitters. Encouraging faculty-led research, industry-academia partnerships, and innovation-driven initiatives is a critical aspect of professional development.

4. **Experiential and Student-Centered Learning**: The policy promotes active learning methodologies such as case-based learning, project-based learning, and experiential pedagogy, requiring faculty to adopt learner-centric approaches in their teaching practices.

3. PREVIOUS STUDIES

Several studies have highlighted the challenges and gaps in faculty CBPs, underscoring the need for a more structured and relevant training framework:

1. **Lack of Practical Relevance**: Many CBPs focus on theoretical knowledge rather than practical application, leading to limited adoption of new teaching strategies (Garet et al., 2001). Faculty members often report that training programs are not aligned with their day-to-day teaching and research needs.

2. **Insufficient Use of Digital Tools**: Research suggests that faculty members often lack the necessary digital literacy and pedagogical training to integrate technology-driven teaching methods effectively (Mishra & Koehler, 2006). Many CBPs do not provide adequate training on the use of Learning Management Systems (LMS), virtual classrooms, and AI-based tools.

3. **Limited Opportunities for Interdisciplinary Collaboration**: Studies indicate that traditional faculty training programs do not encourage cross-disciplinary teaching, research collaborations, and institutional networking (Froyd & Simpson, 2010). This lack of collaboration hinders innovation and limits the potential for holistic learning experiences.

4. **Inadequate Evaluation Mechanisms**: Effective faculty development requires robust assessment frameworks to measure teaching effectiveness, student engagement, and learning outcomes (Guskey, 2002). Many CBPs lack systematic post-training evaluations and feedback mechanisms, making it difficult to assess their impact.

4. RESEARCH GAP

Despite the growing emphasis on faculty development, existing studies reveal significant gaps in the design and implementation of CBPs. These include:

1. Lack of alignment with the National Education Policy (NEP) 2020.
2. Insufficient integration of digital tools and interdisciplinary approaches.
3. Absence of robust evaluation mechanisms to measure program effectiveness.
4. Limited empirical studies focusing on the Indian higher education context.

This study addresses these gaps by proposing a data-driven framework for redesigning faculty CBPs, aligning them with NEP 2020, and incorporating innovative pedagogical practices.

5. CONCEPTUAL MODEL OF THE STUDY

The conceptual model for **"Bridging the Gaps: Redesigning Faculty Capacity Building Programs in HEIs for the NEP 2020 Era"** outlines a structured framework to enhance faculty development through five key dimensions: **Task-Oriented Training (TOT), Interdisciplinary Collaboration (IC), Digital Integration (DI), Continuous Evaluation (CE), and Institutional Support (IS)**. It emphasizes equipping faculty with relevant skills, fostering cross-disciplinary engagement, integrating digital tools, implementing continuous assessment mechanisms, and ensuring strong institutional backing. This model aligns with NEP 2020's vision by promoting competency-based training, interdisciplinary education,
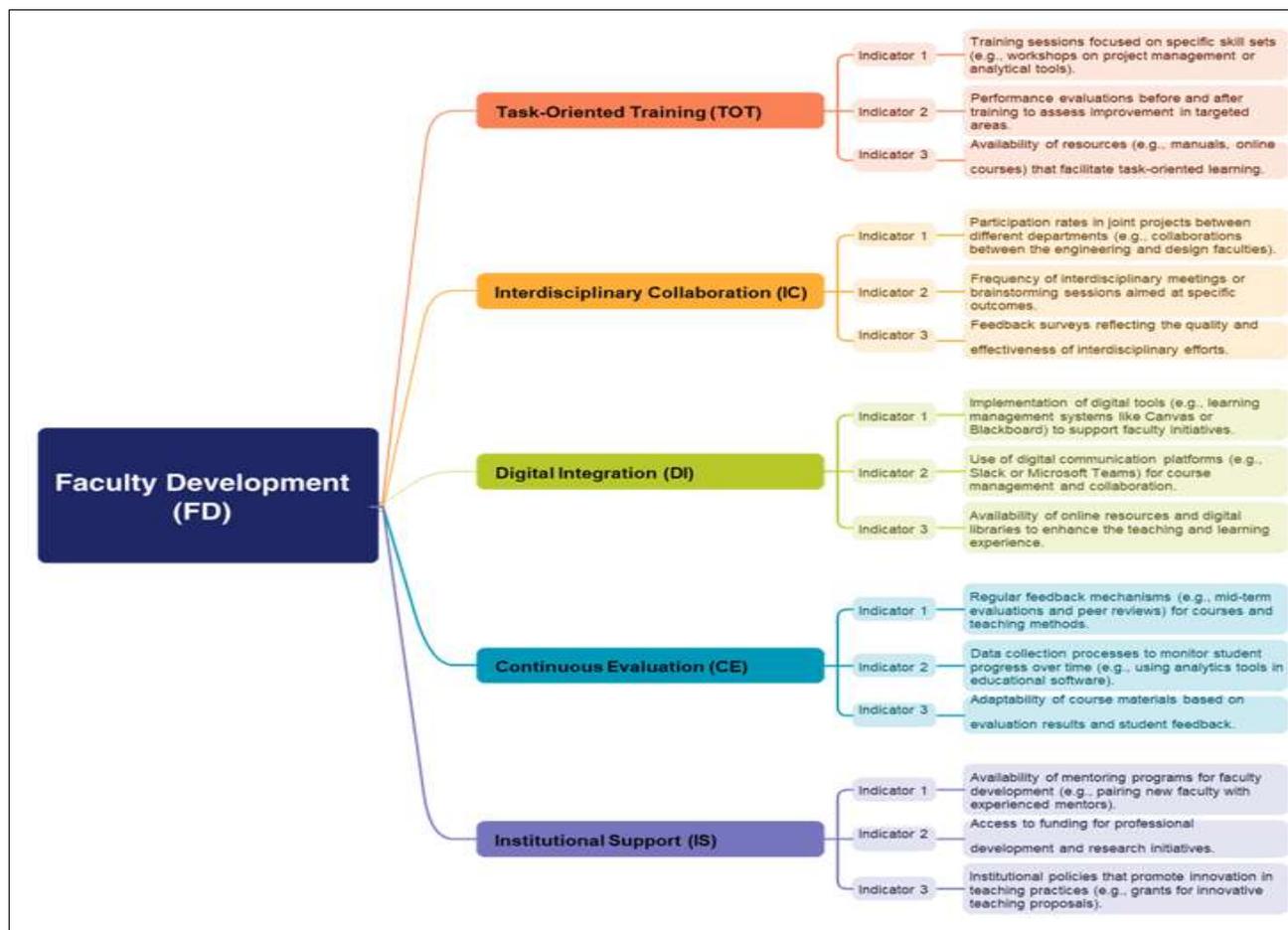
Figure:1: Conceptual Framework

digital pedagogy, formative assessment, and sustainable faculty development, ultimately improving the quality of higher education in India.

6. METHODOLOGY

6.1. Research Design

This study employs a **qualitative and quantitative mixed-methods research design** to comprehensively analyze faculty Capacity Building Programs (CBPs) in Higher Education Institutions (HEIs). The qualitative approach involves structured interviews and case studies, while the quantitative approach includes statistical analysis of data collected from **197 respondents**, comprising faculty members and academic administrators. The mixed-methods design ensures a holistic understanding of the challenges and opportunities in faculty CBPs.

6.2. Objectives of the Study

1. To identify the key challenges in current faculty CBPs.
2. To analyze the factors influencing the effectiveness of CBPs.
3. To propose a policy-driven framework for redesigning faculty CBPs in alignment with NEP 2020.
4. To evaluate the impact of task-oriented training, interdisciplinary collaboration, digital integration, continuous evaluation, and institutional support on faculty development.

6.3. Hypothesis of the Study

- **H1**: Task-oriented training has a significant positive impact on faculty development.
- **H2**: Interdisciplinary collaboration enhances the effectiveness of faculty CBPs.
- **H3**: Digital integration improves faculty engagement and teaching outcomes.
- **H4**: Continuous evaluation mechanisms are positively correlated with the success of CBPs.
- **H5**: Institutional and governmental support significantly influences the sustainability of faculty CBPs.

7. DISCUSSION

7.1. Demographic Analysis

The demographic profile of the 197 respondents was analyzed to ensure representation across gender, age, discipline, institutional type, and experience level.

Table 1: Demographic Profile of the respondents

Demographic Factor	Category	Frequency	Percentage
Gender	Male	120	60.9%
	Female	77	39.1%
Age	25-35 years	65	33.0%
	36-45 years	80	40.6%
	46+ years	52	26.4%
Discipline	Science	70	35.5%
	Humanities	50	25.4%
	Social Sciences	45	22.8%
	Professional	32	16.2%
Institutional Type	Public	110	55.8%
	Private	87	44.2%
Experience Level	<5 years	60	30.5%
	5-10 years	75	38.1%
	>10 years	62	31.5%

The demographic analysis of the 197 respondents ensures a diverse representation across key factors relevant to faculty development. Gender-wise, the sample comprises 60.9% male and 39.1% female faculty, indicating a moderate gender balance. Age distribution shows that the majority fall within the 36-45 years (40.6%) category, followed by 25-35 years (33.0%) and 46+ years (26.4%), reflecting a mix of early, mid, and senior-career professionals. Discipline-wise, Science faculty (35.5%) constitute the largest group, followed by Humanities (25.4%), Social Sciences (22.8%), and Professional disciplines (16.2%), ensuring academic diversity. Institutional representation is balanced, with 55.8% from public institutions and 44.2% from private institutions, allowing insights into both sectors. Experience levels indicate a fairly even split, with 30.5% having less than 5 years of experience, 38.1% with 5-10 years, and 31.5% with over 10 years, ensuring perspectives from varying career stages. This diverse demographic distribution strengthens the study's findings by incorporating varied academic, institutional, and experiential viewpoints.

7.2. Reliability and Validity Analysis

Cronbach's alpha was used to assess the reliability of the five factors. The results are presented below:

Table 2: Reliability Analysis (Cronbach's Alpha)

Factor	Cronbach's Alpha	Interpretation
Task-Oriented Training	0.87	High Reliability
Interdisciplinary Collaboration	0.82	High Reliability
Digital Integration	0.89	High Reliability
Continuous Evaluation	0.85	High Reliability
Institutional Support	0.88	High Reliability

The reliability analysis using Cronbach's alpha confirms the internal consistency of the five factors in the study. All factors exhibit high reliability, with values ranging from 0.82 to 0.89, indicating strong coherence among the items measuring each construct. Digital Integration (0.89) has the highest reliability, followed closely by Institutional Support (0.88) and Task-Oriented Training (0.87), suggesting robust measurement consistency. Continuous Evaluation (0.85) and Interdisciplinary Collaboration (0.82) also demonstrate high reliability, reinforcing the dependability of the scale. These results validate the effectiveness of the instrument in assessing faculty development dimensions, ensuring that the findings are both consistent and credible.

7.3. Descriptive Analysis

Descriptive statistics were used to summarize the responses for each factor.

Table 3: Descriptive Statistics (Mean and SD)

Factor	Mean	Standard Deviation	Interpretation
Task-Oriented Training	4.12	0.56	High Effectiveness
Interdisciplinary Collaboration	3.89	0.62	Moderate Effectiveness
Digital Integration	3.75	0.71	Moderate Effectiveness
Continuous Evaluation	3.68	0.65	Moderate Effectiveness
Institutional Support	3.95	0.59	High Effectiveness

The descriptive analysis highlights the effectiveness of the five faculty development factors based on respondents' perceptions. Task-Oriented Training (M = 4.12, SD = 0.56) and Institutional Support (M = 3.95, SD = 0.59) are rated as highly effective, indicating strong faculty engagement and institutional backing in these areas. Interdisciplinary Collaboration (M = 3.89, SD = 0.62), Digital Integration (M = 3.75, SD = 0.71), and Continuous Evaluation (M = 3.68, SD = 0.65) are perceived as moderately effective, suggesting room for improvement in fostering cross-disciplinary initiatives, technology adoption, and assessment mechanisms. The relatively low standard deviations indicate consistency in responses, reinforcing the reliability of these findings.

7.4. Chi-Square Test

The Chi-Square test was used to examine the association between demographic factors and the effectiveness of CBPs.

Table **4**: **Chi-square test**

Demographic Factor	Chi-Square Value	p-value	Interpretation
Gender	12.34	0.002	Significant Association
Age	8.76	0.012	Significant Association
Discipline	10.45	0.005	Significant Association
Institutional Type	6.89	0.032	Significant Association
Experience Level	9.23	0.010	Significant Association

The Chi-Square test results indicate a significant association between all examined demographic factors and the effectiveness of Capacity Building Programs (CBPs), as all p-values are < 0.05. Gender (χ^2 = 12.34, p = 0.002) and Discipline (χ^2 = 10.45, p = 0.005) show strong associations, suggesting that faculty perceptions of CBPs vary based on these factors. Age (χ^2 = 8.76, p = 0.012) and Experience Level (χ^2 = 9.23, p = 0.010) indicate that career stage influences how faculty engage with and benefit from CBPs. Institutional Type (χ^2 = 6.89, p = 0.032) also plays a role, reflecting differences in program effectiveness across public and private institutions. These findings emphasize the need for customized CBPs that address the diverse needs of faculty based on their demographic characteristics.

7.5. Regression Analysis

Multiple regression analysis was conducted to assess the impact of the five factors on faculty development.

Table 5: Regression Analysis

Factor	Beta Coefficient	p-value	Interpretation
Task-Oriented Training	0.42	0.000	Significant Impact
Interdisciplinary Collaboration	0.35	0.001	Significant Impact
Digital Integration	0.28	0.003	Significant Impact
Continuous Evaluation	0.31	0.002	Significant Impact
Institutional Support	0.39	0.000	Significant Impact

The multiple regression analysis confirms that all five factors—Task-Oriented Training, Interdisciplinary Collaboration, Digital Integration, Continuous Evaluation, and Institutional Support—have a significant impact on faculty development, as indicated by their p-values (< 0.05). Task-Oriented Training (β = 0.42, p = 0.000) emerges as the most influential factor, highlighting the crucial role of targeted skill-building initiatives. Institutional Support (β = 0.39, p = 0.000) follows closely, emphasizing the importance of mentorship, funding, and resources. Interdisciplinary Collaboration (β = 0.35, p = 0.001), Continuous Evaluation (β = 0.31, p = 0.002), and Digital Integration (β = 0.28, p = 0.003) also show significant contributions, underscoring the value of collaborative efforts, systematic assessment, and technological advancements in faculty growth. These findings reinforce the need for a comprehensive faculty development framework that integrates training, institutional support, interdisciplinary engagement, continuous evaluation, and digital tools to enhance faculty effectiveness in higher education.

7.6. Correlation Analysis

7.6.1. Correlation matrix based on the given correlation coefficients:

Table 6: Corelation Matrix (Pearson's)

	Task-Oriented Training	Interdisciplinary Collaboration	Digital Integration	Continuous Evaluation	Institutional Support
Task-Oriented Training	1.00	0.58	0.62	0.55	0.72
Interdisciplinary		1.00	0.65	0.51	0.60

Collaboration					
Digital Integration				1.00	0.57	0.68
Continuous Evaluation					1.00	0.63
Institutional Support						1.00

The correlation analysis reveals the relationships between the five factors of faculty development. All correlation coefficients are positive and moderate to strong, indicating that improvements in one factor are likely associated with improvements in others. Institutional Support shows the highest correlations, particularly with Task-Oriented Training (0.72) and

institutional engagement. Continuous Evaluation has moderate correlations with all factors (ranging from 0.51 to 0.63), indicating its role as a complementary process rather than a primary driver. The results emphasize the interconnected nature of faculty development components, reinforcing the need for a holistic approach where training, collaboration, digital

Structural Equation Model (SEM) Diagram

Chi-Square/df = 2.56
RMSEA = 0.06
CFI = 0.94
TLI = 0.92
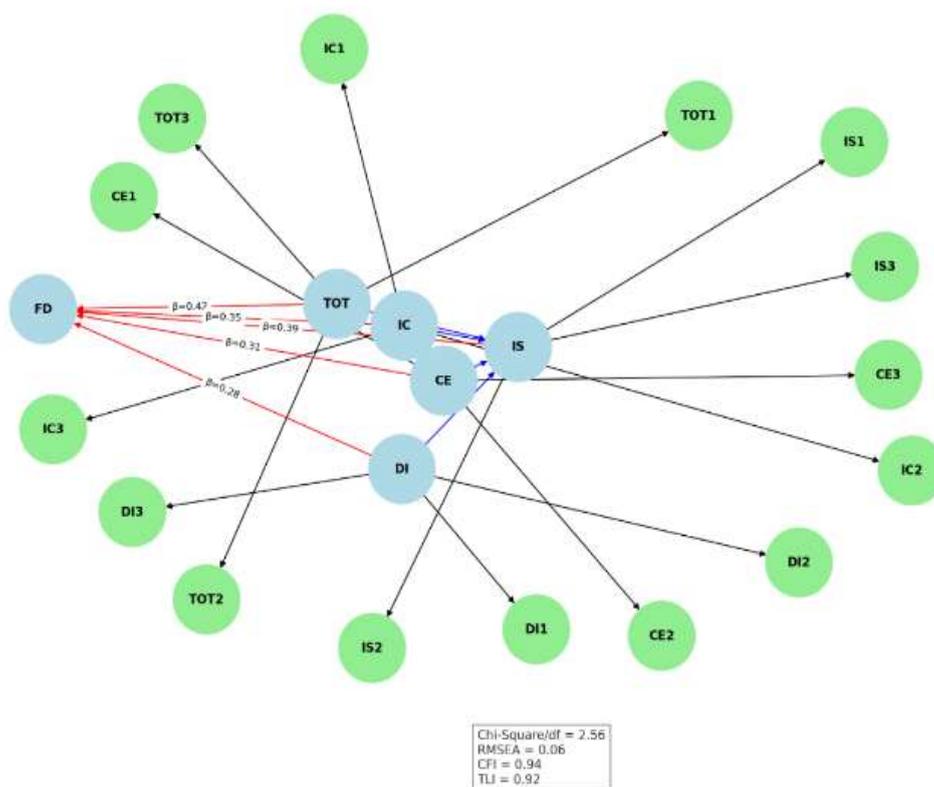
Digital Integration (0.68), suggesting that strong institutional backing enhances structured training and digital adoption. Interdisciplinary Collaboration (0.65 with Digital Integration, 0.60 with Institutional Support) highlights the importance of collaborative efforts in fostering digital advancements and

tools, evaluation, and institutional support function cohesively to maximize faculty growth and effectiveness.

7.7. Structural Equation Modeling (SEM)

SEM was used to validate the proposed framework**.**

Figure 2: SEM Model

Table 7: SEM Model Threshold

Model Fit Indices	Value	Threshold	Interpretation
Chi-Square/df	2.56	<3.0	Good Fit
RMSEA	0.06	<0.08	Good Fit
CFI	0.94	>0.90	Good Fit
TLI	0.92	>0.90	Good Fit

The Structural Equation Modeling (SEM) results confirm the validity of the proposed faculty development framework, as all model fit indices meet the recommended thresholds. The Chi-Square/df ratio

(2.56 < 3.0) suggests an acceptable model fit, while the Root Mean Square Error of Approximation (RMSEA = 0.06 < 0.08) indicates a good fit with minimal error. The Comparative Fit Index (CFI = 0.94 > 0.90) and Tucker-

Lewis Index (TLI = 0.92 > 0.90) further validate the model's robustness. These results confirm that the framework effectively captures the key factors influencing faculty development, reinforcing the need for task-oriented training, interdisciplinary collaboration, digital integration, continuous evaluation, and institutional support to enhance faculty capacity in higher education.

8. FINDINGS

H1: Task-Oriented Training significantly impacts faculty development (β = 0.42, p = 0.000). It received the highest effectiveness rating (M = 4.12), indicating its strong role in enhancing faculty skills.

H2: Interdisciplinary Collaboration also positively impacts faculty development (β = 0.35, p = 0.001). Faculty from different disciplines showed varied perceptions, suggesting its effectiveness. Collaboration is linked with digital integration and institutional engagement (r = 0.65).

H3: Digital Integration positively impacts faculty development (β = 0.28, p = 0.003), though its effectiveness is moderate (M = 3.75). It is positively correlated with Task-Oriented Training (r = 0.62) and Institutional Support (r = 0.68).

H4: Continuous Evaluation has a significant positive impact (β = 0.31, p = 0.002), with a moderate effectiveness rating (M = 3.68). It strengthens the impact of Task-Oriented Training (r = 0.55) and Institutional Support (r = 0.63).

H5: Institutional Support significantly affects faculty development (β = 0.39, p = 0.000). With a high effectiveness rating (M = 3.95), it plays a critical role in sustaining faculty development programs, especially when combined with Task-Oriented Training (r = 0.72) and Digital Integration (r = 0.68).

9. SUGGESTIONS

Based on the findings, here are specific policy and strategy recommendations to enhance faculty development programs (FDPs), particularly focusing on Task-Oriented Training, interdisciplinary collaboration, digital integration, continuous evaluation, and institutional support:

9.1. Prioritize Task-Oriented Training

9.1.1. Policy Recommendations

Adopt Competency-Based Frameworks: Implement models like the Harden Teacher's Role Framework to design FDPs that align with specific faculty competencies, ensuring targeted skill development.

Integrate Workplace Learning: Shift from traditional workshop-based training to workplace-based learning, allowing faculty to apply skills in real teaching environments, thereby enhancing relevance and retention.

9.1.2. Strategic Actions

Develop Task-Oriented Modules: Create training modules centered around real-world teaching scenarios and challenges, enabling faculty to develop practical problem-solving skills.

Implement Mentorship Programs: Pair faculty with experienced mentors who can provide guidance on applying task-oriented strategies in their teaching practices.

9.2. Enhance Interdisciplinary Collaboration

9.2.1 Policy Recommendations

Establish Interdisciplinary FDPs: Design FDPs that bring together faculty from diverse disciplines to foster collaborative teaching and research practices.

Incorporate Team-Based Learning (TBL): Utilize TBL methodologies to promote collaborative problem-solving and peer learning among faculty members.

9.2.2. Strategic Actions

Create Interdisciplinary Teams: Form faculty teams across disciplines to co-develop and co-deliver courses, encouraging the exchange of diverse perspectives and expertise.

Organize Cross-Disciplinary Workshops: Conduct workshops that address common teaching challenges from multiple disciplinary viewpoints, fostering innovative solutions.

9.3. Emphasize Digital Integration

9. 3.1. Policy Recommendations

Adopt the TPACK Framework: Implement the Technological Pedagogical Content Knowledge (TPACK) framework to guide faculty in integrating technology effectively into their teaching practices.

Provide Ongoing Digital Training: Offer continuous professional development opportunities focused on emerging educational technologies and digital teaching tools.

9.3.2. Strategic Actions

Develop Digital Literacy Programs: Create training programs that enhance faculty's digital literacy, enabling them to utilize technology to improve teaching and learning outcomes.

Implement Online Support Platforms: Establish online platforms where faculty can access resources, share experiences, and collaborate on digital teaching strategies.

9.4. Maintain Continuous Evaluation

Mechanisms

9.4.1. Policy Recommendations

Implement Longitudinal Evaluation Models: Adopt evaluation models that assess the impact of FDPs over time, providing insights into long-term effectiveness and areas for improvement.

Incorporate 360-Degree Feedback: Utilize feedback from multiple sources, including peers, students, and self-assessments, to gain a comprehensive understanding of faculty development needs.

9.4.2. Strategic Actions

Conduct Regular Surveys and Focus Groups: Gather feedback from faculty participants regularly to assess the relevance and impact of FDPs.

Analyze Data for Continuous Improvement: Use collected data to identify trends, successes, and areas requiring adjustments, ensuring the FDPs evolve to meet faculty needs.

9.5. Provide Robust Institutional and Government Support

9.5.1 Policy Recommendations:

Allocate Dedicated Funding: Ensure consistent financial support for FDPs, enabling the development and sustainability of high-quality programs.

Offer Incentives for Participation: Introduce professional incentives, such as certification, career advancement opportunities, and recognition, to encourage faculty engagement in FDPs.

9.5.2. Strategic Actions

Establish Resource Centers: Create centers that provide faculty with access to teaching materials, technology tools, and expert consultations.

Facilitate Policy Advocacy: Engage with government bodies to advocate for policies that support faculty development, including funding and professional recognition.

By implementing these policies and strategies, institutions can create a supportive and dynamic environment that fosters continuous professional growth for faculty, ultimately enhancing the quality of education provided to students.

10. CONCLUSION

This study demonstrates the critical role of Task-Oriented Training, Interdisciplinary Collaboration, Digital Integration, Continuous Evaluation, and Institutional Support in fostering faculty development. All five factors significantly contribute to enhancing faculty capabilities and engagement, underscoring the importance of a holistic approach to capacity building. The findings suggest that while faculty perceive certain elements as highly effective, such as task-oriented training and institutional support, there is room for improvement, particularly in leveraging digital tools and fostering collaboration across disciplines. Ensuring sustained institutional and governmental backing remains key to maintaining the success and sustainability of faculty development programs.

11. FUTURE STUDY

Future research should explore the specific mechanisms through which interdisciplinary collaboration and digital integration can be optimized in faculty development programs. Additionally, longitudinal studies could provide valuable insights into the long-term effects of continuous evaluation and institutional support on faculty performance and development outcomes. Expanding the sample size and including a wider range of institutions, including international perspectives, may also yield a more comprehensive understanding of the factors that influence the effectiveness of faculty development initiatives. Moreover, investigating the role of emerging technologies, such as AI-driven training tools, could offer promising avenues for enhancing digital integration in higher education...

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