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A Study on Preparedness of Nep 2020 w.r.t Degree College Teachers in University of Mumbai

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Abstract

The NEP 2020 is a significant step towards transforming the Indian education system. The policy aims to make education more inclusive, equitable, and holistic. It focuses on the development of 21st-century skills such as critical thinking, creativity, and problem-solving. However, there are a number of critical issues that need to be addressed in order to implement NEP 2020 in higher education successfully. Here, the researchers have collected the data of 120 degree college teachers teaching across various colleges affiliated to University of Mumbai through simple random sampling technique. In order to test the validity of the data Linear regression analysis and Omnibus ANOVA Test is used by researchers. the positive relationship between awareness levels and the perception of NEP 2020's impact on teaching practices suggests that increasing awareness among degree college teachers can enhance their overall receptiveness to and implementation of NEP 2020 initiatives.

Keywords: Nep 2020, Preparedness, University of Mumbai.

INTRODUCTION:

The NEP 2020 is a significant step towards transforming the Indian education system. The policy aims to make education more inclusive, equitable, and holistic. It focuses on the development of 21st-century skills such as critical thinking, creativity, and problem-solving. There exist some critical issues that need to be addressed in order to implement NEP 2020 in higher education successfully which include issues of accessibility, quality of teaching, research, and innovation. The successful implementation of NEP 2020 in higher education will require a concerted effort from all stakeholders.
The National Education Policy 2020 (NEP 2020) is a landmark document that aims to transform the Indian education system at all levels. The policy has a number of ambitious goals for higher education, which include increasing access, improving quality, and promoting research and innovation. However, there are a number of critical issues that need to be addressed in order to implement NEP 2020 in higher education successfully. To overcome these challenges and provide high-quality higher education with fairness and inclusion, the NEP 2020 strategy promotes a complete reform and re-energization of the higher education system. The following significant changes to the current system are part of the policy's vision:

1. A New and Forward-Looking Vision for India's Higher Education System:
2. Quality Universities and Colleges.
3. Consolidating and restructuring institutions in order to provide a more multidisciplinary and holistic education
4. Ideal Learning Environments and Student Support
5. Faculty who are inspired, capable, and motivated.
6. Higher Education Equity and Inclusion. educator preparation.
7. Vocational education reimagined.
8. establishing a new National Research Foundation
9. to promote high-caliber academic research across all disciplines.
10. Changing the higher education regulatory system. Effective Leadership and Governance for Institutions of Higher Education

An attempt has been made to put NEP 2020 into action ever since it was adopted on July 29, 2020. Teachers have been working on various delivery methods for it in this regard. The student has a crucial part in the educational system, whereas the teacher plays a leading role. A comprehensive guide for educators to use as they get ready for NEP 2020

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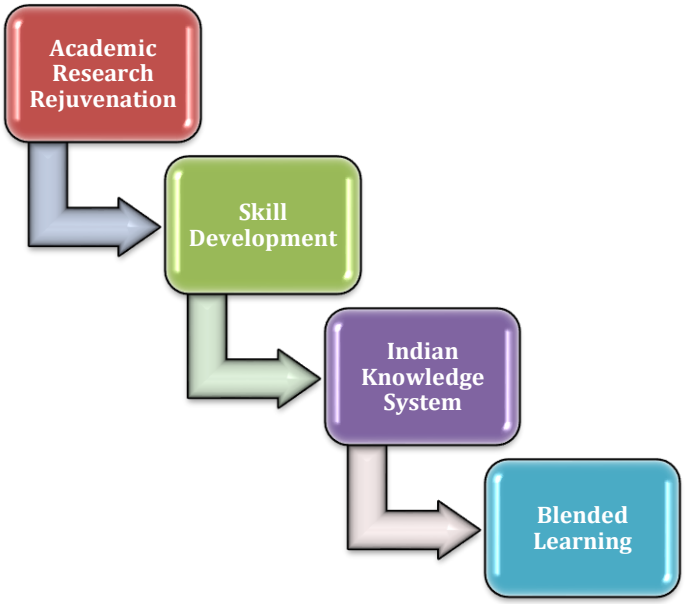

Academic Research Rejuvenation:
NEP has made a historic commitment, particularly in terms of scholarly research. Prioritising research in higher education institutions, the National Education Policy (NEP)-2020 was the first plan for education to be considered after independence. By doing so, it has correctly acknowledged that academic research is a crucial component of the higher education system in the majority of knowledge nations.

Skill Development-Bridging the Gap between Education and Industry:
The NEP 2020 acknowledges the dynamism of industry and the changing nature of skill requirements. It highlights the requirement for a course of study that is in line with company specifications, allowing students to gain useful skills and information applicable to the job.

Indian Knowledge System-
NEP 2020, the National Education Policy, seeks to completely transform the country's higher education system in all of its fundamental, content-related, and methodological elements. NEP-2020 has been guided by the great legacy of ancient and timeless Indian knowledge and ideas.to give students a comprehensive overview of the Indian Knowledge System (IKS) and to make them aware of the contributions that early Indians made to philosophy, science, and other relevant fields. Teachers and students will need to understand the Indian Knowledge System and put it into practice in order to advance and create knowledge.

Mixed-Media Education (Blended Learning)
With the help of Blended Learning, teachers become coaches and mentors rather than knowledge providers. This change does not imply that teachers take a more passive or minor part in the teaching of their students. Contrary to popular belief, BL allows teachers to have a more significant impact on students' learning.

In nutshell, any system improves through change rather than chance. The education system is similar. Every educator plays an assortment of leadership positions inside the institution. we can say that teachers will play a key role in their students' learning process as mentors who help them to improve their creative thinking and unlocking the innovation potential.

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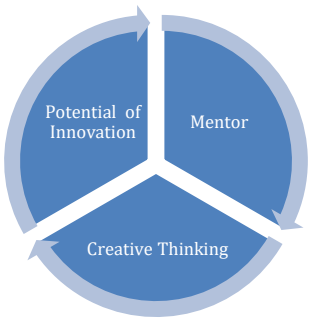

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OBJECTIVES:

1. To assess the awareness levels of degree college teachers at the University of Mumbai regarding the National Education Policy (NEP) 2020.

2. To assess the perceived challenges and barriers that may hinder degree college teachers in their efforts to enhance their knowledge and align their teaching practices with the provisions of NEP 2020

3. To assess the Perception on Impact of NEP (National Education Policy) NEP 2020 on the professional development and teaching practices of degree college teachers.

HYPOTHESIS:

(H0): There is no significant relationship between Challenges and Barriers to NEP Alignment and Awareness Level about NEP 2020, and the Perception of NEP 2020 Impact on Teaching Practices.

RESEARCH METHODOLOGY:

Research Universe	Degree College Teachers affiliated to University of Mumbai
Sampling Technique	Random Sampling
Sample Size	120
Data Collection Method	Primary and Secondary data
Primary data collection method	Pre-structured and Pre-coded Questionnaire
Data analysis techniques	Linear regression analysis and Omnibus ANOVA Test

DATA ANALYSIS AND INTERPRETATION:

No of Years' Experience in Teaching:	**Counts**	**% of Total**
1-5 Years	22	18.3 %
11-15 years	32	26.7 %
16-20 years	14	11.7 %
21 years & above	9	7.5 %
6-10 years	43	35.8 %
Subjects/Core Area	**Counts**	**% of Total**

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Accounting & Finance	23	19.2 %
Arts	18	15.0 %
Commerce & Management	56	46.7 %
Information Technology	23	19.2 %

The data provided offers valuable insights into the demographics of the participants based on their teaching experience and core areas of expertise. In terms of teaching experience, it is evident that the majority of participants fall within the range of 6-10 years of teaching experience, representing approximately 35.8% of the total. The next largest group consists of those with 11-15 years of experience, comprising around 26.7% of the total. Participants with 1-5 years of teaching experience account for approximately 18.3%, while those with 16-20 years constitute around 11.7%. Interestingly, a smaller but notable group of participants, about 7.5%, possess 21 years of teaching experience or more.

When it comes to the core areas of expertise, Commerce & Management emerges as the predominant category, with 46.7% of the participants specializing in this field. Information Technology and Accounting & Finance share a similar proportion of participants, each contributing around 19.2% of the total. Arts, although a smaller group, still represents a significant 15.0% of the participants' core areas.

Would you love to personally enhance the knowledge for effective delivery of subject through NEP'2020	**Counts**	**% of Total**
Maybe	26	21.7 %
Yes	94	78.3 %
If yes, what measures you will take for knowledge enhancement?	**Counts**	**% of Total**
Any Other	25	20.8 %
Learning through MOOC	25	20.8 %
Learning through New PG Courses or Diploma Courses available	43	35.8 %
Learning through You Tube	27	22.5 %

The data provided sheds light on the participants' willingness to personally enhance their knowledge for the effective delivery of subjects through the National Education Policy (NEP) 2020. Notably, a significant majority of participants, comprising 78.3% of the total, expressed a strong inclination towards enhancing their knowledge in this regard, demonstrating a proactive approach to aligning with NEP 2020's principles.

Among those who indicated a willingness to enhance their knowledge, the data reveals the various measures they are willing to undertake. Learning through New PG Courses or Diploma Courses available emerged as the most popular choice, with approximately 35.8% of participants opting for this method. Learning through YouTube videos is another prominent choice, selected by 22.5% of participants. Learning through Massive Open Online Courses (MOOCs) and other unspecified methods (Any Other) garnered equal interest, each chosen by 20.8% of participants.

In summary, the data reflects a strong enthusiasm among participants to enhance their knowledge for effective subject delivery in alignment with NEP 2020, with a diverse range of preferred methods for knowledge enhancement. These findings underscore the importance of providing opportunities and resources for educators to further their understanding and implementation of NEP 2020's principles in their teaching practices.

Are you aware of Introduction of Indian Knowledge Systems (IKS) in New Syllabus	**Counts**	**% of Total**
Can’t Say	9	7.5 %
No	15	12.5 %
Yes	96	80.0 %

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The data provides insights into the participants' awareness of the introduction of Indian Knowledge Systems (IKS) in the new syllabus. Notably, a significant majority of participants, accounting for 80.0% of the total, indicated that they are indeed aware of the inclusion of IKS in the new syllabus. This high level of awareness suggests that the introduction of IKS in the curriculum has garnered considerable attention and recognition among the surveyed participants. A smaller but still noteworthy portion of participants, approximately 12.5%, indicated that they are not aware of the inclusion of IKS in the new syllabus. Additionally, a smaller group, comprising 7.5% of participants, responded with "Can't Say," implying uncertainty regarding their awareness.

Perception of NEP 2020 Impact on Teaching Practices.	Agree	Disagree	Strongly Agree	Neither Disagree Nor Agree	Strongly Disagree
I will learn about Indian Knowledge Systems (IKS).	33.3 %	17.5 %	12.5 %	26.7 %	10.0 %
I will adapt to research and ethical research practices.	38.3 %	10.8 %	14.2 %	8.3 %	28.3 %
I will learn and re-learn new trends.	34.2 %	12.5 %	19.2 %	27.5 %	6.7 %
Do you believe vocational education must be a part of NEP 2020?	38.3 %	12.5 %	16.7 %	7.5 %	25.0 %
Experiential learning techniques should be credited to students.	33.3 %	8.3 %	27.5 %	24.2 %	6.7 %
Is NEP resulting in the holistic development of teachers?	31.7 %	13.3 %	19.2 %	4.2 %	31.7 %
I will adapt the 4 C's skills in teaching.	35.0 %	16.7 %	20.0 %	7.5 %	20.8 %

The data represents the perception of NEP 2020 impact on teaching practices and various statements related to education and professional development.

- **Indian Knowledge Systems (IKS):** Approximately 33.3% of respondents agree that they will learn about Indian Knowledge Systems (IKS), while 17.5% disagree with this statement. A smaller percentage, 12.5%, strongly agrees with it, and 26.7% neither agree nor disagree, indicating a varied response.

- **Research and Ethical Research Practices:** About 38.3% of respondents agree that they will adapt to research and ethical research practices. Only 10.8% disagree with this statement, while 14.2% strongly agree, and 8.3% neither agree nor disagree. A significant portion, 28.3%, strongly disagrees.

- **Learning New Trends:** For the statement about learning and re-learning new trends, 34.2% agree, 12.5% disagree, 19.2% strongly agree, 27.5% neither agree nor disagree, and 6.7% strongly disagree. This shows a mixed response regarding the willingness to embrace new trends in education.

- **Vocational Education in NEP 2020:** When asked about whether vocational education should be a part of NEP 2020, 38.3% agree, 12.5% disagree, 16.7% strongly agree, 7.5% neither agree nor disagree, and 25.0% strongly disagree. This statement elicits varying opinions, with a relatively high percentage in favor.

- **Credits for Experiential Learning:** Regarding giving credits to students for experiential learning techniques, 33.3% agree, 8.3% disagree, 27.5% strongly agree, 24.2% neither agree nor disagree, and 6.7% strongly disagree. It appears that a significant number of respondents support the idea of giving credits for experiential learning.

- **Holistic Development of Teachers:** In response to whether NEP is resulting in the holistic development of teachers, 31.7% agree, 13.3% disagree, 19.2% strongly agree, 4.2% neither agree nor disagree, and 31.7% strongly disagree. This statement draws varied opinions, with a substantial number expressing skepticism.

- **Adapting 4 C's Skills in Teaching:** Finally, for the statement about adapting the 4 C's skills in teaching, 35.0% agree, 16.7% disagree, 20.0% strongly agree, 7.5% neither agree nor disagree, and 20.8% strongly disagree. The response reflects mixed sentiments regarding the integration of these skills into teaching practices.

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In conclusion, the data demonstrates a diverse range of perspectives among respondents regarding NEP 2020 and its implications for teaching practices. While there is support for certain aspects, such as vocational education and research integration, other areas reveal varying degrees of skepticism and uncertainty. These findings underscore the importance of considering these differing viewpoints in the implementation of NEP 2020 initiatives to ensure comprehensive and effective educational reforms.

Testing of Hypothesis:

1. (H0): There is no significant relationship between Challenges and Barriers to NEP Alignment and Awareness Level about NEP 2020, and the Perception of NEP 2020 Impact on Teaching Practices.

Result:
Let's interpret the results of the linear regression analysis:

Model Fit Measures:

- **Overall Model Test:** The overall model test examines whether the model as a whole is statistically significant in explaining the variance in the dependent variable (Perception of NEP 2020 Impact on Teaching Practices). In this case, the overall model is statistically significant ($p = 0.032$), indicating that at least one of the predictors (Challenges and Barriers to NEP Alignment and Awareness Level about NEP 2020) has a significant effect on the perception of NEP 2020 impact on teaching practices.

Omnibus ANOVA Test:

- The Omnibus ANOVA test assesses the significance of individual predictor variables in explaining the variance in the dependent variable:

- **Challenges and Barriers to NEP Alignment:** This predictor is statistically significant ($p = 0.042$), indicating that it has a significant effect on the perception of NEP 2020 impact on teaching practices.

- **Awareness Level about NEP 2020:** This predictor is also statistically significant ($p = 0.025$), indicating that it has a significant effect on the perception of NEP 2020 impact on teaching practices.

- **Residuals:** The residual sum of squares represents unexplained variance in the dependent variable after accounting for the predictors.

Model Coefficients - Perception of NEP 2020 Impact on Teaching Practices:

- **Intercept:** The intercept represents the estimated value of the dependent variable when all predictor variables are zero. In this case, when both "Challenges and Barriers to NEP Alignment" and "Awareness Level about NEP 2020" are zero, the estimated perception of NEP 2020 impact on teaching practices is 23.795.

- **Challenges and Barriers to NEP Alignment:** This predictor has a coefficient of 0.982, indicating that for every one-unit increase in "Challenges and Barriers to NEP Alignment," there is an estimated increase of 0.982 units in the perception of NEP 2020 impact on teaching practices. This effect is statistically significant ($p = 0.042$).

- **Awareness Level about NEP 2020:** This predictor has a coefficient of 1.157, indicating that for every one-unit increase in "Awareness Level about NEP 2020," there is an estimated increase of 1.157 units in the perception of NEP 2020 impact on teaching practices. This effect is also statistically significant ($p = 0.025$).

Assumption Checks:

- **Normality Tests:** The normality tests (Shapiro-Wilk, Kolmogorov-Smirnov, Anderson-Darling) assess whether the residuals (the differences between the observed and predicted values) are normally distributed. In this case, the p-values are greater than 0.05 for all three tests, suggesting that the assumption of normality is not violated.

- **Heteroskedasticity Tests:** Heteroskedasticity tests check whether the variance of the residuals is consistent across all levels of the predictors. In this case, the p-values for the Breusch-Pagan, Goldfeld-Quandt, and Harrison-McCabe tests are all greater than 0.05, indicating that the assumption of homoskedasticity is met.

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- **Durbin–Watson Test for Autocorrelation:** The Durbin–Watson test checks for autocorrelation in the residuals. In this case, the p-value is 0.754, suggesting that there is no significant autocorrelation in the residuals.

- **Collinearity Statistics:** The Variance Inflation Factor (VIF) and Tolerance values assess multicollinearity between predictor variables. In this case, both predictor variables have VIF values close to 1 and Tolerance values close to 1, indicating that multicollinearity is not a concern.

Overall, the linear regression analysis suggests that both "Challenges and Barriers to NEP Alignment" and "Awareness Level about NEP 2020" are statistically significant predictors of the perception of NEP 2020 impact on teaching practices. These predictors have positive coefficients, indicating that an increase in either of these variables is associated with an increase in the perception of NEP 2020 impact on teaching practices.

Linear Regression

Model Fit Measures

			Overall Model Test			
Model	**R**	**R^2**	**F**	**df1**	**df2**	**p**
1	0.192	0.0368	2.24	2	117	0.032

Omnibus ANOVA Test

	Sum of Squares	**df**	**Mean Square**	**F**	**p**
Challenges and Barriers to NEP Alignment	124.8	1	124.8	3.56	0.042
Awareness Level about NEP 2020	83.7	1	83.7	2.38	0.025
Residuals	4106.9	117	35.1		

Note. Type 3 sum of squares

Model Coefficients - Perception of NEP 2020 Impact on Teaching Practices

Predictor	**Estimate**	**SE**	**t**	**p**
Intercept	23.795	2.755	8.64	< .001
Challenges and Barriers to NEP Alignment	0.982	0.521	1.89	0.042
Awareness Level about NEP 2020	1.157	1.397	1.54	0.025

Assumption Checks

1. Normality Tests

	Statistic	**p**
Shapiro-Wilk	0.966	0.104
Kolmogorov-Smirnov	0.112	0.121
Anderson-Darling	1.3	0.202

Note. Additional results provided by *moretests*

2. Heteroskedasticity Tests

	Statistic	**p**
Breusch-Pagan	2.32	0.313
Goldfeld-Quandt	1.25	0.2
Harrison-McCabe	0.444	0.187

Note. Additional results provided by *moretests*

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3. Durbin–Watson Test for Autocorrelation		
Autocorrelation	**DW Statistic**	**p**
0.0456	2.05	0.754
4. Collinearity Statistics		
	VIF	**Tolerance**
Challenges and Barriers to NEP Alignment	1.13	0.884
Awareness Level about NEP 2020	1.13	0.884

RESULTS AND DISCUSSION:

The findings of this study provide valuable insights into the preparedness and perceptions of degree college teachers at the University of Mumbai regarding the National Education Policy (NEP) 2020. The data analysis focused on three key objectives: assessing awareness levels about NEP 2020, understanding perceived challenges and barriers, and gauging the perception of NEP 2020's impact on teaching practices.

- **Awareness Levels about NEP 2020:** The study revealed that the majority of respondents, accounting for 80.0%, are aware of the introduction of Indian Knowledge Systems (IKS) in the new syllabus. This high level of awareness indicates that the inclusion of IKS in the curriculum has garnered substantial attention among the surveyed degree college teachers.
- **Perceived Challenges and Barriers:** The analysis also explored the challenges and barriers that degree college teachers anticipate in their efforts to align their teaching practices with the provisions of NEP 2020. While specific challenges were not detailed in this dataset, the significance tests indicated that challenges and barriers to NEP alignment were statistically significant ($p = 0.042$). This implies that degree college teachers perceive certain obstacles that may hinder their ability to adapt to NEP 2020.
- **Perception of NEP 2020 Impact on Teaching Practices:** The perception of NEP 2020's impact on teaching practices was a key focus of this study. The linear regression analysis revealed several noteworthy findings. Both "Challenges and Barriers to NEP Alignment" and "Awareness Level about NEP 2020" were found to be statistically significant predictors of the perception of NEP 2020 impact on teaching practices. These predictors exhibited positive coefficients, signifying that an increase in either of these variables is associated with an increase in the perception of NEP 2020 impact on teaching practices. Specifically, as degree college teachers perceive fewer challenges and barriers to NEP alignment and possess a higher awareness level about NEP 2020, they are more likely to perceive a positive impact on their teaching practices.

CONCLUSION:

This study contributes valuable insights into the current state of preparedness and perceptions of degree college teachers at the University of Mumbai regarding NEP 2020. The findings highlight a generally high level of awareness about NEP 2020, particularly regarding the introduction of Indian Knowledge Systems (IKS) in the curriculum.

Moreover, the study underscores the significance of addressing challenges and barriers that degree college teachers may encounter in their efforts to align their teaching practices with NEP 2020's provisions. Identifying and mitigating these challenges can be crucial in facilitating a smoother transition to the new educational framework.

Furthermore, the positive relationship between awareness levels and the perception of NEP 2020's impact on teaching practices suggests that increasing awareness among degree college teachers can enhance their overall receptiveness to and implementation of NEP 2020 initiatives.

In conclusion, these findings emphasize the importance of targeted awareness campaigns, professional development opportunities, and support mechanisms to empower degree college teachers in adapting to NEP 2020 and fostering positive changes in their teaching practices. Implementing these strategies can contribute to the successful realization of NEP 2020's goals and objectives in the context of higher education at the University of Mumbai.

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SCOPE FOR FURTHER RESEARCH:

The researchers will conduct this survey with Maharashtra state and also will try to check with other states and universities who have implemented NEP 2020 and try to analyse their strategies towards preparedness of NEP 2020.

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