Online And Blended Learning: A Survey of Policy and Practice in Higher Education Institutions

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***Abstract*—In today's interconnected world, many individuals lead "blended" lives, integrating physical and online activities. Blended learning aligns with this lifestyle, offering distinct advantages to students, teachers, and administrators, such as enhanced access and convenience, improved learning outcomes, and flexible or reduced costs. These benefits can be realized through intentional course design that follows established standards. This study explores the landscape of online and blended learning in higher education institutions across India, aiming to understand the policies, practices, and effectiveness of these learning modes. Through a comprehensive review of existing literature and the deployment of a detailed questionnaire, data were collected from a diverse range of universities and colleges. The survey examines key areas, including demographic information, infrastructure and resources, institutional policies and strategies, implementation practices, challenges faced, and outcomes achieved. The findings provide valuable insights into the extent to which Indian higher education institutions are equipped for and engaged in online and blended learning. The results highlight significant progress in digital education while also identifying critical areas needing further development and support. This research seeks to inform educational policymakers, administrators, and other stakeholders about the successes and ongoing challenges in integrating online and blended learning within the higher education sector in India. The study underscores the importance of a deliberate design process in blended learning, demonstrating its alignment with modern, interconnected lifestyles and its potential to enhance educational experiences and outcomes.**

***Index Terms*—Blended Learning, E-Learning, Educational Policies, Higher Education, Digital Infrastructure.**

I. INTRODUCTION

Learning is a key part of education and is essential for a country's development (Hafeez et al., 2020). In the past, attending classes in person was necessary for learning. However, with the advancements in information technology, the teaching and learning process has significantly changed in the 21st century. This modern approach, known as digital learning or e-learning, involves using technology to enhance education (Arias et al., 2016). The success of the learning process largely depends on the methods used (Ioannou & Iordanou, 2020). Over the years, various learning strategies have been explored and documented (Jia et al., 2017; Senthamarai, 2018; Kohli et al., 2019; Safari et al., 2020).
Recently, blended learning has gained attention as an effective method (Hrastinski, 2019; Yashwant et al., 2020). Many studies have shown that blended learning can be more effective than traditional lecture methods (Bazelais & Doleck, 2018; Godlewska et al., 2019; Holbrey, 2020).

The traditional lecture method, one of the oldest strategies, is useful and cost-effective for delivering information to large groups. However, studies suggest it is less effective in developing critical thinking and teaching skills, particularly in higher education and medical fields (Alamrani et al., 2018). This method is often seen as teacher-centered, where instructors deliver information that students passively receive (Samuelson et al., 2017).
Blended learning, on the other hand, combines face-to-face and online learning.

Different researchers have defined it in various ways:

- Makhdoom et al. (2013) describe blended learning as a flexible technique that integrates technology into learning.
- Eryilmaz (2015) suggests it enhances learning abilities by combining traditional and technology-based methods, sometimes including online classes.
- Alzahrani (2017) highlights the combination of classroom and online resources in blended learning.
- Albiladi & Alshareef (2019) explain it as a strategy that reduces classroom hours by integrating both face-to-face and online learning.

This study aims to explore students, teachers, and professionals' perceptions of blended online learning and its effectiveness. It investigates whether there is a relationship between stakeholders' views and their opinions on the benefits and drawbacks of this learning method. The study also examines how well students and professionals accept blended learning as a new normal. Using surveys and data analysis, this research seeks to provide insights into the future of blended learning in education. The main differences between blended and traditional learning strategies are shown in Table 1.

Table 1: Difference between Traditional and Blended Learning

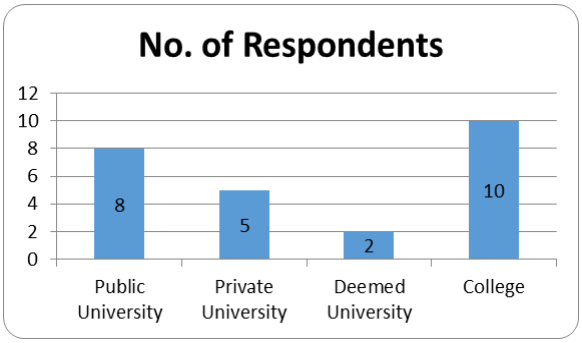
Features	Traditional Learning	Blended Learning
Location	Physical Classes	At any place (Flexible)
Learning	Face to Face learning	Face to face learning and online
Time for Learning	Time Specific (Not flexible)	Not specific time (Flexible)
Technology Application	No Technology application	Necessary to use the technology

II. OBJECTIVE OF THE STUDY

1. Evaluate whether institutions have the necessary IT infrastructure to support online and blended learning.
2. Determine the extent of faculty training provided for online teaching skills.
3. Identify whether institutions have formal policies for online and blended learning.
4. Determine how students' performances are assessed in online and blended courses.

1. Type of Institution:

Sr.no.	Type of Institution	No. of Respondents
1	Public University	8
2	Private University	5
3	Deemed University	2
4	College	10
Total		25

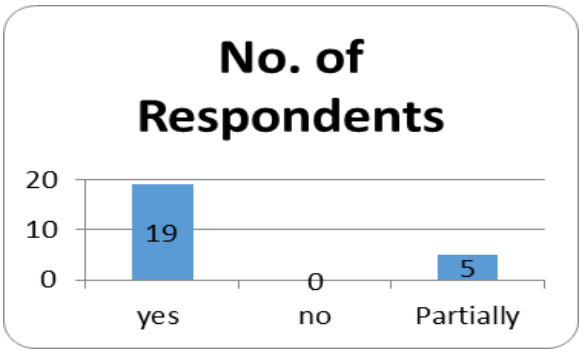


Interpretations:

The data shows that among the 25 respondents, a majority are affiliated with colleges (10 respondents), followed by public universities (8 respondents). Private universities account for 5 respondents, and deemed universities have the least representation with only 2 respondents. This distribution suggests a higher involvement or preference for colleges and public universities among the respondents in the survey.

2.

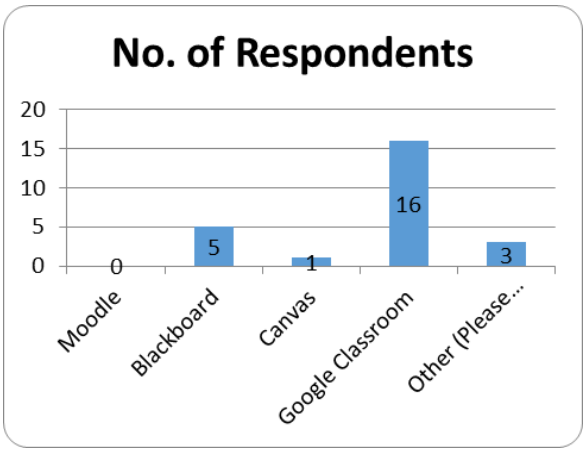
Sr.no.	Does your institution have the necessary IT infrastructure to support online and blended learning?	No. of Respondents
1	yes	19
2	no	0
3	Partially	5
4	Total	24



Interpretations:
The data indicates that the majority of institutions (19 out of 24 respondents) have the necessary IT infrastructure to support online and blended learning. None of the respondents reported a complete lack of such infrastructure. However, 5 respondents indicated that their institutions have only partial IT infrastructure in place. This suggests a strong readiness for online and blended learning, although a minority still face some limitations.

3.

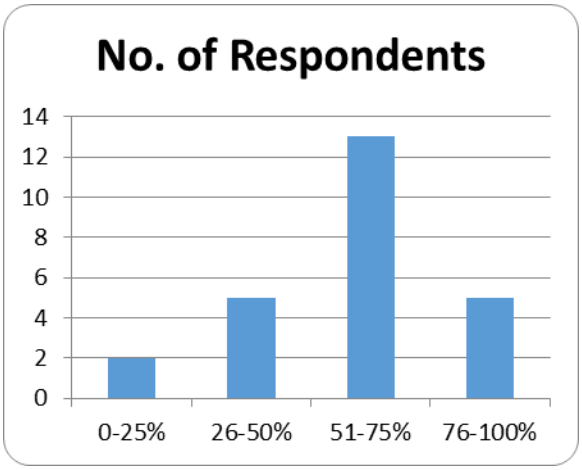
Sr.no.	What type of Learning Management System (LMS) does your institution use?	No. of Respondents
1	Moodle	0
2	Blackboard	5
3	Canvas	1
4	Google Classroom	16
5	Other (Please specify) zoom/Team	3
Total		25



Interpretations:
The data reveals that Google Classroom is the most widely used Learning Management System (LMS) among the institutions, with 16 out of 25 respondents indicating its use. Blackboard is used by 5 respondents, while Canvas is used by only 1 respondent. Additionally, 3 respondents use other platforms such as Zoom or Microsoft Teams. Notably, none of the respondents reported using Moodle. This suggests a strong preference for Google Classroom, with some diversity in LMS choices among the remaining institutions.

4.

Sr.no.	What percentages of your classrooms are equipped with digital teaching aids (smart boards, projectors, etc.)?	No. of Respondents
1	0-25%	2
2	26-50%	5
3	51-75%	13
4	76-100%	5
	Total	25

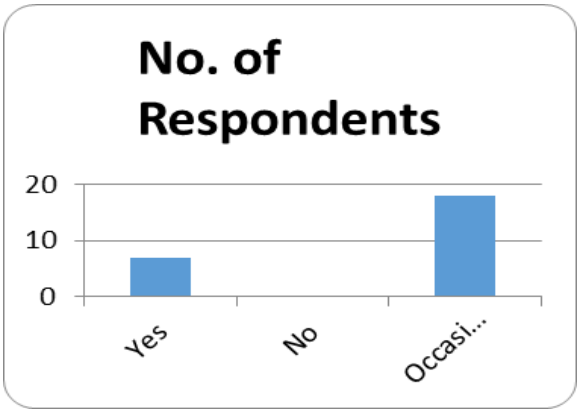


Interpretations:
The data shows that a significant portion of respondents (13 out of 25) reported that 51-75% of their classrooms are equipped with digital teaching aids. Five respondents indicated that 26-50% and another five indicated that 76-100% of their classrooms have such equipment. Only 2 respondents reported that 0-25% of their classrooms are equipped with digital teaching aids. This suggests that while many institutions have a moderate to high level of

digital teaching aids, there is still room for improvement to achieve full digital integration across all classrooms.

5.

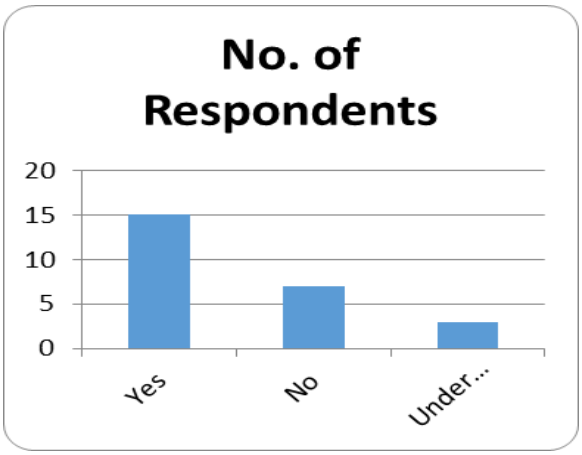
Sr. no.	Does your institution provide training for faculty to develop skills in online teaching?	No. of Respondents
1	Yes	7
2	No	0
3	Occasionally	18
Total		25



Interpretations:
The data indicates that a majority of institutions (18 out of 25 respondents) occasionally provide training for faculty to develop skills in online teaching. Seven respondents reported that their institutions consistently offer such training, while none of the respondents indicated a complete lack of training opportunities. This suggests that while most institutions recognize the importance of online teaching skills, regular and systematic training programs are less common.

6. Formal Policy for Online and Blended Learning

Sr.no.	Does your institution have a formal policy for online and blended learning?	No. of Respondents
1	Yes	15
2	No	7
3	Under Development	3
Total		25

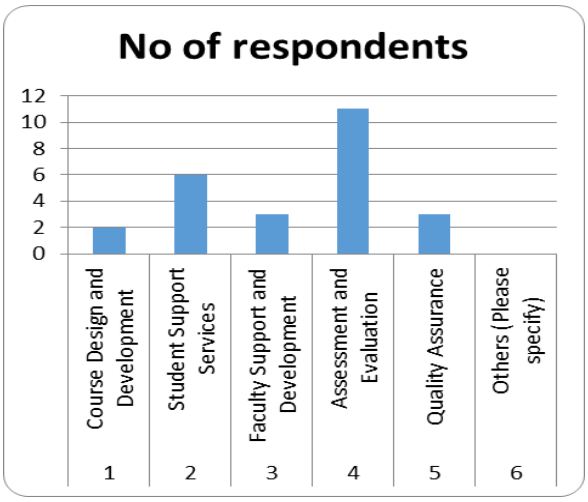


Interpretations:
The data shows that 15 out of 25 institutions have a formal policy for online and blended learning. Seven institutions do not have such a policy, and three are in the process of developing one. This suggests that a majority of institutions recognize the importance of having a structured approach to online and blended learning, though there are still some institutions lagging in formalizing their policies.

Sr.no.	What percentages of courses at your institution are offered in an online or blended format?	No. of respondents
1	0-10%	21
2	11-25%	4
3	26-50%	0
4	51-75%	0
5	76-100%	0
	TOTAL	25

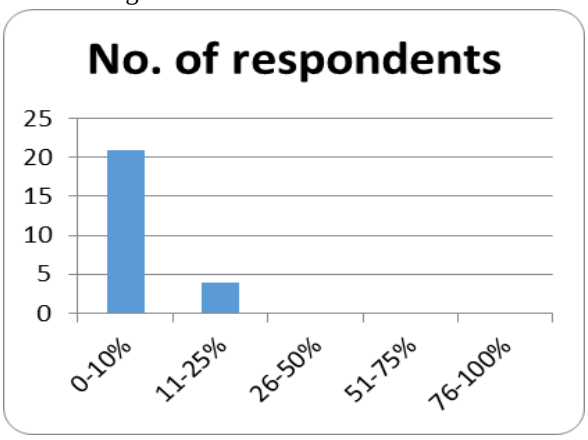
7. Key Components of the Policy

Sr.no.	If yes, what are the key components of the policy? (Select all that apply)	No of respondents
1	Course Design and Development	2
2	Student Support Services	6
3	Faculty Support and Development	3
4	Assessment and Evaluation	11
5	Quality Assurance	3
6	Others (Please specify)	0
Total		25



Interpretations:
Among the institutions with a formal policy, the key components include Assessment and Evaluation (11 respondents), Student Support Services (6 respondents), Faculty Support and Development (3 respondents), and Quality Assurance (3 respondents). Only 2 respondents indicated Course Design and Development as a key component. This indicates a focus on ensuring quality and providing support services within the policies.

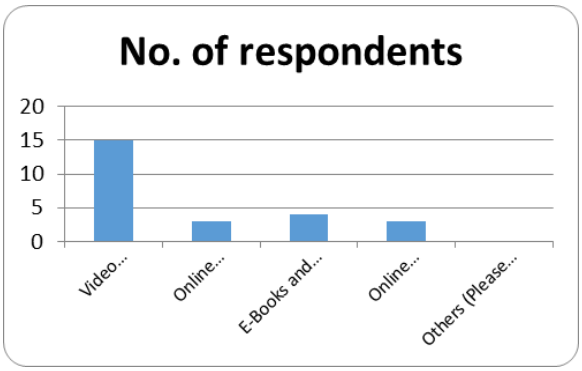
8. Percentages of Courses Offered Online or Blended



Interpretations:
A significant majority (21 out of 25 respondents) reported that only 0-10% of courses at their institution are offered in an online or blended format. Four respondents indicated 11-25%, while no respondents reported higher percentages. This shows that online and blended course offerings are still relatively limited across these institutions.

9. Commonly Used Online Tools by Faculty

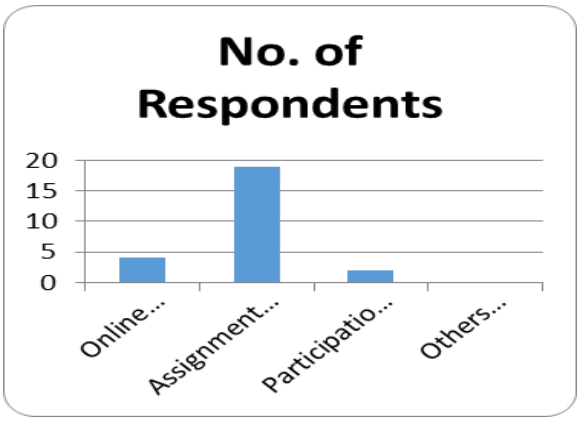
Sr. no.	Which of the following online tools are commonly used by faculty? (Select all that apply)	No. of respondents
1	Video Conferencing (Zoom, Microsoft Teams, etc.)	15
2	Online Discussion Forums	3
3	E-Books and Digital Libraries	4
4	Online Assessment Tools	3
5	Others (Please specify)	0
Total		25



Interpretations:
Video Conferencing tools like Zoom and Microsoft Teams are the most commonly used online tools, with 15 out of 25 respondents indicating their use. E-Books and Digital Libraries (4 respondents), Online Discussion Forums (3 respondents), and Online Assessment Tools (3 respondents) are less commonly used. This highlights a reliance on video conferencing for online learning.

10. Assessment of Student Performance

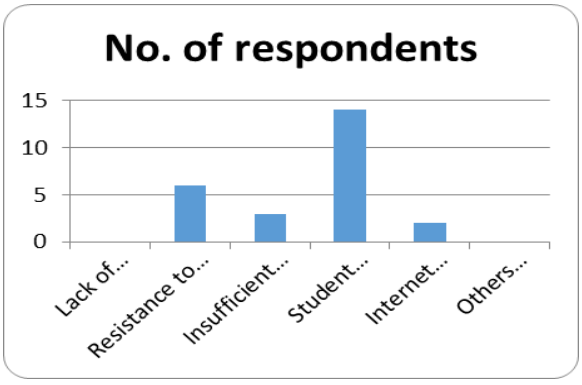
Sr.no.	How are students' performances in online and blended courses assessed? (Select all that apply)	No. of Respondents
1	Online Exams	4
2	Assignments and Projects	19
3	Participation in Online Discussions	2
4	Others (Please specify)	0
Total		25



Interpretations:
Assignments and Projects are the primary method for assessing student performance in online and blended courses, with 19 out of 25 respondents selecting this option. Online Exams are used by 4 respondents, and Participation in Online Discussions by 2 respondents. This suggests that continuous assessment through assignments and projects is preferred over traditional exams in the online

11. Main Challenges in Implementing Online and Blended Learning

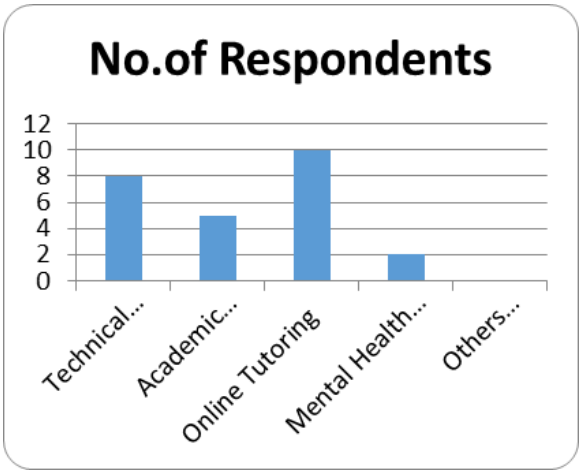
Sr. no.	What are the main challenges faced in implementing online and blended learning at your institution? (Select all that apply)	No. of respondents
1	Lack of Infrastructure	0
2	Resistance to Change	6
3	Insufficient Training for Faculty	3
4	Student Engagement	14
5	Internet Connectivity Issues	2
6	Others (Please specify)	0
Total		25



Interpretations:
The main challenges faced include Student Engagement (14 respondents) and Resistance to Change (6 respondents). Insufficient Training for Faculty (3 respondents) and Internet Connectivity Issues (2 respondents) are less significant challenges. Lack of Infrastructure was not identified as a challenge by any respondents. This indicates that motivating students and overcoming resistance are the primary hurdles.

12. Support Provided to Students for Online Learning

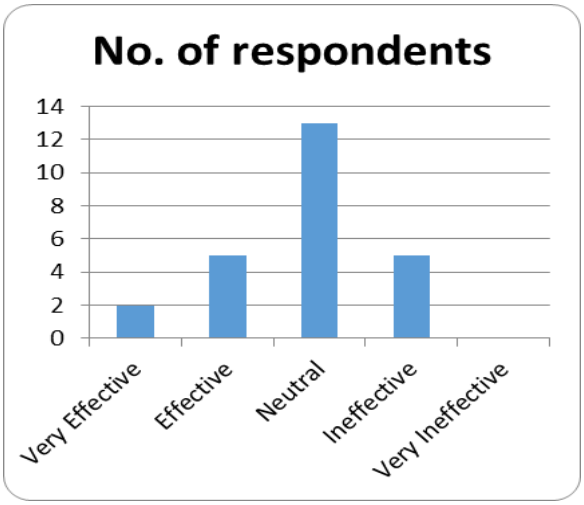
Sr.no.	What types of support does your institution provide to students for online learning? (Select all that apply)	No.of Respondents
1	Technical Support	8
2	Academic Advising	5
3	Online Tutoring	10
4	Mental Health Services	2
5	Others (Please specify)	
Total		25



Interpretations:
Institutions provide various supports for online learning, with Online Tutoring (10 respondents) and Technical Support (8 respondents) being the most common. Academic Advising is provided by 5 respondents, and Mental Health Services by 2 respondents. This shows a balanced approach in providing both academic and technical support, though mental health services are less common.

13. Overall Effectiveness of Online and Blended Learning

Sr.no.	How would you rate the overall effectiveness of online and blended learning at your institution?	No. of respondents
1	Very Effective	2
2	Effective	5
3	Neutral	13
4	Ineffective	5
5	Very Ineffective	0
Total		25



Interpretations:

Respondents' ratings of the overall effectiveness of online and blended learning are varied: 13 respondents are Neutral, 5 consider it Effective, and 2 rate it as Very Effective. Five respondents find it Ineffective, and none rated it Very Ineffective. This suggests mixed perceptions, with a significant portion being undecided or neutral about the effectiveness of online and blended learning.

III. CONCLUSION

The survey data provides valuable insights into the current state of online and blended learning across various institutions. Key findings include:

1. Type of Institution: Colleges and public universities are the most represented among respondents, suggesting a strong involvement of these types of institutions in the survey.
2. IT Infrastructure: Most institutions have the necessary IT infrastructure to support online and blended learning, although some only partially meet the requirements.
3. LMS Usage: Google Classroom is the most widely used LMS, followed by Blackboard and other platforms like Zoom and Microsoft Teams, indicating a preference for easily accessible and user-friendly tools.
4. Digital Teaching Aids: A majority of classrooms are equipped with digital teaching aids, but there is still room for improvement to achieve full digital integration.
5. Faculty Training: Training for faculty is provided occasionally by most institutions, with a smaller number consistently offering it, highlighting a need for more regular training programs.
6. Formal Policies: Many institutions have formal policies for online and blended learning, focusing on assessment, student support, and quality assurance.
7. Course Offerings: The percentage of courses offered in an online or blended format is relatively low, with most institutions offering only 0-10% of their courses in these formats.
8. Online Tools: Video conferencing tools are the most commonly used, indicating a reliance on real-time interaction for online learning.
9. Student Assessment: Continuous assessment through assignments and projects is preferred over traditional exams for evaluating student performance in online and blended courses.
10. Challenges: The main challenges in implementing online and blended learning include student engagement and resistance to change, while infrastructure and internet connectivity issues are less significant.
11. Student Support: Institutions provide various supports, such as online tutoring and technical support, though mental health services are less commonly offered.
12. Effectiveness: Perceptions of the overall effectiveness of online and blended learning are mixed, with many respondents remaining neutral or undecided.

IV. RECOMMENDATION

1. Increase Digital Integration:
Institutions should aim to equip a higher percentage of classrooms with digital teaching aids to enhance the learning experience.

2. Regular Faculty Training:
Implement regular and systematic training programs for faculty to develop skills in online teaching, ensuring they are well-prepared to deliver quality education.

3. Expand Course Offerings:
Increase the percentage of courses offered in an online or blended format to provide more flexible learning options for students.

4. Enhance Student Engagement:
Develop strategies to improve student engagement in online and blended courses, such as interactive content, active learning techniques, and regular feedback.

5. Formalize Policies:
Institutions without formal policies should prioritize developing comprehensive policies for online and blended learning, focusing on key areas like course design, student support, and quality assurance.

6. Diversify Assessment Methods:
Encourage the use of diverse assessment methods, including participation in online discussions and online exams, to provide a more holistic evaluation of student performance.

7. Address Resistance to Change:
Implement change management strategies to address resistance from both faculty and students, promoting the benefits of online and blended learning.

8. Provide Comprehensive Student Support:
Enhance support services for students, including technical support, academic advising, online tutoring, and mental health services, to ensure they have the resources needed for successful online learning.

9. Evaluate Effectiveness:
Regularly assess the effectiveness of online and blended learning programs through feedback from students and faculty, making data-driven adjustments to improve outcomes.

By addressing these recommendations, institutions can better adapt to the evolving educational landscape and ensure the successful implementation and effectiveness of online and blended learning programs.

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