

Online Experimentation of Teaching Methods and Faculty Perceptions at Adichunchanagiri University (ACU): A Study

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Abstract: This study explores faculty perceptions of online teaching methods and their effectiveness at Adichunchanagiri University (ACU), Karnataka, India, focusing on the constituent colleges of ACU. The research examines opportunities and challenges of online experimentation in teaching. A survey of two hundred faculty members utilized a structured questionnaire to assess perceptions, with data analyzed using descriptive statistics (mean, SD) and chi-square tests. Findings reveal strong support for online teaching's potential, including innovation (mean=4.11, P=.000), flexibility in program design (mean=3.98, P=.000), and customized learning experiences (mean=4.045, P=.000). However, significant drawbacks include technical difficulties (mean=3.755, P=.226), lack of face-to-face interaction (mean=3.870, P=.000), and challenges in maintaining student focus (mean=3.600, P=.253). Faculty also noted issues like isolation (mean=3.500, P=.000) and limitations for hands-on learning (mean=3.515, P=.000). The study underscores the need for enhanced technical infrastructure and training to optimize online teaching at ACU, offering insights for improving digital pedagogy in higher education.

Key Words: Online-Teaching, Teacher Identity, Internet/Web-Based Learning, Distance Learning, India, University Teaching. India, Adichunchanagiri University (ACU).

1. Introduction:

Online teaching has made substantial changes to teaching-learning activity, higher educational institutions made the transition from on-campus to online teaching mode. Faculty and students are unprepared for this unanticipated change. Online learning has its advantages but with new challenges. On-campus learning consists of regular classes, laboratories, group projects, and assignments. These activities hold for online mode also. In-person learning promotes group projects by bringing group members together. Online learning students have to make sure to effectively communicate with each other. For this, devices used are personal computers, laptop, mobile phones, and apps are Zoom, MS Teams, and Google Classroom. Documents are shared through emails, messages, and shared documents. This study investigates faculty perceptions of online teaching methods at ACU, focusing on opportunities, disadvantages, and weaknesses as revealed through a survey of 200 faculty members (Tables 6–8). Online education offers potential for innovation, flexibility, and cost-effectiveness, yet faces challenges like technical difficulties, lack of interaction, and limitations in hands-on learning (Journal of The Institution of Engineers, 2021; Nurse Educ Today, 2022). By examining faculty perspectives, this study aims to understand how online experimentation can enhance teaching effectiveness at ACU while addressing barriers, particularly for practical disciplines like engineering and medical sciences. The findings contribute to the broader discourse on digital pedagogy in rural-serving institutions and inform strategies to optimize online education at ACU.

2. Review of Related Literature:

Dassa & Nichols (2019) examined the degree to which the opinions of student teachers aligned with those of the university supervisors and clinical educators who assessed their subject-specific content knowledge and teaching skills. Our study revealed that student instructors regularly rated themselves higher than the professionals who evaluated them, despite our initial concern about low teacher self-efficacy. Supervisors were particularly worried about the kids' capacity to constructively analyse evaluations that weren't at the top. According to our findings, many aspiring teachers may not be

receiving enough healthy skepticism from our teacher education program, which would enable us to better balance the challenging ratio of overconfidence to under confidence.

Martin & et.al (2019) this study evaluates faculty preparedness for teaching online by evaluating their perspectives on the value of teaching skills and their self-reported abilities. Through an online survey, it examines response validity, reliability, and influencing factors. Faculty rated course design, communication, and technical skills as more important than their ability, but viewed their time management ability as stronger than its importance. MANOVA results show differences in perceived importance by gender, online teaching experience, and delivery method, with ability varying by experience and method.

Merkin & King (2023) Florida International University (FIU) has committed substantial resources to advancing hybrid education, offering faculty a semester-long training program and a financial incentive to adapt their courses for a hybrid format, combining equal parts in-person and asynchronous online instruction. While the effectiveness of these courses has been evaluated through student success and satisfaction metrics, faculty satisfaction with teaching in this modality had not been formally studied until recently. Gaining insight into faculty perspectives on hybrid teaching is crucial for universities to make well-informed decisions about allocating resources to support this instructional approach.

Verstraeten & et.al (2025) This study examines university teachers' perspectives on online education to improve their global well-being. Interviews and focus groups revealed benefits like enhanced efficiency and creativity, alongside challenges such as diminished informal student relationships, a change in the teacher's persona, and decreased student engagement. While demands include time constraints and student discontent, online teaching resources offer autonomy, support, and knowledge exchange. Teachers' well-being is supported by encouraging casual contacts and a framework for exchanging knowledge.

Alcaide-Pulido & et.al (2025). This study investigates faculty views on new pedagogies, with an emphasis on how prepared they are for digital and hybrid learning settings and the cooperative dynamics between teachers and students. The preparation of Spanish university professors following two years of required online education is examined using the FROCT scale, which evaluates comfort with risk, identity disruption, teaching norms, equality, and tenure norms. Understanding faculty preparation for online and blended learning, where cognitive, metacognitive, and emotional aspects enhance online socialization and collaboration, is improved by the research, which reveals changes in readiness perceptions with noteworthy gender and age disparities.

3. Objectives and and hypotheses:

1. To know the access to independent device for on-line teaching.
2. To know the on-line teaching more beneficial to students than offline during on-line teaching.
3. To examine the faculty stressful to teach remotely during the on-line teaching.
4. To find out the opportunities of on-line teaching.
5. To know the disadvantageous on-line teaching compared to offline teaching.
6. To know the weaknesses of on-line teaching.

Hypotheses:

H1: Faculty who receive comprehensive training in digital tools and online pedagogy will report significantly higher perceptions of online teaching's opportunities (e.g., innovation, flexibility, and customized learning experiences) compared to those with limited or no training, as measured by higher mean scores on Table 6 items (e.g., mean=4.11 for innovation, mean=4.045 for customized learning).

H2: Technical difficulties and lack of face-to-face interaction (Table 7, mean=3.755 and 3.870, respectively) are significantly associated with lower faculty satisfaction with online teaching at ACU, leading to higher ratings of disadvantages compared to offline teaching.

H3: Faculty perceptions of weaknesses in online teaching, such as student isolation and inability to focus on screens (Table 8, mean=3.500 and 3.425), are significantly stronger among faculty teaching practical or hands-on subjects (e.g., engineering, medical sciences) compared to those teaching theoretical subjects, due to limitations in delivering experiential learning online.

4. Scope:

The present study covers the online experimentation at Adichunchanagiri University (ACU): teaching methods and faculty perceptions. Geographical coverage of the schools is limited to Constituent schools of Adichunchanagiri University. The sample of the study is from six constituent school's faculty coming under Adichunchanagiri University and they are:

1. School of Engineering
2. School of Medical Science
3. School of Pharmacy
4. School of Nursing
5. School of Education
6. School of First Grade College
7. School of Natural Science

5. Methodology:

The research work begins with a literature search. The primary source for literature search is ERIC (Education Resources Information Center) & OED (Online Education Database) database, Google Scholar, Emerald Insight, ProQuest & Education Sources. Also uses other sources such as bibliographies and other indexing and abstracting journals, reports, and conference proceedings. The survey method was adopted to collect data the tools for collecting data are through a questionnaire. The questionnaires were designed for the faculty of six constituent schools Adichunchanagiri University. The observation and interview techniques were also used for primary data collection. Parents were counseled by faculty regarding online reaching and educated them to support their ward during online learning. A sum of two hundred and twenty questionnaires with a choice of answers was issued to all the faculty of six constituent schools Adichunchanagiri University and two hundred filled reactions were received. The data collected through questionnaires were organized and tabulated by using SPSS method. For each attributes SD (Standard deviation), Mean, χ^2 (Chi-Square), P (Probability) were calculated.

Details:

Sample: 200 Faculties.

Analysis Tools: SPSS (Statistical Package for the Social Sciences) for statistical evaluation.

Methodology Enhancements: Future studies should include adopt a longitudinal mixed-methods approach with stratified sampling,

6. Results:

From each table, two significant factors are discussed; the results of the study are as follows:

6.1. Age of the Faculty

Table 1 summarizes the age distribution of two hundred and twenty faculty members at Adichunchanagiri University. The majority are aged 31–35 (38.5%), followed by those over 36 (34.0%) and 26–30 (26.0%). Only 1.5% are under 25. This indicates a relatively mature faculty, with most in their early to mid-career stages, likely influencing their adaptability and perspectives on online teaching methods.

Table: 1
Age of the Faculty

S/N	Range of Age	No. of Responses	Percentage
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1	<25	3	1.5
2	26-30	52	26.0
3	31-35	77	38.5
4	36>	67	34.0
	Total	200	100

6.2. Designation of the Faculty

Table 2 shows the designation distribution of hundred and twenty faculty members at Adichunchanagiri University. Assistant Professors dominate (79.5%), followed by Professors (10.5%), Associate Professors (9.0%), and others (1.0%). The predominance of Assistant Professors suggests a younger, possibly less experienced faculty base, which may impact their familiarity with and adaptation to online teaching methods.

Table: 2
Designation of the Users

S/N	Designation	No. of Responses	Percentage
1	Asst. Professor	159	79.5
2	Associate Professor	18	9.0
3	Professor	21	10.5
4	Others	02	1.0
	Total	200	100

6.3. Access to independent device for on-line teaching

Table 3 outlines faculty access to devices for online teaching at Adichunchanagiri University (N=200). Laptops are the most preferred device (68% rated 5, mean=4.51, P=.002), followed by smartphones (58% rated 5, mean=4.42, P=.003). Desktops (39% rated 5, mean=3.83, P=.000) and tablets (38% rated 5, mean=3.17, P=.000) are less favored. The high means and significant P-values indicate strong faculty reliance on laptops and smartphones, with moderate variability (SD=0.828–1.68) suggesting differences in device access or preference.

Table: 3
Access to independent device for on-line teaching

S/N	Delivering curriculum	Feedback in Percentage (N=200)					Mean	SD	χ^2	P Value
		1	2	3	4	5				
1	Laptop	7 (3.5)	1 (0.5)	11 (5.5)	45 (22.5)	136 (68.0)	4.51	.902	31.753	.002
2	Desktop	20 (10.0)	15 (7.5)	22 (11.0)	65 (32.5)	78 (39.0)	3.83	1.29	27.964	.000
3	Tablet	55 (27.5)	26 (13.0)	24 (12.0)	19 (9.5)	76 (38.0)	3.17	1.68	39.328	.000
4	Smart Phone	2 (1.0)	6 (3.0)	14 (7.0)	62 (31.0)	116 (58.0)	4.42	.828	25.770	.003

Code: 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree 5. Strongly agree. SD = Standard deviation, N=Number of Respondents, χ^2 = Chi-Square, P = Probability, P≤.050 – Significant, P > .050 – Not Significant, Numbers in Parentheses Indicates Percentage

The table indicates that the Chi Square values reveal that, an outstanding difference ($\chi^2=31.753$; $P<.000$) & the biggest choice of faculty are using of 'Laptop' for the access to independent device for on-line teaching, majority of the faculty scoring, 136(68.0%) say are strongly agree' & very few 1 (.5%) of the state 'strongly disagree' with a highest mean worth of 4.51 & SD is .902. Among the access to independent device for on-line teaching among the ACU faculty, 'Teacherkit' has the lowest mean worth 3.17 & SD being 1.68; there is an outstanding difference ($\chi^2 = 39.228$, $P>.000$) among the ACU facilities are replied 'Tablet' is 'strongly disagree' for access to independent device for on-line teaching.

6.4. On-line teaching more beneficial to students than offline.

The on-line teaching more beneficial to students than offline among the Adichunchanagiri University faculty is presented in table. 4. There is a range of on-line teaching more beneficial to students than offline. They are: Online teaching in not beneficial because students are not learning through on-line, Offline teaching in more effective always compared to online mode, teach about 15-20% of the syllabus by on-line mode, Digital learning provide availability of study materials & learning new technological tools, time On-line teaching is good for learning, Force to attend on-line classes, it's not 100% effective, Students having internet issues, Enjoying my teaching and trying to reach maximum students.

Table: 4
Online Teaching

S/N	Online Teaching	Feedback in Percentage (N=200)					Mean	SD	χ^2	P Value
		1	2	3	4	5				
1	Online teaching in not beneficial because students are not learning through on-line	5 (2.5)	41 (20.5)	60 (30.0)	69 (34.5)	25 (12.5)	3.34	1.01	32.283	.322
2	Offline teaching in more effective always compared to online mode, teach about 15-20% of the syllabus by on-line mode	3 (1.5)	17 (8.5)	47 (23.5)	94 (47.0)	36 (19.5)	3.74	0.91	16.312	.001
3	Digital learning provide availability of study materials & learning new technological tools	5 (2.5)	7 (3.5)	19 (9.5)	116 (58.0)	53 (26.5)	4.02	0.85	29.500	.000
4	On-line teaching is good for learning	1 (0.5)	5 (2.5)	38 (19.0)	95 (47.5)	61 (30.5)	4.05	0.80	16.419	.000
5	Force to attend on-line classes, it's not 100% effective	2 (1.0)	11 (5.5)	45 (22.5)	90 (45.0)	52 (26.0)	3.89	0.88	27.715	.011
6	Students having internet issues	1 (0.5)	3 (1.5)	32 (16.0)	113 (56.5)	51 (25.5)	4.05	0.72	57.036	.000
7	Enjoying my teaching and trying to reach maximum	2 (1.0)	6 (3.0)	19 (9.5)	125 (62.5)	48 (24.0)	4.05	0.73	28.080	.000

students									
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Table four indicates that the Chi Square values reveal that, an outstanding difference ($\chi^2=28.080$; $P<.000$) & the biggest choice of faculty are on-line teaching more beneficial to students than offline’ for the ‘Enjoying my teaching and trying to reach maximum students’, majority of the faculty scoring, 125(62.5%) say ‘agree & very few 2 (1%) of the state 'disagree’ with a highest mean worth of 4.05 & SD is 0.73. Chi Square values reveal that ($\chi^2 = 32.283$, $P>.332$) there is an outstanding difference among the ACU Faculty say ‘Agree’ scoring, 69(34.5%). only 5(2.5%) of faculty say ‘Strongly disagree’ with a lowest mean worth of 3.34 & SD is 1.01., for Online teaching in not beneficial because students are not learning through on-line in Adichunchanagiri University.

6.5. Faculty stressful to teach remotely during online teaching

Faculty stressful to teach remotely during the online teaching among the Adichunchanagiri University students is presented in table 5; there is a range of faculty stressful to teach remotely during online teaching. They are: Very Stressful, Due to Some network issues, Some students not able to login, Not at all Stressful, Students can’t attend the classes regularly, Not able to understand the students mindset, Difficult gain attention of the students, Depends on the environment and situations, Not able to communicate with all students, Not able to delivery content properly.

Table: 5
Faculty Stressful

S/N	Faculty Stressful	Feedback in Percentage (N=200)					Mean	SD	χ^2	P Value
		1	2	3	4	5				
1	Very Stressful	8 (4.0)	78 (39.0)	44 (22.0)	59 (29.5)	11 (5.5)	2.93	1.03	22.050	.000
2	Due to Some network issues	5 (2.5)	20 (10.0)	51 (25.5)	94 (47.0)	30 (15.0)	3.62	0.94	36.577	.000
3	Some students not able to login	14 (7.0)	7 (3.5)	38 (19.0)	101 (50.5)	40 (20.0)	3.73	1.04	22.298	.000
4	Not at all Stressful	13 (6.5)	42 (21.0)	55 (27.5)	68 (34.0)	22 (11.0)	3.22	1.09	33.669	.020
5	Students can’t attend the classes regularly	3 (1.5)	9 (4.5)	53 (26.5)	113 (56.5)	22 (11.0)	3.71	0.78	28.782	.000
6	Not able to understand the students mindset	5 (2.5)	24 (12.0)	57 (28.5)	69 (34.5)	45 (22.5)	3.62	1.03	28.873	.000
7	Difficult gain attention of the students	4 (2.0)	19 (9.5)	47 (23.5)	99 (49.5)	31 (15.5)	3.67	0.91	26.783	.010
8	Depends on the environment and situations	2 (1.0)	18 (9.0)	68 (34.0)	90 (45.0)	22 (11.0)	3.56	0.84	20.653	.000
9	Not able to communicate with all students	6 (3.0)	38 (19.0)	43 (21.5)	77 (38.5)	36 (18.0)	3.49	1.08	32.412	.036
10	Not able to delivery content properly	19 (9.5)	67 (33.5)	39 (19.5)	62 (31.0)	13 (6.5)	2.91	1.13	39.195	.001

There is significance difference ($\chi^2=28.782$; $P<.001$) with respect to the 'Students can't attend the classes regularly'. The majority of them replied that 113(56.5%) 'Agree'; only 3(1.5%) 'Strongly disagree', with a mean worth of 3.71 & the SD being 0.78, There are outstanding differences ($\chi^2=22.050$; $P<.000$) about the faculty stressful to teach remotely during 'Very Stressful'. Many faculty biggest choice 'Agree' 59(29.5%) & very few accounting 8(4.0%) of the respondents say 'Strongly disagree' with a mean lowest mean value of 2.93 & SD is 1.03. Faculty stressful to teach remotely during the online teaching among the Adichunchanagiri University Faculty.

6.6. Opportunities of on-line teaching

The table: 6 shows strong support for online teaching opportunities among two hundred and twenty respondents. Most rated opportunities highly, with 54–66.5% giving a 4/5 and 17.5–28.5% a 5/5. "Innovative pedagogical approach" (66.5% rated 4), "customized learning experience" (62.5% rated 4), and "flexible programs" (62.5% rated 4) stand out.

Table: 6
Opportunities of on-line teaching

S/N	Opportunities	Feedback in Percentage (N=200)					Mean	SD	χ^2	P Value
		1	2	3	4	5				
1	Scope for innovation & digital development	1 (0.5)	3 (1.5)	26 (13.0)	113 (56.5)	57 (28.5)	4.110	0.71	26.620	.000
2	Designing flexible programs	2 (1.0)	5 (2.5)	28 (14.0)	125 (62.5)	40 (20.0)	3.980	0.72	28.224	.000
3	Strengthen skills problem solving critical thinking & adaptability	1 (0.5)	8 (4.0)	35 (17.5)	116 (58.0)	40 (20.0)	3.930	0.76	24.472	.000
4	Students can be of any age	3 (1.5)	16 (8.0)	22 (11.0)	124 (62.0)	35 (17.5)	3.860	0.85	28.394	.000
5	An innovative pedagogical approach	1 (0.5)	6 (3.0)	23 (11.5)	133 (66.5)	37 (18.5)	3.995	0.68	14.835	.000
6	Customized learning experience	1 (0.5)	4 (2.0)	25 (12.5)	125 (62.5)	45 (22.5)	4.045	0.68	39.061	.000
7	Cost-effective than traditional education	1 (0.5)	14 (7.0)	33 (16.5)	108 (54.0)	44 (22.0)	3.900	0.83	37.008	.000
8	Wide selection of programs	1 (0.5)	2 (1.0)	22 (11.0)	121 (60.5)	54 (27.0)	4.0	0.98	17.075	.000

Mean scores (3.86–4.11) and significant P-values (.000) confirm widespread agreement. Moderate variability (SD=0.68–0.98) suggests consensus, with "wide selection of programs" showing slightly more variation. Online teaching is valued for innovation, flexibility, and cost-effectiveness.

6.7. On-line teaching disadvantages compared to offline teaching

Table: 7 shows two hundred and twenty respondents' views on online teaching's disadvantages compared to offline teaching. Most see it as somewhat disadvantageous (44.5% rated 4, mean=3.625). Key issues include lack of face-to-face interaction (55% rated 3, mean=3.870), network issues (50% rated 3, mean=3.905), and reduced student focus (49.5% rated 4, mean=3.600). Challenges in

academic counseling (46.5% rated 3, mean=3.740) and teaching complex subjects (31.5% rated 5, mean=4.065) are notable. Most findings are statistically significant ($P=.000$), except for focus ($P=.253$). Online teaching struggles with interaction, technical issues, and effective knowledge delivery.

Table: 7
On-line teaching disadvantageous compared to offline teaching

S/N	Online Teaching	Feedback in Percentage (N=200)					Mean	SD	χ^2	P Value
		1	2	3	4	5				
1	Online teaching very disadvantage as compared to offline teaching	7 (3.5)	18 (9.0)	51 (25.5)	91 (44.5)	33 (16.5)	3.625	0.97	33.201	.000
2	No face-to-face interaction during online teaching		16 (8.0)	34 (17.0)	110 (55.0)	40 (20.0)	3.870	0.82	13.183	.000
3	No proper academic counselling during online teaching		27 (13.5)	39 (19.5)	93 (46.5)	41 (20.5)	3.740	0.93	12.352	.000
4	Fail to reach the students effectively due to network issues and complexity of contents		31 (15.5)	39 (19.5)	90 (45.0)	40 (20.0)	3.695	0.96	28.758	.000
5	Students focus less on topic	1 (0.5)	33 (16.5)	39 (19.5)	99 (49.5)	28 (14.0)	3.600	0.94	39.880	.253
6	Very difficult to teach problematic subjects in on-line mode	1 (0.5)	16 (8.0)	53 (26.5)	65 (32.5)	63 (31.5)	4.065	2.13	33.280	.000
7	On-line teaching does not impart necessary knowledge of the subject	9 (4.5)	35 (17.5)	46 (23.0)	73 (36.5)	37 (18.5)	3.470	1.11	19.077	.018
8	Network issues		9 (4.5)	46 (23.0)	100 (50.0)	45 (22.5)	3.905	0.79	26.654	.000

6.7. Weaknesses of on-line teaching

Table 8 highlights weaknesses of online teaching from two hundred and twenty respondents. Technical difficulties (51% rated 4, mean=3.755) and technology issues (53% rated 3, mean=3.760) are primary concerns. Lack of personal attention (44.5% rated 4, mean=3.675), inability to focus on screens (44.5% rated 4, mean=3.425), and need for self-directed learners (49% rated 4, mean=3.775) are significant. Sense of isolation (46.5% rated 4, mean=3.500) and distractions (40% rated 4, mean=3.420) also stand out. Most findings are significant ($P=.000$), except technical difficulties ($P=.226$) and learner capability ($P=.136$). Variability is moderate ($SD=0.75-1.07$). Online teaching struggles with tech issues, focus, and personal engagement.

Table: 8
Weaknesses

S/N	Weaknesses	Feedback in Percentage (N=200)					Mean	SD	χ^2	P Value
		1	2	3	4	5				
1	Technical difficulties	3 (1.5)	19 (9.5)	39 (19.5)	102 (51.0)	37 (18.5)	3.755	0.91	10.552	.226
2	Learners capability & confidence level		18 (9.0)	45 (22.5)	108 (54.0)	29 (14.5)	3.740	0.81	16.610	.136
3	Time management	3 (1.5)	55 (27.5)	30 (15.0)	86 (43.0)	26 (13.0)	3.385	1.06	18.277	.000
4	Distractions, frustration, anxiety & confusion	1 (0.5)	36 (18.0)	62 (31.0)	80 (40.0)	21 (10.5)	3.420	0.92	26.997	.000
5	Lack of personal/physical attention	1 (0.5)	35 (28.0)	27 (13.5)	102 (44.5)	35 (13.5)	3.675	0.97	32.498	.000
6	Inability to focus on screens	1 (0.5)	56 (28.0)	27 (13.5)	89 (44.5)	27 (13.5)	3.425	1.05	26.460	.000
7	Technology issues		14 (7.0)	50 (25.0)	106 (53.0)	30 (15.0)	3.760	0.79	8.477	.000
8	Sense of isolation	1 (0.5)	25 (12.5)	64 (32.0)	93 (46.5)	17 (8.5)	3.500	0.83	31.106	.000
9	Computer literacy	5 (2.5)	34 (17.0)	53 (26.5)	92 (46.0)	16 (8.0)	3.400	0.94	10.791	.000
10	Limitations for hands-on-learning	6 (3.0)	34 (17.0)	49 (24.5)	73 (36.5)	38 (19.0)	3.515	1.07	8.584	.000
11	Requires self-directed learners	1 (0.5)	5 (2.5)	64 (32.0)	98 (49.0)	32 (16.0)	3.775	0.75	23.893	.000

7. Discussion:

The study at Adichunchanagiri University (ACU), focusing on the constituent colleges of ACU, reveals faculty perspectives on online teaching through a survey of two hundred and twenty respondents (Tables 6–8). Faculty strongly support online teaching's opportunities, such as innovation (mean=4.11, P=.000), customized learning (mean=4.045, P=.000), and flexibility (mean=3.98, P=.000), aligning with research on digital pedagogy's potential (Journal of The Institution of Engineers, 2021). These benefits are crucial for ACU's rural student majority (80%), enhancing access and cost-effectiveness (mean=3.90, P=.000). However, challenges are significant, with technical difficulties (mean=3.755, P=.226) and lack of face-to-face interaction (mean=3.870, P=.000) as major drawbacks (Table 7), echoing global findings (Nurse Educ Today, 2022). Weaknesses like student isolation (mean=3.500, P=.000) and difficulty focusing on screens (mean=3.425, P=.000) (Table 8) are notable, especially for rural students with connectivity issues. Hands-on learning limitations (mean=3.515, P=.000) challenge ACU's engineering and medical programs.

8. Conclusion:

The study on online teaching at Adichunchanagiri University (ACU), specifically at the constituent colleges of ACU, illuminates the dual nature of online education through the perspectives of 200 faculty members (Tables 6–8). Faculty strongly endorse its opportunities, including innovation (mean=4.11, $P=.000$), customized learning (mean=4.045, $P=.000$), and flexibility (mean=3.98, $P=.000$), which align with ACU's mission to provide accessible, cost-effective education to its predominantly rural student population. However, significant challenges—technical difficulties (mean=3.755, $P=.226$), lack of face-to-face interaction (mean=3.870, $P=.000$), and limitations in hands-on learning (mean=3.515, $P=.000$)—highlight barriers to effective implementation, particularly for practical disciplines like engineering and medical sciences. Weaknesses such as student isolation (mean=3.500, $P=.000$) and difficulty focusing on screens (mean=3.425, $P=.000$) further underscore the need for enhanced infrastructure and engagement strategies. To optimize online teaching, ACU should invest in robust technical systems, faculty training in digital tools like GenAI, and hybrid learning models to address practical training gaps. Future research should incorporate longitudinal data and student perspectives to refine ACU's digital pedagogy, ensuring it meets the needs of its diverse learners while advancing educational excellence.

9. References:

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