

An Analysis of Online Learning Platforms: A Study on Coursera at P P Savani University

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Abstract:

Online learning has transformed student learning by offering flexible, easily accessible, and self-paced learning. At P P Savani University, the students have free access to Coursera for a limited period, within which they must complete some mandatory courses as part of the academic curriculum. The study aims to understand students' perceptions regarding Coursera, the challenges, and motivational factors for completing the course, while also considering some aspects such as their background. Department, academic year, and the number of courses they have enrolled in. The study uses a quantitative research method; data were collected through a Google Forms survey from the students across diverse departments and academic years. This study also explores the reasons cited by the students for opting for Coursera courses, the perception of students about the same, the challenges they face in completing those courses, and how they believe Coursera certification can improve their resumes.

Keywords:

Online Learning, Coursera, Digital Education, Student Engagement, Learning Barriers, PPSU.

1. INTRODUCTION:

In the rapidly growing education landscape, one term has become gradually prominent: online learning. As technology continues to prevail in every aspect of our lives, the education industry has swiftly adapted, embracing digital platforms to bring learning experiences beyond the limitations of traditional classrooms.

Online learning can, simply put, be referred to as getting an education using the internet and supplementary digital tools. Generally, students and teachers connect over various online platforms like websites or apps built for learning, instead of being physically seated in a classroom. Teachers give lessons; students complete assignments, and all communication takes place via these digital tools. It allows people to study at a time that suits them and from places to which they may be connected online, without needing to undertake to be together physically at any time.

1.1 Origin and Background of Online Learning

Online learning has changed the way populations gain knowledge and skills. Its beginning was many decades ago with the arrival of computer-based training courses in the 1960s and distance learning programs in the 1980s, but the exposure increased with the rise of the internet in the 1990s. Platforms like Moodle and Blackboard, by the early 2000s, enabled schools to present structured online classes, alongside texts, discussions, and tests.

The rise of MOOCs- Massive Open Online Courses- in 2011 lent further integrity to online education. Platforms like Coursera, edX, and Udacity provide users with affordable or FREE

courses from various universities and companies. High-quality education has become very accessible to many people around the world with no location barriers.

1.2 Current Scenario

Online learning has gained huge popularity and has become an integral part of education, especially after the COVID-19 pandemic forced many institutions to take the necessary steps in favour of online education. The list of popular online learning platforms includes (but is not limited to):

Coursera: Offers short courses and a few full degree programs, mostly for free or with charges. It has secured partnerships with over 270+ universities and corporate firms.

edX: Harvard and MIT founded edX to create open-source, collaborative, and free courses.

Udemy: An online learning and teaching platform for courses by industry experts.

LinkedIn Learning: Courses on business, technology, and creative skills, important for further professional development.

Each platform brings a unique set of strengths to support different types of learning, specifically, from academic learning to developing professional and creative skills.

1.3 About Coursera

Founded in 2012 by two Stanford University professors, Daphne Koller and Andrew Ng, Coursera has grown into one of the world's largest online learning platforms with over 100 million learners and partnerships with more than 270 universities and companies. A wide range of courses, from short skill-based learning to full-fledged degree programs, can be found here.

The courses on Coursera include video lectures, quizzes, assignments, and hands-on projects. The platform has been made flexible and user-friendly, with courses set in a self-paced format so that students can study at their convenience and speed. Coursera credentials, often provided by well-known universities and organizations, are generally regarded very highly in the employment market and serve a student well in moving up the career ladder.

At P P Savani University (PPSU), students get free access to Coursera courses for a limited period during their academic careers. Students from various departments—like Engineering, Science, Agriculture, Management, Architecture, and Medical—must complete some compulsory courses. They may choose for others to satisfy their wishes for learning and to obtain extra skills. The program hence empowers the students to gain universally acknowledged knowledge and certificates, which would open up a world of job opportunities for them.

1.4 Need for this paper

Online learning platforms such as Coursera are profoundly supportive of meaningful learning experiences in student life at PPSU, but they face numerous challenges, with this faculty grievously affecting the learning experience and completion of courses. A good number have trouble balancing self-paced courses with academic considerations and managing time to ensure one remains consistently engaged throughout the process. The challenges are further aggravated by language barriers, technical snags, and comprehension problems regarding course content delivered in English. Last but not least are motivation challenges while working through courses, quizzes, and completing assignments.

The present research will study student perceptions of Coursera at PPSU, analysing both the platform's strengths and challenges. Also, it seeks to examine Coursera from the perspective of students from other departments and years, their motivations for enrolling, and their opinions

regarding the impact of the platform on future employability. Based on the insights from this research, it is expected to pinpoint the specific problems faced by students of PPSU for possible improvements in course delivery and learning.

1.5 Research Gap and Scope of the Study

Although Coursera is acknowledged as an established online learning platform, with most of the studies done so far focusing on users worldwide, little attention has been given to institution-oriented reasons. There have been virtually no studies that analyse how students from specific universities, such as PPSU, perceive Coursera's efficiency and actual influence on their learning curves. Little room has been given to looking specifically at students' challenges at PPSU, like time constraints, balancing self-paced learning and their academics, language barriers, and technical issues. Also, the studies explicating how students perceive Coursera and the way its certification would make them employable have not been consistent with what other institutions have shown. It is thereby a necessity to understand these gaps to customize the online learning experiences for students' specific needs, varying with their very backgrounds and years of study.

This study focuses on an understanding of perceptions, challenges, and preferences surrounding the online learning platform for PPSU students. It looks into their experiences from various departments and years regarding what motivated them to enroll, what challenges they had to face when using the platform, and their satisfaction with the course content and delivery. This study also addressed the attitudes of the students towards Coursera as a means of building skills for better employment opportunities in their future. This should provide insight into recommendations for enhancing online learning support at PPSU and for making Coursera a far more effective learning tool.

2. LITERATURE REVIEW:

(Thi Thuy An Ngo et al., 2023) had conducted a study where they discussed "Students' Perception Towards Learning Massive Open Online Courses on Coursera Platform: Benefits and Barriers." The study examines students' perceptions of learning in Coursera MOOCs by giving insights into benefits and barriers. The data collection involved responses from 200 surveys and 30 interviews using mixed methods. The study finds such benefits as flexible learning and skill enhancement. Barriers include limited time to interact with an instructor and issues with managing study time. The study is limited, given that it took place at one university, with self-reported data that hindered generalization.

(Zailani Ibrahim et al., 2023) had conducted a study where they discussed "Investigating the Relationship Between Students' Performance and Engagement in Online Learning Platform". This study investigates how student engagement with the Brighten LMS Moodle-generated system impacts academic performance at Universiti Tenaga Nasional (UniTen). A quantitative study examined students' progress through quizzes, assignments, and forums by tracking log file explorations into Brightspace. Higher engagement is demonstrated to generally yield improved performance, albeit the study findings relate to one course at one of the universities, and hence become applicable to only a limited extent.

(Hasan Tanış et al., 2022) had conducted a study where they discussed "How usable is Coursera? A usability analysis through eye-tracking and authentic tasks". This study aimed to assess the usability of the Coursera website according to the ISO 9241-11 standard, paying attention to how usability issues affect dropouts and motivation in MOOCs. Twelve participants were observed, three of whom participated in an eye-tracking study, thus gathering information

on fixation and gaze plotting, and building heatmaps. It turned out Coursera was effective and efficient, though users with more advanced skills with computers and the Internet expressed satisfaction at the sight of these times. These issues were that the user interface did not support multiple languages, and searching was not efficient, particularly for intermediate or advanced users of English. Future research should encompass a wider range of participants and further usability metrics.

(Long Quoc Nguyen, 2022) had conducted a study where they discussed “Students' Satisfaction of Courses in Coursera as a Massive Open Online Course Platform: A Case Study”. This study examines student satisfaction with Coursera, focusing on learning experience, satisfaction factors, and perceived platform usefulness. The study was conducted using a sample of 120 Vietnamese students enrolled in an academic writing course and found that factors such as delays in response, vagueness of assessments, limited instructor interaction, and ineffective plagiarism detection all contributed to student dissatisfaction. From surveys and interviews, frustration with Coursera was described along the lines of assessments and support, despite careful consideration of flexibility and certification. The study's generalizability is limited due to its small sample size and single-course concentration, requiring further investigations to be undertaken.

(Huma Shafiq et al., 2017) had conducted a study where they discussed “Courses Beyond Borders: A Case Study of MOOC Platform Coursera”. The study evaluates institutional participation, instructor involvement, and course delivery on Coursera. Using a quantitative approach, data from Coursera's website were manually collected and analysed. Findings show that by February 2016, 1765 courses were offered by 138 institutions from 28 countries, with 59% from U.S.-based universities and 33% offering flexible, self-paced learning. The study is limited to publicly available data and does not assess course quality or learner outcomes.

(Yanchun Sun & Chao Xin, 2017) had conducted a study where they discussed “Using Coursera Clickstream Data to Improve Online Education for Software Engineering”. The article aims to analyse students' engagement data to identify vital and challenging content in the online software engineering courses to enhance online software engineering education. This lies amid dealing with the challenge of the vast scope of software engineering and difficulties in assessing students' comprehension in a non-face-to-face environment. The research used data analytical procedures to find students' interaction instances, such as pause, rewind, and replay of videos. This analysis allows educators to identify learning behaviours and improve the quality of the course by modifying their pedagogical approaches. This study mentioned only a few superficial engagements, which, by definition, do not capture the whole scope of the issues involved in assessing students' understanding, and the results are specific to Coursera.

(Samantha Audsley et al., 2013) had conducted a study where they discussed “An Examination of Coursera as an Information Environment: Does Coursera fulfil its mission to provide open education to all?”. The paper analyses Coursera's approach to delivering education as an accessible and flexible option via a qualitative review of its information environment and the associated literature. It examines Coursera's platform, which comprises video lectures and discussion forums, as the principal means of disseminating education. As found, while Coursera is successful in broadening educational access, there have been observed challenges regarding the moderation of forums and control for plagiarism. There remain ongoing struggles regarding unanswered questions in forums, intimidating levels of activity, and failure to detect plagiarism.

(Anja Likovič & Katarina Rojko, 2022) had conducted a study where they discussed “E-Learning and A Case Study of Coursera and Edx Online Platforms”. The research deals with the merits, demerits, and possible influences of e-learning with special reference to Coursera and edX during and after the coronavirus. Through literature analysis, Dex method, and netnography, it concludes that e-learning has no restraints of time and space to work on, but wrestles with intention from the learner, with Coursera coming marginally ahead of edX on the grounds of cost-effectiveness and variety in content. Limitations relating to insights on the sustainable engagement of diverse users in the long run are present.

(Smitha Sambrani, 2022) had conducted a study where she discussed “An Empirical Analysis of Learners’ Experience on Select MOOCs Platforms concerning Users Reviews and Ratings”. The paper's objective is to compare user experience across seven major MOOC platforms — Coursera, edX, Udemy, Swayam, LinkedIn, Khan Academy, and Upgrad — using online reviews and ratings. A total of 63,652 reviews were analysed from Google Play Store and Appbot over one year (April 2020 to April 2021). The study employs sentiment analysis and chi-square tests to analyse user satisfaction levels. The study finds that most of the platforms have had a positive user experience. One of the main limitations of the review is that it relied on app-based reviews, which may not have captured the whole span of learner feedback.

(Ayushi Jain et al., 2023) had conducted a study where they discussed “Effects of online platforms on learners' satisfaction: a serial mediation analysis with instructor presence and student engagement”. This study investigates the effects of online learning platforms, the instructor's presence (IP), on learner satisfaction (LS) with learner engagement as a mediator. Results supported by the use of primary data from 610 responses, as they were collected from Indian higher education institutes, were analysed with PLS-SEM and showed that OP positively influenced both IP and LE, thereby significantly enhancing LS. The study presents an extensive framework illustrating the connections between OP, IP, LE, and LS and presents insights into modifying online education strategies. Limitations of the analysis include considering only a single country, which may reduce the global applicability of its findings.

(Huan Yang Chan et al., 2021) had conducted a study where they discussed “Text Analytics on Course Reviews from Coursera Platform”. The paper proposes a text analytics pipeline to help online course seekers quickly assess and compare courses based on reviews and ratings. The pipeline supplies text cleaning, lemmatization, sentiment analysis, text mining, and visualization, all implemented in Jupyter Notebook in Python. When applied to three courses in the area of Python, the solution worked well in providing insights from n-gram analysis and word clouds, but could not successfully recognize functionally negative reviews. Limitations include poor performance in sentiment analysis and a small sample size based on the courses the pipeline covered.

(Munadia Rahma Hanifa et al., 2019) had conducted a study where they discussed “Evaluation and Recommendations for the Instructional Design and User Interface Design of Coursera MOOC Platform”. The research evaluates how Coursera stands by the principles of instructional and interface design; namely, Gagné's Nine Events, Chickering and Gamson's Seven Principles, and Shneiderman's Eight Golden Rules. In the context of a survey of Indonesian participants, mainly students and workers from the Java region, the analysis shows that Coursera adheres to all instructional design principles except one interface design rule; thus, recommendations are proposed for improving the platform's usability based on user data

analysis. One of the limitations noted is the regional focus that limits the wider applicability of the findings.

(Soumaya El Emrani et al., 2019) had conducted a study where they discussed “Massive Open Online Courses Platforms: Analysis and Comparative Study of Some Pedagogical and Technical Characteristics”. This paper compares six MOOC platforms: Coursera, edX, Udacity, Canvas, FutureLearn, and Riwaq. The course structure analysis was based on 16 courses in computing, business, arts, and humanities. Interface reliability, utility of computing tools, costs, course duration, types of learning activities, methods of evaluation, social interaction, and instructor participation were evaluated. The findings point to differences and similarities between and among the platforms, providing a basis for determining the most suitable platform for the Adaptive Connectivist MOOC (ACM) approach. It acknowledges that a limited sample of courses may not give a fully representative picture of each specific platform's breadth.

(Olga Korableva et al., 2019) had conducted a study where they discussed “Studying User Satisfaction with the MOOC Platform Interfaces Using the Example of Coursera and Open Education Platforms”. The study examines the influence of interface design on the retention of students in MOOCs by comparing Coursera and the Open Education Platforms. It presents a methodology to identify user-friendly design factors and optimal behavioural patterns. It is interesting to note that the theoretical analysis and experiments singled out major elements within the interface that make for user experience and offer recommendations for design improvements on the Open Education platform. One limitation is that only two platforms are focused on in the study, making it possibly too narrow in the trends of MOOC usability.

(Svetlana N. Bezus et al., 2020) had conducted a study where they discussed “Distance Learning Nowadays: The Usage of Didactic Potential of MOOCs (on platforms Coursera, edX, Universarium) in Higher Education”. The paper accounts for the inclusion of MOOCs into traditional higher education within the framework of outlining the digital competence required by teachers for running such international learning platforms. The paper compares Coursera, edX, and Universarium language courses, assessments, and comparisons of the digital tools and educational materials used within assessments, continuing, assessing, and evaluating. This study helps educators choose the right platforms and courses that may aid in ensuring quality learning. The other limitation is that it looked only into language courses, which do not precisely reflect other areas.

(Robab Saadatdoost et al., 2019) had conducted a study where they discussed “Understanding MOOC Learners: Insights from Participation in Coursera MOOC”. The paper explores learner experiences and knowledge construction in Coursera's discussion forums while emphasizing the importance of active participation. Data were collected from over 60 online interview forums and some 160 days of field notes. Qualitative analysis yielded insights into learners' feelings, challenges, ideas, and suggestions. Limitations include a platform focus and the subjective nature of self-reported data.

(Nguyen Thi Thao Ho et al., 2022) had conducted a study where they discussed “The adoption of blended learning using Coursera MOOCs: A case study in a Vietnamese higher education institution”. This study investigates factors affecting students' satisfaction, continuance intention, and recommendations for blended learning using Coursera MOOCs at a higher education institution in Vietnam. Using a sample of 637 students from four campuses and

structural equation modelling, findings indicate that the learning content and online responsiveness enhance students' satisfaction, while online reliability has no impact. Satisfaction and class activities possess positive effects on students' intention to continue and to recommend Coursera MOOCs. The limitation is that the study is being conducted at a single institution and might not reflect applicability to broader contexts.

3. OBJECTIVES:

To study the perception of students about Coursera as an online study platform.

To examine the challenges faced by students while using Coursera.

To determine the preference of students regarding Coursera.

4. RESEARCH METHODOLOGY:

The research utilized a quantitative approach that focused on gathering numerical information to explore students' experience, challenges, and extent of engagement with Coursera at P P Savani University (PPSU). The systematic approach enabled the recognition of trends and patterns in student answers, providing a data-driven account of their views and inclinations towards the platform. Data collection was done through a Google Form survey questionnaire with multiple-choice and rating scale items. These were framed to obtain demographic information, usage habits, and students' ratings of some of Coursera's aspects.

A convenience non-probability sampling method was used, whereby the survey questionnaire was distributed among friends, classmates, and peers across various departments and years so that participants were widespread and extensive. Google Forms was utilized to craft and distribute the survey with ease, and SPSS (Statistical Package for the Social Sciences) was employed to carry out sophisticated data analysis. Descriptive statistics like frequencies and percentages were determined, in addition to correlation analyses to identify relations among variables, for instance, between course completion and perception of career impact. Finally, generating actionable recommendations to improve online learning strategies at PPSU.

5. ANALYSIS & INTERPRETATIONS OF THE STUDY

5.1 Analysis of the Google Form Survey

87% were Indian and 13% international out of 162 student replies, showing quite a local pool of students. Concerning the department, the majority of the students are from Medical (29%), (23.5%) Liberal Arts & Management, (22.2%) Engineering, (14.8%) Science, (8%) from Agriculture, and Architecture (2.5%). In terms of year of study, 34% of the respondents were in their 3rd year, 25.3% in their 4th year, 22.8% in their 1st year, and 17.9% in their 2nd year. Regarding Coursera usage, 47.5% enrolled in 1–3 courses, 22.8% in 4–6 courses, only 14.9% enrolled in 7 or more courses, and 14.8% took no courses. Similarly, 47.5% completed 1–3 courses, but 14.8% didn't complete a single course. This suggests low to moderate participation. Regarding course difficulty, 45.7% said they were easy or very easy, and 25.9% said they were hard or very hard. Motivators cited were faculty needs (27.8%) and student interest (27.2%), with career reward and peer pressure following.

Almost half of the students (47.6%) felt that Coursera enhanced their job opportunities and resumes, 33.3% were uncertain, and 19.1% disagreed. Problems with certificates were faced by 38.2%, 35.2% did not have any, and 26.5% were uncertain.

Language was a challenge to 33.9% of the students, while 41.4% did not agree, and 24.7% had no opinion. Time management was difficult for 38.9%, though 38.3% coped. Technical

problems, such as internet connectivity, were faced by 33.9% of the students, while 36.4% did not agree, and 29.6% had no opinion.

32.1% of students experienced motivational challenges, 37.1% were motivated, and 30.9% were neutral. 39.5% of the students encountered challenging course material, 37.6% easy, and 22.8% neutral. Likewise, 35.2% encountered quizzes or assignments as challenging, and 37.1% did not.

Most highly rated were video lectures (30.2%), quizzes and assignments (27.8%), and certificates/peer discussions (21% each). Most recommended changes were improved language support (25.9%), technical support (24.1%), interactive content (21.6%), and clearer assessments (15.4%).

Lastly, 62.3% of students would recommend Coursera, 19.1% would not, and 18.5% were undecided.

5.2 Crosstabs

Table 5.1 Analysis of Coursera Course Engagement Across Different Departments

	School/Department:					
	Liberal Arts & Management Studies	Engineering	Agriculture	Science	Architecture & Design	Medical
Completed 1-3 courses as part of the required curriculum	13	21	7	10	2	24
Difficulty completing the required courses on Coursera	4	2	1	2	2	3
Completed any additional courses beyond the required ones as per the curriculum	12	17	7	15	3	23
1-3 additional Coursera courses completed beyond the required curriculum	13	9	5	9	1	22
Believe that completing these courses will help enhance your resume or improve the chances of getting a job?	6	7	3	7	2	20
Faced difficulty while enrolling in the course	7	6	3	4	2	4
Had issues receiving the certificate even after fully completing the course	9	8	3	5	2	4
Difficulty understanding English content	7	8	4	4	2	4
Struggled to find enough time to complete the course due to other academic or work commitments	8	12	3	6	2	4

Experienced internet connectivity problems or other technical issues during the course	9	11	5	5	2	3
Found it difficult to stay motivated and manage self-paced learning	8	7	3	4	2	4
The course content was too advanced or difficult for me to understand	7	9	4	5	2	4
Had difficulty completing the quizzes or assignments	8	7	4	7	1	3

The above crosstab presents insights into how students from different academic backgrounds engage with Coursera courses. It highlights participation, challenges faced, and perceived benefits across different schools/departments: Liberal Arts & Management Studies, Engineering, Agriculture, Science, Architecture & Design, and Medical.

5.3 Correlation (Hypothesis)

Table 5.2 Correlation Between the X & Y Variables.

	Are you an Indian Student or an International Student?	School/ Department	Year of Study	How many Coursera courses have you enrolled in?
How many Coursera courses have you completed so far as part of the required curriculum?	.589	.713	.294	.000
How difficult or easy did you find completing the required courses on Coursera?	.076	.659	.072	.204
What was your primary motivation for completing Coursera courses?	.183	.725	.531	.598
The course content was too advanced or difficult for me to understand	.031	.007	.478	.047
Had difficulty completing the quizzes or assignments	.003	.003	.657	.044
What features of Coursera did you find most helpful?	.039	.395	.454	.009

Do you believe that completing these courses will help enhance your resume or improve the chances of getting a job?	.265	.002	.000	.210
Which aspects of Coursera courses need improvement?	.225	.881	.795	.229
Would you recommend Coursera to other students at PPSU?	.261	.202	.231	.570
Had issues receiving the certificate even after fully completing the course	.000	.002	.295	.000
Difficulty understanding English content	.002	.003	.742	.005
Struggled to find enough time to complete the course due to other academic or work commitments	.022	.003	.766	.015
Experienced internet connectivity problems or other technical issues during the course	.008	.004	.878	.009
Found it difficult to stay motivated and manage self-paced learning	.018	.031	.217	.040
Correlation is significant at the 0.05 level (2-tailed).				

5.3.1 Discussions (Accepted hypothesis):

INDEPENDENT VARIABLES:

- 1) Are you an Indian Student or an International Student?
- 2) School/Department
- 3) Year of Study
- 4) How many Coursera courses have you enrolled in?

DEPENDENT VARIABLES:

- 1) How many Coursera courses have you completed so far as part of the required curriculum?
- 2) How difficult or easy did you find completing the required courses on Coursera?
- 3) What was your primary motivation for completing Coursera courses?
- 4) The course content was too advanced or difficult for me to understand.
- 5) Had difficulty completing the quizzes or assignments.
- 6) What features of Coursera did you find most helpful?

- 7) Do you believe that completing these courses will help enhance your resume or improve the chances of getting a job?
- 8) Which aspects of Coursera courses need improvement?
- 9) Would you recommend Coursera to other students at PPSU?
- 10) Had issues receiving the certificate even after fully completing the course.
- 11) Difficulty understanding English content.
- 12) Struggled to find enough time to complete the course due to other academic or work commitments.
- 13) Experienced internet connectivity problems or other technical issues during the course.
- 14) Found it difficult to stay motivated and manage self-paced learning.

Objective-1: To study the perception of students about Coursera as an online study platform.

Hypothesis Interpretation:

Student nationality has a major influence on students' perception of the difficulty of Coursera course material. Indian and international students will encounter the material in different ways, probably because of differences in their academic background or levels of English expertise. Nationality also affects students' capacity to do quizzes or assignments, implying that differences in educational systems, knowledge of test styles of tests, or language difficulties might influence performance. Also, nationality influences the selection of preferred Coursera tools by students, with significant differences in the preference for aspects such as video lectures, quizzes, peer discussion boards, or flexible deadlines among Indian and foreign students.

The student's academic discipline also has a significant influence on his or her experience on Coursera. Students across disciplines view the difficulty of course content differently, with non-technical majors tending to find the content harder than technical or more directly applicable majors. Likewise, departmental membership influences how well students can manage assignments and quizzes because proficiency in taking online tests or applying discipline-specific problem-solving approaches varies by discipline.

The number of Coursera classes a student has enrolled in also plays an important role in their experience as a whole. Students who have more enrollments are more likely to keep enrolling in more, indicating a greater level of interest and regular effort. Students with less enrollment are typically more likely to struggle with the material, probably because they have not gotten used to Coursera's learning system. In addition, students with higher exposure to various courses better adjust to the types of assessment on the platform with fewer problems in quizzes and assignments. The number of courses taken also affects how students perceive varying features of Coursera; more experienced students tend to consider resources such as discussion forums or varying deadlines as more helpful than inexperienced students. Overall, nationality, academic department, and course enrollment frequency significantly shape students' perceptions and challenges while using Coursera.

Objective-2: To examine the challenges faced by students while using Coursera.

Hypothesis Interpretation:

Student nationality is a crucial factor in many of the issues encountered on Coursera. Indian and international students differ considerably in their experiences. Nationality affects aspects of obtaining certificates upon course completion, comprehending English content, having time

to take courses due to academic or professional obligations, experiencing technical issues such as internet connectivity, and perseverance in self-learning. This indicates that linguistic, cultural, academic background, or resource issues differ by nationality and affect how students experience Coursera courses.

The student's school or department also largely influences the issues encountered. Students across various disciplines of study encounter diverse difficulties in receiving certificates, English content understanding, managing time, technical issues, and sustaining drive towards autonomous learning. This could be a result of inconsistencies in course familiarity, workload, or applicability of Coursera material to their core area of study.

The number of courses a student took through Coursera had a significant influence on several challenges. Students who took more courses were more prone to experience difficulty in getting certificates, comprehension of English content, managing time, internet or technical issues, and maintaining self-paced learning motivation. This shows that with higher interaction, students face more challenges, which might be caused by compounded workload or platform fatigue.

In contrast, the year of study was not found to have any significant correlation with any of the challenges, signifying that students from all the years of study encounter similar challenges regardless of their seniority levels.

Objective-3: To determine the preference of students regarding Coursera.

Analysis shows that both the academic department (school/department) and the year of study of students have significant effects on students' beliefs in Coursera's capability to boost resumes and enhance employment opportunities. This suggests that students in various academic departments hold different perceptions regarding the value of Coursera for career growth, perhaps based on matching course content with their discipline of study. For example, students from business or technical disciplines might find courses on Coursera more applicable and useful for their professional lives than students from other disciplines.

Equally, the year of study of students also contributes significantly to how they view Coursera's effect on employability. Students in advanced years of their courses of study would be more career-oriented and hence more likely to appreciate the value of Coursera in building their resume and potential employment prospects. It may be because they are more aware of industry needs and the necessity for skill acquisition since they are about to graduate.

In conclusion, the academic background and academic maturity (study year) of students play a great role in determining how they view the career advantages of Coursera, whereas other factors such as nationality or the number of courses taken do not have any statistically significant impact.

1. FINDINGS

The survey revealed that there was a huge majority (87%) of Indian students using Coursera, with just 13% international users, showing a highly local user group. By department, Medical students were the biggest group (29%), followed by those from Liberal Arts & Management (23.5%), Engineering (22.2%), Science (14.8%), Agriculture (8%), and Architecture (2.5%). A majority of the respondents were in their 3rd and 4th years of study, which implies that the senior students tend to be more inclined towards Coursera participation, perhaps because they

are closer to graduation and have heightened concern about career preparation and academic exposure.

Course enrollment analysis revealed moderate rates of participation, with approximately half the students (47.5%) taking 1–3 Coursera courses. A lesser group (14.9%) took more than 7 courses, and 14.8% took no courses. Rates of course completion were paralleling enrollment rates, reflecting steady patterns of use. Although a significant percentage of students are testing Coursera, a lesser percentage reflects stronger engagement, suggesting potential for higher motivation and longer-term participation.

Student attitudes toward course difficulty were mixed. Approximately 45.7% of students considered the courses easy or very easy, and 25.9% considered them hard or very hard. Faculty suggestions (27.8%) and personal interest (27.2%) were primarily responsible for motivation to enroll in Coursera courses, with career advantage and peer pressure also playing significant roles. While there was initial enthusiasm, motivational issues plagued almost one-third of the students, pointing to the necessity for stronger, more stimulating support structures to assist in maintaining learners over the course period.

There were some challenges that students faced while using Coursera. The most frequent problem was time management, stated by 38.9% of participants, along with language issues (33.9%), technical issues like internet connection (33.9%), and difficulty in understanding the course material (39.5%). Certificate problems were also highlighted, with 38.2% of students having difficulties in obtaining evidence of having completed courses. The challenges differed significantly among departments, with the most problems being reported by Engineering and Liberal Arts students in terms of enrollment, certification, and time management.

Despite the difficulties, 47.6% of the students felt that going through Coursera courses added strength to their resumes and increased job opportunities. Of the platform features, video lectures were the most valued (30.2%), followed by assignments and quizzes (27.8%), and certificates and discussion forums (21% each). The areas of improvement suggested were more language support (25.9%), improved technical support (24.1%), more interactive content (21.6%), and clearer assessment measures (15.4%).

Cross-tab analysis showed considerable departmental variation in Coursera activity. Most active in pursuing required courses were Medical and Engineering students, while Engineering and Liberal Arts students were most likely to experience common problems with assignments, understanding the language, and access to the internet. Technical students showed greater confidence in Coursera's worth for career growth, while those from non-technical fields, such as Agriculture and Architecture, were less sure of its worth.

Student nationality played an important role in shaping experiences on Coursera, especially within domains such as content understanding, assignment handling, and platform tool navigation. In the same vein, the academic department exerted considerable influence on student perceptions of course difficulty and handling of issues related to the platform. Students taking more courses adapted well to Coursera's format but also faced more difficulties, possibly as a result of greater engagement. Surprisingly, the year of study didn't impact on challenges encountered, but older students were more positive towards the career advantages of taking Coursera courses.

2. RECOMMENDATIONS

To make Coursera more accessible, the site needs to include subtitles, translations, and multiple languages as courses to support students, especially foreign students, in better understanding the content. Since 33.9% of students faced language issues, adding features like AI translations would be supportive. Coursera needs to also improve technical assistance to solve issues about internet access, uploading assignments, and access to certificates, since 33.9% of students had problems with these areas. Providing fast solutions and live help would streamline learning.

To become more interactive with students, Coursera must include more interactive features like live Q&A, group work, and interactive quizzes, as 21.6% of the students desired content with increased interaction. More discussion forums would boost the students' learning and interaction. Since 39.5% of the students believed that the content was difficult, Coursera must offer the courses at different levels and provide extra learning materials to help them.

Most students (38.9%) also struggled to balance time between Coursera courses and other responsibilities. Coursera can help by offering flexible deadlines, short modules of courses, and learning tools like study groups and trackers. Coursera can also give assurance that the courses are useful to the students in their careers, because 19.1% of them doubted their job value. Industry partnerships, career counselling, and awarding of industry-verified certificates would benefit the students with improved job opportunities.

Finally, since 14.8% of students withdrew without enrolling in any courses, Coursera needs to find ways to encourage them. Reminding them, giving personalized feedback, and forming study groups with instructor support can motivate students to finish their courses. By resolving these issues and taking advantage of Coursera's strengths, PPSU and Coursera can offer a better and more effective learning experience for students.

3. CONCLUSION

In conclusion, Coursera has been an effective online learning platform for PPSU students, where a majority of them (62.3%) would recommend it most highly due to its flexibility, efficient assessments, and engaging video lectures. However, challenges like language issues, technical issues, and time management issues have affected completion rates and overall student satisfaction. The study suggests that nationality, department, and enrollment in the number of courses are important drivers in influencing students' experience and hence their understanding of material, completing assignments, and perceived usefulness of the platform. For increasing participation and learning, Coursera needs to address some very important issues by improving multilingual support, offering subtitles and translation, and making content accessible to students with English difficulty. Enhancing technical support, addressing issues of course, assignment, and certification access, and integrating interactive features such as live Q&A, collaborative group projects, and discussion boards will enhance the learning experience. Furthermore, making available courses in conformity with departmental and industrial demands will enhance relevance and boost career prospects.

Incorporating more flexible schedules, guided study groups, and progress monitoring tools can help students balance their course load with Coursera courses, reducing dropout rates and increasing completion rates. Personalized reminders and feedback can also motivate students,

reminding them of their learning goals. By incorporating these areas, the platform's effectiveness in delivering high-quality instruction will likewise rise, as will student happiness. A more individualized educational experience will result from this collaboration between the institution and Coursera, which will match online courses to students' requirements and professional objectives. In the long run, funding these improvements will result in increased course completion rates, better skill development, and better employment prospects for students. Coursera may provide PPSU students with a more varied and active learning experience by utilizing these enhancements.

4. LIMITATIONS

This study opens the window to other insights, such as students' perceptions and experiences with Coursera at P P Savani University (PPSU); there were certain limitations.

The last limitation was that other valuable insights beyond their appeal to students were unavailable, such for example the perception and experience with Coursera at P P Savani University.

The first limitation was to focus on the perception of the student of P P Savani, as well as restricting the research to this single site, in that the findings may not therefore be generalized to the students from other universities and different educational contexts. Expanding the geographical scope will elicit multiple views toward the standing of effectiveness and challenges of Coursera.

The second limitation is that the sample size was just 162 students, which probably would not cover the entire representation of all students of PPSU. A vaster and more representative sample should be approached to give a more complete understanding of the student experiences in the different courses and years.

The third limitation decouples this study as quantitative analysis only, where it quite missed looking deeper underneath-the-surface issues like perceptions and motivations, thus building a tower over the mixed methodologies, including qualitative measures like interviews as well as focus group discussions to give insightful reasons behind student behaviour and engagement.

5. AREA FOR FURTHER RESEARCH

The sources share the recommendations for further studies, up to which further researchers may continue from now on by analysing the effect of Coursera certification on career development and employability of the participants. A wide inquiry involving more institutions would probably assure a correlation concerning the challenges faced by the PPSU students across different educational contexts. The design of Coursera should also be evaluated with other designs across a wide spectrum of disciplines to evaluate its influence on the performance of students. Finally, such an investigation may complement strategies that will help explore ways through which catching students' attention could motivate them to complete courses on these platforms. In the last round, learning about instructor presence, peer interaction, and a local context will all provide ideas on how best to improve the learning experience.

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