Lab-1

E-learning platforms fail to keep learners engaged

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Key Observations

- Lack of proper UI/UX designs.
- Most of the learning contents are long videos and presentations which lack in interactivity to keep the learning platform engaging.
- Few platforms are text-heavy, making it less engaging and people start to divert from the platform.
- Lack of user specific content leading to incompletion rates and frustration.

Stakeholder identification

- Students: Active Participants, managing their own learning through self-paced navigation, discussions and assignments
- Instructors: Instructors design courses, facilitate discussions, provide timely feedback, and monitor progress to foster community and accountability.
- corporate learners: business-relevant modules with simulations, flexible scheduling, measurable outcomes and integration

Interview questionnaire & responses

1. How does poor UI/UX impact your platform use?
2. What frustrates you about long videos lacking interactivity?
3. Why do text-heavy formats cause disengagement?
4. How does content uniformity lead to incompletion?
5. Name one interactive feature to boost engagement.
6. Rate need for diverse content (short modules/visuals): 1-10.
7. How does confusing navigation reduce your session time?
8. Why do dense text blocks prompt you to quit?
9. How does repetitive content format cause frustration?
10. What do you do when there are long texts in the courses you do.
11. Suggest a self-paced learning improvement.
12. What flexible design fixes dropout risks?

Key Insights from the interview:

The survey data, was filled mostly by from Students (Age 18-24). It was revealed that a high demand for diverse, interactive content, with requests for gamification, simulations and quizzes. The core

problem noticed in the survey was text overload, which prompts users to actively avoid content by skipping or using AI tools to summarize, leading to incomplete learning.

1/14/2026 10:53:22	Sandhya Gopinath		37-50	It will not look user friendly	Boring and time consuming	Hard to understand
1/14/2026 15:19:38	N SREE VARSHINI	Student	18-24	It makes it difficult	Time	Time consuming
1/16/2026 10:36:26	PRATHYAKSH BR	Student	18-24	Poor UI/UX in learning platforms like freeCodeCamp frustrates users	Long videos lacking quizzes or pauses cause frus	Dense text blocks overwhe
1/16/2026 12:49:05	Prem	Student	18-24	Complex navigation or confusing design hinders user interaction an	This often leads to multitasking or stopping the vi	Large amounts of text can
1/16/2026 12:56:02	Praanesh Balakrishnan	Student	18-24	I use only if I HAVE to use the platform	Lack of Sections	Too much to read
1/16/2026 13:12:37	T Hema Sai		18-24	It's just Frustrating when we are not having a good interface	Feels like Skipping it off	Maybe not having the patie
1/16/2026 13:44:55	Ashish Mishra	Student	18-24	It makes difficult to find any courses and creates confusion	It's just like we see the video and finish it but don't	Because it's not engaging
1/16/2026 16:38:01	Sindhu Sunil	Instructor/Professor	37-50	Unclear buttons and layout reduce my interest and affect my learnin	Without pauses or activities, it becomes hard to s	Continuous reading withou
1/16/2026 16:45:53	Ridit Santhosh	Student	<18	It impacts very badly	It makes me feel bored	Cognitive overload
1/16/2026 16:52:50	Vrishab	Student	<18	It impacts very badly	It makes me feel bored	Cognitive overload
1/16/2026 18:41:56	V. Dushyanth	Student	<18	It impacts very badly	It makes me feel bored	Cognitive over load
1/16/2026 18:50:02	Kruti BK	Student	18-24	Poor UI/UX makes the platform hard to use. I get confused, it takes r	It becomes boring and I loose interest.	It feels too long to read an
1/16/2026 19:47:31	Arjun	Student	18-24	few are bad and few are too modern which makes it difficult for findi	Starts feel boring when the content starts to devia	makes us feel lazy to read
1/16/2026 20:15:51	Gyanaranjan Mahanta	Student	18-24	NA	NA	NA
1/16/2026 20:20:04	Keshav V H	Student	18-24	better	no content intrest	

1/16/2026 20:22:50	Sneha Singh	Student	18-24	Bad design makes me lose focus and motivation to continue learnin	Long videos without breaks make me zone out an	Too much reading makes
1/16/2026 20:22:58	Vikram Gupta	Student	25-36	Poor UI makes it hard to find course materials and navigate between	No interactive elements make passive watching b	Too much reading makes
1/16/2026 20:23:02	Pooja Bansal	Student	18-24	Confusing interface leads to wasted time searching for assignments	No interactive elements make passive watching b	Dense text without visuals
1/16/2026 20:23:10	Nikhil Shah	Student	25-36	Confusing interface leads to wasted time searching for assignments	Cannot skip to specific topics, have to watch entir	Large blocks of text are ov
1/16/2026 20:23:19	Meera Joshi	Student	25-36	Bad design makes me lose focus and motivation to continue learnin	Long videos without breaks make me zone out an	Dense text without visuals
1/16/2026 20:23:23	Rahul Kumar	Student	25-36	Bad design makes me lose focus and motivation to continue learnin	No interactive elements make passive watching b	Too much reading makes
1/16/2026 20:23:31	Karthik Nair	Instructor/Professor	25-36	Complex interface makes it difficult to upload content and track stuc	Students complain about long videos affecting en	Students skip text-heavy s
1/16/2026 20:23:42	Kavya Iyer	Coporate Learner	18-24	Unintuitive design makes it hard to track progress and complete mar	Long training videos are difficult to fit into busy w	Heavy text content is hard
1/16/2026 20:23:43	Siddharth Rao	Coporate Learner	18-24	Poor UI wastes valuable work time trying to navigate training module	Long training videos are difficult to fit into busy w	Heavy text content is hard
1/16/2026 20:42:30	Ishaan Malhotra	Student	18-24	Slow loading animations waste time and make me impatient during (	No closed captions available for noisy environmer	No dark mode option caus
1/16/2026 20:42:35	Diya Kapoor	Student	<18	Pop-up notifications constantly interrupt my focus and disrupt learni	Cannot download videos for offline viewing during	No dark mode option caus
1/16/2026 20:42:41	Aryan Bhatt	Student	18-24	Cluttered interface with too many buttons overwhelms me and crea	No closed captions available for noisy environmer	No text-to-speech integrat
1/16/2026 20:42:46	Tanvi Saxena	Student	<18	Slow loading animations waste time and make me impatient during (	No closed captions available for noisy environmer	No dark mode option caus
1/16/2026 20:42:51	Harsh Pandey	Instructor/Professor	25-36	Outdated content management system requires multiple clicks for s	Cannot easily segment long lectures into digestib	Platform doesn't support r
1/16/2026 20:42:57	Nisha Choudhary	Coporate Learner	25-36	Enterprise integration issues create workflow disruptions and reduce	Cannot integrate training videos with existing	

1/16/2026 21:17:57	Bharath	Student	18-24	It increases the complexity making it hard to navigate, thereby break	It makes the learning process boring	Reading plain texts feels r
1/16/2026 23:48:21	Vishnumaya C	Working professional	25-36	Makes accessibility frustrating.. downgrades customer experience a	Fails to engage the audience, reduces productivity	It requires more effort to u
1/16/2026 23:57:26	Shijith	Coporate Learner	25-36	Reduce intrest to learn	Too much lags	No idea
1/18/2026 14:19:30	Dilip Kumar B	Student	18-24	creates significant barriers that prevent users from effectively intera	Long-form content over 5–15 minutes requires va	The brain can only handle

Pain-point analysis table

Category	Identified Pain Points
Functional	Confusing navigation/UI design leading to wasted time searching.
Emotional	Content uniformity and text heavy content leads to boredom, causing a critical lack of motivation and resulting in user frustration and dropouts.
Systemic	The absence of accessibility features, such as Improper Navigation Design, Dark Mode and Captions, creates discomfort and limits use for some learners.

Critical Pain Point:

High risk of disengagement and course incompletion was caused by text-heavy content and long videos, which actively prompt users to skip key sections or abandon the course entirely.

Root cause Identification

- 1st Why: Why do users disengage and not complete the courses?
  - Because the content is monotonous, text-heavy and unengaging (like dense text blocks, long passive videos and repetitive structures).
- 2nd Why: Why is the content monotonous and unengaging?
  - Because the content creation process relies heavily on a uniform format that lacks variety, interactivity and visual/cognitive breaks.
- 3rd Why: Why does the content creation rely on a uniform format?
  - Because the content creators are not equipped to produce diverse, modular and interactive learning elements (like simulations, quick quizzes, gamification).

- 4th Why: Why are content creators not producing diverse, interactive elements?
  - Because there is a lack of systemic platform features and builder tools to easily implement and manage these advanced learning elements.
- 5th Why (Root Cause): Why is there a lack of systemic platform features for advanced learning?
  - The platform's foundational architecture and resource allocation have historically prioritized basic content delivery (like storage, streaming) over modern, interactive learning pedagogy and functional design.

Wicked problem explanation

The "Scale and Engagement in course design" is found to be the Wicked problem in the survey.

- Users want more engagement, but platforms focus on scalable and uniform content.
- Simple fixes do not work, while complex ones cost a lot and fit only specific cases.
- This problem links user psychology with the lack of tools for creators.
- "Engagement" is a challenge that needs constant changes and full-time effort.

The problem is found to be wicked.

Reflection

- Lack of proper UI/UX designs.
  - The assumption regarding the hinderance of platform use due to poor UI/UX was found to be true as the survey responses explicitly mentioned "confusion in navigation" and that it "hinders user interaction and exploration," leading to users feeling lost and exiting sessions prematurely.
- Most of the learning contents are long videos and presentations which lack in interactivity to keep the learning platform engaging.
  - The assumption that long videos lacking interactivity are unengaging was found to be true as the survey revealed users find these videos "Boring and time consuming" leading to "mind-wandering and poor retention" and this was directly supported by the strong user request for Quizzes/Quick Assessments as the most-needed interactive feature.
- Few platforms are text-heavy, making it less engaging and people start to divert from the platform.
  - The assumption that text-heavy formats cause disengagement was found to be true because users reported experiencing "cognitive overload" and admitted to actively avoiding the content by skipping sections or using AI tools like ChatGPT to summarize the dense text, which is a direct sign of diversion.
- Lack of user specific content leading to incompletion rates and frustration.
  - The assumption that content uniformity leads to incompletion was found to be true and was the most quantifiable validation, with the need for diverse content (short modules/visuals) rated extremely high, proving that the uniform format is undesirable and contributes to feelings of "lack of interest." All four initial assumptions underlying the survey were thus found to be true as validated by the responses.