# **UX Research Report**

Title: AI-Powered Tutor for Online Learning

### 1. Introduction

### **Project Background:**

Online learning platforms have brought significant changes to education, but they often fail to meet user needs. Key challenges include poor usability, lack of personalized learning experiences, insufficient tools for engagement and others. This study aims to address these issues and explore user preferences for an AI-powered tutor platform that enhances the learning experience for students and educators.

# **Key Findings:**

- Students need better tools for productivity, including integrated note-taking features.
- Personalized learning paths and tailored feedback are critical for improving engagement and outcomes.
- Educators require advanced analytics to track progress and AI tools to simplify lesson creation.

#### **Research Goals:**

- 1. Enhance the usability and accessibility of the platform for diverse users.
- 2. Design features that support personalized, adaptive learning experiences.
- 3. Improve engagement through interactive tools and collaborative features.
- 4. Equip educators with effective tools for teaching and progress tracking.
- 5. Provide career-focused functionalities to help users prepare for real-world applications.

### 2. Overview of Research

This research focuses on collecting insights from users to address key challenges and validate platform features. Feedback was gathered through surveys, structured forms, and user input to ensure findings were grounded in real experiences. The insights guided actionable recommendations for improving the platform's usability, engagement, and overall effectiveness.

# 3. Findings

# 3.1 Usability Challenges

- **Feedback:** "The platform should be easy to understand off the bat and shouldn't be too hard to navigate."
- **Insights:** Users, including students and educators, find navigation unintuitive, especially for first-time use.

## • Recommendations:

- Simplify navigation using clear labels, breadcrumbs, and search functions.
- o Include onboarding tutorials for new users.

### 3.2 Personalization Needs

- **Feedback:** "If designing an AI-powered tutor platform, the most essential feature would be personalized learning paths."
- **Insights:** Users want the platform to adapt to their learning pace, skills, and preferences.

### • Recommendations:

- Develop AI-driven personalized study plans based on performance.
- Include tailored feedback and content recommendations.

## 3.3 Engagement and Interactivity

- **Feedback:** "If there was a tool that could make it feel like students were right there in the classroom, it would be very beneficial. For example, a virtual reality classroom could be helpful."
- **Insights:** Students and educators desire tools to replicate the classroom experience online.

#### • Recommendations:

- Add features like private chat rooms, live polls, and collaboration tools.
- Explore virtual reality (VR) classrooms as a future enhancement.

### 3.4 Student Productivity and Tools

#### • Feedback:

- "I have to use a separate device or notebooks to take notes while studying. It's inconvenient."
- "A workspace feature that integrates everything would make studying more seamless."

• **Insights:** Students struggle with juggling multiple tools for studying. Having an integrated workspace would enhance their productivity.

### • Recommendations:

- Provide a built-in workspace for note-taking, coding, and organizing study materials within the platform.
- Ensure cloud storage integration for seamless access across devices.

## 3.5 Career Preparation

### • Feedback:

- "It would be helpful to have mock interview tests or career-focused features after completing a course."
- Insights: Students value tools that help them transition from learning to career readiness.

### • Recommendations:

- Introduce mock tests and interview preparation tools for students who have completed certificates or specific learning milestones.
- o Provide tailored career guidance based on individual performance and goals.

# 3.6 Technical Challenges

- **Feedback:** "Online platforms require more time and effort to prepare materials compared to traditional methods."
- Insights: Technical difficulties and time-consuming processes affect productivity.

## • Recommendations:

- Improve platform reliability and minimize disruptions.
- Integrate AI-assisted tools for faster content creation.

#### 3.7 Student Feedback

#### • Feedback:

- o "I find it hard to stay motivated while studying online. A reward system or gamified challenges might help."
- o "The platform should suggest the best time to study or remind me of deadlines."
- "Sometimes I feel isolated during online learning. Tools for group discussions or casual chats would be nice."
- **Insights:** Students need features that enhance motivation, collaboration, and reminders to maintain productivity.

## • Recommendations:

- Introduce gamification features like rewards and progress badges.
- Add scheduling tools and reminders to help students manage their time.
- Create social features like discussion forums or group chat options.

#### 4. Recommendations

## **Short-Term Improvements:**

- 1. **Simplify Navigation:** Address usability issues by introducing clear labels, breadcrumbs, and search functions to improve user experience.
- 2. **Develop Personalized Learning Paths:** Implement adaptive study plans tailored to individual learning needs to enhance engagement.
- 3. **Provide Collaborative Tools:** Introduce private chat rooms and interactive features to replicate the classroom experience online.

## **Long-Term Strategies:**

- 1. **Enhance Engagement Features:** Explore immersive learning options such as virtual reality classrooms or gamified elements to sustain motivation.
- 2. **Expand Career Support Tools:** Build features like mock tests and career guidance for learners transitioning into the workforce.
- 3. **Optimize Platform Reliability:** Focus on improving system performance and minimizing disruptions to ensure a seamless user experience.

# 5. Limitations and Next Steps

#### **Limitations:**

- Findings are based on a small sample of user reviews.
- Some proposed features, like VR classrooms, require further feasibility studies.

### **Next Steps:**

- 1. Collect additional reviews and feedback from at least 30 participants.
- 2. Conduct usability testing with prototypes of dashboards and interactive tools.
- 3. Test engagement tools like chat rooms and gamified elements during future sprints.
- 4. Explore the technical feasibility of career preparation features, such as mock tests and interview tools.

# 6. Conclusion

This research highlights the need for user-friendly, engaging, and adaptive online learning platforms. While addressing usability and personalization challenges, the AI-powered tutor can also integrate features that promote interaction, productivity, and career readiness. By iterating based on user feedback, the platform can provide meaningful and impactful solutions for students and educators alike.

## 7. References

- 1. User Reviews (2025).
- 2. Maze. (n.d.). UX Research Report Templates.