

Knowunity Study Challenges – Boosting User Retention

Feature Overview

- **Daily Personalized Study Sessions:**
Users choose their grade and subject; a daily challenge is generated consisting of flashcards and a quiz.
- **Active Learning:**
To complete the daily challenge, users must review the flashcards and achieve 80% or more correct answers on the quiz
- **Gamification & Habit Formation:**
Users earn XP for completing challenges and build streaks, motivating them to return daily.

Note: For this PoC, flashcards are sourced from an existing API. In a full product, these will be enhanced with AI-generated content and a spaced repetition system.

Product Hypothesis

If we implement Study Challenges that combine flashcards with quiz validation and gamified rewards (XP and streaks), users will form daily study habits and significantly improve Day-over-Day retention (expected 10-15% uplift). This is because the feature not only makes learning efficient but also turns it into a rewarding, habit-forming experience.

Go-To-Market (GTM) Strategy

- **Onboarding:**
Introduce Study Challenges via an in-app banner and short tutorial for both new and existing users.
- **In-App Integration:**
Add a dedicated "Study Challenges" tab (or prominent home screen widget) showing daily challenge progress, XP, and streak status.
- **Engagement Push:**
Use push notifications and in-app reminders to encourage daily participation (e.g. "Keep your streak alive – complete today's challenge!").
- **Social Sharing:**
Provide simple sharing options for achievements (e.g. "I just earned 50 XP and a 3-day streak on Knowunity!") to drive organic growth.

Key Metrics to Track

- **Retention Rates:** Monitor Day 1, Day 7, and Day 30 retention for users engaging with Study Challenges (expected 10-15% uplift).
- **Challenge Completion:** Track how many daily challenges are completed and average streak length. Segment users with consistent completions vs sporadic participation.
- **Quiz Success Rates:** Measure percentage of quizzes passed to gauge effective learning.
- **Engagement:** Monitor DAU and average session length post-launch.
- **Segmentation:** Analyze cohorts (new, existing, lapsed/re-engaged) to compare retention and engagement using in-app analytics (Firebase Analytics/Amplitude).
- **Hypothesis Validation:**
 - Use A/B testing to validate metrics, starting with a 50/50 split or a 10–20% test group for initial rollout/risk mitigation.
 - Validate whether gamification and active learning elements drive improved retention and engagement.
 - Post-release, use further A/B testing (Control vs. Test group) to refine challenge design, notification frequency, and overall user experience.
- **Future Enhancements:** Collect qualitative feedback via in-app surveys and Net Promoter Score (NPS) to refine the experience further.

Sources:

“**Spaced repetition** has been shown to significantly improve long-term knowledge retention compared to traditional study methods. Similarly, regular quizzes strengthen memory by promoting active recall—repeated quizzing further boosts retention.”

[Flashcards.dev](https://flashcards.dev)

“**Gamification** features also have a strongly positive effect on user motivation and retention. For example, seeing a streak count grow or earning XP can trigger intrinsic rewards and pride. Over half of Duolingo’s users have reported that its gamified system (including points and streaks) keeps them personally motivated to continue learning. One study found that apps with gamified daily challenges enjoyed approximately 30% higher user retention than those without, and Duolingo’s streak feature itself drove a measurable increase in daily active users. Additionally, friendly competition—such as leaderboards—can further increase engagement, as people naturally strive to improve their rankings. Notably, Duolingo’s use of personalized, friendly notifications (featuring their owl mascot) contributed to a 5% increase in daily active users.”

[Strivecloud.io](https://strivecloud.io)