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INNOVATION IN ACTION: TURNING IDEAS INTO REALITY

Chapter 28

Tra-Learn: From Zero to Trade Hero

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ABSTRACT

Tra-Learn is a mobile learning app designed to transform how secondary school students (ages 15 - 17) engage with trade and commerce. Moving beyond the limitations of traditional textbook learning, Tra-Learn introduces an interactive, game-based environment that makes complex trade concepts more accessible, engaging, and practical. The app integrates dynamic features like quizzes, bite-sized notes, current global trade news, and business simulation games to encourage active learning and critical thinking. These elements help bridge the gap between theoretical knowledge and realworld application, making the learning experience meaningful and enjoyable. One of Tra-Learn's key strengths lies in its accessibility. With offline functionality, students can continue learning anytime, anywhere, without constant internet access. This feature ensures inclusive education, especially for areas with limited connectivity. Tra-Learn also offers a clean, intuitive interface that allows students to navigate effortlessly through content tailored to their learning pace and preferences. The personalized learning pathways support a more effective and engaging educational journey, fostering greater independence and curiosity. Tra-Learn aims to nurture economically informed, globally aware students who are prepared to think critically about the world by reimagining how trade and commerce are taught. It's not just an app; it's a step towards cultivating a new generation of learners ready to thrive in a global economy.

Key Words: trade education, mobile learning, gamification, secondary education, interactive app

1. INTRODUCTION

Trade has always been essential for economic development and cultural exchange, from ancient caravans to modern cargo ships. It involves more than just transactions; it encompasses systems, regulations, relationships, and innovations facilitating trade (Rudge, 2024). In contemporary economies, trade significantly boosts GDP, employment, and technological advancement (Heakal, 2025).

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Recognizing the benefits of trade is crucial, as it drives economic growth and fosters international relationships. However, teaching this complex subject to younger learners is challenging. Traditional educational methods, such as textbooks and lectures, often disengage students and fail to link theory to real-world contexts (Feder, 2021).

With globalization changing the economic landscape, there is an urgent need for students to grasp trade concepts. Interactive digital tools can enhance engagement and understanding (Ryhus, 2024). Tra-Learn was designed to meet this need, providing a visual and interactive platform for teaching trade, aligning with modern digital pedagogy trends (Crudu, 2024).

2. PROBLEM STATEMENT

Traditional teaching methods in trade education often alienate high school students, especially those who struggle to connect textbook theories to real-world scenarios. Educational research consistently shows that learners retain more information and remain more engaged when actively involved in learning (Feder, 2021). However, most syllabuses lack experiential components that relate trade theories to practical decision-making.

Moreover, access to quality trade education is uneven. Students in under-resourced or rural areas frequently lack exposure to up-to-date and engaging content, especially in economic subjects. There is also minimal support for self-learners who seek to explore trade outside formal classroom settings. Tra-Learn addresses these gaps by offering a holistic and inclusive learning experience. It provides scenario-based simulations, real-time trade news, gamified quizzes, and editable notes, making trade education accessible, interactive, and relevant.

3. OBJECTIVES

The objectives are:

3.1 To Enhance Accessibility and Engagement in Trade Education

By making trade education interactive and accessible for students aged 15–17 through gamification and quizzes, we can encourage sustained interest in trade and commerce topics.

3.2 To Promote Active and Experiential Learning

The goal is to enable students to apply trade concepts using real-time news, interactive quizzes, and simulation games, boosting knowledge retention and critical thinking.

3.3 To Facilitate Self-Learning and Continuing Education Opportunities

Tra-Learn supports self-learning and continuing education, providing diverse resources for high school students and teachers. Its mobile accessibility enables global trade learning for all backgrounds, anytime and anywhere.

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4. MATERIALS/METHODS



Figure 1: Tra-Learn Interfaces

Upon entering Tra-Learn, users are welcomed with a secure login and sign-up page. New users can easily register using their email or social media accounts, while returning users can quickly log in to resume their progress and explore all features seamlessly. A "forgot password" option allows fast account recovery. The "Notes" feature enhances learning by offering quick access to key ideas across various topics. Users can browse randomly or search for specific content, with instant mind maps providing clear visual overviews to aid understanding and retention. Tools like the share button (arrow icon), edit button (pencil icon), and bookmark feature let users share materials, personalize notes, highlight key points, and save lessons for easy access later. Tra-Learn also features an interactive "Quiz" section that actively engages users with time-bound quizzes on trade concepts. This gamified approach challenges users to think guickly, rewarding correct answers with coins redeemable in the "Business Simulator" games, encouraging continuous learning. Tra-Learn's Business Simulator offers a fun, interactive way to experience real-world business challenges. Players use starter coins to build and grow virtual companies, making strategic decisions to stay profitable. With simple controls like "PLAY," "EXIT," and "SETTINGS," the game sharpens critical thinking while keeping users entertained. The News feature delivers up-to-date trade insights, letting users filter by Brands, Country, or Topic for guick, targeted access to relevant issues, making it easy to stay informed without the hassle.

5. NOVELTY

Tra-Learn offers offline access to lessons and quizzes, which is ideal for students in lowconnectivity areas. Its mobile-first, user-friendly design combines gamification with interactive features for an engaging learning experience. Tailored pathways focus on individual strengths and weaknesses, while real-world simulations and up-to-date business news foster a dynamic environment. This innovative platform empowers the next generation of global entrepreneurs and trade professionals. 2025 Inventopia FBM-Seremban International Innovation Competition (FBM-SIIC)

6. COMMERCIALIZATION POTENTIAL

Tra-Learn has strong commercialization potential, aligning with entrepreneurship and trade education trends for both public and private schools. Its customizable features allow for easy updates without significant changes. With a user-friendly design and offline capabilities, it supports low-energy mobile use, bridging the digital divide among students. Thus, Tra-Learn establishes itself as a scalable, user-centric learning solution.

7. BENEFIT TO COMMUNITY

This app teaches high school students, ages 15-17, essential trade, business, and economics knowledge through easy notes, engaging quizzes, and business simulation games. It enhances their financial literacy and critical thinking while building confidence in decision-making. The app fosters interest in entrepreneurship and money management, nurturing skilled young individuals ready to contribute to their communities and future careers.

8. FEEDBACK FROM COMMUNITY

Feedback from 30 students revealed unanimous agreement on the effectiveness of learning through apps, with all respondents stating that such tools enhance study efficiency due to their interactive and user-friendly design. Over half (56.7%) strongly agreed that mobile apps improve learning accessibility, citing the ability to study anytime and anywhere as a key benefit. All participants praised the business and trade game for making complex topics more enjoyable and engaging, enhancing learning motivation. Tra-Learn's offline access feature was especially appreciated by 80% of students, as it supports consistent learning despite poor internet connectivity. Additionally, all students agreed that features like quizzes, current trade news, and concise notes help clarify trade concepts, making the subject more relatable and easier to understand.

9. CONCLUSION

Tra-Learn is an innovative app that aims to transform how students approach trade education. It focuses on making learning enjoyable, accessible, and relevant to everyday life. By leveraging technology, Tra-Learn encourages curiosity and confidence among students, preparing them for the global marketplace. Ultimately, it aims to empower young individuals to adopt the mindset of future business leaders.

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