👀 Project Background: TIPE App Development

What is TIPE? 🔗

Trauma informed positive education (TIPE) is **one such approach using positive education strategies that was developed to meet dual concerns within the classroom for healing and growth**

Positive Education is an educational approach that emphasizes well-being and positive psychology, helping students develop a positive mindset to enhance their learning experience.

Trauma-Informed Education mainly focuses on students who have experienced psychological trauma (such as family issues, bullying, or war). It aims to help them regulate their emotions, build a sense of safety, and create a supportive learning environment for them

TIPE (Trauma-Informed Positive Education) combines both methods, focusing on students' mental health and providing them with support.

1. Introduction 🔗

Research has shown that traumatic experiences can significantly affect students' cognitive engagement and academic performance (van der Kolk, 2014). To this end, Berry Street has worked with two primary schools and one secondary school over the past five years to promote trauma-informed Positive Education (TIPE) to support students' mental health and learning abilities (Brunzell, Stokes, & Waters, 2019).

Despite TIPE's success, teachers still face challenges in assessing and responding to students' ready to learn scale. In the educational environment, students' ready to learn scale is one of great importance to the teaching effect. However, many teachers are unable to know the emotional and psychological state of students in real time, which makes it difficult to adjust teaching strategies. Currently, TIPE policies are only documented in books and are not easily accessible. In addition, there is a lack of digital tools to help teachers track student learning. And, since the school banned mobile phones, the project needed to develop an app for PCS and ipads to ensure smooth use by teachers and students.

To this end, we propose to develop the TIPE App, which will provide:

1. Questionnaire system: Students can assess their ready to learn scale to study through questionnaires (grades 1-3 for very young children, grades 1-5 for others).
2. Automatic report generation: The system generates reports based on questionnaire data submitted by students, which can only be viewed by teachers in order to adjust teaching strategies.
3. Simple and intuitive interface: The app works on PC and iPad, ensuring ease of use and accessibility.

The project combines research on educational technology (Hew & Brush, 2007) and student engagement (Fredricks, Blumenfeld, & Paris, 2004) to optimize teacher-student interaction and improve classroom outcomes

2. Problem Statement 🔗

In recent years, research has shown that traumatic experiences can affect students' learning and mental health. To address this challenge, Berry Street has worked with three schools over the past five years to promote trauma-informed Positive Education (TIPE) to support students' mental health and learning resilience (Brunzell et al., 2019).

However, the following problems still exist in practical applications:

1. Difficult to quantify students' ready to learn scale: It is difficult for teachers to assess students' learning status in real time, leading to difficulties in teaching adjustment.
2. Lack of effective feedback mechanisms: TIPE is currently limited to written materials and lacks digital tools to help teachers capture student learning.
3. Device limitations: Since students can't use mobile phones at school, teachers need a solution that works with PCS and ipads.
4. The interface needs to be simple and easy to use: The main users of the app are teachers and students, especially young students, so the interface needs to be intuitive and easy to use.

3. Scope of Solution 🔗

To meet the needs of teachers, students and schools, we plan to develop the TIPE App, which has the following core features:

1. Students' ready to learn scale questionnaire:
   - ✅ Intuitive interface, suitable for students of different ages.

   - ✅ Lower grades (1-3 scale) and upper grades (1-5 scale) can choose the appropriate grading method.

   - ✅ Immediately after the student submits the questionnaire, the data is stored and used to generate the report.

2. Automatic generation of learning readiness reports (visible to teachers only):
   - ✅ Combined with the questionnaire data, the system automatically generates reports for teachers to view.

   - ✅ Protect students' privacy and avoid unnecessary influence on the grading results.

3. Multi-platform support (PC & iPad)：
   - ✅ A web-based version (Web App) that is easy to use on school computers and ipads without additional software：
   - ✅ Suitable for touch screen devices (iPad) to ensure a good user experience.

4. Simple and easy-to-use interface design：
   - ✅ The operation process is simple and in line with the use habits of students of different ages.

   - ✅ The teacher interface is clear and efficient, helping to quickly understand students' readiness to learn.

4. Project Goals and Execution Plan 🔗

🎯 Project Goals 🔗

✔️ Develop a functional prototype of the TIPE App.
✔️ Ensure the app is accessible and user-friendly for different groups.
✔️ Conduct user testing and iteration based on feedback from Berry Street, teachers, parents, and students.

📅 Execution Plan 🔗

The project will be divided into the following phases:

1. Demand analysis:
   - ✅ Communicate with Berry Street and the faculty team to determine the TIPE strategy that should be included in the App.
   - ✅ Understand the usage habits of students of different ages, and design a suitable scoring mechanism.

2. Design and Development:
   - ✅ Design intuitive and easy to use UI interface to ensure that students and teachers can easily use.
   - ✅ Develop questionnaire module, data storage, automatic report generation and other core functions.

3. User testing and optimization:
   - ✅ Let teachers and students try out the App and collect feedback.
   - ✅ Optimize the interface and interaction logic based on feedback to ensure a smooth operating experience.

4. Final deployment:
   - ✅ Ensure the App is stable and supports school PCS and ipads.
   - ✅ Provide technical support to help schools implement the system smoothly.

5. Conclusion 🔗

This project presents an opportunity to digitally transform TIPE education, making trauma-informed strategies more accessible and effective. By collaborating with Berry Street, educational researchers, and schools, the TIPE App will become a key tool for supporting students' emotional and academic development.

Through this initiative, we aim to equip teachers, and guide students in applying proven TIPE strategies, fostering a more supportive and resilient learning environment.

Reference(APA7)

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