# Regulations Assessment: Educational Learning Platforms

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## 1. Problem Description

An ed-tech company has developed an AI-powered personalized learning platform that:

- Collects data on student learning behaviors, including time spent on tasks, answer patterns, and attention metrics through webcam eye-tracking

- Adapts curriculum difficulty and presentation based on individual performance

- Predicts future academic outcomes and learning disabilities

- Recommends personalized intervention strategies to teachers

- Generates automated progress reports for parents and administrators

- Uses natural language processing to evaluate written assignments

- Tracks emotional responses during learning through facial expression analysis

The key challenges include:

- Processing sensitive data from minors across multiple jurisdictions

- Potential algorithmic bias affecting students from different socioeconomic, cultural, and linguistic backgrounds

- Ensuring transparency of assessment methods to educators and families

- Managing the psychological impact of AI-driven recommendations on student self-perception

- Balancing personalization with standardized educational outcomes

- Addressing digital divide concerns in technology access

## 2. Legal/Framework Analysis

### i. Pakistan Regulation of AI (2024)

Interestingly, the Pakistan Regulation of AI (2024) does not have specific provisions for educational learning platforms. Further, the act doesn't address the collection of sensitive data from minors, nor does it mention education in any regard even though it mentions about public awareness, judicial systems, telecommunication, and even agriculture. Thus, the clauses of the section have no applicability.

**Gaps/Recommendations:** Since the act doesn't mention education, the following cluases potentially come to mind:

- AI systems deployed in educational contexts must maintain student privacy and shall not collect unnecessary behavioral or biometric data. Systems must be designed to protect the psychological well-being of students and promote equal educational opportunities

- AI applications involving minors require explicit parental consent with comprehensive disclosure of data collection practices. Providers must implement age-appropriate design principles and restrict the retention of minor data beyond essential educational purposes.

- Automated educational assessment systems must demonstrate statistical fairness across demographic groups, with regular auditing and mitigation of performance disparities. Systems must not perpetuate historical disadvantages or educational inequities