# Executive Summary of Requirements for the Bilingual Educational Reading Platform with AI Mentoring for Students of Puerto Rico Department of Education

## 1. Interface and Accessibility

A. Bilingual platform (Spanish and English), with the option to switch language throughout navigation.

B. User-friendly design for students, teachers, and parents.

C. Linguistic and cultural adaptation:

a. Spanish: local Puerto Rican accent and vocabulary.

b. English: standard American accent and vocabulary appropriate for ELLs (English Language Learners).

D. Compliance with current grade-level curriculum standards (K–5).

## 2. Educational and Assessment Components

A. Reading development in both languages through:

a. Interactive activities, texts, games, and comprehension exercises.

b. Online formative and summative assessments.

B. Diagnostic tests three times a year (August, December, May):

a. Levels: Kindergarten to 5th grade.

b. Format: multiple choice.

c. Structure: at least three questions per standard, organized by subject and grade.

d. Results: analyzed, summarized, and delivered to designated staff.

## 3. Artificial Intelligence (AI) Integration

A. AI must allow:

a. Automatic adaptive adjustment of difficulty level based on performance.

b. Personalized learning profile: identifies strengths and needs.

c. Determination of individual reading level.

d. Automatic reinforcement suggestions.

B. Voice recognition:

a. Listens to the student while reading.

b. Detects and corrects pronunciation, rhythm, and intonation errors.

c. Generates feedback.

## 4. Integrated Assessments in English and Spanish

A. Measure literal and inferential comprehension.

B. Aligned with DEPR standards.

C. Grade-appropriate, easy to apply and understand.

D. Allow comparison of performance between languages.

## 5. Monitoring Dashboard

A. Presents usage and progress metrics by:

a. Student, group, school, region, and island level.

B. Main metrics:

a. Frequency and duration of sessions.

b. Texts completed, reading level, skill progress.

c. Comparisons between grades, schools, and schedules.

d. Access devices and reading categories.

C. Dynamic visualization: graphs, tables, and indicators by skill (comprehension, fluency, vocabulary, etc.).

D. Data export: Excel, PDF, or other formats.

E. Differentiated access: teachers, students, administration, and families.

## 6. Family Access and Communication

A. Family portal with daily access to student progress.

B. Clear and simple visualization of:

a. Achieved level, skills worked on, areas to reinforce.

C. Suggestions and support strategies for home use.

## 7. Resources for Teachers

A. Interactive activities aligned with standards and reading levels.

B. Recommendations of texts and teaching strategies.

C. Practical intervention and follow-up guides.

D. Access to reports by student, group, or specific skill.

## 8. Technical and Compliance Requirements

A. Comply with privacy and accessibility (federal regulations: FERPA, ADA, COPPA).

B. Multi-platform support (computer, tablet, mobile phone).

C. Secure cloud infrastructure with data backup and traceability.

D. Design compatible with UDL (Universal Design for Learning).