

EU AI Act Article 13 Compliance Document

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Last Updated: [Date]

Approved By: [School Leadership Team]

Review Date: [Date + 2 weeks]

System Name and Purpose

Name: LexiTutor

Purpose: LexiTutor is an AI-powered tool designed to improve reading capability and support for Year 5 multilingual students by analyzing voice recordings and providing feedback on pronunciation, pace, and tone. This tool connects students who many need additional reading support, with early intervention and support.

Classification: High- risk under EU AI Act given that it is being used by minors and processes biometric data.

Intended Users and Context

- Year 5 classroom teachers and students

Acceptable Use Context

- Reading assessment sessions during class time
- Individual student progress monitoring
- Early intervention planning and support
- Personalized recommendations of learning material
- Teacher professional learning and training on reading support

Prohibited Use Context

- High-stakes academic decisions- LexiTutor is not for final grades or promotion decisions without human oversight
- Standalone assessment- Must always be combined with the professional judgement of the teacher
- Surveillance- Not for general monitoring other than educational assessment

System Logic and Functioning

How LexiTutor Works

LexiTutor processes student voice recordings through the following steps:

1. **Voice Data Collection:** Students read aloud during structured reading sessions. Voice recordings are captured within the LexiTutor application (maximum 3 minutes per session).
2. **Biometric Analysis:** The system analyzes speech patterns, pronunciation accuracy, reading pace, and tone using voice recognition technology designed for multilingual learners.
3. **Pattern Recognition:** Advanced algorithms compare student performance against age-appropriate reading benchmarks while accounting for multilingual backgrounds and accent variations.
4. **Feedback Generation:** The system produces:
 - Real-time pronunciation corrections
 - Reading pace recommendations
 - Personalized reading material suggestions
 - Early intervention alerts for teachers
5. **Progress Tracking:** Student performance data is stored in individual profiles to track improvement over time and identify learning trends.

Data Processing

- **Input Data:** Voice recordings, student identification data, reading scores, teacher observations
- **Processing Location:** Secure servers in the United States with GDPR compliance measures
- **Output Data:** Performance analytics, recommendations, progress reports
- **Integration:** Connects with existing school information systems

Limitations and Risks

Technical Limitations

- **Language Bias-** System may misinterpret pronunciation that is common in multilingual learners as errors

- Background Noise- Performance not as good in classrooms that have a lot of background noise
- Accuracy rates: Voice analysis rates are slightly lower for heavily accented speech patterns

Educational Risks

- Overreliance: Teachers may become too dependent on AI recommendations rather than using their professional judgement
- Labeling Risk: Students may be inappropriately categorized as needing additional support
- Privacy: Voice recordings include biometric data which can be misused if security is breached.

Current Mitigation Strategies

- Teacher training on the tool and its limitations
- Clear process in place to include human review of all AI recommendations
- Secure data storage with encryption
- Regular review of trends in data to red flag algorithmic bias

Human Oversight

All AI-generated recommendations to be reviewed by teachers before implementation.

- Teachers will review all AI feedback before sharing with students
- Weekly PLC meetings teachers evaluate AI recommendations against their own assessment of students
- Monthly review of AI insights and performance for the duration of the plot
- Teachers should override AI recommendations when their professional judgement indicates different student needs

Special Warnings

Do not use LexiTutor data for:

- High-stakes academic decisions- LexiTutor is not for final grades or promotion decisions without human oversight

- Standalone assessment- Must always be combined with the professional judgement of the teacher
- Surveillance- Not for general monitoring other than educational assessment

Contact Information

Technical Issues: IT Support Team - [contact info]

Educational Concerns: Reading Specialist Coordinator - [contact info]

Privacy Questions: Data Protection Officer - [contact info]

General Inquiries: School Administration - [contact info]