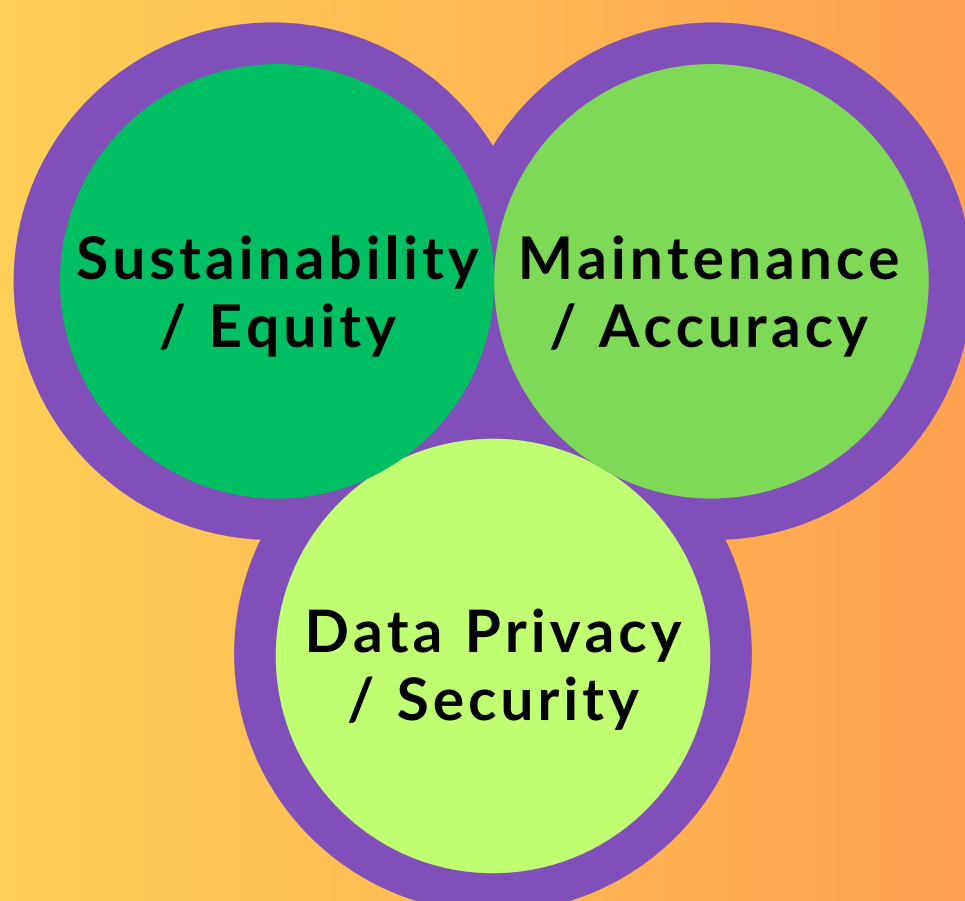


# The case for Small Language Models (SLMs) in education



***Sustainability / Equity.*** No need for cloud infrastructure, and no variable or huge local equipment cost. Students are provided one standard platform, not dividing based on socioeconomics.



***Maintenance / Accuracy.*** Easier and cheaper to update with new data, and flexible for frequent fine-tuning or incremental learning. Better for straightforward or repetitive tasks.

## ***Data Privacy / Security:***

- Data is processed and stored in-house
- Privacy-by-design approach
- Limited external dependencies (e.g., APIs)
- Lower risk of breach
- Local deployment and data control
- Reduced data sharing risks
- Security in constrained environments
- Transparency and customization
- Reduced risk of data leakage
- Lower legal and compliance risks

## SLMs vs. LLMs (Large Language Models)

SLMs	LLMs
Less computationally expensive	Performance improvement with increased model size
Encourages techniques to improve performance without scaling model size	Difficult to host locally, data security issues



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