



Automating Attendance in Schools (for safety)

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Pain Point:

Current attendance systems have improved absence notification, but still have high potential for human error.

A background image showing a teacher and students at a table. The teacher is a woman with blonde hair, wearing a white face mask and a blue and green geometric headband. She is leaning over the table, interacting with a young girl. The girl has dark skin and is wearing a blue patterned shirt. There are other students and adults in the background, some wearing face masks. The scene appears to be outdoors under a striped awning.

The solution

Biometric student attendance could reduce reliance on teacher, allowing them to focus more attention on instructional tasks.

This would also speed absence alert process & decrease human error due to manual input system.

Collection Components:

Fingerprint scanners for home hacking run in the \$27-\$50 range at present.

Open-source software for these scanners is available for Arduino hardware (\$25-60).



Phase-based Challenges

Phase one presents an opportunity to troubleshoot the data collection process, especially with smaller fingers.

The largest challenge occurs in the second phase, involving integration of biometric input with existing attendance systems.

Phase 2 also involves classroom trials.

Since one possible solution in phase 2 could involve collaboration with PowerSchool (or similar SIS), phase 3 would be to ensure compatibility with existing absence notification features of this system.

Why not?

Biometric attendance systems do exist, but only seem to be used in select higher education institutions.

Why not use input automation to improve safety and prioritize interventions for our students?

