

ASSISTIVE TECHNOLOGY IN CLASS

Assistive technologies have taken hold in classrooms today in ways not expected by many. In the vocational classroom, these technologies have become essential in providing a safer environment for trainees. For those entering programs that are of special needs, these have been hugely helpful in training more people in the trades.

AUGMENTED REALITY (APPLE VISION PRO)

This technology, based on VR, allows digital simulation of equipment in real, physical spaces. In the vocational classroom, this is useful for assessing student knowledge prior to working on real and expensive equipment.

PROS: Allows students to gain familiarity with high-risk equipment safely in a semi-realistic environment. Enables more students to learn trades by having multiple tranches at the same time.

CONS: AR equipment and software can be extremely pricey and relatively fragile.

There is not a lot of augmented reality software available and it is difficult to develop.

TRANSLATION TOOLS (GOOGLE TRANSLATE)

Google Translate and other translation tools have a use of doing translation in order for students to do research outside of English language. For manuals that are in foreign languages, this is useful to safely operate equipment.

- **PROS:** Handy for ELL students to use manuals in their native language.

- Teachers can use translation tools to translate foreign-language manuals into English.

- **CONS:** The nuances of languages (especially Slavic languages) is often missed in machine translation.

- Overreliance on machine translation can make learning some foreign languages difficult.

GOOGLE SPEECH RECOGNITION AND SYNTHESIS

Text-to-speech tools are useful to help students understand technical manuals. Use these tools with translation tools, and this can help foreign language learners comprehend in their native language.

PROS: Allows people with difficulty reading to be able to understand assignments or readings.

Useful for allowing the student to focus on working on a task without having to switch focus between a book and the work trained.

CONS: Overreliance on text-to-speech can discourage reading by some students.

Some text-to-speech tools may mispronounce words, which may confuse some who speak different dialects natively.

References:

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