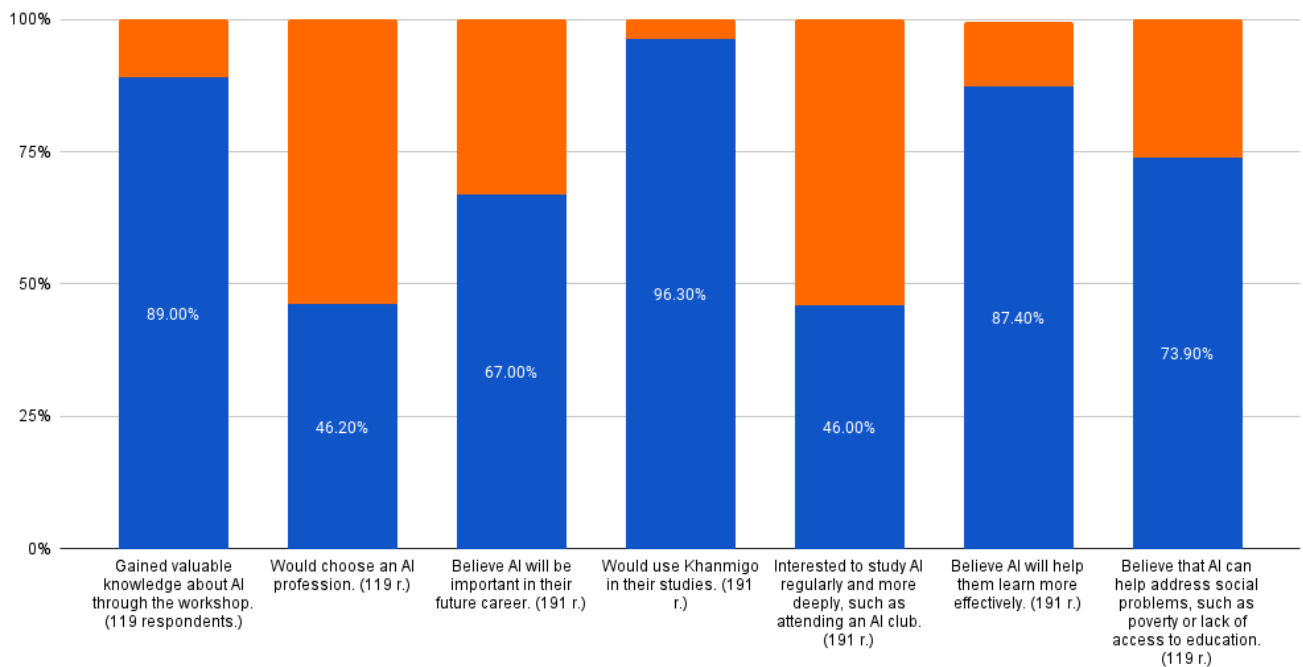


**Introduction:** We believe that implementing the "Day of AI" materials alongside Khan Academy in Ukraine will create a highly synergistic educational environment. Khan Academy provides students with the necessary mathematics and programming background for studying AI. Concurrently, expanding AI literacy among Ukrainian students ensures they are prepared to use educational AI tools as effectively as possible. When ChatGPT-4o or Khanmigo becomes available in Ukraine, students will be ready to integrate them immediately into their studies.

### Day of AI Survey Results:



**Khanmigo:** Our primary goal with Khan Academy is to make Khanmigo available in Ukraine. With access to Khanmigo, millions of Ukrainian schoolchildren will be able to study and engage with artificial intelligence for several hours a day, achieving mastery in its daily application.

To facilitate the widespread application of Khanmigo, we are working on the following implementation and integration strategies:

- Hire a team of "school leads" to visit schools and instruct them on integrating Khan Academy into their teaching. In addition to training on using Khan Academy, we will educate students on using ChatGPT-4o, similar to the [OpenAI demo with Sal Khan](#).
- Develop an online course to train Ukrainian teachers about Khan Academy. Target passionate math teachers to build a self-propagating community excited about Khan Academy.
- Integrate Khan Academy into the 50,000 Chromebooks donated to Ukraine by Google.
- Integrate Khan Academy into the 130,000 non-Chromebook devices donated to Ukraine through the Device Coalition. Implement Khan Academy in 120 Digital Learning Centers across Ukraine.



Nazar Drugov, William Florance (Head of Strategic and Government Initiatives, Google for Education), Tymofiy Mylovanov (President of KSE), Anastasiia Bazir

**Catalyzing English Learning:** Only 1 in 100 Ukrainians knows fluent English. In order to become a thriving nation and connect with the global community, Ukraine needs to develop proficiency in English.

Once Ukrainian students know English, they will gain access to the best resources, such as MIT OpenCourseWare or the full Khan Academy library in English.

To achieve this, we aim to leverage Khanmigo using one of the following options:

1. Prompt the Ukrainian Khanmigo to always provide its response twice: first in English, then in Ukrainian. Students will feel compelled to try to parse the English first because it is faster than waiting for the Ukrainian version to generate afterwards.
2. Prompt Khanmigo to always select a term in Ukrainian to complement with its translation in English. This would help students build a vocabulary for STEM subjects.
3. Most likely, Khan Academy will make Khanmigo available in English only for a period, even once it is available in Ukraine. Students would see that their classmates who are better in English are benefiting a lot from Khanmigo, stimulating them to learn English.



Tymofiy Mylovanov and Sal Khan



Rachel Boroditsky (KA Chief of Staff) and Laker Newhouse

**AI in Localization:** We are thoughtfully incorporating AI to speed up our translation of Khan Academy while maintaining quality. Here's how:

1. *LLMs and Terminology:* Using Ukrainian textbooks with approved terminology and our own manual translations, we few-shot prompt our custom GPT to translate using language that is correct and engaging for children. Our translators actively use it, and every translation goes through an audit to ensure accurate mathematical terminology.
2. *AI Translation in One Click:* We are working on a solution to translate all Khan Academy mathematics text with AI in a single day. (Their Math K-12 + Calculus content contains 5,847,573 words.) To achieve this, we are collaborating with Khan Academy and Crowdin, the developers of Khan Academy's translation platform. We have identified that complete AI translation is feasible through their pre-translation feature, but we are now focused on ensuring that the translation maintains accurate terminology.
3. *AI to Recreate Videos:* What sets Khan Academy's videos apart for many users is the enthusiastic, animated voice that excites learners to go above and beyond. We are running experiments with AI to create videos that match the high quality of the original content, such as with HeyGen.

**Global Framework:** By actively incorporating and experimenting with AI in our localization project, we aim to develop an easily replicable framework for other countries, especially countries where children are facing disrupted, war-torn education.

As we progress in our implementation, we plan to write up a case study to document the lessons we have learned and spread best practices.