

EdReNe Worldcafés

The notes below capture discussions across several rounds, highlighting the use of AI in educational contexts from various countries. Here is a consolidated summary focusing on similarities and differences.

Question 1 – What are your future plans with AI on your platform?

The integration of AI in education is a recurring theme across the discussions, with several commonalities and unique approaches observed among the participating countries.

Commonalities:

1. Generative AI and Chatbots

- Slovenia and Greece both emphasize the use of generative AI to create educational content and scenarios. They also discuss using AI to generate questions to evaluate student understanding.
- Norway and Britannica are exploring chatbots to assist students and teachers. Norway focuses on NDLA chatbots for prompting students and teachers, while Britannica highlights the collaboration with Microsoft Reading Progress.

2. AI for Student Assistance

- Slovenia and Norway are leveraging AI to help students with their studies. Slovenia mentions an app for reading without collecting personal data, while Norway discusses a student AI assistant to aid in studying and summarizing materials.
- Turkiye focuses on AI literacy and coding projects for students, aiming to enhance their skills in AI and problem-solving.

3. Machine Learning and Metadata

- Italy and Germany are utilizing machine learning to handle metadata. Italy's approach involves using AI to translate and categorize video content, while Germany is working on a project to integrate metadata with curricula to help teachers find materials.

4. AI for Language Translation

- Both European Schoolnet and Italy are utilizing AI for translating content. European Schoolnet focuses on translation of content for MOOCs, whereas Italy is translating video content into text.

Differences:

1. Stakeholder Collaboration

- Greece places a strong emphasis on collaboration with various stakeholders, including universities and ministries, to implement AI in schools. This involves developing language models and incorporating critical thinking and social skills into the curriculum.

2. Guidelines and Ethics

- Norway is setting guidelines for AI usage in education, focusing on editorial standards and raising awareness about bias and ethics among students. This is not explicitly mentioned by other countries.

3. Repository and Data Management

- The European Schoolnet has a large but underutilized repository of educational resources. They recognize the need for more specific and reflective content, aiming to develop recommendation systems to enhance usage.
- Slovenia is working on connecting different platforms and consolidating scattered materials to create a more cohesive repository for teachers and students.

4. AI in Vocational Education and Training (VET)

- Slovenia also mentions the use of AI in VET.

5. Practical Problem Solving

- Turkiye focuses on practical problem-solving and real-life challenges, with students learning to code and use AI to address these issues.

6. Portal Redevelopment:

- Ireland plans to redevelop their portal, aiming for improvements.

7. Content Accessibility

- Latvia discusses difficulties in finding educational materials and suggests using Khan Academy-style videos to improve searchability and access. They also consider using existing content to create personal tutors for students, highlighting a unique approach to content accessibility and personalized learning.

Overall, the discussions reveal a shared interest in using AI to enhance education through content creation, evaluation, student assistance, and improving resource accessibility. However, each country also brings unique perspectives and priorities to their AI implementations, reflecting their specific educational needs and contexts

Question #2: Do you find the 7 basic requirements for responsible AI in education important? Why? How do you take these requirements into account in your platforms?

Below are the seven basic requirements, as proposed in the vision paper on responsible use of AI in the Flemish education:

1. The learning process of the learner is paramount from a pedagogical-didactical and socio-emotional perspective
2. AI is not an end in itself
3. AI applications in education are trustworthy
4. AI applications in education are based on shared values
5. Responsible AI is a continuous process
6. Education has a support network that is AI-ready and AI-resilient
7. Professionalisation and responsible AI go hand in hand

Participants found the 7 basic requirements unanimously important. They felt the 7 basic requirements, as proposed, are general and broad enough. Concerning requirement 3: AI applications in education are trustworthy there was some discussion about the formulation of this requirement as AI application will never be trustworthy. The subcategories under this basic requirement are very clear though, trustworthy applications should meet these 7 key requirements:

1. *Human autonomy and oversight*
2. *Transparency*
3. *Diversity, non-discrimination and fairness*
4. *Societal and environmental well-being*
5. *Privacy and data governance*

6. *Technical robustness and safety*
7. *Accountability*

The way of implementing the 7 basic requirements is very dependent on the kind of platform. For example, a platform that focuses solely on video content should implement the basic requirements in a different way than a platform that contains mainly user-generated, text-based content. The approach to handling AI-generated content is already now very diverse. Some platforms refuse any AI-generated content. Other platforms just ask the user or creator to tick a box if AI is used to create the learning material without any other check procedure.

Some platforms already have an internal policy on the use of AI in content they have self-created. It's important though that such policies are submitted to constant review and updated if needed.

During the world cafés it seemed that people who work in a governmental context are stricter concerning the use of AI than commercial initiatives.

Concerning the bias in AI-generated materials, some people mentioned that bias is present in real life too. People are biased by themselves. Even Wikipedia is biased. Everyone agreed that teachers, students, educational professionals should be aware that the bias in AI-generated content is there because the AI-systems are trained on biased datasets. For example, when using the prompt '*a picture of a wedding*', the output is almost always European/western weddings.

One risk for people who think about the use of AI in education (like us) is that we generalize this behavior to all teachers. This is not the reality. A big part of the teachers are not thinking about AI and might not even be aware that a system like ChatGPT exists...let alone that it might have an impact on education.

Manipulation is not new; Photoshop has been there for a long time. The difference now is the scale and how easy it is to fake an image/text/voice.

There are some initiatives to train a new large language model on curated, trustworthy, factual, scientific based texts, for example GPT-NL. It would be a good idea to bundle forces over the EdReNe-network and make an LLM with all data combined.

Question 3: How do you try to stay an alternative for commercial initiatives who provide learning materials?

Because of the diversity in participants, we changed the original question and talked about the difference between commercial and open-source learning materials. We mostly focused on cost and quality assurance.

Cost

- The cost for schools is obviously different. In the case of commercial offerings, we see that for schools it often feels unusual having to pay for digital (learning) materials. The idea that “what is on the internet, should be free” is still common.
- Also in the case of open source materials, there is usually a cost involved. However this cost is in most cases not paid directly by the schools or the users. This cost can involve the development of the materials (e.g. NDLA) or the management of the repository (e.g. KlasCement).

Quality assurance

- The participants felt like in general, the perception is that the quality standards for commercial products are higher than for open-source alternatives.
- We heard the example of Britannica who have a very extensive and strict quality assurance system, where contents are checked six times before being published.
- However, this is not the case for all commercial players. Especially for startups, it can be very challenging to install and ensure an extensive quality check.
- In the case of open-source repositories, the situation is diverse and related to who develops the materials. In some cases, the materials are developed by professionals and checked (e.g. NDLA), other repositories are moderated but there are also examples of repositories where there is no check on the published materials.
- The participants mentioned that a big advantage of open-source learning materials is that they can easily be changed by other users, which is also a system of quality assurance.