

Shiksha Copilot: Responsible AI FAQ

- **What is Shiksha Copilot?**

- Shiksha Copilot is a part of project VELLM (universal empowerment with LLMs) from Microsoft Research India. It is a copilot experience built for teachers (through webapp/ telegram) to create their own lesson plans and learning experiences for next classes that they would be teaching using this copilot.
- As a teacher, you can select the curriculum that you are teaching, the grade, the subject and chapter that you would like to teach in your next classes and build engaging learning experiences for teaching in the class. This includes real world examples, analogies, hands on activities, assessments etc. Once these engaging learning experiences are generated, the teacher can validate the content. The Shiksha Copilot then automatically creates deliverables like lesson plan document, presentation and student handout using this validated lesson plan.

- **What can Shiksha Copilot do?**

- Shiksha Copilot plays the role of a virtual assistant to teachers. It assists the teacher by creating more engaging and personalized experiences, driven by learning outcomes thus reducing manual effort and expediting the content creation process.
- The teachers can create many engaging learning experiences like hands-on-activities, assessments, real-world examples or analogies etc.
- Once the teachers create the lesson plans, the content would be available in docx and ppt format to be directly consumed in their classroom.
- Teachers can also interact with in chat in a free-flowing conversation to ask questions or generate new learning experiences.

- **What is/are Shiksha Copilot's intended use(s)?**

- Shiksha Copilot's intended use is working with teachers and empowering teachers across the globe to generate personalized and engaging learning experiences unique to their students' needs, thereby improving the overall learning outcomes.
- We would like to run a pilot for Shiksha Copilot working with an NGO - Sikshana Foundation who is working in the education domain and with the school teachers for the last several years.
- Working with Sikshana Foundation, we are piloting Shiksha Copilot with a few teachers to understand the usability of such a copilot for teachers and get the feedback to improve the Shiksha Copilot prototype.

- **How was Shiksha Copilot evaluated? What metrics are used to measure performance?**

- We performed a qualitative analysis to evaluate the quality of the Shiksha Copilot system using the internal testing team and received early feedback from our collaborator, Sikshana Foundation. To measure any possible harms through the system, we performed two rounds of red teaming.

- We actively perform automatic content moderation on content generated by (and input to) the Shiksha Co-Pilot using Azure Content Filtering. We also use meta prompts for providing guidelines to the Copilot to generate education related content only and generate the content that is unbiased and respectful.
- We also monitor the system responses through anonymous telemetry to identify ongoing issues with the system and make periodic improvements.
- **What are the limitations of Shiksha Copilot? How can users minimize the impact of Shiksha Copilot's limitations when using the system?**
 - Shiksha Copilot generates the content using AI. The AI generated content may have some errors rarely. So, the users of Shiksha Copilot should validate the content before using this content in their classrooms.
 - The AI systems used in Shiksha Copilot are capable of generating text in languages other than English, but performance for non-English languages needs to be assessed and improved for Shiksha Copilot. Shiksha Copilot users are requested to provide feedback on specific issues that they see during the pilot deployment.
- **What operational factors and settings allow for effective and responsible use of Shiksha Co-Pilot?**
 - *Describe the operational factors and ranges within which the system is expected to perform reliably and safely. List the choices that end users can make (e.g., customization, settings, etc.), with a description of how those choices may impact system behavior in the real world.*
 - Shiksha Co-Pilot is best used in English language where we have evaluated and applied quality measures and harm mitigations.
 - For non-English language interactions, the system would work through translation provided by Azure Cognitive Services thereby guaranteeing effective quality.
 - Shiksha is deployed with human experts like teachers in the loop. So, the teachers should evaluate and validate AI generated responses before delivering the content eventually. This also provides continuous anonymized feedback to improve the system.