A guidebook to Author Aide FAQs



Responsible AI, Security, and Privacy

The learning and assessment industry has entered an exciting new era of innovation. All promises great change, but this provokes natural and logical questions: What changes? How will it impact us? What are the risks? How do we responsibly achieve change?

The questions we receive illustrate the curious, considered minds of an active community of product builders, authors, publishers, and assessment users.

We attempt to answer your most pressing queries here.

It's worth noting that though specific to Learnosity's inaugural AI product, Author Aide, the responses here speak to our core approach to safeguarding user privacy, customer security, and responsible development across all our AI products.

If there's anything we don't cover in the following pages, please feel free to get in touch.

Learnosity's mission and Al vision

Learnosity believes that education and learning opportunities should be equitable, inclusive, and accessible to all.

Our mission is to advance education and learning worldwide with best-in-class technology. As part of our mission, we're committed to the responsible use of AI in education and learning.

This document attempts to provide answers to common questions about Author Aide concerning security, privacy, and AI ethics. Since Author Aide is subject to continual improvement, this document is accurate as of the time of publication.

Our AI manifesto

We believe that AI:

Reframes what's possible in assessment

Al gives us a once-in-a-lifetime opportunity to transform assessment so that educators, learners, and customers can focus on the things that matters most.

Should be used as a supplement, not a substitute

We view AI as a powerful tool for supporting and elevating human agency.

Should empower all

Al should be equitable, available to organizations of all sizes, and help meet individuals' diverse needs.

Should be used responsibly

Al systems must be secure, efficient, and reliable in order to protect user privacy and academic integrity.

Requires ongoing commitment

Al is an emerging field and we anticipate rapid and continuous change. We're committed to adapting to the uncertain by exploring the opportunities and risks that arise as the landscape changes.

Author Aide—an overview

Author Aide is an Al-enriched authoring tool that enables rapid question and test creation.

It works by letting users select a question type, choose an area of interest, add a prompt, and then generate a question with learner feedback in seconds. Users can then review the question and save, modify, or regenerate it.

From a responsible AI perspective in assessment, Author Aide should be considered relatively low risk.

Some key points concerning our approach to its development:

- Author Aide's design puts users in total control over when and how it's used.
- It does not have access to any learner/test-taker data.
- Learners/test-takers do not interact with Author Aide.
- Learnosity does not use—and does not let our AI service providers use—customer data for model training.
- Author Aide security is covered by <u>Learnosity's ISO 27001 certification</u>. As between Learnosity and the customer, the customer owns their own data. Learnosity never uses customer data for purposes other than improving the service.

For Learnosity API customers, Author Aide is available within the Learnosity Author Site and within the Learnosity APIs. For Questionmark customers, Author Aide is available within Questionmark OnDemand Advanced Assessments.

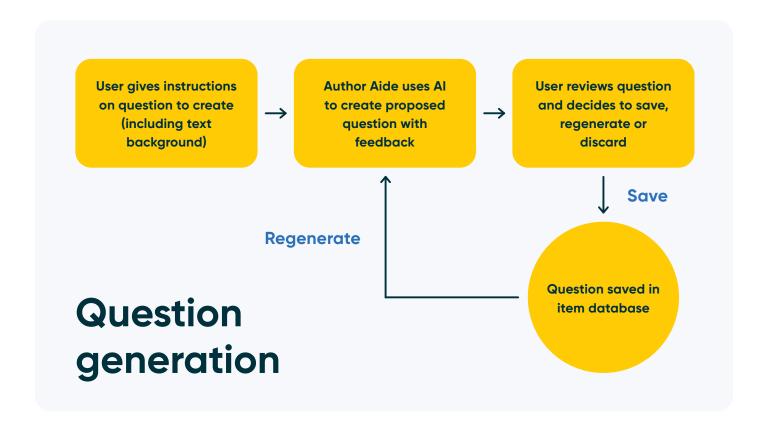
Author Aide-in depth

What functionality does Author Aide offer?

Author Aide is an evolving product and its functionality will expand over time, but it currently lets users generate:

- Multiple-choice questions
- True/false questions
- Fill-in-blanks questions, and
- Translate questions to/from over 40 languages

There are a number of ways that authors can control how questions are generated. In addition, they can also upload their own material to help guide the AI to create more specific, tailored and/or curricula-specific questions. Questions can also include feedback and, once generated, the author can discard, regenerate, or save them in their item bank.



How is Author Aide connected to other Learnosity/Questionmark software?

Author Aide is an independent software product that can be accessed in four ways:

1	Via the Learnosity Author Site	An interactive user interface for authoring questions used by Learnosity API customers. Access is only possible after logging into the Author Site.
2	Via Questionmark Advanced Assessments	An interactive authoring system used by Questionmark customers, this is the Learnosity API-powered version of the Questionmark platform. Access is only possible after logging into the Questionmark platform as an administrator.
3	Via a standalone API	Designed for publishers and software developers who wish to use Author Aide as a standalone API within their software, independently of other Learnosity APIs. This allows including AI generation of questions within third party applications. Learn more on the Author Aide API.
4	Via the Learnosity Author API	Designed for publishers and software developers who use the existing Author API from Learnosity and wish to add Author Aide to include AI generation of questions within their third-party applications.

In order to control access for different tenants and manage subscriptions, Author Aide uses its own database. Questions generated by Author Aide that users choose to save are not kept in the Author Aide database but in the normal item banks associated with Learnosity or Questionmark authoring.

What systems and regions host Author Aide?

Learnosity and Questionmark customers can choose to have Learnosity APIs or Questionmark OnDemand systems hosted in data centers in the US, Europe, or Australia.

Since Author Aide is hosted in AWS, and the AI component is hosted in Microsoft Azure, the Author Aide component is hosted in the US.

However, Author Aide data does not persist in the US. When users save questions created or translated in Author Aide, they are saved for the long term in the same location as manually created questions for item bank storage. Questions may be stored temporarily for up to 30 days in the US, but not permanently.

Is Author Aide optional?

Yes. Author Aide is a standalone product with a separate license. It can be easily disabled from the main APIs/Questionmark systems.

It is also usually chargeable. A limited amount of free use is permitted for some customers for evaluation purposes, but an order with license terms must be entered into and payment made for use beyond these limits.

Security

What certifications apply to Author Aide?

Learnosity's ISO 27001 certification applies to all Learnosity and Questionmark products, including Author Aide.

This certification ensures that all Learnosity and Questionmark products adhere to stringent information security standards. Our ISO 27001 certificate is available to view here.

Learnosity is a member of the <u>EDSAFE AI Industry Council</u>, supports the <u>SAFE Benchmarks</u> Framework, and is a signatory of the Student Privacy Pledge.

Our hosting and AI providers are also 27001 certified and have several other certifications including SOC 2, ISO 9001 and ISO 27701.

What security measures have been taken while developing Author Aide?

Learnosity is committed to security, with a full-time security team that reports directly to our Chief Strategy Officer, a Learnosity co-founder.

We are externally audited as part of our ISO 27001 certification. We also run our own penetration tests, customer penetration tests, and have other security audits, including those required for our Questionmark OnDemand for Government FedRAMP's authorization.

Learnosity has a product development security policy as part of its ISO 27001-certified Information Security Management System. The policy is owned and managed by Learnosity's Chief Technology Officer and is reviewed and updated at least annually, the last update at the time of writing was April 2024. The policy covers access to source code, security training, use of third-party code, separation of environments, role-based training, and secure architecture principles.

Author Aide and all other Learnosity software are developed following this policy.

Learnosity uses a formal security development lifecycle (SDLC) that includes information security considerations. Learnosity's secure development process aligns with best practices, including OWASP.

How is author access to Author Aide protected?

Author Aide is protected by the same authorization and authentication as the rest of the item authoring software.

If using the Author Site, the user must log in. If two-factor authentication is enabled (recommended) the user must use that.

If using Questionmark Advanced Assessments, the user must log in to the Questionmark platform as an administrator. All the usual login capabilities apply, including SAML and multifactor authentication.

If using the Author Aide API or the Author API, it is the customer that determines control authentication and authorization.

When is Author Aide data deleted?

Learnosity is committed to security, with a full-time security team that reports directly to our Questions generated in Author Aide are not stored permanently within Author Aide—they are copied to the normal item bank databases with other questions. They can be deleted there in the same way as other questions are.

Can I see further information on Learnosity security?

General information on Learnosity's API security.

General information on the Questionmark platform security can be read here: www.questionmark.com/trust and www.questionmark.com/go/od-measures.

Our hosting provider for Author Aide is AWS, and information on their security can be found at https://aws.amazon.com/compliance/programs/.

We also use Microsoft Azure for hosting the Al model and information on their security can be found at https://learn.microsoft.com/en-us/legal/cognitive-services/openai/data-privacy.

If you need more information, please reach out to your business contact. Subject to putting appropriate confidentiality agreements in place, we can share a security pack that describes more about security for the Learnosity APIs or the Questionmark platform.

Privacy

What personal data is used within Author Aide?

No personal data is shared with the AI that powers Author Aide. It's a product for enabling faster authoring—no student/learner data is processed by the system. The only personal data used is the author name, and this is not passed to the third-party AI service.

What role does Learnosity have under privacy laws?

Learnosity follows the instructions of its customers in how it processes their personal data, and is considered a processor, sub-processor, or service provider under data privacy laws.

Author Aide does not generally process personal data. Customers are requested not to put personal data in the system (e.g. as prompts for the AI). But in case personal data is inadvertently put into the system, and with respect to author names, Learnosity is a data processor and contracts with customers and suppliers include data processing agreements.

Responsible Al

Is any customer data used to train any model?

No. Neither Learnosity nor our AI service provider uses any of the information provided to Author Aide or generated by Author Aide to train any model. This includes user input and any material customers provide to supplement the AI model and the model output.

The Al large language model is treated as "stateless" in this respect—i.e. not modified by Author Aide input.

Microsoft Azure does not train Al on Learnosity customer data. See <u>this statement from</u> Microsoft Azure to learn more about its use of data.

What generative AI model is used by Author Aide?

Under the hood, Learnosity currently uses GPT-4 and GPT-40 hosted by Microsoft Azure for item generation and translation.

However, our intention is to be model agnostic and adopt models over time that best fit their intended purpose. All models used will keep customer data confidential and forbid training on customer data. We will provide information on other models used on request or in updates to this document.

Is there any monitoring of the use of Author Aide?

Learnosity may review the use of Author Aide to help improve the software and monitor usage analytics, but customer data is not used to train the model.

Our AI service provider does not monitor the use of Author Aide generally but does monitor for abuse (e.g. harmful content), as set out in the data use URL above.

Is any Author Aide data from one customer shared with another customer?

No. Neither Learnosity nor our Al service providers share any input to Al or output from Al with other customers.

Is the material that Author Aide generates accurate and reliable? Does it hallucinate?

Any large language model can potentially hallucinate. However, through diligent design, we have taken measures that limit this through careful prompting and providing ways for you to ground its responses in standards and learning material. As with all tools that utilize AI, output generated by Author Aide should always be checked by a human to ensure accuracy and reliability.

Are questions produced by Author Aide ready for production use?

Authors should ensure that questions are appropriate for the needs of the test, and questions should be reviewed by a human before use. Questions produced by Author Aide should not be used in production without review.

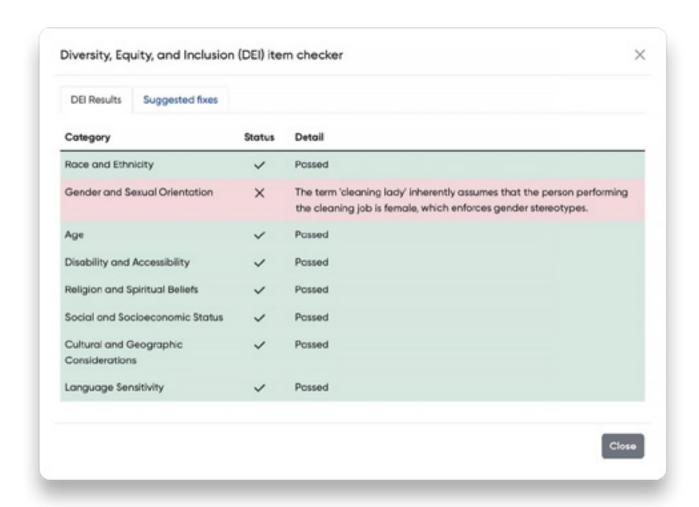
Can questions produced by Author Aide be biased?

Al models are trained on a large corpus of human writing, which may itself contain bias. Learnosity prompts the Al to reduce some kinds of bias, but it is important that questions go through the usual review and pilot process in the same way as questions created by humans.

How inclusive and diverse are questions produced by Author Aide?

Learnosity seeks to ensure, via prompting, that Al-generated questions take into account diverse learners and test takers. However, as mentioned above, it's important to ensure that questions produced by Author Aide go through the usual review process to encourage inclusivity and diversity.

Learnosity has an Al-powered DEI checking functionality in development (available later in 2024) that will allow you to quickly review questions for diversity and inclusivity. Please contact your sales representative for more information.



What happens to copyright?

Neither Learnosity nor our service providers make any claim to the copyright of any materials provided to or generated by Author Aide. Our customers own the output from Author Aide, as much as possible by the applicable legal jurisdiction.¹

If Author Aide is used multiple times with the same input, will it produce the same output?

No, not usually. Generative AI is typically non-deterministic, and repeating a call or regenerating will usually result in different outputs.

Is Author Aide an LLM plug-in?

No. Author Aide has been built from the ground up as an Al authoring tool designed to fit into an item authoring workflow.

Does Author Aide use a chat interface to AI?

No. Author Aide calls the AI large language model via a secure API and controls its calls with carefully designed prompts that are intended to make it more likely that the questions produced are effective.

What is the advantage of using Author Aide over users interacting directly with a model like ChatGPT?

Using Author Aide is an improvement to having users directly use a generative AI system like ChatGPT. The advantages include:

- Assurance that inputs and outputs are not used to train Al models
- Much greater security; items are generated and held within a secure authoring system and not copied and pasted from browsers
- Only those authorized to create and review questions can do so
- More efficient as questions are transferred directly into your item bank once approved
- Interface designed from the ground up for human-Al interaction
- Workflow designed for AI and integrated into the item development process
- Better quality items due to careful prompting by Learnosity
- Organizational consistency

¹ Note that in some jurisdictions it may not be possible to claim copyright on Al-created material.

Is Author Aide a generalist or specialist AI tool?

Author Aide is a specialist AI tool focused only on creating and translating questions. It uses a general-purpose model, but customer input can supplement the model with material focused on a specific domain.

The advantage of a specialist AI tool is that it has been built for the purposes of question creation. The advantage of the tool calling a general model is that such models are frequently improved and updated, and represent the state of the art in generative AI.

What do you recommend that customers consider when seeking to use Author Aide within a framework of responsible and ethical AI?

Bias and diversity

You need to ensure there is a good review of questions to ensure that they are appropriate for your testing needs, including that they are not biased and that they meet your diversity goals.

• Compliance with laws

Many jurisdictions are introducing laws in relation to use of AI, and these need to be monitored.

Copyright

Items created using AI may not have copyright protection, and you need to consider any implications of this.

Documenting use of Al

It's good practice to document all use of Al in assessment within your organization, and Author Aide should be included in this.

Efficacy

Does Author Aide improve the efficiency of question and test creation? It's worth considering if you can obtain qualitative or quantitative measures to help evidence this.

Humans in the loop

Ensure that there is genuine human review of items created by Author Aide.

Review

Al technology is changing quickly - put in place a review cycle to review your use of Author Aide and other Al.

• Staff training

You may need to train authors and reviewers in how to address the new item development process with AI.

Supplier contracting and vetting

Ensure that you have appropriate contractual protection within your contracts with suppliers, including Learnosity.

For more information on ethical and responsible AI within assessment, see "Creating Responsible and Ethical AI Policies for Assessment Organizations" published by the ATP in 2024, which had significant input from Learnosity. Available here.

About Learnosity

Learnosity is the global leader in assessment solutions.

Serving over 750 customers and more than 40 million learners, our mission is to advance education and learning worldwide with best-in-class technology.

More at **learnosity.com**

