

Rubric for Evaluating AI Tools: Fundamental Criteria

The rubric is designed to offer insight into the strengths and weaknesses of an AI tool, evaluated against a set of criteria. It does not identify a threshold that an AI tool needs to cross before it should be used. Not all rubric criteria are necessarily applicable to all AI tools. This work builds on and is meant to be used in consort with "Rubric for eLearning Tool Evaluation" by Lauren M. Anstey & Gavan P.L. Watson, copyright 2018:

<https://teaching.uwo.ca/pdf/elearning/Rubric-for-eLearning-Tool-Evaluation.pdf>

Category	Criteria	Works Well	Minor Concerns	Serious Concerns	Not applicable
Functionality	Responsiveness	The AI provides rapid and accurate responses to queries.	Occasional delays or inaccuracies in AI responses.	Slow response times and frequent inaccuracies hindering the learning process.	
	Ease of Use	The AI interface is intuitive, with little to no learning curve for new users.	Some users require assistance to navigate or understand AI functionalities.	Users find the interface confusing, leading to a significant barrier to effective use.	
	Tech Support / Help Availability	Robust support materials specifically for AI, with responsive technical support for AI-related inquiries.	AI support materials are less thorough.	Lack of AI-focused support materials and channels.	
Accessibility	Accessibility standards	The AI tool complies with international accessibility standards and includes features like text-to-speech, alternative text for images, and screen reader compatibility.	The tool has some limited capacity to meet accessibility guidelines.	The tool fails to meet basic accessibility standards, making it difficult or impossible for users with disabilities to utilize it effectively.	
	Cost of Use	The AI tool is free or offers significant value for its cost, with transparent pricing models.	The tool has some cost barriers, but discounts or institutional licenses can reduce expenses.	The high cost of the tool significantly limits its accessibility to a broader user base.	

Technical	Operating Systems & Browsers	The AI tool is compatible with a wide range of operating systems, mobile devices and browsers and does not require extensive resources.	The tool works on most systems but is optimized for certain operating systems / browsers, which could limit some users.	Compatibility is limited to a few operating systems / browsers, excluding users.	
	Additional Downloads	No additional downloads are required to use the AI tool, or any required software is lightweight and easy to install.	Some additional downloads are necessary, but they do not significantly impact the ease of setup or use.	The tool requires multiple or resource-intensive downloads, complicating setup and use, and possibly violating institutional IT policies.	
	Offline Access	The AI tool can function with minimal connectivity or has offline capabilities.	The tool requires a stable internet connection for most functionalities.	Constant, high-speed internet is essential, rendering the tool unusable in low-connectivity environments.	
Privacy, Data Protection, and Rights	Sign Up/ Sign In	The AI tool uses secure authentication methods and offers options for anonymity where appropriate.	The tool requires some personal information for sign-up but has transparent policies on data usage.	The sign-up process lacks secure authentication or unnecessarily requires extensive personal information.	
	User Control Over Data	Users have full control over their data, with options to modify, delete, export, or restrict processing of their data.	Users have some control, but there may be limitations on how they can manage their data within the AI system.	Users have little to no control over their data once it is entered into the AI system.	
Social Presence	Collaboration	The AI tool enhances collaboration through features like group chats, forums, and intelligent matchmaking for study partners or groups based on skills and learning goals.	The tool supports some collaborative functions, but some features may not be as robust or user-friendly as desired.	Collaboration is hindered by the tool, either through lack of supportive features or by creating barriers to effective group work.	

Teaching Presence	Facilitation	The AI tool facilitates meaningful learning experiences, effectively guiding students through the learning process and providing timely support.	The tool aids in facilitation but may require additional instructor intervention for optimal guidance.	The AI tool's facilitation is limited or misaligned with instructional goals, necessitating significant instructor effort to maintain teaching presence.	
Cognitive Presence	Enhancement of Cognitive Tasks	The AI tool actively supports a range of cognitive tasks, enhancing learning efficiency and effectiveness.	The tool provides some cognitive support, but it may not be comprehensive across all task types.	The tool does little to enhance cognitive tasks, possibly hindering cognitive engagement due to poor design or functionality.	
Ethics	Bias and Fairness	The AI tool has been audited for bias, and mechanisms are in place to ensure fairness across diverse user groups.	Efforts to mitigate bias are in place, but occasional issues may arise that require manual correction.	The tool has known biases or has not been audited for bias, potentially perpetuating systemic inequalities.	
	Transparency	The AI provides clear explanations for its outputs, and the decision-making process is well-documented and accessible to users.	Some level of transparency is provided, but it can be challenging for users to understand the full decision-making process.	The decision-making process is opaque, and users have little to no understanding of how or why decisions are made.	

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Environment	Energy Efficiency	The AI tool is designed for high energy efficiency, with optimization to reduce power consumption during both training and inference.	The tool is reasonably energy-efficient but could be improved with further optimization.	The tool requires a significant amount of power with no apparent efforts to improve energy efficiency, leading to high operational costs and environmental impact.	