

WHITEPAPER



AI-Powered Feedback:

Achieve Peak Program Performance
with Video Practice & Assessment Tools



More than four in five companies
plan to adopt education and
workforce development technologies
in the next five years.

—THE FUTURE OF JOBS REPORT 2023,
WORLD ECONOMIC FORUM

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Introduction

Artificial Intelligence, or AI, is transforming the workplace. This disruptive force is changing the way we work across industries and reshaping the future of workplace Learning & Development.

L&D professionals can now leverage AI-powered solutions to augment and expand the vital role feedback plays in their employees' learning journeys. These innovative tools are wielding the power of artificial intelligence to break through and beyond the limitations of traditional feedback methods.

Where written assessments and instructor-led feedback fall short, these smart mechanisms step up to meet the demands of modern learners and organizations. They offer the immediacy, scalability, and personalization sought after in today's fast-paced, technology-driven learning landscape.

While AI feedback tools can address a variety of learning and development needs, this white paper will discuss AI-powered video practice and assessment tools. We'll take a close look at tools that combine the capabilities of artificial intelligence with video-based learning. We'll explore their benefits and provide guidance on how to integrate them into your L&D program to supercharge its performance.

AT A GLANCE

The Power of AI-Powered Video Practice & Assessment Tools

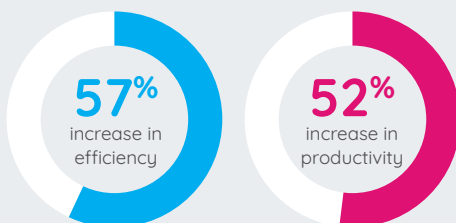
- ① A feedback tool captures how learners perform on video.
- ② Using AI, it analyzes the video performance and provides feedback.
- ③ The tool offers insights beyond traditional assessment methods.



“We’re at the cusp of using AI for probably the biggest positive transformation that education has ever seen.”

—SAL KHAN, FOUNDER & CEO, KHAN ACADEMY

The time to adopt AI technologies is now. Organizations and leaders that tap into the power of AI-driven feedback in their L&D programs will hold a competitive edge with improved program performance and an enhanced culture of learning.



Early adopters of artificial intelligence and virtual reality for their L&D programs have seen a **57% increase in efficiency** and a **52% increase in productivity**.

[Trend Watch 2023: Learning and Development](#), HROToday

Why Feedback is Vital in L&D

Whether in classrooms or boardrooms, feedback is an essential component of continuous learning, propelling learners toward their goals. Feedback surpasses mere evaluation – it’s a tool that reinforces learning, bridges gaps, and fuels growth.

With feedback, learners don’t just practice what they already know, they’re guided to improve where needed. Feedback provides essential insights to acknowledge achievements, address shortcomings, and set goals. Overall, it contributes to more effective learning outcomes by creating an interactive and adaptive learning environment that supports learners’ development and success.



Feedback is one of the most powerful influences on learning and achievement”

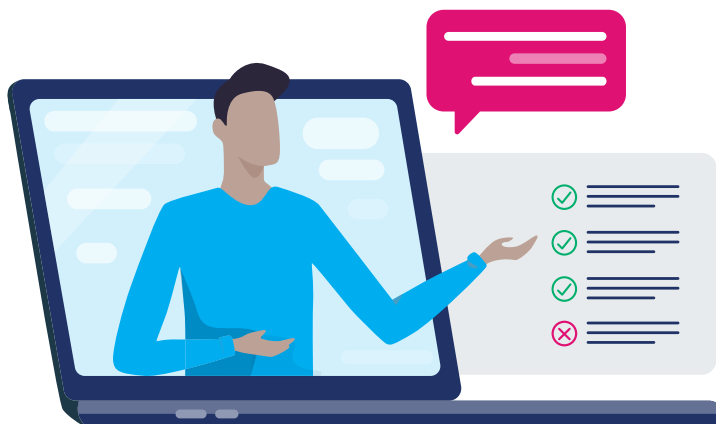
—JOHN HATTIE, [THE POWER OF FEEDBACK](#)

Immediate Feedback

Immediate feedback refers to the prompt and timely information provided to learners right after they complete a task, answer a question, or perform an activity. It’s delivered in real time, allowing learners to make adjustments and learn from their mistakes almost instantly. It transforms learning from a passive experience into an interactive process that accelerates growth and development.

Immediate feedback is:

- ⑤ **Engaging** – it helps learners stay motivated by providing a sense of progress and accomplishment
- ⑤ **Enhancing** – it deepens retention and understanding and enables learners to grasp concepts more effectively by addressing misconceptions or errors right away
- ⑤ **Empowering** – it allows learners to take charge of their learning journey, encouraging self-directed learning and promoting autonomy



“A general rule is that, the sooner the feedback is given, the better it affects the employee’s performance.”

—ELOISE MARTHOURET, [The effect of quick feedback on employee motivation and performance](#)

AI-Powered Feedback

AI-powered feedback involves using artificial intelligence technology to provide learners with timely and personalized insights based on their performance in various learning activities. This innovative approach combines AI algorithms with the learning process to deliver feedback that goes beyond traditional assessments, offering deeper analysis and tailored guidance.

AI-powered feedback is:

- ② **Immediate** – it enhances learner engagement by providing timely information
- ② **Personalized** – it provides specific recommendations for improvement
- ② **Scalable** – it makes it feasible to provide personalized guidance to a large number of learners simultaneously

TRADITIONAL FEEDBACK METHODS VS. AI-POWERED FEEDBACK TOOLS

Traditional Feedback	AI-Powered Feedback
Limited personalization	Highly-personalized
Delayed or infrequent response times	Real-time and immediate
Time-intensive for instructors	Saves time for instructors
Limited scalability	Scalable among an entire workforce
Focus on final assessment	Focus on continuous growth

What Are AI-Powered Video Practice & Assessment Tools?

Imagine having a coach available 24/7 to provide tailored feedback and guidance for each of your learners. That's the essence of AI-driven video feedback.

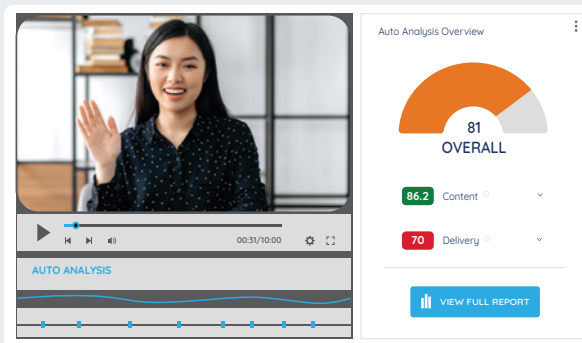
These tech-enabled practice and assessment tools harness the capabilities of artificial intelligence to enhance the learning and skill development process through video-based activities. They combine the power of AI algorithms with the visual and auditory components of videos, offering learners a dynamic and personalized learning experience.



How Do They Work?

AI-POWERED VIDEO PRACTICE

- ⑦ Learners record themselves on video to practice various skills, such as presenting, role-playing, or demonstrating a process.
- ⑦ AI algorithms analyze these videos, assessing factors like tone of voice, speaking rate, content delivery, and more.
- ⑦ Based on the analysis, the AI offers constructive feedback and personalized suggestions for improvement.
- ⑦ This continuous feedback loop allows learners to refine their skills over time, adjusting their approach based on the insights provided by the AI.



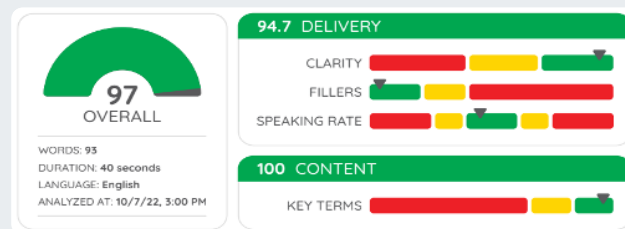
Bongo's AI Coach, powered by generative AI, provides immediate feedback at the learner's pace and creates a safe practice environment.

Learners can confidently engage in repeated practice and get the immediate feedback they need to improve, all on their own time.

AI-POWERED VIDEO ASSESSMENT

- ⑦ Instructors or evaluators use these tools to assess learners' video presentations or performances.
- ⑦ AI algorithms automatically analyze the videos, identifying elements like clarity, engagement, and adherence to specific criteria.
- ⑦ The AI generates data-driven insights and reports, highlighting strengths and areas needing improvement.
- ⑦ This automated assessment process saves time for instructors and provides learners with objective and consistent evaluations.

Driven by AI, **Bongo's Auto Analysis** automates review and assessment efforts and saves time – allowing L&D pros to quickly identify knowledge gaps, key term and key phrase usage, and more – all at scale.



Advantages of Using AI-based Feedback Tools

- ② **Personalized Feedback:** Learners receive tailored feedback based on their specific videos, addressing their unique strengths and areas needing improvement.
- ② **Immediate Insights:** Feedback is provided in real-time, enabling learners to make adjustments while the experience is still fresh in their minds.
- ② **Safe Learning Environment:** Learners can practice without fear of judgment, as the focus is on improvement rather than evaluation.
- ② **Scalability:** AI can evaluate many videos simultaneously, making it feasible to provide feedback to numerous learners efficiently.
- ② **Soft Skills Enhancement:** Through targeted feedback, AI-powered tools help enhance soft skills like communication, empathy, and active listening.
- ② **Data-Driven Insights:** AI-generated reports offer data-backed insights, allowing learners and instructors to track progress and growth.

BONGO'S AI-POWERED FEEDBACK TOOLS

AI COACH is an AI-powered practice and feedback assistant developed to offer around-the-clock feedback and coaching tailored to each unique learner. It's designed to provide tonal analysis and coaching tips for learner videos, creating a safe environment for learners to practice and improve.

AI Coach can:

- ② Accelerate skill development
- ② Provide relevant, personalized feedback, 24/7
- ② Create a safe, judgment-free space for learners to practice
- ② Provide scalable feedback to an unlimited number of learners
- ② Ensure consistent learning experiences for all team members
- ② Automate common areas of feedback to save instructor's time

AUTO ANALYSIS is an AI-driven reporting feature that provides data-driven insight into the quality of a learner's video presentation. It streamlines assessment efforts and saves time – allowing professionals to quickly identify knowledge gaps, key term and key phrase usage, and more – all at scale.

Auto Analysis can:

- ② Promote soft skills development
- ② Enable targeted, streamlined feedback
- ② Encourage repeated practice and self-assessment
- ② Improve scalability of video assessments
- ② Help identify potential problem areas faster
- ② Automate review and assessment of all team members



“Students are given the opportunity to practice and be provided with feedback using the Auto Analysis tool... this tool analyzes clarity, speaking rate, and use of filler words, which can be very, very helpful in automating the feedback that a learner gets when delivering a presentation.”

– HEATHER APPEAL, SERVICENOW

Inside AI Coach

Bongo's AI Coach harnesses the power of advanced AI technology, leveraging the OpenAI GPT-3.5 large-language model and generative AI, to provide users with comprehensive coaching tips and tonal analysis.

Cutting-Edge Algorithms

At the heart of AI Coach lies a sophisticated system of AI algorithms. These algorithms are like sets of intelligent rules that enable computers to perform tasks that traditionally require human intellect. Designed to process data, make informed decisions, and learn from experiences, AI algorithms form the backbone of our AI-powered video practice program.

In action, AI Coach utilizes these algorithms to autonomously assess both the visual and auditory aspects of videos. To extract coaching tips and tonal analysis, Bongo initiates a secure data exchange by sending encrypted video transcript data and Auto Analysis metrics to OpenAI. This intricate process ensures users receive not just feedback, but actionable insights to enhance their skills.

Engineered Prompts for Precise Feedback

The development of AI Coach involved crafting a highly sophisticated set of prompts meticulously tailored to provide learners with relevant and actionable feedback through the Bongo platform. This complex prompt engineering accomplishes several crucial objectives:

- **Consistency Across Learner Videos:** By employing standardized prompts, AI Coach ensures uniform feedback delivery across diverse learner submissions.
- **Skill-Enhancing Feedback:** The prompts are strategically designed to focus on skill development, enabling learners to receive relevant and practical guidance.
- **Transparent Model Behavior:** Through an approach that prompts the AI model to “show its work,” AI Coach offers a transparent view of how feedback is generated, contributing to enhanced accuracy.
- **Synchronous Interaction for Comprehensive Analysis:** AI Coach can efficiently process longer videos, maintaining advanced synchronous interaction capabilities to ensure thorough evaluation.

User-Centric Experience

A distinctive feature of AI Coach is its seamless integration. Users don't need to enter prompts to receive the feedback they require. By meticulously directing the interactions with the OpenAI model, AI Coach guarantees more consistent and targeted outcomes compared to an open-ended approach.

Privacy at the Core

Privacy and data protection are paramount. AI Coach is designed to uphold the confidentiality of personal information. Actual learner videos and user data remain confidential, never transmitted during the process. Additionally, transcripts are not employed for training the AI models, ensuring a secure and privacy-conscious environment for all users.



“The Bongo video system has enhanced our online training by incorporating learning content that can adapt to learners’ level of proficiency based upon the AI learning engine and challenges them to learn more. Using real-world scenarios that can be analyzed before our coach can review allows instant feedback for the learners and additional coaching to keep them on track and excited about the training.”

Personalized Learning Experiences, at Scale

In today's diverse learning landscape, recognizing that each learner possesses a unique array of skills, challenges, and learning needs has transformed the way organizations approach skill development.

The realization that a one-size-fits-all approach falls short in catering to individual growth has led to the emergence of personalized feedback and coaching as fundamental elements in creating impactful learning experiences that resonate deeply and drive substantial progress.

But here's the challenge: How can this personal touch be extended across diverse teams and groups in a way that's scalable, systematic, and efficient? This is where the game-changing potential of AI comes into play.

AI: Your Partner in Personalized Learning

AI technology is reshaping the learning landscape, offering a revolutionary solution to this challenge. By harnessing AI's capabilities, learning and development professionals can seamlessly customize their programs to align with each learner's distinct progress and performance trajectory. AI-powered feedback tools stand as the vanguard of this transformation, enabling the delivery of immediate, specific, and relevant feedback that caters to each learner's unique pace and requirements.

Tailored Learning, Amplified Efficiency

Navigating the intricacies of delivering personalized feedback to larger groups has historically posed significant logistical challenges. This is where AI-powered tools prove invaluable, streamlining the process by providing consistent, targeted feedback to a diverse array of learners. This uniformity ensures everyone has a comparable learning experience, while simultaneously accelerating the skill development journey for every individual.

Furthermore, the integration of AI-powered video practice and assessment tools alleviates the need for instructors to constantly monitor practice sessions. This newfound freedom empowers educators to focus on crafting engaging learning experiences or offering personalized coaching in their areas of expertise, thereby elevating the overall quality of the learning journey.

“By leveraging AI-powered tools, organizations’ L&D teams can develop and implement personalized training programs that are aligned with each employee’s learning pattern and style, resulting in more meaningful trainings.”

—JAGDISH CHUGANI, [How HR Professionals Can Coexist With AI Tools, Forbes](#)

Balancing Automated Feedback and Human Interaction

Achieving the perfect balance between automated feedback and human interaction is key to unlocking the full potential of learning. When both elements are equally integrated into the learning journey – the efficiency and consistency of automated feedback and the personalized touch of human interaction – it remains perfectly balanced.

- ④ Automated feedback offers immediate insights and objective analysis, aiding in rapid skill enhancement.
- ④ Human interaction brings empathy, mentorship, and the ability to address nuanced queries.

Together, automated feedback and human interaction create a learning experience that's both efficient and compassionate – a powerful union that propels learners toward success.



“What I love, love love is that there are 2 levels of feedback the learner gets. There’s an Auto Analysis feature that runs based on her video and gives her a score. So, before I can go in there and give her additional personal feedback, she gets immediate feedback. The cool thing is that, let’s say her score is low. She gets that feedback right away, and what we’re seeing is that people will by choice, record again and upload a better version.”

– BRITT ANDREATTI, BRAIN AWARE TRAINING

Boost Engagement and Performance

Engagement is a driving force that motivates learners to achieve their goals. With AI feedback tools in play, this critical factor gets a boost, fostering an environment where engagement flourishes.

Feedback sparks and sustains learners’ interest, nurturing a sense of continuous achievement at every step of the learning journey. This enhanced engagement creates improved performance outcomes, where learners are not just learning, but excelling.

Research Insights

Feedback serves as a dynamic force that underpins the learning process, bolstering learners’ self-assurance and nurturing their commitment to ongoing improvement.

An extensive body of research lends support to the profound impact of feedback on learners’ confidence and motivation. An analysis of the collective findings of more than 250 feedback studies demonstrates that feedback catalyzes significant improvements in both student learning and satisfaction.

Automatic feedback, a product of AI’s transformative potential, emerges as an invaluable tool in this context. A systematic review of automatic feedback in online learning environments unveiled a resounding finding: 65% of the studies corroborated that automatic feedback leads to noticeable enhancements in student performance. The results are clear: When AI and feedback work together, they create a positive combination that enhances the learning process, making it better and promoting continuous improvement.

Other notable outcomes include:

- ⌚ Results from a comparative study between an experimental group and a control group of students showed that **using a proposed automatic feedback tool improved learning outcomes.**
- ⌚ A study of an e-assessment tool showed the **quality of teaching and learning could be improved by using technology** to increase faculty efficiency and provide students with real-time feedback mechanisms to help them develop a culture of self-monitoring and self-assessment.
- ⌚ Students who participated in the study of an automated assessment management system attested to the **advantages of working with the assessment tool, extolling the virtues of immediate feedback.**

Overall, the transformative potential of immediate, automated feedback is far-reaching. Beyond the enhancement of learners’ self-confidence and self-awareness, it nurtures sustained motivation and enthusiasm for ongoing learning. This process, over time, equips learners with the capabilities to not only achieve their goals but to surpass them, resulting in exceptional performance outcomes.



A study conducted by the Association for Talent Development found that **learners who receive regular feedback show a 39% increase in learning retention.**

RESEARCH STUDY

A Comparison of 3 Assessment Types on Student Engagement and Content Knowledge in Online Instruction

27 learners enrolled in an undergraduate course in adolescence at CSU Fullerton were randomly assigned to three groups and subjected to one of three treatment conditions:

- ④ Independent Reading
- ④ Bongo Video Assignment
- ④ Bongo Video Assignment with Auto Analysis

Analysis of variance (ANOVA) of treatment by topic was computed.

QUANTITATIVE RESULTS



These were the obtained means out of a possible rubric score of 9. For the main effect of Treatment, the mean of Retention for Bongo ($M = 7.5185$, $SD = 1.1887$) was significantly larger than for Independent Reading ($M = 6.2593$, $SD = 1.4031$), $p < .001$. For the main effect of Treatment, the mean of Retention for Auto Analysis ($M = 8.1481$, $SD = 1.2921$) was significantly larger than for IR ($M = 6.2593$, $SD = 1.4031$), $p < .001$. Additional analysis of the data by topic indicated that these differences were also influenced by the complexity of the reading material.

Learners also completed a Q&A survey of Bongo's Auto Analysis.

QUALITATIVE RESULTS

- ④ A tool that **increased engagement, comprehension, and retention**
- ④ Recognition of the **importance of focused reading and reiterative practice** to master content versus skimming over the surface
- ④ Saw **value in the experience of presenting** to instructors and peers, which increased accountability and analysis of material
- ④ Bongo's video assignments enabled the exercise of **teaching and articulating ideas** to solidify student's learning and retention
- ④ Auto Analysis helped **improve presentation skills** that would be essential in future roles

CONCLUSION

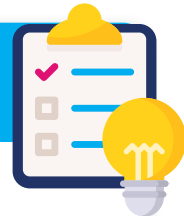
- ④ Learners using Bongo's Video Assignments had **better recall** of new concepts than the learners using Independent Reading and became better academic readers.
- ④ Learners using Bongo with Auto Analysis **retained more information** than learners using either independent reading or Bongo without AA.
- ④ Bongo's Video Assignments empowered a **desire to improve** overall presentation skills.
- ④ Learners saw extreme value in both automated and instructor coaching and feedback providing them **more connection and engagement** in online instruction.

Optimize L&D Programs

Integrating AI-powered feedback into your existing L&D programs is a big step that can greatly boost the impact of what you're already doing and completely change how learning happens in your organization.

To harness the full potential of AI feedback, following are some valuable strategies to keep in mind.

TOP 10 TIPS FOR ENHANCING YOUR L&D PROGRAM WITH AI-POWERED FEEDBACK



- 1 Start with Clarity:** Clearly define your learning objectives and the specific skills you aim to enhance through AI-powered feedback. Understanding your goals will help you align AI feedback with your program's purpose.
- 2 Seamless Integration:** Integrate AI feedback seamlessly into your existing L&D infrastructure. Choose a platform or tool that easily complements your program's workflow and enhances the learner experience.
- 3 Content Customization:** Tailor AI feedback to your content. Make sure the feedback provided aligns with your curriculum, addressing the learning outcomes you've set for your learners.
- 4 Blend Human and AI Expertise:** While AI-powered feedback offers automated insights, remember the value of human expertise. Incorporate AI as a supportive tool for instructors, combining it with personalized human feedback.
- 5 Train and Support Instructors:** Provide training to instructors on effectively utilizing AI feedback. Help them understand how to interpret AI-generated insights and blend them with their own guidance.
- 6 Real-Time Application:** Leverage AI feedback in real time during learning activities. Immediate insights enable learners to adjust and improve on the spot, enhancing their engagement and skill development.
- 7 Continuous Improvement:** AI feedback generates data-rich insights. Continuously analyze this data to identify trends, areas for enhancement, and opportunities for fine-tuning your program's efficacy.
- 8 Personalized Learning Pathways:** Use AI feedback to create personalized learning pathways. Direct learners to resources and activities that address their specific needs and challenges, fostering a more tailored learning experience.
- 9 Feedback Loop with Learners:** Encourage learners to reflect on their AI-generated feedback and set personal improvement goals. This reflective process empowers learners to take an active role in their development.
- 10 Adapt and Evolve:** Stay open to refining your AI feedback strategy based on learner responses and evolving technology. Flexibility is key to optimizing the benefits of AI in your L&D programs.

Maximizing the potential of AI feedback involves a balanced integration of technology and human expertise. By aligning AI-powered feedback with your program's goals and leveraging its capabilities to enhance engagement and personalization, you'll pave the way for a more effective and impactful learning experience.

CASE STUDY

Going Beyond Multiple Choice with AI-Powered Video Assessment

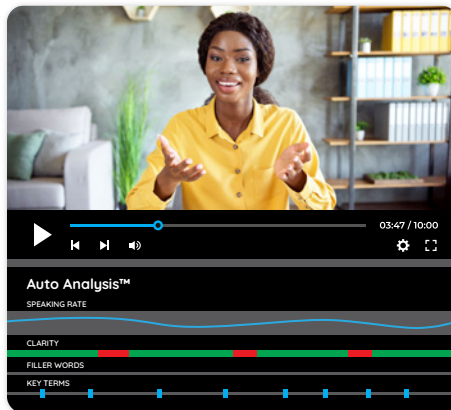
SITUATION

A leading digital accessibility solutions provider aimed to upgrade its certification process for Go to Market teams. The goal was to seamlessly shift from traditional assessment methods to a dynamic AI-driven feedback solution that leverages video assessment for certification.

SOLUTION

The organization partnered with Bongo Learn to elevate its certification process. By utilizing Bongo's versatile Question & Answer workflow, the company efficiently transformed its conventional multiple choice quizzes into engaging video-based assessments. This allowed learners to respond directly within the Bongo platform, fostering an interactive experience.

Moreover, to scale grading, the company harnessed the power of Bongo's AI-driven feedback tool, Auto Analysis. By specifying essential terms or phrases learners need to articulate, the tool ensures a comprehensive understanding and practical application of the product.



Bongo captures video evidence of proficiency to showcase a learner's authentic abilities.

RESULTS

As learners worked through the video assignments, the general feedback received was that they realized how much information they had forgotten from their initial training. The learners spent more time looking through old training materials ensuring they were properly prepared before completing the video assignments. The engagement was much higher and overall retention of the material was significant for the GTM teams.

Navigating Common Challenges

While AI-powered feedback and assessment tools offer a wealth of benefits to L&D programs, their implementation is not without challenges. Addressing these is crucial to ensure the ethical, effective, and secure use of AI in learning and development settings.

Here are some common challenges and strategies to overcome them:

- **Bias and Fairness:** AI algorithms can sometimes unintentionally reinforce biases that exist in the training data, leading to unfair assessment outcomes. Utilizing a variety of AI technologies to achieve the desired outcome can reduce the impact of potential bias in any one technology. Implement transparency measures that allow for the examination of AI decision-making processes.
- **Ethical Considerations:** Ensure the use of AI aligns with ethical guidelines and respect for learners' rights. Create clear guidelines for the ethical use of AI feedback, ensuring that it enhances learning rather than infringing on privacy or autonomy.
- **Data Privacy & Security:** Collecting and storing learner data is essential for AI assessment tools, but it also raises privacy concerns. Adhere to data protection regulations and obtain informed consent from learners to collect and use their data. Implement robust security measures to safeguard sensitive information and ensure data is used only for its intended purpose.
- **Transparency:** Learners should understand how AI-powered feedback tools work and how their data is used. Provide clear communication about the role of AI in assessments and the benefits it offers. Transparency fosters trust and encourages learners to actively engage with the feedback provided.
- **Resistance to Change:** Introducing AI in L&D programs can encounter resistance from learners, instructors, and business leaders. Provide comprehensive training and support to educators to help them adapt to the new technology. Showcase the benefits of AI-powered tools to learners and leaders, emphasizing how they enhance learning outcomes.

By proactively addressing these challenges, organizations can harness the power of AI-powered feedback tools while fostering a responsible and learner-centric approach. A thoughtful and well-executed strategy will ensure AI enhances the learning experience, promotes growth, and meets the highest ethical and security standards.



Conclusion

Unleash the Power of AI-Driven Feedback Tools

Learning and development is undergoing a profound transformation fueled by the power of artificial intelligence. AI feedback, with its immediate insights and personalized guidance, has emerged as a game-changer, elevating the impact of L&D programs to new heights. Through this whitepaper, we've explored the landscape of AI-powered video practice and assessment tools, and their potential to revolutionize the learning experience.

Transforming the Learning Landscape

AI-based feedback offers a range of benefits that redefine how employees learn and grow. It's engaging, enhancing, and empowering. By delivering tailored insights in real time, AI feedback keeps learners engaged and motivated. It enhances understanding and addresses misconceptions on the spot, fostering effective learning. Moreover, it empowers learners to take charge of their learning journey, promoting autonomy and self-directed growth.

A New Set of Tools

AI-powered video practice and assessment tools bridge the gap between traditional feedback methods and the demands of modern learners, enabling scalable, immediate, and personalized insights. From practice to immediate feedback, these tools harness the capabilities of AI to refine skills, boost engagement, and drive performance.

Optimizing Program Performance

As L&D professionals, the opportunity to harness the potential of AI-powered feedback is within reach. By exploring and implementing AI-driven solutions, you have the chance to transform your programs into dynamic, efficient, and engaging experiences.

Embrace the capabilities of AI-powered video practice and assessment tools to create learning environments that truly resonate with modern learners. By adopting AI feedback methods, you empower your organization to achieve peak program performance, fostering a culture of continuous learning and growth.

Are you ready to achieve peak program performance with AI-powered video practice and assessment tools?



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