

# Using Generative AI to Create Authentic Learning Experiences

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## 1. Executive Summary

This piece of research has begun to look at the area of authentic learning and how it can be facilitated using Generative AI (GenAI) tools. There are other elements of an authentic learning experience, such as authentic assessment, that will be researched in one of our other GenAI research streams.

This report outlines many of the key elements of an authentic learning experience; providing real-world context and activities, the use of experiential learning approaches, incorporating timely and effective feedback techniques, encouraging reflection on the learning experience and process, personalised learning, and learner perception of authentic learning.

We have outlined what is involved in each of these elements of authentic learning from a research standpoint and from the practicalities of implementing them, while also using the GenAI tool ChatGPT to provide us with some use cases in relation to each of these elements. For now, we are speculating that while GenAI can certainly help to facilitate a number of the elements of an authentic learning experience, once provided with detailed and precise information, where it is currently lacking is in pulling all of these elements together into one holistic learning experience. The research and tool tested demonstrates that the learner is required to provide accurate and contextual information in order to receive guidance, thus relying on the learner's understanding of their own experience and judgement.

The areas of trust and ethics need to be investigated further in the context of learning, with a reluctance by many educational institutions, organisations, and government agencies to use GenAI for educational purposes.

However, the research into GenAI for learning is in its relative infancy, and this report is merely a starting point to look at what GenAI may do for learning now and into the future. More research is required into how GenAI can facilitate authentic learning experiences, and as part of Learnovate's research in this space, we will continue to test and evaluate current and emerging tools to identify how and why they can help to facilitate authentic and effective learning in both formal education and corporate learning contexts.

## 2. A note from ChatGPT

As a starting point to this research, we asked ChatGPT (version 3.5): "How can I use ChatGPT to create an authentic learning experience?". ChatGPT provided the following response:

"Using ChatGPT to create an authentic learning experience can be an engaging and effective way to enhance your understanding of various topics. Here's how you can go about it:

1. **Ask Open-Ended Questions:** Rather than asking simple yes or no questions, try to ask open-ended questions that require detailed explanations. This encourages ChatGPT to provide more elaborate responses, which can deepen your understanding of the topic.
2. **Seek Clarifications:** If you don't understand something in ChatGPT's response, don't hesitate to ask for clarification. This mimics a real learning environment where you would ask your teacher or peers to explain concepts further.
3. **Provide Context:** When asking questions, provide context to help ChatGPT understand the specific aspect of the topic you're interested in learning about. For example, instead of asking, "Tell me about World War II," you could ask, "What were the main causes of World War II in Europe?"
4. **Engage in Dialogue:** Treat your interactions with ChatGPT as a dialogue rather than just a Q&A session. Share your thoughts, opinions, and insights on the topic, and ask follow-up questions based on ChatGPT's responses.
5. **Use Different Perspectives:** Experiment with asking ChatGPT to explain concepts from different perspectives or in different contexts. This can help you gain a more well-rounded understanding of the topic.
6. **Explore Various Topics:** ChatGPT has knowledge on a wide range of topics, so don't be afraid to explore different subjects that interest you. Whether it's history, science, literature, or anything else, ChatGPT can help you learn more about it.
7. **Evaluate Information:** Just like in real learning situations, critically evaluate the information provided by ChatGPT. Cross-reference it with other sources, fact-check when necessary, and consider different viewpoints.

8. **Set Learning Goals:** Define specific learning goals or objectives for your interactions with ChatGPT. This could be mastering a certain concept, understanding a historical event in depth, or exploring a new field of study.
9. **Keep Track of Progress:** Keep track of what you've learned from your interactions with ChatGPT. You could take notes, summarize key points, or even create flashcards to review later.
10. **Supplement with Additional Resources:** While ChatGPT can provide valuable insights and explanations, it's also beneficial to supplement your learning with additional resources such as textbooks, articles, videos, or online courses.

By following these tips, you can leverage ChatGPT to create an authentic learning experience that is engaging, interactive, and tailored to your interests and learning goals.”

It can be seen from the information provided by ChatGPT that the information is relevant and useful; however, it would need to be checked to ensure its accuracy and authenticity. It is useful as a starting point as we delve a little deeper in what we mean by ‘authentic learning’.

### 3. Introduction

#### 3.1 What is an 'authentic' learning experience?

Chabeli, Nolte, & Ndawo (2021) define authentic learning as 'a learner-centred approach in which learners co-construct their own knowledge by engaging in and addressing real life problems that demand the use of higher order thinking skills, real world resources and tools while thinking and acting like experts'. Nachtigall et al. (2022) define authentic learning as 'a pedagogical approach that situates learning tasks in the context of future use' while Donovan, Bransford, & Pellegrino (1999), define authentic learning as 'a pedagogical approach that allows students to explore, discuss, and meaningfully construct concepts and relationships in contexts that involve real-world problems and projects that are relevant to the learner.

In all of the definitions above, the focus is on presenting learners with real-world tasks and scenarios where they can apply their learning through tasks such as discussion and problem-solving.

Delving a little deeper into the theory behind authentic learning, the concept of 'situated learning' is important to consider, where learning is supported by being situated in an environment that aligns learning objectives with real-world tasks, content, and context (Roach, Tilley, & Mitchell, 2018). The authors in this case refer to the paradigm shift from behaviourist to constructivist models of learning as 'a primary factor in stimulating a move to the design of real-world, complex, student-generated situated learning experiences'.

This means that learners constructing their own concepts and relationships, as well as co-constructing their own knowledge, has led to this shift towards 'authentic learning'.

The difference being that constructivism allows learners to discover or construct their own learning, whereas behaviourism relies on external stimuli and repetition.

### 3.2 Creating real-world context

Lombardi & Oblinger (2007) refer to 'learning by doing' as the most effective way to learn, noting that 'technologies now make it possible to offer students authentic learning experiences ranging from experimentation to real-world problem solving'.

Providing simulations and the ability for learners to generate their own content and context can help to facilitate experiential learning with learners having a sense of autonomy over their learning experience.

The availability and accessibility of GenAI tools can certainly help to facilitate these authentic learning experiences, however more sophisticated versions of these tools may not necessarily be available equally due the cost and complexity of developing and accessing them. It is also worth noting that even without technology, creating authentic learning experiences has always been challenging due to the complexity of development of tasks and activities, the time required to design and develop this content, and often the cost involved.

While it is important to create real-world context to generate an authentic learning experience, there are other elements that can be considered.

For example, Herrington, J., & Oliver, R. (2000) identified nine characteristics of situated learning environments which led to Reeves, Herrington, & Oliver, R. (2002) specifying ten characteristics of authentic activities. They:

- have real-world relevance.
- are ill-defined, requiring students to define the tasks and sub-tasks needed to complete the activity.
- comprise complex tasks to be investigated by students over a sustained period of time.
- provide the opportunity for students to examine the task from different perspectives, using a variety of resources.
- provide the opportunity to collaborate.
- provide the opportunity to reflect and involve students' beliefs and values.
- can be integrated and applied across different subject areas and lead beyond domain-specific outcomes.
- are seamlessly integrated with assessment.
- create polished products valuable in their own right rather than as preparation for something else.
- allow competing solutions and diversity of outcome.

Experimental research on whether these characteristics can be supported through generative AI is only beginning to emerge. Salinas-Navarro et al. (2024) for example have started to explore how Generative AI tools can be leveraged as *'agents-to-teach-and-learn-with'*, *'agents-to-asses-with'*, and *'agents-to-learn-with'*, emphasizing the transformative role of GenAI tools in enhancing teaching and learning efficacy and effectiveness.

### 3.3 Reflection

The points above show that reflection is an important element of an authentic learning experience, something that was arguably first identified by Kolb's (1984) experiential learning model, in which it is noted that 'reflection is the key for learners to transform concrete experience into abstract concepts' (Chang, 2019, p. 95).

To further expand on the importance of reflection in an effective learning experience, Costa and Kallick (2008) identify the following elements related to reflection for learning:

- reflecting on work enhances its meaning
- reflecting on experiences encourages insight and complex learning
- we foster our own growth when we control our learning (autonomy) so some reflection is best done alone, however, reflection can also be enhanced when we ponder learning with others
- reflection involves linking a current experience to previous learnings (a process called scaffolding)
- reflection also involves drawing forth cognitive and emotional information from several sources: visual, auditory, kinesthetic, and tactile.

Allowing learners to reflect on their learning experience provides them with the opportunity to apply what they have learned in their own context and experience, with regular reflection opportunities helping to cement the learning and make it more effective over time.

### 3.4 Feedback

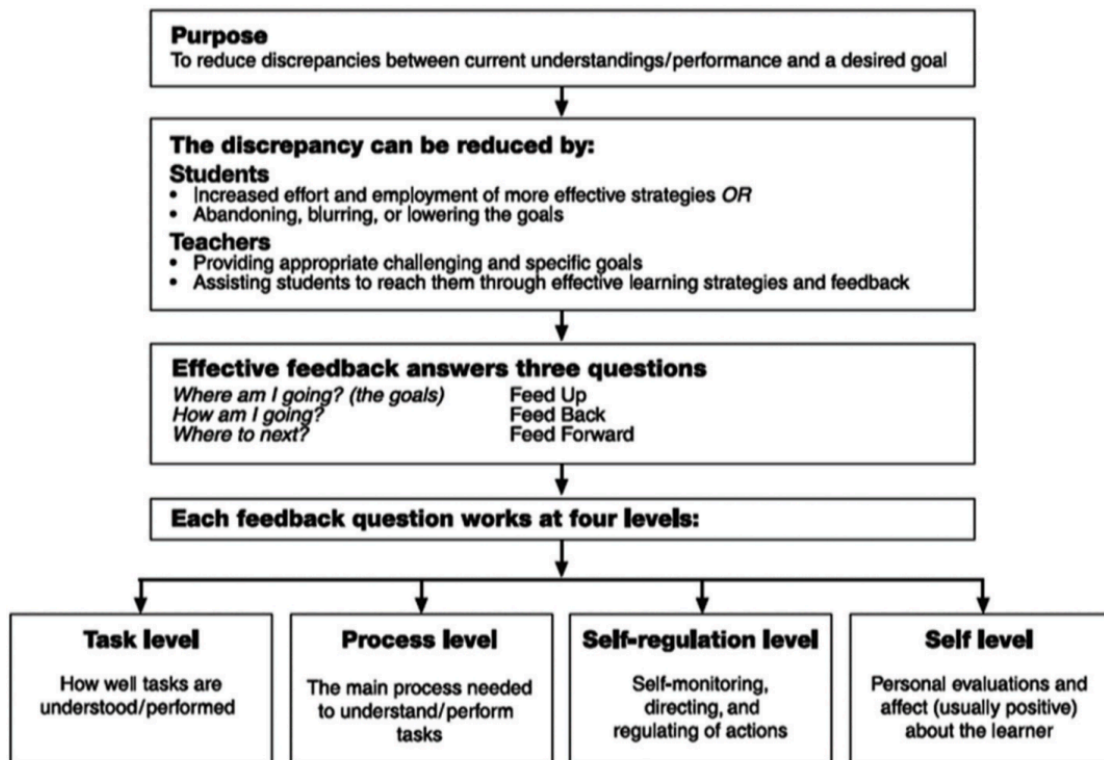
As well as opportunities for reflection, feedback is an extremely important element of an authentic learning experience, with numerous studies and meta-analyses over the years having examined the impact of feedback on learning and identifying it as one of the most



effective influences on learner achievement (Roman et al., (2020); Hattie & Gan (2011); Hattie & Yates (2014)).

Hattie & Timperley (2007) defined feedback as ‘information provided by an agent... regarding aspects of one’s performance or understanding’ (p. 81). This is an interesting definition in relation to this report as ‘agent’ can be interpreted as a human teacher or tutor, or a tech agent such as a conversational AI chatbot or GenAI.

Hattie and Timperley’s 2007 feedback model is one of the most well-known and implemented models of feedback in the world of learning (Figure 1) which identifies four levels at which feedback can be delivered to learners from the Task level (how well tasks are understood/performed) to the Self level (self-evaluation).



*Fig. 1. A model of feedback to enhance learning (Hattie & Timperley, 2007, p. 88).*

More recently, Mandouit and Hattie (2023) have revisited Hattie and Timperley’s 2007 work and have found that if students are to interact with and use feedback, it must be ‘heard, be understandable, and actionable’ and that ‘feedback primarily oriented around correcting or commenting on past performance without a future focus may be seen by students to be of

little educative value' (p. 8). In this case, the authors found, based on reviews of others' work in the feedback space, that feedback models need to include student perspectives, with opportunities for students to apply feedback in subsequent learning tasks.

Dawson, Carless, & Lee (2021) propose a framework for authentic feedback with five dimensions; realism, cognitive challenge, affective challenge, evaluative judgement, and enactment of feedback, stating that 'authenticity is a further significant feature of feedback designs' (p. 295). This framework contains some of the fundamentals of authentic learning as outlined in this report, such as realism and real-world challenges, and could be incorporated into a more holistic, authentic learning experience that is constructively aligned with authentic assessment.

A final point to note in relation to feedback is that in most cases, it should be timely. For example, Barboza & da Silva (2016) found that 'the degree of perception of interactivity by the students lessens as the time to feedback increases', with students identifying that that for feedback to be effective, it must be returned quickly so that it can be acted on within the context of their learning (Denton et al., 2008; Mulliner & Tucker, 2017).

Using GenAI to provide timely and accurate feedback to learners could be one of the 'quicker wins' when it comes to the utilisation of GenAI for authentic learning.

### **3.5 Personalisation**

Barab et al. (2000) suggest that authenticity can neither be pre-planned, nor pre-authenticated by teachers or educators but rather, in true constructivist fashion, the students must find their own authentic learning answers. This brings us to the topic of personalisation for authentic learning.

Personalisation is defined by Patrick et al. (2013) as 'tailoring learning for each student's strengths, needs and interests – including enabling students' voices and choices in what, how, when and where they learn – to provide flexibility and supports to ensure mastery of the highest standards possible' (p. 3) with Iucu & Marin (2014) stating that authentic learning experiences 'are those that are personally relevant from the learner's perspective' (p. 410). Personalised learning benefits students by taking their personal differences and needs into consideration in terms of instruction, assignments, and assessments (Li & Wong, 2021).

More broadly this brings into the conversation elements of Differentiation and Individualisation (Bray & McClaskey, 2012). Bray & McClaskey argue that true personalized learning can only be achieved in an environment where the learner plays an active role in their learning and co-designs their learning experiences. This is different from individualization, where the learning is designed by an educator for a specific learner, or differentiation, where the educator designs multiple learning experiences on the same subject suited to different needs of the learners. Universal Design for Learning (UDL) guidelines could be leveraged to understand the individual learning needs of a learner so that meaningful learning experiences could be developed for each learner.

ChatGPT (and GenAI in general) can be used to create adaptive learning systems that adjust their teaching methods based on a student's progress and performance, ultimately providing more support for learners (Baidoo-Anu & Ansah, 2023). However, there is still work to be done on how this can be achieved, particularly with the emerging technologies.

It is worth noting that while ChatGPT and other GenAI are relatively recent developments, they represent an evolution of adaptive learning and we can investigate how to leverage many of the concepts and architectures that have been developed such as Adaptive Hypermedia (AH) (Brusilovsky, 1998; Knutov, De Bra, & Pechenizkiy, 2009) which offer personalised content, presentation, and navigation support. AH builds a model of the individual user and applies it for adaptation to that user, such as adapting to the user's knowledge and goals, upon which GenAI has been developed.

Providing a personalised learning experience or “learning path”<sup>1</sup> that adapts to the learner’s needs in an authentic context or scenario helps learners to feel part of the learning experience and that the learning has been tailored to them, which helps with motivation, engagement, and in putting the learner at the centre of their learning experience.

Personalised learning paths could be created both through content curation or content creation (using Generative AI).

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<sup>1</sup> While the terms ‘learning path’ and ‘learning plan’ are used somewhat interchangeably in the computer science literature relating to adaptive or personalised learning, we note that in an educational context a ‘plan’ can have a much more specific meaning

### 3.6 Perception

An interesting point about authentic learning, which echoes the research on immersive learning, is that the data suggests what really matters is *cognitive* realism and not *physical* realism (Roach, Tilley, & Mitchell, 2018). This means that if the learner *perceives* the experience as authentic then the experience is effectively authentic from the learner's perspective. This is an area that we propose for further research as we investigate further the affordances of tools and technologies such as GenAI to provide this level of cognitive realism.

According to Lombardi & Oblinger (2007), authentic learning may be more important than ever in this rapidly changing world, where, as they state 'the half-life of information is short and individuals can expect to progress through multiple careers' (p. 10). They argue people need to develop career-transcending skills to differentiate themselves, and authentic learning experiences, that address the ill-defined real-life problems we face, are best suited to develop these skills.

While there are other elements that may be considered as part of an authentic learning experience such as collaboration and participation in Communities of Practice (CoPs) or Virtual Communities of Practice (vCOPs), for the purpose of this piece of research we will consider the elements identified thus far, namely real-world context, reflection, feedback, personalisation, and perception, and how GenAI could help support and facilitate this experience.

Similarly, while authentic assessment forms a vital part of an authentic learning experience, this area will be addressed through another of our GenAI workstream reports, as well as the concepts of coaching and personalised learning plans.

### 3.7 Making the case for authentic learning

We have outlined above how authentic learning can facilitate more effective and 'deeper' learning experiences using real-world scenarios and context, helping with learner motivation and engagement, there are other outcomes that may be considered.

This article<sup>2</sup> in eLearning Industry notes that ‘students who focus on the learning process are more likely to succeed’, increasing motivation and retention, as well as building 21<sup>st</sup> century skills such as problem-solving and communication.

Olufunke et al. (2022) state that ‘authentic-based learning environments aid students in developing appropriate and effective understanding’ with Lock and Duggleby (2017) going further to state that ‘it has become essential for learning activities to be authentic and interactive in order to achieve learning outcomes to improve students’ academic performance’.

It provides a deep, more lasting experience and ideally assessed through generic attributes that are related to individual learners’ intrinsic characteristics, spanning throughout the life’ with industry echoing the importance of authentic learning by stating ‘authentic learning fosters intrinsic motivation, which is to say behavior driven by internal rewards, because the nature of the work itself is satisfying’.<sup>3</sup>

Facilitating this type of learning experience helps to make the learning more ‘sticky’, meaning that the experience is more likely to succeed in its learning outcomes, which benefits not just the learner, but the business, in the case of corporate learning, or the institution, in the context of formal education.

While we have outlined how an authentic learning experience can facilitate deeper, more active learning that is more long-lasting by helping the learner to acquire skills and knowledge in the context in which they are being used, it can also help with learner motivation and engagement as well as providing a more active, experiential learning experience. In this context, we need to investigate how GenAI can help to facilitate these types of learning experiences.

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<sup>2</sup> <https://elearningindustry.com/authentic-learning-model-creating-meaningful-learning-experiences>

<sup>3</sup>

<https://www.turnitin.com/blog/authentic-learning-what-is-it-and-why-is-it-important-subtitle-essential-s-series#>

#### 4. GenAI for Authentic Learning

We have identified some of the key elements of an authentic learning experience, and will now investigate how GenAI can facilitate and/or support some of these approaches in order to create an authentic learning experience for learners.

The benefits of AI in education originates from three fundamental factors: that it can firstly increase capacity and productivity of educators, secondly that it provides valuable observations to enhance teaching and learning, and support learners' well-rounded development and lastly AI in Education can deliver autonomous learning (The Institute for Ethical AI in Education (2020); Connolly et al. (2022)).

While the potential applications of GenAI in education technology are only starting to be explored, research is already suggesting that it can be used effectively to 'provide information and customized learning plans, generate feedback, and offer complementary learning resources to students at any time' (Salinas-Navarro et al., 2024, p. 2). The authors go on to state that '...alternative to using GenAI in education, beyond exams and assignment writing, is building supportive and engaging learning environments that complement traditional pedagogical methods' with GenAI tools that 'can support teachers (or academics) as agents-to-think-with through a constructionist view, fostering more interactive and engaging learning experiences and promoting more profound understanding, critical thinking, and hands on activities in students' fields' (p. 3).

This study sheds light on the interplay between GenAI tools and experiential learning for authentic assessment, a topic which will be further explored in one of our other research strands.

GenAI tools can support teachers (or academics) to think through a constructionist view, 'fostering more interactive and engaging learning experiences and promoting more profound understanding, critical thinking, and hands-on activities in students' fields' (Santos, 2023, p. 1). As noted previously, constructivism allows learners to discover or construct their own learning, which can be an incredibly motivating and effective experience for learners.

While many of these studies focus on the formal education context, it is worth noting that these concepts can be applied to the corporate learning context with L&D being supported in a similar way by GenAI tools in the design, development, and delivery of learning content.

While we have investigated the benefits of GenAI for authentic learning, it cannot be stressed enough how important it is at this point to use GenAI effectively, 'ensuring that precise questions are asked to prevent GenAI hallucinations and the generation of fake content' (Salinas-Navarro et al., 2024, p. 21). The authors go on to state that 'ethical implications and risks associated with GenAI tools should be carefully considered, and human agency and learning needs should always take precedence' (p. 2).

As GenAI becomes more sophisticated and even more prevalent in an educational context, 'students will need to develop the necessary cognitive skillsets to evaluate the information that gen-AI provides and transcend it by being better critical and creative thinkers' (Lang, 2024, p. 16).

To build the use cases in this report, we leveraged ChatGPT (version 3.5) as a starting point. There are many GenAI tools available such as Gemini (Google), CoPilot (Microsoft), and Claude (Anthropic) to name a few of the larger open generative AI platforms. However, for the purpose of this report we used one tool in order to identify how the technology can support the elements of an authentic learning experience, with a plan to test more of the available tools as we continue to identify questions, challenges, topics of interest, and areas for further research.

#### **4.1 Learner Context**

In looking at providing context to a learning situation, we asked ChatGPT the same question based on two separate learner scenarios, one where the learner is a first year college student and the second where the student was engaging in PhD. studies (Appendix Use Case 1). GenAI allows learners to set their own context while posing a question or set of questions which can help to set personalised context and more accurate information based on the learner's situation.

#### **4.2 Experiential Learning**

In order to develop problem-solving ability and to promote experiential learning, we set the context of a learner engaging in executive coaching learning, and asked ChatGPT for real-world activities that the learner could practice in order to improve their knowledge and

practice. In this case, the GenAI tool provided a list of potential activities that the learner could engage in to practice what they are learning in a real-world context (Appendix Use Case 2). The tool suggested activities such as peer coaching and role-playing in order to 'learn-by-doing' which is an important element of an authentic learning experience.

### 4.3 Feedback

Where a teacher or tutor may not be available to provide timely feedback to a learner, GenAI may be able to provide learners with feedback on a particular task, or in the case of this report, feedback on a section of this written report (Appendix Use Case 3).

While this may be useful, this type of feedback may not be entirely accurate as the tool is simply reacting to a piece of text that is presented to it, and will not understand particular nuances of the feedback such as the context of the bigger picture of the piece being written, or how to provide feedback on the process rather than the finished product.

This article<sup>4</sup> outlines how AI can use machine learning (ML) and data analytics to analyse learners' responses, performance, and progress.

For our use case, we provided ChatGPT with the below text from this report:

*Barab et al. (2000) suggest that authenticity can neither be pre-planned, nor pre-authenticated by teachers or educators but rather, in true constructivist fashion, the students must find their own authentic learning answers. This brings us to the topic of personalisation for authentic learning.*

*Personalisation is defined by Patrick et al. (2013) as 'tailoring learning for each student's strengths, needs and interests – including enabling students' voices and choices in what, how, when and where they learn – to provide flexibility and supports to ensure mastery of the highest standards possible' (p. 3) with Iucu & Marin (2014) stating that authentic learning experiences 'are those that are personally relevant from the learner's perspective'.*

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<sup>4</sup> <https://www.linkedin.com/advice/0/how-can-ai-enhance-authenticity-assessment-xo20e>



*Personalised learning benefits students by taking their personal differences and needs into consideration in terms of instruction, assignments, and assessments (Li & Wong, 2021).*

*ChatGPT (and GenAI in general) can be used to create adaptive learning systems that adjust their teaching methods based on a student's progress and performance, ultimately providing more support for learners (Baidoo-Anu & Ansah, 2023).*

*It is worth noting that while ChatGPT and other GenAI are relatively recent developments, they represent an evolution of adaptive learning and we can investigate how to leverage many of the concepts and architectures that they developed such as Adaptive Hypermedia (AH) (Brusilovsky, 1998) (Knutov, De Bra, & Pechenizkiy, 2009) which offer personalised content, presentation, and navigation support. AH builds a model of the individual user and applies it for adaptation to that user, such as adapting to the user's knowledge and goals, upon which GenAI has been developed.*

We then asked ChatGPT: Can you give me some feedback on this piece of work?

What can I do to make it more relevant to a broader audience?

Is there anything missing?

As can be seen from Appendix Use Case 3, the tool provided some useful feedback, and being more specific about what the user wants to gain from the feedback can help with its accuracy. It is important to provide the GenAI tool with detailed and specific information about our context, frame of reference and feedback objectives to ensure the most relevant and accurate response.

It may be worth considering whether learners may be more open to feedback from an objective source such as a GenAI tool than from a teacher or tutor where often the feedback can feel more personal; something perhaps worthy of further research. Also, the issue of trust in relation to using a GenAI tool as a coach or mentor in a learning context is something to be investigated further in our research strand on coaching using GenAI.

#### **4.4 Reflection**

As can be seen from Appendix Use Case 4, the tool provided some reflective questions in response to being asked about workplace ethics and to provide some questions to use to reflect on the learning. While these questions were useful, we expanded on this reflection by

asking the tool to provide us with some best practices on how to reflect on this type of learning.

In this case, ChatGPT provided us with helpful tools for reflection such as journaling and coaching which, while helpful, are not necessarily specific to the context of workplace ethics. We will explore the possibilities and potential for generative AI coaching in more detail in a later research report to specifically explore this functionality.

#### **4.5 Personalisation**

While one of our other research streams will investigate in more detail the use of personalised learning paths through GenAI, for the purpose of this research we provided ChatGPT with the context of the learner, a tool they are already familiar with (Articulate Storyline for eLearning content creation) and asked the tool for a personalised learning plan to help with understanding how GenAI can help the user to develop their knowledge and understanding of using AI tools to design and develop learning content.

Rather than a personalised learning plan, the tool merely provided a list of high-level and generic suggestions on how to learn more about AI tools and how these can be leveraged to design and develop learning content. While Articulate Storyline tool is mentioned in the response, it does not provide sufficient detail to constitute a detailed learning plan. Further and more specific prompting to elaborate on these generic results might improve the output.

#### **4.6 Perception**

While perception is an important element of an authentic learning experience, with learners perceiving the experience as being authentic an important element to consider, this particular area will be investigated further as we investigate further the area of coaching for learning using GenAI.

It is worth noting, however, that the prompts that a user provides to a GenAI tool are key to the accuracy of the information received and perhaps to the authenticity of the experience from the user's perspective, something that may require further research.

#### **4.7 Conclusion**

We have outlined some of the key elements of an authentic learning experience and how GenAI tools such as ChatGPT can be used to support these elements, however, there is still much work to be done in this space. We will continue our research into the various GenAI tools as they become available and the insights from the emerging research into how these tools can help to provide a more holistic approach to an authentic learning experience.

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## 6. Appendix

### Use Case 1a: Learner Context



**You**

I am a first year student in college studying history. Can you tell me what I need to know about the French Revolution?

**ChatGPT**

**ChatGPT**

Certainly! The French Revolution was a pivotal period in French and world history, spanning from 1789 to 1799. It was a period of radical social and political upheaval in France that profoundly impacted not only French society but also had far-reaching consequences for Europe and the world. Here's a concise overview of the key points you should know:

#### 1. Causes of the French Revolution:

- **Social Inequality:** The French society was divided into three estates, with the clergy and nobility enjoying privileges while the common people, the Third Estate, faced heavy taxation and oppression.
- **Economic Crisis:** France faced severe financial difficulties due to years of war, extravagant spending by the monarchy, and a regressive tax system.
- **Enlightenment Ideas:** The ideas of liberty, equality, and fraternity propagated by Enlightenment philosophers such as Rousseau and Voltaire inspired people to question the authority of the monarchy and demand political change.

#### 2. Key Events:

- **Estates-General:** In 1789, King Louis XVI called a meeting of the Estates-General to address the financial crisis. This eventually led to the Third Estate declaring themselves the National Assembly, signaling the beginning of the Revolution.
- **Storming of the Bastille:** On July 14, 1789, Parisian revolutionaries stormed the Bastille, a symbol of royal tyranny, leading to widespread revolt across France.
- **Declaration of the Rights of Man and of the Citizen:** Adopted in August 1789, this document proclaimed the principles of equality, liberty, and fraternity as the basis of the new French government.
- **Reign of Terror:** During 1793-1794, the radical phase of the revolution led by Robespierre saw mass executions of perceived enemies of the revolution, including King Louis XVI and many others.
- **Rise of Napoleon Bonaparte:** The instability of the revolutionary period paved the way for Napoleon Bonaparte to seize power. He eventually crowned himself Emperor of France in 1804.

#### 3. Impact:

- **End of Monarchy:** The French Revolution resulted in the overthrow of the absolute monarchy and the establishment of a republic.
- **Spread of Revolutionary Ideas:** The ideals of the French Revolution, such as democracy and nationalism, inspired revolutionary movements across Europe and the world.

- **Reign of Terror:** The excesses of the Reign of Terror and the radical phase of the revolution led to debates about the balance between liberty and order in revolutionary movements.
- **Legacy:** The French Revolution left a lasting legacy in modern political thought, shaping concepts of citizenship, rights, and democracy.

#### 4. **Historiography:**

- The French Revolution has been interpreted and reinterpreted by historians over the years, with different schools of thought emphasizing various aspects such as social, political, or economic factors.

Understanding these key points will provide you with a solid foundation for studying the French Revolution in greater depth. It's a complex and fascinating period of history that continues to influence political and social movements around the world.



## Use Case 1b: Learner Context



I am a PhD. student in history. Can you tell me what I need to know about the French Revolution?

ChatGPT

ChatGPT

As a PhD student in history, you'll be delving into the French Revolution in far more detail than at the undergraduate level. Here's a more comprehensive guide to what you should know:

### 1. Historiography and Interpretations:

- Familiarize yourself with the major schools of thought in French Revolutionary historiography, including Marxist, revisionist, social, cultural, and political history perspectives.
- Understand the evolution of interpretations over time, from early romantic views to more nuanced analyses focusing on social structures, economic factors, and cultural dynamics.

### 2. Causes and Preconditions:

- Go beyond the traditional narrative of political grievances and explore the deeper socio-economic factors that contributed to the Revolution, such as agrarian crisis, urbanization, Enlightenment ideas, and demographic changes.
- Study the role of intellectuals, such as philosophes, in disseminating ideas that challenged the existing order and paved the way for revolutionary change.

### 3. Social Structures and Class Dynamics:

- Analyze the complex social hierarchy of pre-revolutionary France, including the three estates (clergy, nobility, and commoners), and how tensions between them fueled revolutionary fervor.
- Investigate the emergence of new social groups, such as the bourgeoisie and sans-culottes, and their roles in the Revolution.

### 4. Political Events and Revolutionary Phases:

- Explore the sequence of events leading up to the Revolution, from the convening of the Estates-General to the radicalization of the Revolution during the Reign of Terror.
- Examine key moments like the Tennis Court Oath, the Storming of the Bastille, the Declaration of the Rights of Man and of the Citizen, and the execution of King Louis XVI.

### 5. Ideas and Ideologies:

- Study the diverse array of political ideologies that emerged during the Revolution, including liberalism, republicanism, radicalism, and conservatism.
- Analyze the impact of Enlightenment thought on revolutionary ideology and its dissemination through pamphlets, newspapers, and political clubs.

### 6. Violence and Terror:

- Investigate the causes and consequences of the Reign of Terror, including the role of revolutionary tribunals, the Committee of Public Safety, and figures like Maximilien Robespierre.
- Consider the debates surrounding the justification and necessity of revolutionary violence in achieving political change.

### 7. International Dimensions:

- Examine the international context of the French Revolution, including its impact on neighboring countries and the spread of revolutionary ideals throughout Europe.
- Investigate the military conflicts, such as the Revolutionary Wars and Napoleonic Wars, and their role in shaping the course of the Revolution.

### 8. Legacy and Impact:

- Assess the long-term consequences of the French Revolution on French society, politics, and culture, as well as its global impact on subsequent revolutions and political movements.
- Consider how the Revolution continues to influence contemporary debates about democracy, human rights, and social justice.

By engaging with these themes and questions, you'll gain a deeper understanding of the French Revolution and its significance within the broader context of modern European history. Remember to consult primary sources, engage with recent scholarship, and critically evaluate different interpretations as you conduct your research.

## Use Case 2a: Experiential Learning



**You**

I am studying to be an executive coach. What types of activities would help me to practice?

**ChatGPT**

**ChatGPT**

Practicing to become an executive coach involves honing various skills, including communication, active listening, empathy, problem-solving, and strategic thinking. Here are some activities that can help you develop and refine these skills:

1. **Role-Playing Scenarios:** Create simulated coaching sessions where you play the role of the coach and someone else takes on the role of the client. Choose different scenarios to practice various coaching techniques and approaches.
2. **Case Studies and Analysis:** Analyze real-world case studies of executive coaching engagements. Consider the challenges faced by the clients, the strategies employed by the coach, and the outcomes achieved. Reflect on what you would have done differently and why.
3. **Peer Coaching:** Pair up with other aspiring coaches or colleagues who are interested in coaching. Take turns being the coach and the client, providing each other with feedback and support.
4. **Observation and Feedback:** Attend coaching sessions led by experienced coaches or mentors. Observe their techniques, communication style, and rapport-building skills. Afterwards, ask for feedback on your own coaching style and areas for improvement.
5. **Group Coaching Exercises:** Facilitate group coaching sessions where you work with a small group of individuals on a shared goal or challenge. This can help you practice managing group dynamics, fostering collaboration, and providing individualized support.
6. **Self-Reflection and Journaling:** Regularly reflect on your coaching experiences, noting what worked well and what could be improved. Journaling can help you track your progress over time and identify patterns in your coaching approach.
7. **Continuous Learning:** Stay informed about the latest trends, theories, and research in executive coaching through books, articles, podcasts, and professional development workshops. Apply new insights and techniques to your coaching practice.
8. **Networking and Mentorship:** Build relationships with experienced coaches in your field who can offer guidance, advice, and support as you develop your coaching skills. Attend networking events, join professional associations, and seek out mentorship opportunities.
9. **Feedback Surveys:** Develop feedback surveys to collect anonymous feedback from your coaching clients. Use this feedback to identify areas of strength and areas for improvement in your coaching practice.
10. **Ethical Dilemma Discussions:** Engage in discussions and exercises that explore ethical dilemmas commonly faced by executive coaches. Practice making ethical decisions and navigating challenging situations with integrity.

By engaging in these activities regularly and deliberately, you can strengthen your skills as an executive coach and build confidence in your ability to support clients effectively. Remember that coaching is a continuous learning journey, and each coaching experience offers opportunities for growth and development.

## Use Case 2b: Experiential Learning



You

Can you create a role-playing scenario for executive coaching training?

ChatGPT

ChatGPT

Title: "Navigating Leadership Challenges: An Executive Coaching Simulation"

Scenario Overview: In this executive coaching simulation, participants will take on the roles of seasoned executives facing various leadership challenges within a fictional company, Luminary Enterprises. The scenario is designed to immerse participants in real-world executive coaching situations, providing opportunities to practice effective coaching techniques and strategies.

Roles:

### 1. Alexis Montgomery - CEO:

- Alexis is the dynamic CEO of Luminary Enterprises. She has a bold vision for the company's future but struggles with maintaining a healthy work-life balance and managing stress amidst high expectations.

### 2. Ryan Patel - Chief Financial Officer (CFO):

- Ryan is a numbers-oriented executive who excels at financial management. However, he faces challenges in effectively communicating his ideas to other departments and fostering collaboration.

### 3. Sarah Chen - Chief Marketing Officer (CMO):

- Sarah is a creative and innovative marketing expert. She faces pressure to deliver results in a highly competitive market while also navigating internal politics and conflicts within her team.

### 4. Michael Thompson - Chief Technology Officer (CTO):

- Michael is a tech-savvy leader responsible for driving innovation within the company. However, he struggles with delegation and empowering his team members, often micromanaging projects.

### 5. Emily Rodriguez - Human Resources Director:

- Emily is tasked with managing the company's talent and fostering a positive work culture. She grapples with addressing employee morale issues, conflicts, and diversity challenges within the organization.

Scenario Details: Participants will be divided into small groups, with each group assigned one of the executive roles listed above. They will receive detailed background information about their character, including their personality traits, leadership style, current challenges, and goals.

Throughout the simulation, participants will engage in coaching sessions with their assigned executives, role-playing as experienced executive coaches. They will have the opportunity to ask probing questions, provide feedback, and offer guidance to help the executives overcome their challenges and achieve their objectives.

The scenarios will be dynamic and evolving, allowing participants to adapt their coaching approach based on the executives' responses and progress. Facilitators will introduce unexpected twists and turns, such as sudden market changes, interpersonal conflicts, or ethical dilemmas, to challenge participants' coaching skills and decision-making abilities.

Key Learning Objectives:

1. Practice active listening and empathy to build rapport with executives.
2. Develop effective questioning techniques to uncover underlying issues and motivations.
3. Provide constructive feedback and guidance to support executive development.
4. Explore strategies for navigating complex leadership challenges, including communication, delegation, conflict resolution, and decision-making.
5. Enhance self-awareness and adaptability as a coach to meet the diverse needs of different executives.

Conclusion: The executive coaching simulation will conclude with a debriefing session where participants can reflect on their experiences, share insights, and receive feedback from facilitators and peers. By immersing themselves in realistic coaching scenarios, participants will gain valuable skills and insights that they can apply to their roles as executive coaches in real-world settings.

### Use Case 3: Feedback

We provided ChatGPT with this piece of text from this report:

*'Barab et al. (2000) suggest that authenticity can neither be pre-planned, nor pre-authenticated by teachers or educators but rather, in true constructivist fashion, the students must find their own authentic learning answers. This brings us to the topic of personalisation for authentic learning.*

*Personalisation is defined by Patrick et al. (2013) as 'tailoring learning for each student's strengths, needs and interests - including enabling students' voices and choices in what, how, when and where they learn - to provide flexibility and supports to ensure mastery of the highest standards possible' (p. 3) with Lucu & Marin (2014) stating that authentic learning experiences 'are those that are personally relevant from the learner's perspective'. Personalised learning benefits students by taking their personal differences and needs into consideration in terms of instruction, assignments, and assessments (Li & Wong, 2021).*

*ChatGPT (and GenAI in general) can be used to create adaptive learning systems that adjust their teaching methods based on a student's progress and performance, ultimately providing more support for learners (Baidoo-Anu & Ansah, 2023).*

*It is worth noting that while ChatGPT and other GenAI are relatively recent developments, they represent an evolution of adaptive learning and we can investigate how to leverage many of the concepts and architectures that they developed such as Adaptive Hypermedia (AH) (Brusilovsky, 1998) (Knutov, De Bra, & Pechenizkiy, 2009) which offer personalised content, presentation, and navigation support. AH builds a model of the individual user and applies it for adaptation to that user, such as adapting to the user's knowledge and goals, upon which GenAI has been developed.'*

We then asked ChatGPT:

Can you give me some feedback on this piece of work?

What can I do to make it more relevant to a broader audience? Is there anything missing?

#### ChatGPT

#### ChatGPT

- Overall, your piece provides a comprehensive overview of the concept of personalization in education, touching upon relevant literature and connecting it to the potential of using AI, specifically ChatGPT and other Generative AI models, for adaptive learning systems. Here's some feedback and suggestions to enhance its relevance to a broader audience and potential areas of improvement:
- **Clarity and Accessibility:** While the piece is well-researched and informative, some parts might be dense or technical for a broader audience. Consider simplifying complex concepts and using more accessible language to ensure clarity and understanding, especially for those who may not be familiar with educational terminology or AI technology.

- **Concrete Examples:** Provide concrete examples or case studies illustrating how personalized learning and adaptive systems have been implemented in real-world educational settings. This can help readers grasp the practical applications and benefits of these concepts.
- **Engagement with Potential Challenges:** Address potential challenges or concerns associated with personalized learning and AI in education, such as data privacy issues, equity considerations, or the potential for over-reliance on technology. Acknowledging these concerns demonstrates a nuanced understanding of the topic and helps prepare readers for potential obstacles in implementation.
- **Broader Context:** Expand the discussion to include the broader context of educational trends and needs, such as the shift towards lifelong learning, the impact of globalization on education, or the growing importance of digital literacy skills. By situating personalized learning within these larger trends, you can make the topic more relevant and compelling to a wider audience.
- **Practical Recommendations:** Offer practical recommendations or tips for educators, policymakers, or stakeholders interested in implementing personalized learning approaches or integrating AI technology into educational settings. Providing actionable insights can help readers see how they can contribute to or benefit from these developments in education.
- **Future Directions:** Discuss potential future directions or emerging trends in personalized learning and AI in education. This could include advancements in AI technology, innovative approaches to personalized instruction, or evolving pedagogical practices. By looking ahead, you can spark curiosity and inspire readers to explore further developments in the field.
- By incorporating these suggestions, you can make your piece more accessible, engaging, and relevant to a broader audience interested in the intersection of personalized learning, AI, and education.

## Use Case 4a: Reflection



You

I'm learning about workplace ethics. Can you provide me with some questions that I can use to reflect on my learning?

ChatGPT

Certainly! Here are some reflective questions to consider as you learn about workplace ethics:

1. What are the core values that guide ethical behavior in the workplace, and how do they align with my personal values?
2. Can you recall a situation where ethical dilemmas arose in a workplace setting? How were they addressed, and were the outcomes satisfactory?
3. How does organizational culture influence ethical decision-making processes within a workplace?
4. Reflect on a time when you had to make a difficult ethical decision at work. What factors did you consider, and how did you ultimately resolve the situation?
5. In what ways can diversity and inclusion intersect with workplace ethics? How can organizations promote both ethical behavior and diversity?
6. Consider the role of leadership in fostering an ethical work environment. What characteristics or behaviors do ethical leaders typically exhibit?
7. Reflect on the importance of transparency and honesty in workplace relationships. How do these values contribute to a healthy organizational culture?
8. How do ethical considerations extend beyond interactions with colleagues to include relationships with clients, customers, and stakeholders?
9. What are some common ethical challenges faced by employees in my industry, and how can they be addressed effectively?
10. Reflect on the impact of technology and social media on workplace ethics. How can organizations navigate the ethical implications of digital communication and data privacy?

These questions can help you deepen your understanding of workplace ethics and encourage self-reflection on how you approach ethical dilemmas in your professional life.



## Use Case 4b: Reflection



You

I'm learning about workplace ethics. What are the best approaches for me to reflect on my learning?

ChatGPT

ChatGPT

Reflecting on workplace ethics is crucial for deepening your understanding and applying ethical principles effectively in your professional life. Here are some effective approaches for reflecting on your learning about workplace ethics:

1. **Journaling:** Keep a reflective journal where you can record your thoughts, experiences, and observations related to workplace ethics. Write about ethical dilemmas you encounter, how you respond to them, and the outcomes of your decisions. Reflect on your values, beliefs, and motivations, and how they influence your ethical behavior in the workplace.
2. **Case Studies Analysis:** Engage in analyzing real-life case studies or hypothetical scenarios that involve ethical issues in the workplace. Reflect on the different perspectives, stakeholders' interests, and potential consequences of various courses of action. Consider how you would approach similar situations in your own work environment and the ethical principles that would guide your decisions.
3. **Peer Discussions and Feedback:** Participate in discussions with colleagues, mentors, or peers about workplace ethics. Share your experiences, dilemmas, and ethical challenges, and listen to others' perspectives. Offer and receive constructive feedback on ethical decision-making processes and consider alternative viewpoints that may enrich your understanding of ethical issues.
4. **Ethical Decision-making Frameworks:** Familiarize yourself with ethical decision-making frameworks, such as the Utilitarian Approach, Deontological Approach, Virtue Ethics, or the Ethical Decision-making Model. Reflect on how these frameworks can help you analyze ethical dilemmas, identify ethical principles at stake, and make informed decisions aligned with your values and ethical standards.
5. **Self-Assessment Tools:** Use self-assessment tools or surveys to evaluate your ethical awareness, values, and behaviors in the workplace. Reflect on the results and identify areas for improvement or development. Consider setting specific goals for enhancing your ethical competence and integrating ethical principles into your professional practice.
6. **Mentorship and Coaching:** Seek guidance from mentors, coaches, or ethical advisors who can provide support, guidance, and perspective on ethical issues in the workplace. Engage in reflective conversations with them, share your concerns or dilemmas, and seek their input on ethical decision-making processes. Reflect on their feedback and incorporate it into your approach to workplace ethics.
7. **Continuous Learning and Growth:** Commit to ongoing learning and growth in the area of workplace ethics. Stay informed about current trends, best practices, and emerging issues in ethical leadership and corporate governance. Attend workshops, seminars, or training sessions focused on workplace ethics, and engage in continuous self-reflection and improvement.

By employing these approaches for reflecting on your learning about workplace ethics, you can deepen your understanding, enhance your ethical competence, and cultivate a culture of integrity and accountability in your professional endeavors.

## Use Case 5: Personalisation



### You

I am working for a large pharmaceutical company as a learning designer and want to improve my skills of content creation using AI. I currently use Articulate Storyline to create learning content and have never used AI to create content. Could you create a personalised learning plan for me to learn how to integrate AI into my learning content design and development?

### ChatGPT

### ChatGPT

Certainly! Here's a personalized learning plan tailored to help you integrate AI into your learning content design and development process:

#### 1. Understanding AI Basics:

- Start by familiarizing yourself with the basics of artificial intelligence. This includes understanding key concepts such as machine learning, natural language processing (NLP), and deep learning.
- Recommended resources: Online courses on platforms like Coursera, Udemy, or LinkedIn Learning covering AI fundamentals.

#### 2. Exploring AI Tools and Platforms:

- Research and explore AI tools and platforms that can be integrated into your content creation process. Look for tools that offer features such as natural language generation, content recommendation systems, or personalized learning algorithms.
- Recommended tools: Explore platforms like OpenAI's GPT-3 for natural language generation, as well as learning management systems (LMS) with built-in AI capabilities for personalized learning.

#### 3. Hands-on Practice with AI Content Creation:

- Experiment with AI-powered content creation tools and platforms to create sample learning content. This could include generating interactive scenarios, quizzes, or simulations using AI-generated text or personalized recommendations.
- Recommended activity: Use AI-powered content creation tools like ChatGPT to generate dialogue-based scenarios or simulations for your Articulate Storyline courses.

#### 4. Integration with Articulate Storyline:

- Explore ways to integrate AI-generated content into your existing Articulate Storyline projects. This may involve exporting AI-generated text or multimedia content and incorporating it into your courses seamlessly.
- Recommended activity: Experiment with exporting AI-generated text or multimedia elements from platforms like OpenAI's GPT-3 and integrating them into your Storyline projects.

#### 5. Collaboration and Networking:

- Connect with other learning designers and professionals who are also exploring AI in content creation. Join online communities, forums, or LinkedIn groups focused on

AI in education and learning design to share insights and learn from others' experiences.

- Recommended activity: Engage in discussions, ask questions, and share your own experiences with integrating AI into learning content design and development.

#### 6. Continuous Learning and Improvement:

- Stay updated on the latest advancements in AI technology and its applications in education and learning design. Continuously seek out new tools, techniques, and best practices to enhance your skills and stay ahead in the field.
- Recommended resources: Follow AI and EdTech blogs, attend webinars or conferences, and participate in relevant online courses or workshops to keep learning and improving your AI content creation skills.

By following this personalized learning plan, you can gradually build your expertise in integrating AI into your learning content design and development process, enhancing the effectiveness and efficiency of your training materials for your pharmaceutical company.