Getting Started with AI in L&D
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Today we’re going to talk about 4 things …

- Mindset
- Application
- Data
- Preparation
Why are you interested in AI?
AI is **NOT** about robots.
This is what AI can do today.

- Pattern Recognition
- Natural Language Processing
- Conversational Response
- Discovery
- Visual Recognition
- Sentiment Analysis
- Text <> Speech
We are here.

We are here.

Emerging

Pervasive

Revolutionary
L&D will not introduce AI in your workplace.

AI-enabled technology is likely already in use by your Sales, Marketing, Logistics or Recruitment teams.
Before we can talk about applying AI in workplace learning ...
... we have to talk about boxes.
L&D tends to put new concepts into isolated boxes, thereby missing the larger potential impact of the innovation.

AI represents the next technology inflection point for L&D.
75% of commercial applications will use AI by next year within 3 years.
How can you apply AI within workplace learning?
AI can be applied to **solve problems** in different ways. AI-enabled traffic signals can alleviate congestion and help vehicles move through a designated area more effectively. Self-driving cars are also AI-enabled and focus on transportation challenges but from a different perspective.
Before you decide how you want to apply AI, you must determine what **problem** are you trying to solve.
10 Real-world AI Applications in L&D

- Administration
- Translation
- Authoring
- Chatbot
- Search
- Recommendation
- Coaching
- Personalization
- Impact Analysis
- Gap Analysis
A host of L&D administrative tasks, such as class scheduling, report generation and course assignments, can be automated through emerging AI-enabled tools.
AI can be applied to develop digital learning content from source material but still requires human review and revision to ensure accuracy and context.
Many chatbots are complicated branching programs and not true applications of AI. Some do use AI capabilities, such as natural language processing.
AI can be applied to help users find specific information rather than just providing links to related content based on keywords.
Recommendation

AI is sometimes used to recommend content to a user based on how their data profile matches other user activity.
Coaching

AI can be applied to provide actionable coaching recommendations, just like a personalized exercise application.
Janet
Let’s continue with your guided learning today.

Michael
You have a certification due today.

Adam
Here’s your chance to practice your knowledge!

Personalization
AI-enabled personalization goes beyond just content recommendation by adapting the learning experience to meet the immediate, proven needs of an individual.
Machine learning can be applied to large data collections in order to establish causation between learning activities and performance outcomes.
AI can be applied to proactively identify employee capability gaps and match people to roles with both speed and scale.
Many AI applications within L&D are just now emerging and represent a different potential value based on each org need.
Is L&D ready for AI?

Kinda ...
AI requires data. An AI-enabled application must have the right information architecture at its foundation to power the solution.
Software-Enabled AI
Limited IA Required

Applications may be able to function without a robust information architect.
Software-Executed AI
IA Foundation Required

Applications require a strong information architecture in order to function.

- Recommendation
- Coaching
- Personalization
- Impact Analysis
- Gap Analysis
AI
Machine Learning
Analytics
Information Architecture
Information architecture is to data as libraries are to books. Many L&D teams just don’t have a lot on their shelves with which to start.
Even organizations with data may not have applied solid analytics practices to clean and organize this data so it can be used effectively by an application.
A data-enabled AI application requires clean, consistent, bias-free data to help you solve the right problem.
L&D does not have sufficient data to power AI.

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**Level 2: Learning**

Learning evaluation is the measurement of the increase in knowledge—before and after.

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**Level 1: Reaction**

Reaction evaluation is how participant feels about the training or learning experience.

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**Level 3: Behavior**

Level 3: Behavior evaluates if the participant performed or behaviors changed as a result of the training or learning experience.

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**Level 4: Results**

Level 4: Results evaluates the extent to the which the specified objectives were met.

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The Kirkpatrick Model
Fixing the measurement problem begins with mindset – the way we think about learning in the modern workplace.
data-rich solution design

1. Determine the right-fit solution
2. Define the knowledge required to execute the expected behavior
3. Define the observable behavior required to achieve the result
4. Agree on a clear, measurable business result

DESIGN + MEASUREMENT
data-rich **learning tactics**
multi-dimensional **data**

- **Demographic**
  Who is this person?

- **Consumption**
  What has this person reviewed?

- **Feedback**
  What does this person say they want/need?

- **Context**
  What else is happening around this person?

- **Connections**
  How does this person engage with the org?

- **Knowledge**
  What does this person know right now?

- **Behavior**
  What is this person doing on the job?

- **Results**
  What impact is this person having on business outcomes?
How are people engaging with learning opportunities?

Engagement
How is people’s knowledge changing over time?

Learning
How is learning impacting business results and delivering ROI?

Outcomes
How are people’s behaviors changing on the job?

Behaviors
How are we projected to perform in the future with our key business goals?

Prediction
Learning is continuous. Measurement must also be continuous.

Adaptation
How can we continuously adapt our support tactics to ensure optimum results?
What steps can you take to prepare for the application of AI in L&D?
1 | explore AI within your organization
2 | do your AI homework
3 | find the problems
4 | establish a vision for AI-enabled L&D
5 | fix your measurement practices
6 | partner with experts + providers
7 | solve specific problems
8 | evolve your role
As we explore AI, L&D must continue to focus on solving problems to help people do their best work every day.
To summarize …

1 | L&D is late to the AI party, but that’s OK.
2 | AI is very good at very specific tasks.
3 | AI is not about tech. It’s about solving problems.
4 | Meaningful AI is out of reach until we fix L&D measurement.
5 | To fix measurement, we must change how we approach learning.
6 | Don’t try to solve this one on your own. Get expert help.
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