



Inclusive Teaching Using AI

Adapting Network eAcademy Training to Emerging Learning Trends

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GNA-G Network eAcademy

Working Group Open Meeting

Network eAcademy by the GÉANT project:

<https://wiki.geant.org/spaces/NETDEV/pages/870744119/Network+eAcademy+Training+Portal>

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Public (PU)

Agenda



Shifting Learning Trends

Learner feedback, AI-mediated consumption of content and the decline of long linear material

1

Inclusive Teaching Foundations

Equity, diversity and inclusion in training and the principles of Universal Design for Learning (UDL)

2

AI Tools for Inclusive Learning

Technologies which support accessibility, language needs, confidence and engagement

3

Opportunities and Risks

Benefits and pitfalls of **AI-mediated** learning for engagement, quality, rigor and learning outcomes

4

Strategies and Discussion

Actionable steps for the Network eAcademy and open brainstorming with other programmes

5

Shifting Learning Trends

What Learner Feedback Tells Us

- Quizzes and interactive content are the preferred learning formats
- AI tools are relied upon to summarise videos and extract key points
- Quick explanations are requested **from AI assistants** instead of re-watching
- Tolerance for long, **linear content** has clearly decreased
- Shorter, dynamic experiences that deliver value quickly are favoured

Quiz

Preferred Format
Interactive content tops
eAcademy learner feedback

AI

New Learning Habit
Summaries, key points
and
quick explanations on
demand

Short

Attention Shift
Dynamic micro-content is
preferred over long units



What is Inclusive Teaching?

‘The ways in which pedagogy, curricula and assessment are designed and delivered to engage students in learning that is meaningful, relevant and accessible to all.’

Hockings (2010), Advance HE



Anticipatory by Design

Barriers to learning are anticipated and removed before delivery rather than being fixed afterwards



Why It Matters Here

eAcademy learners differ in language, background, connectivity and learning preferences

WHY

Engagement

WHAT

Representation

HOW

Action & Expression

Universal Design for Learning

1

Multiple Means of Engagement

The 'why': motivation through choice, relevance and interactivity

2

Multiple Means of Representation

The 'what': the same content in video, text, audio and quiz form

3

Multiple Means of Action and Expression

The 'how': learning shown through labs, quizzes or projects

4

The Plus One Approach

One more way to access, engage or demonstrate at each 'pinch point'

How Learners Now Consume Training



Discover

A unit is found via search or the eAcademy catalogue



Condense

AI is used to summarise videos and extract key points



Verify

Quick explanations are requested from AI assistants



Practice

Quizzes and interactive tasks confirm understanding



Apply

Knowledge is applied to operational network tasks

DISCOVER

CONDENSE

VERIFY

PRACTICE

APPLY

AI Tools Supporting Diverse Learner Needs

Accessibility

- Text to speech for written material
- AI summarisation of long units
- Podcast generation (NotebookLM)
- Materials in multiple formats

Language Support

- AI transcription of live sessions
- Paraphrasing and translation
- Language correction of drafts
- Glossaries of network terminology
- Simplified explanations on demand
- Captions in multiple languages on all video content

Engagement

- AI presentation and speaking coaches
- Practice Q&A with AI tutors
- Instant feedback on quizzes
- Low-stakes practice environments
- Gamified and interactive learning units

Opportunities and Risks of AI-Mediated Learning



Opportunities

- Personalised pace and format for every learner
- Summaries, captions and translation lower barriers
- Interactivity raises engagement and retention



Risks

- Condensed content can strip depth, rigor and context
- Over-reliance may weaken foundational understanding
- Accuracy, bias and unequal access to AI tools

Strategies for the Network eAcademy



Design Short and Modular

Long linear units are restructured into micro-modules with clear outcomes that deliver value quickly (for lengthy Learning Units)



Embed Interactivity

Quizzes, labs and retrieval practice are placed inside every unit rather than only at the end



Keep Rigor and Quality

All summaries complement rather than replace full material; accuracy and assessment standards are maintained



Adopt the Plus One Approach

Each unit gains one more way to access content, engage with it or demonstrate learning



Thank you!