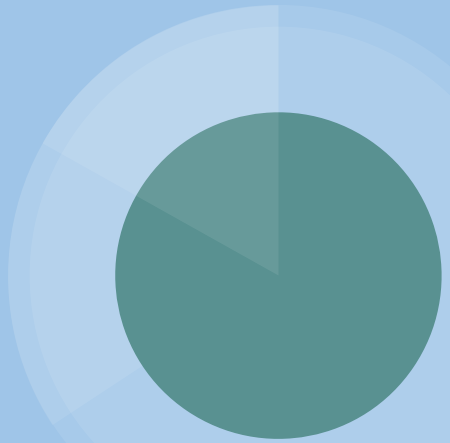
Education 4.0 and Today's Learners: Supporting Our Online Learners for the Long Haul



MELANIE BOOTH Ed.D.

Vice President, Educational Programming & Engagement
NC-SARA

ILCCO – February 7, 2023

In 2022, the World Economic Forum called for **Education 4.0**, a reimagination of education as “an inclusive, lifelong experience that places the responsibility for skill-building on the learner, with teachers and mentors acting as facilitators and enablers.”

This keynote presentation will share some frameworks and perspectives about Education 4.0, today’s learners’ mindsets, and heutagogy, the practice of facilitating and enabling learning.

OVERVIEW

- Education 4.0
- A New View of Learners: Mindsets
- Heutagogy
- Bringing it All Together: A 21st Century Ecosystem

WHAT IS EDUCATION 4.0?

World Economic Forum May 2022

Education 4.0:

"an approach to reimagining education in a way that is inclusive, focuses on a broad range of skills to prepare learners for the Fourth Industrial Revolution, and leverages technological and pedagogical innovation to put learners at the centre of learning. "

Full report:
https://www3.weforum.org/docs/WEF_Catalysing_Education_4.0_2022.pdf

The World Economic Forum's Education 4.0 Framework

Content (built-in mechanisms for skills adaptation)

Global citizenship skills

To include content that focuses on building awareness about the wider world, sustainability and playing an active role in the global community.

Innovation and creativity skills

To include content that fosters skills required for innovation, including complex problem-solving, analytical thinking, creativity and system-analysis.

Technology skills

To include content that is based on developing digital skills, including programming, digital responsibility and the use of technology.

Interpersonal skills

To include content that focuses on interpersonal emotional intelligence (i.e. empathy, cooperation, negotiation, leadership and social awareness).

Experiences (leveraging innovative pedagogies)

Personalized and self-paced learning

From a system where learning is standardized, to one based on the diverse individual needs of each learner, and flexible enough to enable each learner to progress at their own pace.

Accessible and inclusive learning

From a system where learning is confined to those with access to school buildings to one in which everyone has access in learning and is therefore inclusive.

Problem-based and collaborative learning

From process-based to project and problem- based content delivery, requiring peer collaboration and more closely mirroring the future of work.

Lifelong and student-driven learning

From a system where learning and skilling decrease over one's lifespan to one where everyone continuously improves on existing skills and acquires new ones based on their individual needs.

New & Improved Assessment

Education 4.0 calls for:

- Better and more data; more practice engaging with and making meaning of the data → information and insights
- Better learning assessment:
  - "assessment through a lens of enabling "learning to learn" rather than testing recall of specific subjects or facts"
  - Involving others in individual assessment – e.g. employers
  - Cognitive and non-cognitive skills development

New Learning Technologies

"While technology itself will not lead to better quality education, advances in education technology can support **more inclusive** and **skills-based learning** and can help enhance educational processes. Furthermore, investment in the adoption of technology in learning can build **resiliency** into education systems so that they are able to withstand potential future shocks to the system, such as the COVID-19 pandemic."

Empowerment of and Support for Teachers

4.0 Calls for
Investments in
Professional Development
&
Innovative Pedagogy
Development

The World Economic Forum's Education 4.0 Framework

Content (built-in mechanisms for skills adaptation)

Global citizenship skills

To include content that focuses on building awareness about the wider world, sustainability and playing an active role in the global community.

Innovation and creativity skills

To include content that fosters skills required for innovation, including complex problem-solving, analytical thinking, creativity and system-analysis.

Technology skills

To include content that is based on developing digital skills, including programming, digital responsibility and the use of technology.

Interpersonal skills

To include content that focuses on interpersonal emotional intelligence (i.e. empathy, cooperation, negotiation, leadership and social awareness).

Experiences (leveraging innovative pedagogies)

Personalized and self-paced learning

From a system where learning is standardized, to one based on the diverse individual needs of each learner, and flexible enough to enable each learner to progress at their own pace.

Accessible and inclusive learning

From a system where learning is confined to those with access to school buildings to one in which everyone has access in learning and is therefore inclusive.

Problem-based and collaborative learning

From process-based to project and problem- based content delivery, requiring peer collaboration and more closely mirroring the future of work.

Lifelong and student-driven learning

From a system where learning and skilling decrease over one's lifespan to one where everyone continuously improves on existing skills and acquires new ones based on their individual needs.

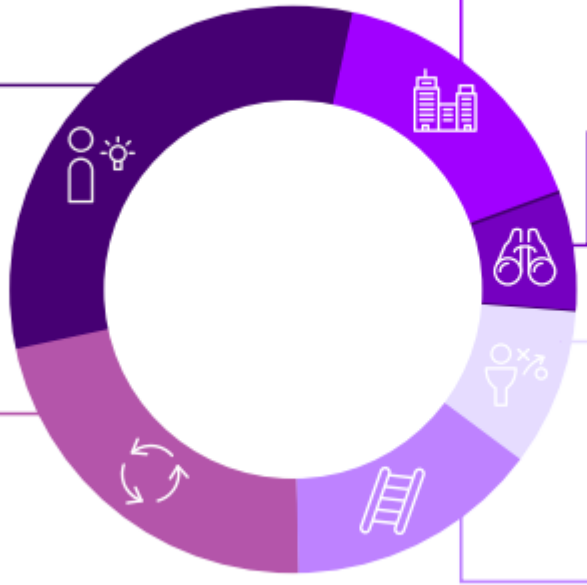
A NEW VIEW OF LEARNERS: *MINDSETS*

LEARNING MINDSETS

Based on goals and emotions; not traditional demographic factors (age) or type of institution

- 96% percent of students find a high-quality digital experience important to their satisfaction
- For every segment, learners wanted "Greater flexibility around coursework modality (online, onsite, hybrid opportunities)"
- Re-tooling the student experience by segment / learning mindset
- Source: https://www.accenture.com/us-en/insights/public-service/serving-all-students

Six learner segments



16%
Campus Enthusiasts
Residential students actively participating on campus—inside and outside the classroom—who plan to start their first job after graduation.

7%
Wayfinding Intellectuals
Full-time, intellectually curious students seeking to explore a broad array of disciplines and to conduct research, with strong interest in staying within academia.

9%
Trajectory Transformers
Full-time workers who are skeptical about the value and outcomes of credentials but seek short, focused programs for building specific skills and being able to change careers.

14%
Mid-Career Climbers
Full-time workers looking to advance in their careers by obtaining a credential in a specific skill-based area valued by their employer.

31%
Junior Specialists
Focused learners pursuing a credential to secure their first job in a specific field.

23%
Evolving Professionals
Successful, early-stage workers seeking to expand their industry knowledge while satisfying their intellectual curiosity.

Wayfinding Intellectuals (7%)

Full-time, intellectually curious students seeking to explore a broad array of disciplines and to conduct research, with strong interest in staying within academia.

Example: An undecided major at a small liberal arts college who is making great connections with professors through research and is seriously considering graduate studies.

Campus Enthusiasts (16%)

Residential students actively participating on campus—inside and outside the classroom—who plan to start their first job after graduation.

Example: A student at a large state school who evaluated Greek life, student clubs, sports teams and gyms before deciding to enroll.

Junior Specialists (31%)

Focused learners pursuing a credential to secure their first job in a specific field.

Example: A commuter student working part time who selected a major early on and has a clear career goal.

Evolving Professionals (23%)

Successful, early-stage workers seeking to expand their industry knowledge while satisfying their intellectual curiosity.

Example: An early-career professional going back to school for an MBA and interested in programs that emphasize the theoretical and practical sides of Finance.

Mid-Career Climbers (14%)

Full-time workers looking to advance in their careers by obtaining a credential in a specific skill-based area valued by their employer.

Example: A middle manager with a busy career whose mentor recommended using their company's tuition stipend for an Executive Leadership certificate course before next year's promotion reviews.

Trajectory Transformers (9%)

Full-time workers who are skeptical about the value and outcomes of credentials but seek short, focused programs for building specific skills and being able to change careers.

Example: A full-time worker facing uncertain job security in their current field who is seeking a specific coding bootcamp program with consistently high outcomes.

The World Economic Forum's Education 4.0 Framework

Content (built-in mechanisms for skills adaptation)

Global citizenship skills

To include content that focuses on building awareness about the wider world, sustainability and playing an active role in the global community.

Innovation and creativity skills

To include content that fosters skills required for innovation, including complex problem-solving, analytical thinking, creativity and system-analysis.

Technology skills

To include content that is based on developing digital skills, including programming, digital responsibility and the use of technology.

Interpersonal skills

To include content that focuses on interpersonal emotional intelligence (i.e. empathy, cooperation, negotiation, leadership and social awareness).

Experiences (leveraging innovative pedagogies)

Personalized and self-paced learning

From a system where learning is standardized, to one based on the diverse individual needs of each learner, and flexible enough to enable each learner to progress at their own pace.

Accessible and inclusive learning

From a system where learning is confined to those with access to school buildings to one in which everyone has access in learning and is therefore inclusive.

Problem-based and collaborative learning

From process-based to project and problem- based content delivery, requiring peer collaboration and more closely mirroring the future of work.

Lifelong and student-driven learning

From a system where learning and skilling decrease over one's lifespan to one where everyone continuously improves on existing skills and acquires new ones based on their individual needs.

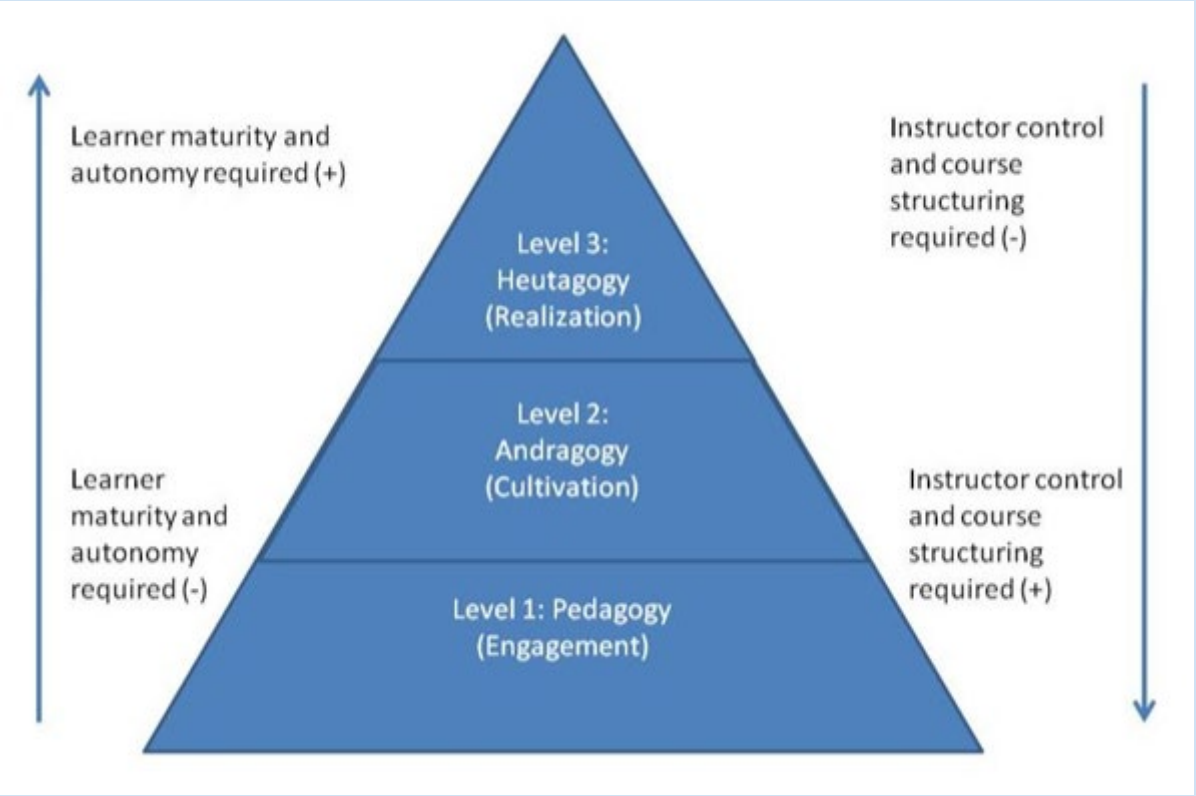
REFLECTIVE QUESTIONS:

To what extent do we *really* know our learners?
*The ones we *actually* serve?
*The ones we may be *striving* to serve?

To what extent do our educational programs and practices reflect our learners' "mindsets"?

HEUTAGOGY

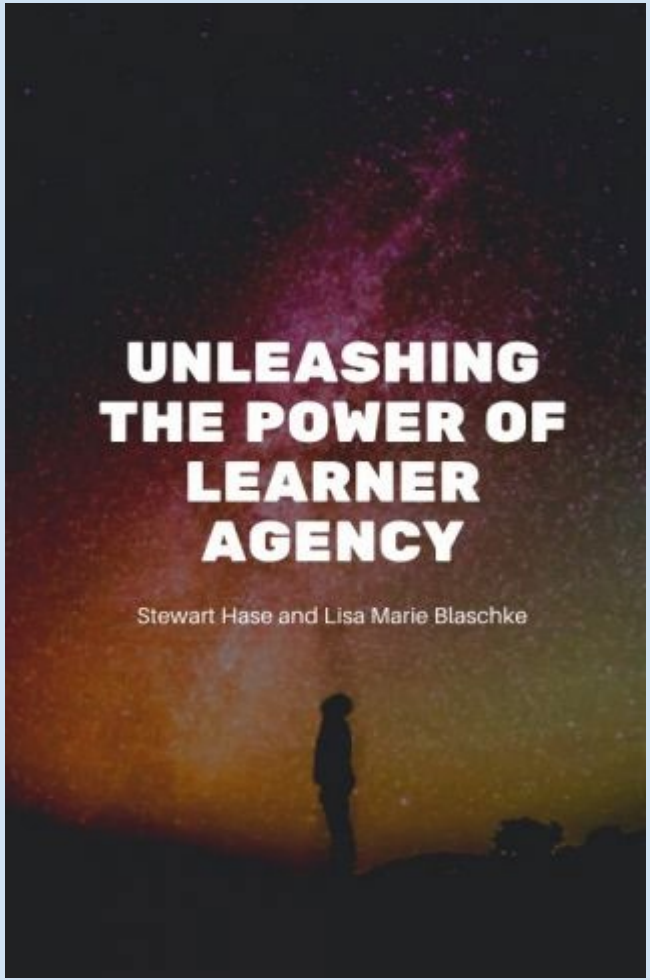
HOOT-A-WHAT??!?!?!?



Blaschke, L.M. (2012). Heutagogy and lifelong learning: A review of heutagogical practice and self-determined learning. International Review of Research in Open and Distance Learning, 13(1), 56-71. http://www.irrodl.org/index.php/irrodl/article/view/1076/2113

PRINCIPLES

- Learner Agency & Self-Efficacy
- Learning to Learn: Reflection, Metacognition
- From Skills and Competencies to Capabilities and Capacity for Learning
- Self-Directed to Self-Determined
- KICKER: Learning may not be linear! (OH NO!)



OER: https://edtechbooks.org/up

The World Economic Forum's Education 4.0 Framework

Content (built-in mechanisms for skills adaptation)

Global citizenship skills

To include content that focuses on building awareness about the wider world, sustainability and playing an active role in the global community.

Innovation and creativity skills

To include content that fosters skills required for innovation, including complex problem-solving, analytical thinking, creativity and system-analysis.

Technology skills

To include content that is based on developing digital skills, including programming, digital responsibility and the use of technology.

Interpersonal skills

To include content that focuses on interpersonal emotional intelligence (i.e. empathy, cooperation, negotiation, leadership and social awareness).

Experiences (leveraging innovative pedagogies)

Personalized and self-paced learning

From a system where learning is standardized, to one based on the diverse individual needs of each learner, and flexible enough to enable each learner to progress at their own pace.

Accessible and inclusive learning

From a system where learning is confined to those with access to school buildings to one in which everyone has access in learning and is therefore inclusive.

Problem-based and collaborative learning

From process-based to project and problem- based content delivery, requiring peer collaboration and more closely mirroring the future of work.

Lifelong and student-driven learning

From a system where learning and skilling decrease over one's lifespan to one where everyone continuously improves on existing skills and acquires new ones based on their individual needs.

PULLING IT ALL TOGETHER: A 21st Century Learning Ecosystem

FINAL REFLECTIVE QUESTION (2-part):

For 4.0 to be realized:
What constitutes "student success" accordingly?
And: how we you know it when we see it?

MELANIE BOOTH Ed.D.

Melanie Booth, Ed.D.

mbooth@nc-sara.org / boothmelanie@gmail.com

LinkedIn: melaniebooth