



Keeping Up-to-Date:

Lifelong Learning Practices of

Instructional Designers and Educational Technologists

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Knowledge

Doubling Curve

1900
100 years

1945
25 years

2015
13 months

2020
12 hours

Cynefin

Model:

Workplace

Environment

Complex

the relationship between cause and effect can only be perceived in retrospect

probe – sense – respond

emergent practice

novel practice

no relationship between cause and effect at systems level

act – sense – respond

Chaotic

Complicated

the relationship between cause and effect requires analysis or some other form of investigation and/or the application of expert knowledge

sense – analyze – respond

good practice

best practice

the relationship between cause and effect is obvious to all

sense – categorize – respond

**Simple
Obvious**

Students are unprepared for workplace

- 21st century skills needed:
 - Critical thinking
 - Creativity
 - Problem-solving
 - Emotional intelligence
 - Resilience
 - Lifelong learning

Hart Research Associates,
2013; Messum, Wilkes,
Peters, & Jackson, 2017



We now accept the fact that learning is a **lifelong process** of keeping abreast of change. And the most pressing task is to teach people **how to learn.**

~Peter Drucker



What is Lifelong Learning?

- Learning pursued throughout life
- Ongoing, voluntary, and self-motivated: learning for personal or professional reasons
- Flexible, diverse: Available at different times and places





Informal Learning

learning resulting from daily life activities (readings, how-to's)
Often referred to as *experiential learning*

Non-formal Learning

learning embedded in planned activities (vocational skills
acquired at the workplace)

Formal Learning

learning that occurs within an organized and structured context (formal
education, in-company training), and that is designed as learning. It may
lead to formal recognition (diploma, certificate)

Andragogy and Lifelong Learning

Adults learn best when their learning is

- **Self-directed**
- Practical
- Experience-based
- Interactive
- Quickly applied
- Individualized



Heutagogy

- Learning theory, an extension of andragogy
- Assumes self-directed and self-determined:
Focus on the concept of human agency, metacognition, and how people can learn effectively (esp. online) by knowing how to learn
- Rooted in humanism and constructivism

Hase & Kenyon, 2000; Hase 2016

LEVEL 3:

HEUTAGOGY
(REALIZATION)

LEVEL 2:

ANDRAGOGY
(CULTIVATION)

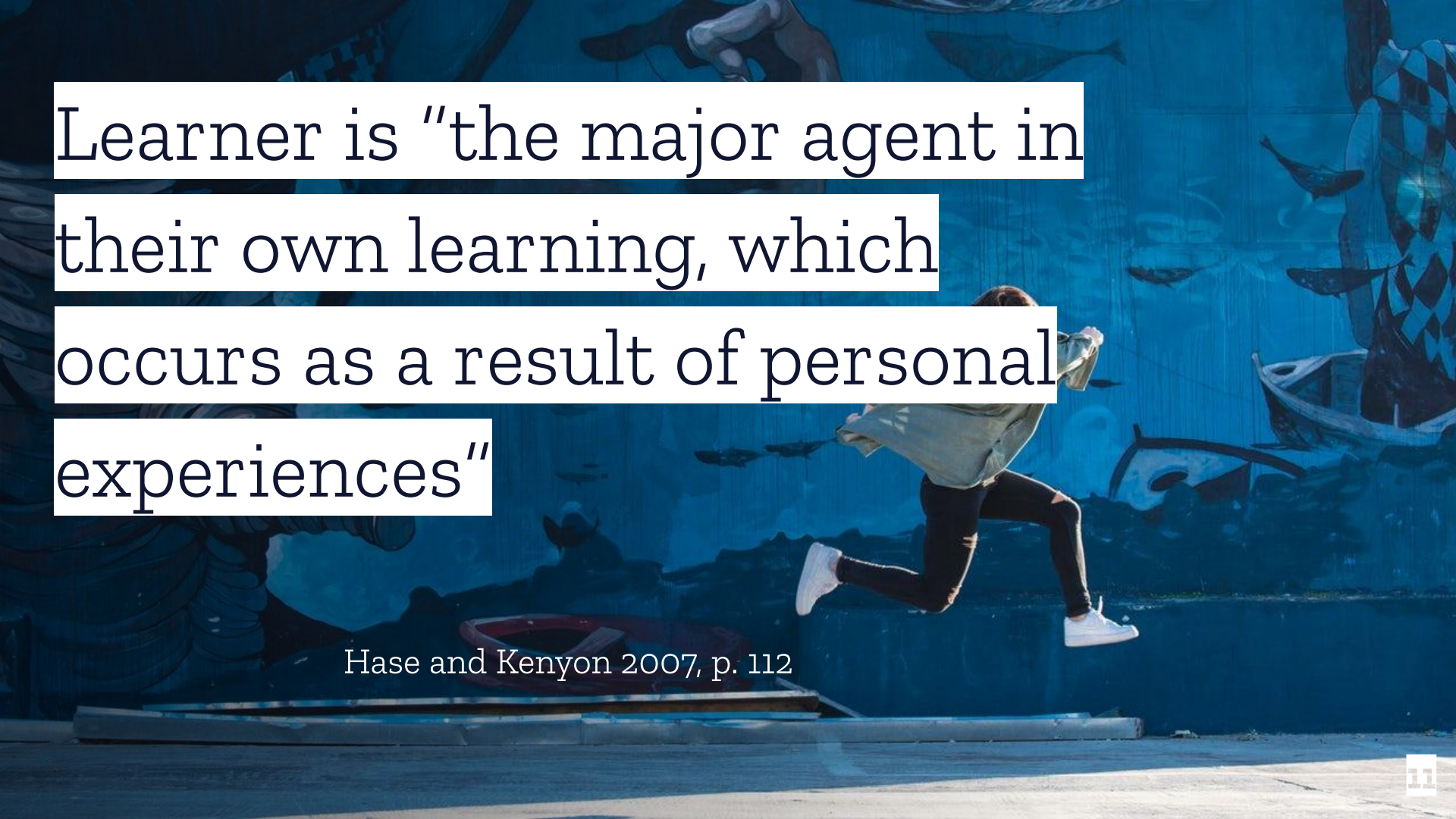
LEVEL 1:

PEDAGOGY
(ENGAGEMENT)

▲
LEVEL OF
LEARNER MATURITY AND
AUTONOMY REQUIRED

LEVEL OF
INSTRUCTOR CONTROL AND
COURSE STRUCTURING
REQUIRED
▼

Blaschke, 2012
<https://bit.ly/2Sd4LXq>

A person is running from left to right across a concrete surface. The background is a vibrant blue wall covered in a mural of an underwater scene, featuring various fish, a boat, and a large, stylized figure. The person is wearing a light-colored jacket, dark pants, and white sneakers. The text is overlaid on the left side of the image in white boxes.

Learner is "the major agent in
their own learning, which
occurs as a result of personal
experiences"

Hase and Kenyon 2007, p. 112

Learner determines

- learning goals
- resources required
- means for learning
- evaluation of learning outcomes

Focus on **what and how** the learner
wants to learn

Principles of Heutagogy

- **Learner-centered and determined**
- **Capability:** using own competencies in unfamiliar and familiar circumstances (e.g., self-efficacy, communication, creativity)
- **Double-loop learning:** psychological and behavioral engagement - how problem impacts action and outcomes, followed by selection of problem-solving processes and reflection on change in own beliefs and actions
- **Self-reflection & metacognition:** holistic reflection - what is learned and how
- **Non-linear knowledge:** learners choose their own path

Methodology

Participants

- Recruitment through a combination of purposeful sampling techniques (e.g., link tracing; Palinkas et al., 2015)
- Thirty professionals in corporate (n=10), K-12 (n=10), and higher ed (n=10) environments
- K-12 - educational technologists (n=10)
- Higher ed and corporate:
 - Instructional designers (n=15)
 - Educational technologists (n=5)

Data Sources & Analysis

- 60-90 minute semi-structured interviews
- Thematic analysis within NVivo based on Constant Comparative for Naturalistic Inquiry (Lincoln & Guba, 1984)
 - Two coders coding structure and higher level themes for 3 divergent interviews
 - One served as primary coder for remaining interviews
 - Next round: verification with 2nd coder of select interviews & calculation of interrater reliability (revisiting code structure and coding if necessary)

Limitations

- Snowball began with personal contacts of team members ⇒ overrepresentation of Purdue and Indiana University graduates and staff
- Part of a larger study so questions asked regarding LLL may have been limited

Findings

Learner-Directed



- **Part of the job**

"You can't stop learning in a position like this. It's going to constantly be changing so you have to be ok with that."

- **Willing & eager to learn**

"I honestly think that in order to work with technology, that's one of the best things about technology, you just need time and a willingness to learn."

Learner-Assessed Needs

- **Specific project needs**

"I was faced with 'wow I don't know what I don't know right now.' And trying to find out what tools are available and articulating what my needs are relative to what they're able to do."

- **Keep up-to-date:** what may be needed "down the road"
 - Theories
 - Best practices
 - Technical skills
 - Technology

Learner-Selected Paths & Double-Loop Learning

- **Learn from experience:** prior experience helps understand current situations
- **Trial and error:** accepting and learning from errors; “mess up and try again”, usually part of the work process
- **Playing around:** purposeful experimentation, e.g., trying out new technology to see how it works
- **From precedent:** similar situations or technology
- **Social learning:** experts, colleagues, learning communities

To Sum Up

A hand is shown from the bottom right, holding a glowing, intricate network of connections that resemble a neural network or a complex web of relationships. The connections are thin, golden lines with small, glowing nodes at their intersections. The background is a soft, blue gradient, and the overall lighting is warm and focused on the hand and the network.

Lifelong Learning is
Part of Job & Life

But need to learn how to learn!

Focus on Learners - Heutagogy

- **Learner-centered environment**
 - Opportunities to interact with peers and experts
 - Flexible schedules
 - Managers open to learning initiatives, feedback, coaching, and mentoring
 - Supportive internal culture, policies, and resources
 - Access to tools and resources, e.g. financial support, access to the internet, relevant hardware/software, and materials

Hase & Kenyon, 2000; Hase 2016

Thank you!

Questions?

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