

Digital Learning Environment

- Tools
- Resources
- Process

TCH 505 Instructional Technology for Today's Educator

Han Liu

Shippensburg University



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What is Learning Environment?

- Learning environments are typically constructivist in nature, engaging learners in "sense-making" or reasoning about extensive resource sets. Learning environments typically include **four components**: an enabling context, resources, a set of tools, and scaffolds (Hannafin, Land, & Oliver, 1999).
- <http://www.edtech.vt.edu/edtech/id/models/environs.html>

What is Learning Environment?

- **T**he sum of the internal and external circumstances and influences surrounding and affecting a person's learning.
- <http://medical-dictionary.thefreedictionary.com/learning+environment>

Essential Components of Learning Environment

- Learning facilities
- People (teacher, and students)
- Supplies and tools
- Family and community
- Culture (freedom, independence, helpfulness)

Traditional Learning Environment

External Environment		Internal Environment	
Learning Facility Environment	Classroom: Sound, Light, temperature	Emotional Factor	Motivation, persistence, responsibility
Learning Resources	Library, reading room, green house, technology lab	Sociological Factor	By oneself Pairs/Groups With Authoritative adult
School Supporting System	PTA, community, museum, business, government	Physiological Factor	Visual/Auditory/Kinesthetic, MI Food/drink intake while concentrating Morning/noon/night (Energy peaks)
Family Environment	Social economic status, educational level, race, ethnicity	Psychological Factor	Global/analytical learner <u>Right-brained/left brained dominance</u> Impulsive/Reflective

Digital Learning Environment: A Comparative Review

Components	Traditional	Digital
Place of Learning	Classroom, library, home	Anywhere - global
Time of Learning	School hours, home hours	Anytime – 24/7
Learning Resources	Teacher lecture, textbook	Digitized Open Source
Teaching/Learning Tools	Textbook, notebook, blackboard, chalk, audio player	Multimedia tools & free online tools
Teacher Role	Sage on the stage, Talk & chalk; impart & test	Facilitator, co-learner Director, networker
Student Role	Listener, note-taker, homework doer	Learner, researcher, creator, problem solver, decision maker
Student Demographics	Homogeneous, from small communities, same state/country, same language	More diversity mingled in race, ethnicity, SES, culture, learning style

Teaching and Learning Tools

- Word processing
- Image
- Audio
- Video
- Animation
- Communication
- Publishing/Presenting
- Sharing
- Cooperating
- Social networking

Resources

- Digitized textbooks
- [OCW & Open Educational Resources \(OERs\)](#)
- Free online tools, games, lesson plans...
- Open dictionaries and videopedia
- Open source offered by other organizations
 - [e.g. SAS Video Lectures](#)

Process: What to Learn, How to Learn

Category	Traditional	Digital
Learning Goal Setting	State/SD decide	Self-decide
Content Mandate	Planned	Based on learner interest
Time Sequence	Linear	Non-linear
Learning Pace	School mandated	Self-directed
Learn Resources/Learn Tools	Use school or community facilities	Use personal or free resources and tools
Question	Seek answer from teacher or library	Seek and compare answer from the Internet
Assessment	Teacher/School directed assessment	Self-directed assessment
Teacher-Student Relationship	Teacher → student	Teacher ↔ Student

- End