

Human Centred learning

- building relationships
- clear communication pathways
- transparent process

flexible

student centred

digital + F2F (multi-modal)

Intentional

Authentic and relevant

meaningful

inclusive

community based

To what extent can human centred learning be integrated into K-12 distributed and open learning?

Bates

Questions	Behaviourism	Cognitivism	Constructivism	Connectivism
How does learning occur?	black box observable behaviour main Focus	structured, computational existing schema previous experiences	social, meaning created by each learner engagement, participation, social, cultural	distributed, within a network, social technologically enhanced, patterns diversity of network
What factors influence learning?	nature of reward punishment, stimuli	encoding, storage, retrieval	prior knowledge remined to current context	adaptive patterns representative of current state existing in networks
What is the role of memory?	memory is hardwiring of repeated experiences where reward + punishment are the most influential	duplicating knowledge constructs of "knower"	socialization building and constructing knowledge	connecting to (adding notes) complex learning
How does transfer occur?	stimulus response task based learning	reasoning, clear, objectives, problem solving	Social, vague	
What types of learning are best				

History of E learning in Canada

- BC offered correspondence ed. 1919
- 2019 State of the Nation Report - Canada
- Every Canadian prov. and territory has some form of online distance education, e learning, program
- primary driver of K-12 e learning in Canada is gov't
- First Canadian Virtual Schools around 1994
- Highest per capita enrollments (pre-covid)
- most e learning across Canada are using either an asynchronous, online delivery medium or a blended learning format

Learning Spaces

Distributed (BC context) - increases student access, choice, flexibility for study outside of classroom schedules

Blended - leveraging the internet to afford each student a more personalized learning experience, including student control over the time, place, path, and/or pace of learning

Online E-Learning - the implementation of computer technologies to education. Can take many forms, whether it is used face to face in classrooms, as a share of required classroom activities or stroke work, or to deliver a fully online course. Can include distance ed.

Open Learning - intentional design that expands learning opportunities for all learners beyond class walls

Learning Mediums (Digital Focus) - Beyond Digital tools

minimal tech/media

students meet f2f
teacher uses simple technology
such as email, or web for e-learners

students meet online
teacher uses simple
technology such as CMS,
electronic bulletin boards

Blended

Blended

conventional
face to face
classroom

Fully online

students meet f2f -
teacher uses technology such as
simulations, tutorials, digital video

Blended

Blended

students meet online - teacher
uses multiple asynchronous
technology such blog, wikis, and
interactive videoconferencing

tech / media infused

E-learning vs Classroom

elearning

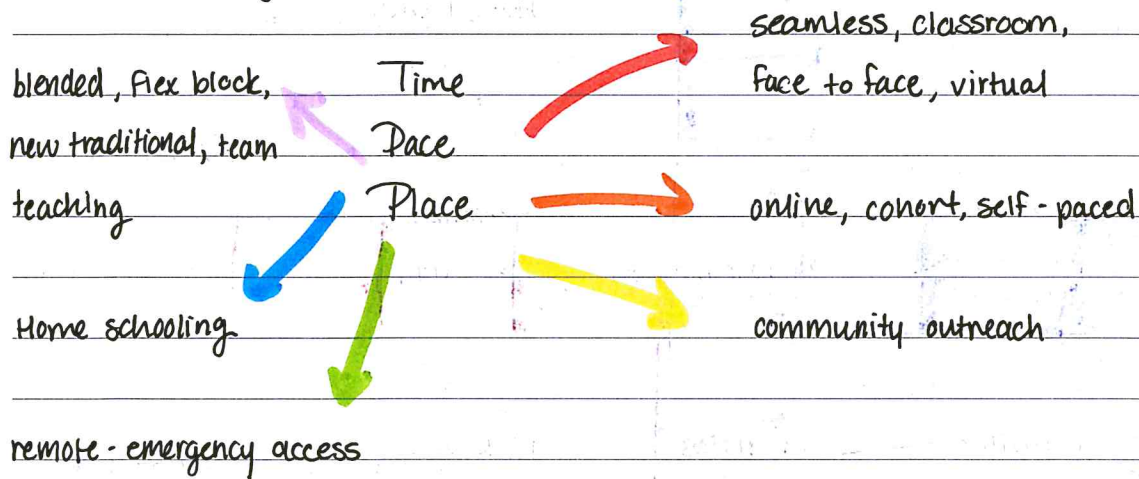
- can be completed anywhere with an internet connection. Anytime a learner is free - progress is saved
- complete at your own place. Don't rush to keep up with people around you.
- overhead costs are reduced (no travel time, accommodations etc.)
- If you are unsure about something, you can go back over it again and again
- content is engaging and interactive

Classroom

- learners have to be available at the same time and be the same place.
- trainer can focus more on particular topics depending on group needs
- may cost a lot for accommodations and getting to the training venue
- you can ask questions at the time of the training
- ideal if the learner group aren't confident using computers

How to support at home learning: Advice From K-12 Online Teachers.

Learning Landscapes K-12



SAMR

redefinition → tech allows for the creation of new ~~tasks~~ tasks, previously inconceivable

modification → Tech allows for significant task design

Augmentation → Tech acts as a direct tool substitute, with functional improvement

Substitution → Tech acts as a direct tool substitute, with no functional change

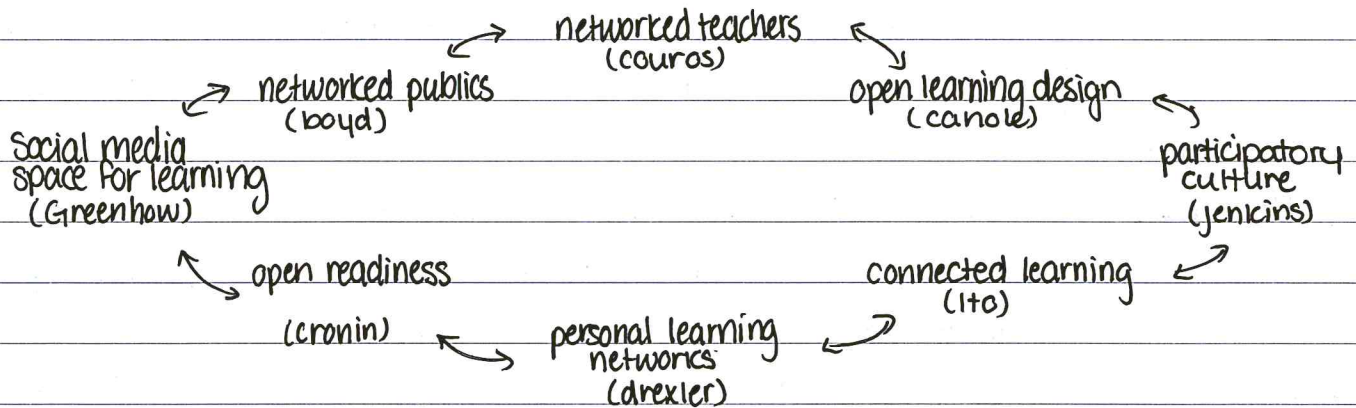
Enhancement

Transformation



Class Task	Substitution	Augmentation	Modification	Redefinition
Notetaking	notes taken on 105 notes	students choose their own notes app	all students use notability for all notes	teachers have access to all students' notes
Research	using safari to copy and paste information	bookmark and share notes using the share button	download and annotate with notability	collaborative mindmaps
Presentation	make a keynote presentation on the Ipad	demonstrate understanding with explain everything	combine audio, video and text in movie presentation	nearpod presentation
File Sharing	sent by email every lesson	shared dropbox folder	Showbie	Itunes U
Reading	open PDF from email	use dictionary & search document	annotating documents in Notability & Ibooks	Interactive Ibook
Assessment	Google form test	Google form test with automatic marking script	creative projects with strip designer Showme & iMovie	creative assignments with audio feedback in Showbie

Current Literature : K-12 Open Learning



Vygotsky (1978) Dewey (1916) Barth (1969) Scardamalia & Bereiter (2014)

Four themes Interconnecting theories

- (a) a focus on sociocultural learning
- (b) how access to multiple interactions from different cultural contexts help develop new learning opportunities
- (c) the importance of student voice and choice: and
- (d) the importance of considering zones of proximal development to expand personal learning experiences.

Principles of open learning design in K-12 learning contexts :

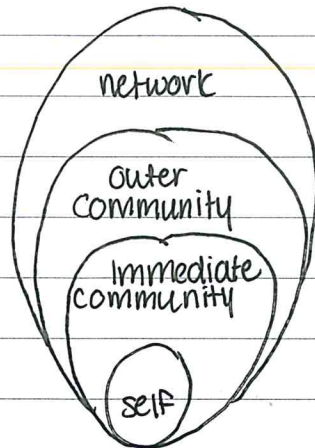
- (1) open learning is dependent upon the opportunity for learners to co-design personally relevant learning pathways
- (2) learners collaboratively and individually share their learning experiences through open and closed feedback loops that include multiple people, space perspective, experiences, and nodes of learning.
- (3) learners need to transparently demonstrate their learning in meaningful ways that integrate curriculum and competencies
- (4) open learning occurs through stages and continuums and is a personal learning experience that transcends formal learning environments.
- (5) open learning emphasizes the learning process in order to build upon

Safe learning Space

Freedom to choose
what you want to learn
and how

people can gather info
and resources w/o
feeling threatened

relaxed and low
stress atmosphere



people are honest with
each other

failure and risk
taking is encouraged and
recognized / does not
jeopardize the learning
of others

people can share & listen to
multiple perspectives

people have a choice
about how they participate

MACRO - will I share openly ?

MESO - who will I share with ?

MICRO - who will I share as ?

NANO - will I share ?

Open Learning Design

- Stage 1 - Building Relationships
- Stage 2 - Co-Designing Learning Pathways
- Stage 3 - Building & Sharing Knowledge
- Stage 4 - Building Personal Learning Networks.

↓
Reflections

Teaching Effectiveness Framework

