Open Educational Practice (OEP):
Expanding Learning Environments for all K-12 Learners
Verena Roberts
Problem:

Internet is Open & Public and K-12 has Ethical Obligations & Legislation

Technology Focus on Tools Rather than on Learning

Pedagogy Shifting in K-12

Expectation to Integrate Curriculum (Facts) and Competencies

Limited Expansion of Learning Environments from Formal to Non-Formal Learning Environments

Students are not being provided the opportunities to develop skills, competencies and abilities that encourage connecting, collaborating, interacting & learning with others in digital spaces outside of formal learning environments

Limited Connections Outside the classroom to Share Content and Ideas with different people
in classroom contexts and help refine the key components of an intervention” (The Design-Based Research Collective, 2003, p. 6). This design based research will include the collaboration of researchers, teachers and students in examining the effects of open educational practice on learners and learning. By participating in an innovative learning experience as a result of their teachers’ use of open educational practice, high school students will have the opportunity to expand their learning environments beyond the classroom by connecting, interacting and communicating with others through networks and nodes of learning, and thus build new knowledge, new learning experiences and personal learning environments (PLEs). One of the intentions of this research is to increase awareness of open educational practice for K-12 teachers.
Design-Based Research

- Balance between theory and practice
  - Participants & Researchers have voice
  - Collaborative Design intervention
  - Authentic Research Learning Environments
  - Practical application & replication
  - Iterative Cycles and Prototypes

- Flexible Design for Emerging Research

- Blends both Qualitative and Quantitative Research

- Evaluation of Innovation for continual improvement
Research Context

- 1 Teacher, 34 Grade 10 Students, High School Students (15 years)
- Sociocultural Constructivist Program: Connecting Community Partnership (Housebuilders) with Grade 10 Interdisciplinary Program
- Students Offered Alberta Ed Program of Studies, Career and Technology Studies & Competency Focused Projects
- Focus on:
  - Building Authentic Relationships
  - Developing Identity
  - Expanding Learning Beyond Classroom Walls

Retrieved from http://schoolblogs.rockyview.ab.ca/buildingfutures/
We want High School students to, “use this online presence as a way to start networking their interests and passions so that they have a leg up on all their peers once they leave high school by developing their social reputation, online digital identity and voice. This project is also about teaching and working with your son/daughter about how to be mindful about what they are posting and how to use the power of the net for good”  

(Building Futures Teacher Letter Home to Parents)
K-12 OEP: Expanding Formal, Non-formal and Informal Learning Environments

Research Questions:
In what ways does OEP expand learning opportunities for K-12 learners?
- How does an open learning design intervention (OLDI) design for open learning experiences to support K-12 learners?
- What are K-12 students’ and teachers’ perspectives of open learning experiences?

Methodological Approach:
Design Based Research (DBR)
VandR mapping
Online survey Collaborative
Collaborative & Individual Field Notes
Reflections

OLDI: Open Learning Design Intervention

Building Theory: K-12 OEP

Building Practice: OLDI

Building Digital Literacies

Developing Personal Learning Network (PLN)

Intentional-> Interactions Collaborations Connections

Theoretical Framework: K-12 Open Learning

Digital Literacies

Conceptual Framework: OEP in K-12 Contexts
Literature Review

Figure 1. A Model for Networked Education (Credit: Image by Catherine Cronin, building on "The Networked Teacher" by Alec Couros. CC BY-SA)
K-12 Indicators of Open Educational Practice:

- Designing For Sharing
- Participatory Learning
- Safe Learning Spaces
- Expanding Learning between Formal, Informal, Non-formal Learning Environments

Open educational practice (OEP) in K-12 learning contexts describes an intentional design that expands learning opportunities for all learners beyond classroom walls by collaboratively and individually sharing and building knowledge and encouraging networked participation by interacting with others from multiple cultural perspectives. 

Roberts, 2018

Description of OEP in K-12 Learning Contexts
Open Learning Design Intervention (OLDI)

- Formal Learning
- Open Learning
- Non-Formal Learning

Digital Literacies
- Intentional...
- Interactions
- Collaborations
- Connections

Outcomes/Objectives/Competencies

Personal Learning Network

Roberts, 2018
Stage 1: Build Relationships
Develop relationships between all learners which includes student-teacher and student-student relationships.

OLDI: Open Learning Design Intervention
Roberts, 2018

Stage 2: Development of Digital Literacies
Activities to develop digital skills, abilities and knowledge with a focus on digital literacies. The topics ranged from basic digital skills like: Building and Adding Digital Artifacts into Folders, Exploring how to Power Search Online, Webconferencing, Considering Online Relationships, Respect and Consent and Examining Digital Privacy.

Stage 3: Find Your Yoda
Students consider extending their personal learning beyond their formal classroom learning environment to find and connect with people and other learning opportunities that are authentic to each individual learner.

Stage 4: Be A Yoda
Students will focus on exchanging, sharing and collecting learning artifacts and supporting other learners while Building a Sustainable Personal Learning Network/Environment.

Data Collection Tools:
- VanDi Mapping Tool
- Online Survey
- Teacher & Student Reflections
- Teacher & Researcher Reflections and Observations
Theoretical Framework

K-12 Open Learning Environments

Remixed from Visitors and Residents Mapping White and LeCornu, 2017

Roberts, 2018
<table>
<thead>
<tr>
<th>Cycles</th>
<th>Type of Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle 1</td>
<td>Literature review, VandR mapping tool, Online Survey, Collaborative and Individual Field Notes: Teacher and Researcher, Student Reflections</td>
</tr>
<tr>
<td>Cycle 2</td>
<td>VandR mapping tool, Online Survey, Collaborative and Individual Field Notes: Teacher, Researcher, Student Reflections</td>
</tr>
<tr>
<td>Cycle 3</td>
<td>VandR mapping tool - Beginning and End of Cycle, Online Survey - Beginning and End of Cycle, Collaborative and Individual Field Notes: Teacher, Researcher, Student Reflections</td>
</tr>
</tbody>
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*Figure 2. Summary of intended data collection methods within each meso-cycle of the project*
Visitors and Residents Mapping

White & LeCornu (2017)
Activity towards the middle of the continuum is in ‘closed’ groups or communities.

Highly Resident activity is visible online.

CC BY Lanclos, White & Phipps
Example of Mapping Mature Learner Engagement
Reusing & Considering Previous Coding

*Figure 6. Digital VandR mapping Themed Templates (White and LeCornu, 2017).*
Possible Implications for Practice

- Increase in student agency, choice and voice
- Increase in Access to Learning for All
- Increased Participatory Learning
- Expanded Learning Environments
- Increased Connections with Authentic Learning Opportunities Outside Classroom Walls
- Increase Development of Learner PLN’s
- Increase in Digital Literacies for All Learners
Possible Implications for Policy:

- Sharing & Collaborating with Others Outside of Classrooms & Districts
- Increased understanding of privacy and data collection
- Increased awareness of OER and Open Learning
- Emphasis on Policy that Supports Learning Over Technology Tools
- Increased Professional & Learner Accountability
Questions for Colleagues

1) How can open learning expand learning opportunities for High School students?

2) How can educators facilitate open learning between face to face and digital learning environments? What are the benefits of expanding into digitally open learning environments?

3) How can the Visitors and Residents mapping tool be used to consider expanding learning environments?
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