



# CREATING LEARNER ECOLOGIES ONLINE

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# OBJECTIVES OF PROJECT

1. Find ways to achieve a range of collaborative learning spaces
2. Provide students with the opportunity to engage freely in collaborative activities
3. Provide students with a way to engage in a secure online learning community to:
  - Critically examine research, opinions, arguments together
    - Build a shared knowledge base
    - Build a support base

# KEY TERMINOLOGY

**Emergence:** the continuous outcomes of the process of interactions in an ecology  
balancing limiting and facilitating influences  
non-teleological (there is no goal to development)  
(Corning, 2012; Lewin, 1999; van Lier, 2004)

**Ecology:** person in environment over time (consider interactive whole)  
(Bronfenbrenner, 1979; Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Evans, 2000;  
Bronfenbrenner & Morris, 2006; Hoare, 2007; Rosa & Tudge, 2013)

**Setting:** space where individual interaction occurs (microsystem)

**Space:** interaction of settings (mesosystem)

WHAT IS 'SPACE'?

And how can we think about space from a leaner  
ecology perspective?

# HOW DO WE DEFINE 'SPACE' IN A LEARNER ECOLOGY?

Barron (2006) has some interesting thoughts on moving away from the dichotomy of "in school" and "out of school" learning that seems particularly relevant today:

*"There is a growing consensus that we can come to understand more about learning if we document both similarities and differences between learning processes inside and out of school and focus on the study of the complex relationships between them [Hull & Schultz, 2001]." (Barron, 2006 pg. 198)*



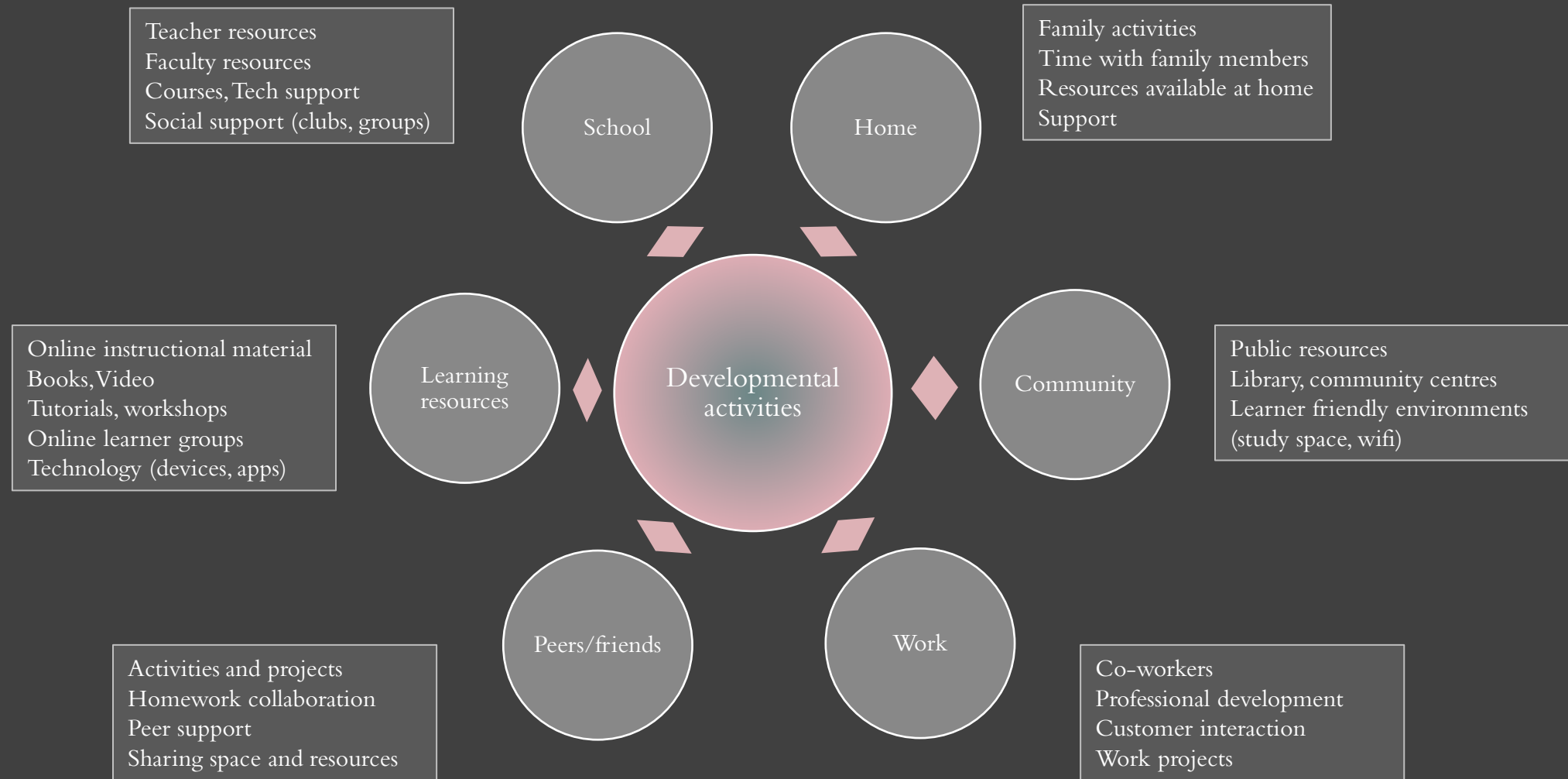
#rageagainstthedichotomy

# ONLINE 'SPACE'

*To plan for the emergence of learner ecologies, we must primarily focus on allowing for complex relationships between learning settings and contexts to emerge.*

*This necessitates the instructor to prepare a variety of tools, or affordances, for the students to use as the students and instructor see suitable given the goals of the course.*

# COLLABORATIVE LEARNING SPACES



# QUESTIONS FOR CONSIDERING SPACE

What are the **opportunities available** for engaging in meaningful activities?

What **settings** can we provide for students to engage in meaningful activities?

Focus on the spaces and affordances that exist because of the opportunities of the current situation

Guiding questions:

From an ecological perspective...

★ *What are the opportunities now?*

★ *What are things that I would continue to incorporate into future courses?*



# OBJECTIVES OF PROJECT

## 1. Find ways to achieve a range of collaborative learning spaces

Using the university LMS as a basis, find what additional resources are available that can be used as affordances for learner development from an ecological framework

(LMS) Moodle/Teams

- VoiceThread
- Stream
- Zoom
- Quizlet
- Duolingo

# OBJECTIVES OF PROJECT

## 2. Provide students with the opportunity to engage freely in collaborative activities

All course work needs to support this objective – encourage meaningful engagement

- formal assignments (training)

  - graded presentations/discussions

  - demonstration of understanding of unit goals

  - graded collaborative activities

- informal class work/activities (encouraging peer support)

  - informal feedback

  - free discussion, problem solving

  - peer support

  - non-graded collaborative activities

## OBJECTIVES OF PROJECT

3. Provide students with a way to engage in a secure online learning community where they can develop research communication skills through...

# OBJECTIVES OF PROJECT

a) Critically examining research, opinions and arguments together

Using a course training students with:

- Socratic Questioning
- Modes of argumentation

# OBJECTIVES OF PROJECT

## b) Building a shared knowledge base

### objective analysis

- Specialised and general topics
- Reference library
- Shared collection of research resources and material

### subjective analysis

- Student narratives (subjective reflections)  
Weekly casual diaries (reflective and speculative)  
'research narratives' (thank you Andy Barfield!)

# OBJECTIVES OF PROJECT

## c) Building a support base

### 1. Real time and asynchronous feedback

#### - anonymous feedback

Zoom group presentations

Forms: Likert scale, comments and questions

#### - identified feedback

VoiceThread activities

Support activities (positive comments, reactions)

Opposing argument activities (using techniques of argumentation)

Casual diary reflections and positive feedback/support for classmates

# OBJECTIVES OF PROJECT

c) Building a support base

2. Collaborative assignments

Zoom group practice, VoiceThread activities and interaction

- Socratic Questioning (short unit assignments)

- Opposing argument technique practice (short unit assignments)

- 2-3 member presentation/debate projects (main semester project)

# OBJECTIVES OF PROJECT

c) Building a support base

3. Real time study support

allowing for support systems to emerge through the Zoom space

- Quiet study space

- Student discussion space

- Teacher question, feedback, assistance space



# WHAT DID THE PROJECT ACHIEVE?

Something different than a dichotomy – acknowledging diversity and encouraging diverse opportunities for support

By approaching the design of a course from an ecological perspective, we can attend to the complex of resources students apply to their learning from varying settings and contexts (family, community, peer, work, learning resources, university...).

By doing this, we can better navigate the many facilitating and limiting influences in learner ecologies, allowing us to focus on providing settings that encourage meaningful engagement, resulting in learner development.

The achievement of the project is to provide a framework that will guide our understanding of ‘space’ for learning, and guide the selection of ever-changing available tools.

FACTORS OF  
INFLUENCE  
FROM  
SELECTED  
CONTENT

Using Socratic Questioning and Modes  
of Argument for communication  
training – communities of experts

4 factors of influence were observed:

1. Non-expert questioning expert
2. Clarifying meaning together
3. Neutrality
4. Research and reference libraries

# FACTORS OF INFLUENCE

Why was this project important, and how does it stimulate individual/collaborative discussion and research?

## Socratic Questioning

### 1. Non-expert questioning expert

*Low stress format - the presenter (expert) is given the role of 'topic moderator' - setting the grounds for the topic - the objective data.*

*This format is great for class collaboration, because it is focussed on exploring depth and reasoning.*

*The 'expert' has the chance to create a deeper, stronger argument, and thus improve their presentation (and grade), while at the same time being responsible for the learning of their audience.*

*Meaning = the response you get.*

*The 'non-expert' has the chance to critically dissect an argument, and learn about it at a much deeper level.*

*However, they also have the responsibility to engage with the argument and explore it as much as they can, so that they help their partner learn and develop their argument.*

The responsibility goes both ways.

# FACTORS OF INFLUENCE

Why was this project important, and how does it stimulate individual/collaborative discussion and research?

## Socratic Questioning 2. Clarifying Meaning

*Collaboratively, the students work towards summarizing research, making a collection of critically examined research topics: peer-review, however from a non-expert audience, trained in searching for arguments that make as much sense as possible.*

# FACTORS OF INFLUENCE

Why was this project important, and how does it stimulate individual/collaborative discussion and research?

## Socratic Questioning

### 3. Neutral

*A very important aspect is that the presentation and examination of the argument is done from a neutral standpoint. The presenter does not have to present an opinion, but this opinion is based on a critical review of research. The questioning also has to be as neutral as possible, to make as much sense as possible.*

*The presenter is allowed to change their argument/opinion based on new research/new understandings from the Socratic Questioning, if desired.*

# FACTORS OF INFLUENCE

Why was this project important, and how does it stimulate individual/collaborative discussion and research?

Socratic Questioning

4. Research and referencing

*This project also is a great opportunity to explore research and share references:*

*By providing a space to collect reference/materials, and ideas, the students and the class generate a reference bank for future use.*

# STUDENT RESPONSE

Factors of time

*flexible, allowing for individual needs,  
and providing for regular activities*

Collaborative problem solving

*sharing knowledge and expertise*

Peer support

*social spaces – virtual places to be  
together and share learning*

Access to teacher

*easily contact and get personalised  
feedback/advice*

Individual needs

*use learning material as needed,  
depending on level of each person*

# POSSIBLE FUTURE APPLICATIONS

1. Intergenerational resources - integrate with human resources in the community
2. Integration of university affiliated community outreach programs (community volunteer learner development groups)

## Why?

- Expertise from local community
- Contribution of student perspectives in the local community
- Possible developmental activities for students and the local community (resilience, healthy ageing)
- Coaching, sageing, social apprenticing opportunities



## FOR MORE INFORMATION:

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