Learning from and with Others

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Augmented Learning Environment

Outline

- ✓ What do "learning from and with others" and "augmented learning environment" mean in the learning context?

- ✓ What activities can help students develop these abilities?

- ✓ What are the roles of these two components in students' learning development?

- ✓ L2L Outcomes

What is knowledge?

Knowledge is a familiarity or awareness, of someone or something, such as facts (descriptive knowledge), skills (procedural knowledge), or objects (acquaintance knowledge) contributing to one's understanding. (Wikipedia)
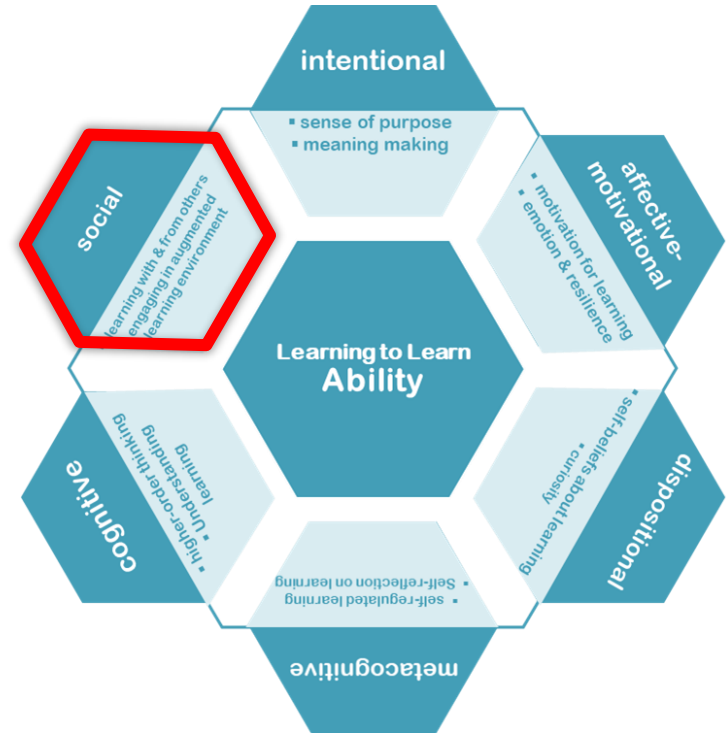
Why do we need social dimension in Learning to Learn?

PolyU L2L Model

The **social dimension** represents the interpersonal aspect of learning, where the learner learns from and with others in the immediate learning environment and beyond.

Social Constructivism

A social learning theory developed by Russian psychologist **Lev Vygotsky**, posits that individuals are active participants in the creation of their own knowledge (Schreiber & Valle, 2013).

Knowledge Co-creation

✓ Knowledge co-creation is of a **collaborative nature** and involves both knowledge sharing and creation.

✓ It is a process that culminates in the production of new knowledge.

Situated Cognition

Situated cognition theory conceives of learning as a **sociocultural phenomenon** rather than the action of an individual acquiring general information from a decontextualized body of knowledge (Kirshner and Whitson 1997).

Adult learners are a rich and diverse source of stories, data that can transform the classroom from a source for transferring knowledge from instructor to learners to a resource for interpreting, challenging, and creating new knowledge.

In the situated learning approach, knowledge and skills are learned in the contexts that reflect how knowledge is obtained and applied in everyday situations.

Situated cognition has been seen as a means for relating subject matter to the needs and concerns of learners (Shor 1987).
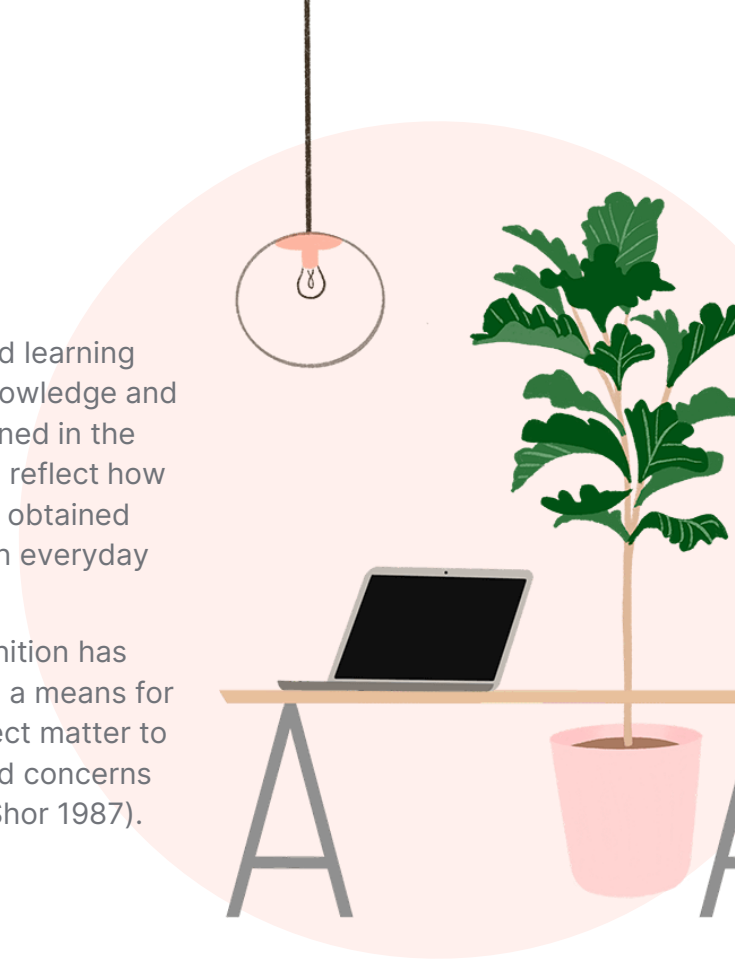
To situate learning means:

✓ to place thought and action in a specific place and time

✓ to involve other learners, the environment, and the activities to create meaning

✓ to locate in a particular setting the thinking and doing processes used by experts to accomplish knowledge and skill tasks (Lave & Wenger, 1991)

In the Classroom...

to create the conditions in which participants will experience the complexity and ambiguity of learning in the real world

Major Premises

(1) learning is grounded in the actions of everyday situations

(2) knowledge is acquired situationally and transfers only to similar situations

(3) learning is the result of a social process encompassing ways of thinking, perceiving, problem solving, and interacting in addition to declarative and procedural knowledge

(4) learning is not separated from the world of action but exists in robust, complex, social environments made up of actors, actions, and situations (Anderson, Reder & Simon 1996; Wilson 1993)

Community of Practice

✓ Community is the joining of practice with analysis and reflection to share the tacit understandings and to create shared knowledge from the experiences among participants in a learning opportunity.

✓ Community also refers to the body of knowledge created by an individual entering an area of inquiry. Jacobson (1996) identifies practitioner knowledge and cultural knowledge as communities in which a new member must learn to perceive, interpret, and communicate experience through interactions with other members of that community. (Stein, 1998)

Learning from & with Others

refers to the learner's mindset and skills to engage effectively in group work, collaborative learning and co-creation of knowledge.

In other words...

to students

- ✓ engage themselves in learning and building knowledge with other people

to teachers

- ✓ engaging students in group learning activities with other peers that promote collaboration in thinking, building new knowledge through ideas exchange and experience sharing among the group, and delivering outputs of their collaboration

"Collaboration means that people labor together in order to construct something that did not exist before the collaboration, something that does not and cannot fully exist in the lives of individual collaborators. (Peters, J.M., & Armstrong, J.L. 1998)

Collaborative Learning

"Collaborative learning" is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together. Usually, students are working in groups of two or more, mutually searching for understanding, solutions, or meanings, or creating a product. Collaborative learning activities vary widely, but most center on students' exploration or application of the course material, not simply the teacher's presentation or explication of it. (Smith & MacGregor, 1993)

Cooperative Learning

Cooperative learning represents the most carefully structured end of the collaborative learning continuum. Defined as "the instructional use of small groups so that students work together to maximize their own and each other's learning" (Johnson et al. 1990), cooperative learning is based on the social interdependence theories of Kurt Lewin and Morton Deutsch (Deutsch, 1949; Lewin, 1935).

Collaborative Learning & Cooperative Learning

[John Myers, 1991]

Cooperative	Vs.	Collaborative
Product	←·········→	Process
American	←·········→	British
Quantitative	←·········→	Qualitative
Teacher-centred	←·········→	Student-centred
A set of techniques	←·········→	A philosophy of living
Transmission	←·········→	Transformation

[Kenneth Bruffee, 1995]

	Associated Life	
↗		↖
Cooperative	Vs.	Collaborative
Teacher-directed	←·········→	Student-directed
Evaluate group process	←·········→	Not evaluate group process
Authority with teacher	←·········→	Encourage dissent
Foundational knowledge	←·········→	Non-foundational knowledge
Initiation into communities	←·········→	Renegotiation of membership
Primary education	←·········→	University education

Peer Learning

Discussion

Study Group

Peer Assessment

Group Project

Laboratory Work

What activities can help students develop these abilities?

In-Class Activities

- ✓ Think-pair-share
- ✓ Peer Instruction
- ✓ Jigsaw
- ✓ Spider Web Discussion
- ✓ Chain Notes
- ✓ ...

Spider–Web Discussion

To train students to work together collaboratively in solving problems and to self-assess that process. It can ensure all students have access to complex texts and complex dialogue and think critically.

Debriefing on Learning from & with Others

✓ Students are required to reflect on the experience of providing feedback to a peer.

✓ The purpose of this activity is to let them consider what skills / mindsets they have developed from this experience, whether they would do it differently and in what ways they might go about improving themselves in their own learning process.

Prompt Questions for Students

✓ Did I do an effective job of communicating my learning to others?

✓ How did I feel about collaborating with my peers and what did I learn from the process?

✓ Is there anything that stands out to me from learning with/doing research or project with my peers?

✓ Did I or my team encounter any difficulties during the process and how did I or my whole team overcome them?

✓ What was my main role in the group activities? (and/or identify any strengths and weaknesses).

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Prompt Questions for Students

- ✓ What have I contributed to this team or what strengths do I bring to this team?

- ✓ What do I need from others to get the best out of myself?

- ✓ Who are the key people I need to communicate well with (on/off the pitch).

- ✓ What would I do to improve my social skills for better cooperative working and learning?

- ✓ What did I learn from other's feedback?

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Assessment Rubric

Survival Learner

1

I see group work primarily as a division of labour; I seldom interact with others

Progressing Learner

2

I see group work as an opportunity to learn from each other; I actively contribute to group discussions

Sophisticated Learner

3

I see group work as an opportunity for the co-creation of knowledge; I establish rapport and engage openly and constructively in discussions with others
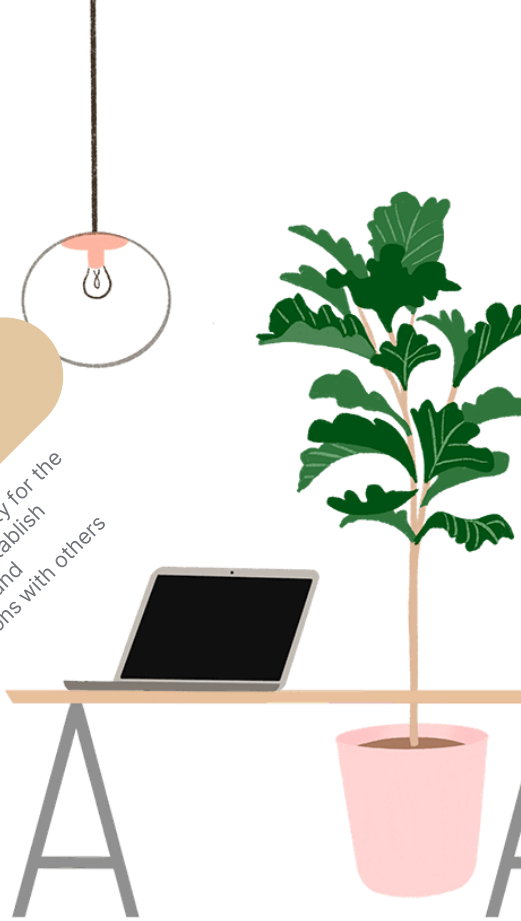
Augmented Learning Environment

refers to the learner's mindset and skills to explore learning opportunities in the broader physical, virtual and social environments beyond the classroom and develop strategies for learning in different settings.
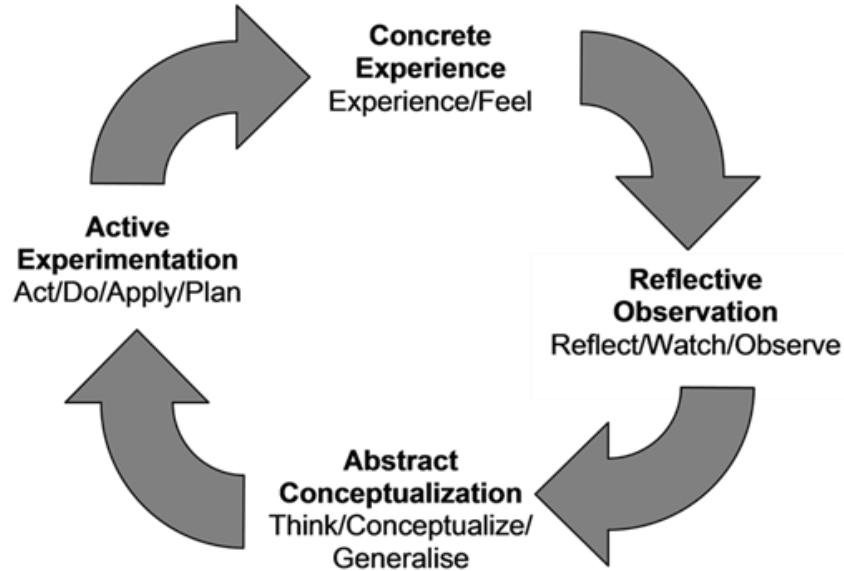
In other words...

to students

- ✓ engage themselves in different learning environments

to teachers

- ✓ facilitating activities not just in the classroom but also on site and online, and giving students the liberty to learn in different environments

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Model of Kolb's (1984) Experiential Learning

Concrete Experience
Experience/Feel

Reflective Observation
Reflect/Watch/Observe

Abstract Conceptualization
Think/Conceptualize/Generalise

Active Experimentation
Act/Do/Apply/Plan

10 Characteristics of Learner-Centered Experiences

Personal

Reflection

Anytime, Anywhere feedback from my partners in learning

Models

Agency

All of the world's knowledge at my fingertips

Inquiry

Goals + Accountability

All of my artifacts are archived in shared multimedia records

Productive Struggle

Collaboration

All of the world's thinkers connected with me

Authentic

Critique + Revision

Katie Martin
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How to help students develop augmented learning environment in the subject activities?

Three Before Me

An evolution of this strategy is that the teacher can require students to refer to three different types of references or resources (journals, articles, videos, newspapers...) to obtain information when preparing for an individual assignment.

WHAT IS 3 BEFORE ME? A TEACHING STRATEGY TO BUILD CAPACITY IN STUDENTS

'3 Before Me' is a simple rule--arguably both a teaching and learning strategy--that requires that when students experience a challenge, they must first ask three different people for help before reaching out to the teacher.

teachthought

https://www.teachthought.com/pedagogy/3-before-me/

Field Trip

Before the Trip

- ✓ Communicate goals & expectations
- ✓ Establish questions to answer / hypotheses to test

During the Trip

- ✓ Facilitate learning onsite
- ✓ Structure observation, interaction & gathering of evidence
- ✓ Utilize the materials and resources

After the Trip

- ✓ Debrief by returning to questions / hypotheses
- ✓ Have students apply learning
- ✓ Reflect on whole process

https://www.newvisions.org/blog/entry/before-during-after-field-trips-how-to-ensure-effective-student-learning

Personal Learning Environment & Network

✓ PLE&N is a self-configured online environment which allows students to connect with other learners for effective knowledge sharing and collaborative knowledge creation.

✓ Students configure and customize their own PLE&N. It has helped students transcend the boundary of traditional classroom settings into one that has no physical boundary, offers ubiquitous access, and operates dynamically with networked learners, and at the same time it has helped transform students into more independent and inquisitive learners. (Tsui, 2015)

Personal Learning Environment & Network
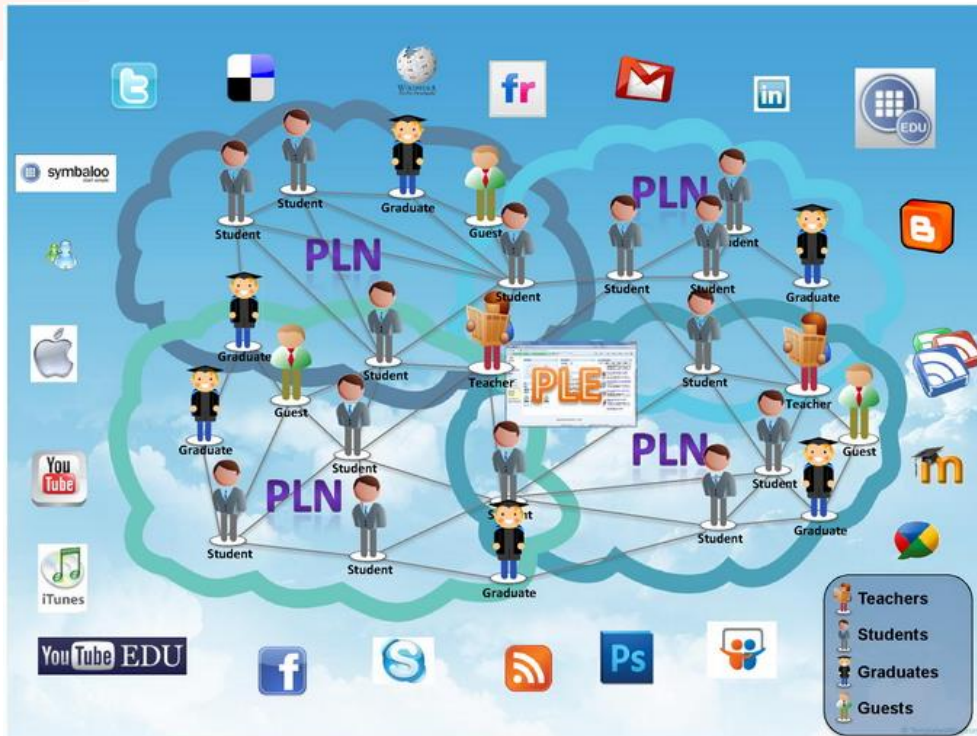
(Tsui, 2015)

Self-Reflection on Augmented Learning Environment

✓ After subject activities, students need to reflect on what they have learned from the subject activities with broader settings and context beyond the classroom, what new skills they have acquired and how they are going to apply these new strategies to their future study.

✓ The objective of this session is to let students recognize that learning can happen in diverse situations and develop their abilities to explore more resources and create opportunities for learning effectively in different environments.

What kinds of learning activities, resources and materials you may use for your subject?

Experiences
Resources & Materials
Activities
Feedback or Inspiration

Assessment Rubric

1 — Survival Learner
I see learning as confined to the classroom and the study materials

2 — Progressing Learner
I recognise that learning is not confined to the classroom; I actively explore resources and opportunities for learning in the broader physical, virtual and social environment

3 — Sophisticated Learner
I actively expand and create learning environment by visiting places, making good use of learning management tools and establishing personal network for learning

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What are the roles of these two components in students' learning development?

Roles in Students' Learning Development

- Students engage effectively in group work, collaborative learning and co-creation of knowledge.

- Students explore learning opportunities in the broader physical, virtual and social environments beyond the classroom and develop strategies for learning in different settings.

- Students increase their participation and contribution to the learning process.

- Students work together collaboratively in solving problems and to self-assess that process to achieve deeper understanding in learning.

- Students expose to sustainable learning environment and complex dialogue and think critically about the world.

L2L Outcomes

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L2L Outcomes

- ✓ Improve teamwork skills and realize the benefits of learning in groups.

- ✓ Develop the mindset and skills for engaging in collaborative learning and the co-creation of knowledge.

- ✓ Explore learning opportunities and build experiences in the broader learning contexts beyond the classroom.

- ✓ Nurture diverse learning habits and strategies for learning in different settings.

- ✓ Apply analytical abilities, critical thinking and communication skills in a variety of learning environments.

Summary of L2L

1. How to help students develop sense of purpose and make learning content meaningful to themselves?

2. How to help students increase their motivation for learning and manage their emotions?

3. How to help students believe in themselves and become curious about learning new knowledge?

4. How to help students manage their learning by themselves and improve themselves from their learning experience?

5. How to help students engage in learning for deep understanding and know how to improve their learning?

6. How to help students learn better when working with other people and engage themselves in different learning environments?

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