



HS 525: Cognitive, Sociocultural and Critical Foundations of the Learning Sciences

Lecture 13: September 16, 2025
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Reflection on last week: Vygotsky and Expansive learning

Key points:

- 1) Activity systems are the units of analysis
- 2) Multivoicedness - multiple perspectives
- 3) There must be contradictions for learnings - tensions between the multiple objects of a system
- 4) Cyclical process of learning - questioning
-> expansion: Zone of proximal expansion

Challenges:

- 1) Identifying contradictions

An example activity system

Tools:

- 1) Theories of history, society and culture
- 2) Norms of argumentation

Subject:

Engineering student

Object:
Socially responsible person

Outcome
Tensions between and within goals of engineering education

Tools:

- 1) Lectures
- 2) Assignments
- 3) Projects
- 4) Design and making techniques

Subject:

Engineering student

Rules:

- 1) Question
- 2) Discuss

Community

- 1) Instructor
- 2) Peers
- 3) Seniors

Div of labour
Among student groups

Tools:

- 1) Faculty-student interactions
- 2) Junior-senior interactions
- 3) Extracurricular activities
- 4) Co-curricular activities

Div of labour
Among student groups

Community

- 1) Instructor
- 2) Peers
- 3) Seniors

Rules:

- 1) Listen to lectures
- 2) Solve assignments
- 3) Do projects

Subject:
Engineering student

Object:
Socially responsible and technically proficient engineer

Rules:

- 1) Take courses to complete credits
- 2) Obtain minimum grades
- 3) Respect ethics and culture of the campus

Community

- 1) Students
- 2) Deans and other admin officials
- 3) Faculty and staff

Div of labour
Among student community

For the activity system described previously:

- Explain the expansive learning cycle (questioning → analysis → modeling → implementation → reflection → consolidation).
- If this system were to go through expansive learning, what new model of activity could emerge?
- What first step could trigger the cycle?

<https://docs.google.com/document/d/12BiVCl y-DVoT4NsgeF9Q3WqPxjkvzcN838gm4htkoNk/edit?tab=t.ixyp1mxn58e4>

