25m

# Collab in Times of Anxiety

When there is no escape from people, how can everyone participate comfortably despite students describing anxiety about working with real people instead of Zoom screens?

Late 2022 saw institutionally-encouraged face-to-face classes return as the learning norm. However, learners expressed high levels of anxiety regarding face-to-face classes.

This presentation reviews a study on ‘new’ learning environments and reworks it for face-to-face learning after the Covid gap years.



Maria Lisak

# Overview

- Literature Review of Hmelo-Silver et al's *Understanding collaborative learning processes in new learning environments*
- Analyzing my teaching for collaboration
- The Collaboration Process I foster to deal with anxiety
- Comparing Hmelo-Silver's Tools & Steps to mine
- Preliminary Findings from Student Comments and Language Practice Notes
- References & Contact Information

## The Literature Review

This presentation gives a summary of a study with a robust collaborative process scaffolded in an online course. This presentation reviews:

1. The collaborative and individual tools learners used in the course
2. the activity steps and modalities planned and implemented
3. the researchers codes identifying specific aspects of collaboration

## The Study

Hmelo-Silver, C. E., Chernobilsky, E., & Jordan, R. (2008). Understanding collaborative learning processes in new learning environments. *Instructional Science*, *36*(5), 409-430. https://doi.org/10.1007/s11251-008-9063-8

# The Details

**What is the study about?**

- Collaboration
- Process
- ‘New’ learning environment - now it’s old! Zoom and Covid!

**What is the significance of the study?**

- How tools/modes for individual and collaborative engagement work together to promote collaboration in online and face-to-face environments

**How is the study conducted? What methodology and methods were used?**

- Sociocultural Theory Frame
- Chronologically-Ordered Representations of Discourse and Tool-Related Activity (CORDTRA) diagrams
- Frequency analyses provided an easily interpreted snapshot of each group’s activity.
- The CORDTRA analyses provide a more dynamic view that helps researchers and teachers better understand how collaborative learning unfolds.

# Tools

Individual  Tools include a personal notebook where students

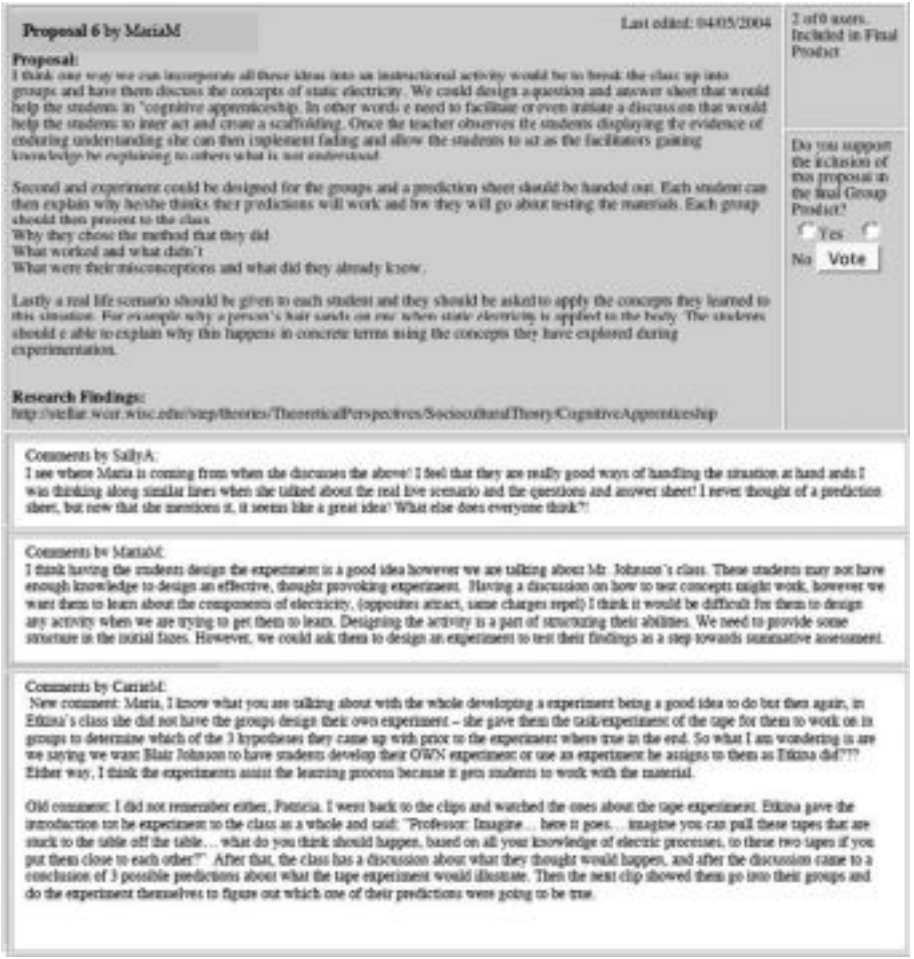
- conduct preliminary problem analysis
- keep notes on their research
- provide an explanation of their group’s product
- reflect on their learning experience

Collaborative Tools

- STELLAR whiteboard (shown in Fig. 2)
    - The whiteboard served as the editable solution space, where students could post and edit their solution proposals during and after discussions. It was also a space where other students and the facilitator could provide feedback and ask questions.” p 414
- threaded discussion

Fig. 2 STELLAR whiteboard

- STELLAR whiteboard (shown in Fig. 2)



**Proposal 6** by MariaM — Last edited: 04/05/2004

2 of 0 users Included in Final Product

**Proposal:**
I think one way we can incorporate all these ideas into an instructional activity would be to break the class up into groups and have them discuss the concepts of static electricity. We could design a question and answer sheet that would help the students in "cognitive apprenticeship. In other words e need to facilitate or even initiate a discuss on that would help the students to inter act and create a scaffolding. Once the teacher observes the students displaying the evidence of enduring understanding she can then implement fading and allow the students to act as the facilitators gaining knowledge be explaining to others what is not understood

Second and experiment could be designed for the groups and a prediction sheet should be handed out. Each student can then explain why he/she thinks their predictions will work and hw they will go about testing the materials. Each group should then present to the class
Why they chose the method that they did
What worked and what didn't
What were their misconceptions and what did they already know.

Lastly a real life scenario should be given to each student and they should be asked to apply the concepts they learned to this situation. For example why a person's hair stands on end when static electricity is applied to the body. The students should e able to explain why this happens in concrete terms using the concepts they have explored during experimentation.

**Research Findings:**
http://stellar.wcer.wisc.edu/step/theories/TheoreticalPerspectives/SocioculturalTheory/CognitiveApprenticeship

Do you support the inclusion of this proposal in the final Group Product?
Yes No Vote

Comments by SallyA:
I see where Maria is coming from when she discusses the above! I feel that they are really good ways of handling the situation at hand and I was thinking along similar lines when she talked about the real live scenario and the questions and answer sheet! I never thought of a prediction sheet, but now that she mentions it, it seems like a great idea! What else does everyone think?!

Comments by MariaM:
I think having the students design the experiment is a good idea however we are talking about Mr. Johnson's class. These students may not have enough knowledge to design an effective, thought provoking experiment. Having a discussion on how to test concepts might work, however we want them to learn about the components of electricity, (opposites attract, same charges repel) I think it would be difficult for them to design any activity when we are trying to get them to learn. Designing the activity is a part of structuring their abilities. We need to provide some structure in the initial fazes. However, we could ask them to design an experiment to test their findings as a step towards summative assessment.

Comments by CarrieM:
New comment: Maria, I know what you are talking about with the whole developing a experiment being a good idea to do but then again, in Etkina's class she did not have the groups design their own experiment – she gave them the task/experiment of the tape for them to work on in groups to determine which of the 3 hypotheses they came up with prior to the experiment where true in the end. So what I am wondering is are we saying we want Blair Johnson to have students develop their OWN experiment or use an experiment he assigns to them as Etkina did??? Either way, I think the experiments assist the learning process because it gets students to work with the material.

Old comment: I did not remember either, Patricia. I went back to the clips and watched the ones about the tape experiment. Etkina gave the introduction for he experiment to the class as a whole and said: "Professor: Imagine… here it goes… imagine you can pull these tapes that are stuck to the table off the table… what do you think should happen, based on all your knowledge of electric processes, to these two tapes if you put them close to each other?" After that, the class has a discussion about what they thought would happen, and after the discussion came to a conclusion of 3 possible predictions about what the tape experiment would illustrate. Then the next clip showed them go into their groups and do the experiment themselves to figure out which one of their predictions were going to be true.

# Activity Steps, Individual Tools, Modes

**STEP 1 Study video case Individual, Online**

**STEP 3 View other students proposals Collaborative, Online**

**Table 1** Structure of STELLAR activity

| Activity | Description | Modality |
|---|---|---|
| STEP 1 | Study video case | Individual, Online |
| STEP 2 | Record observations and initial proposals in online personal notebook that guides students towards relevant lesson features | Individual, Online |
| STEP 3 | View other students proposals | Collaborative, Online |
| STEP 4 | Identify concepts to explore for redesign | Collaborative, Face-to-face |
| STEP 5 | Conduct and share research | Collaborative, Online |
| STEP 6 | Collaborative lesson design<br>Groups present project to class | Collaborative, Online<br>Collaborative, Face-to-face |
| STEP 7 | Explanation and justification of group product | Individual, Online |
| STEP 8 | Reflection | Individual, Online |

# Designing My Study

- What was I scaffolding?
  - Individual tools
  - Collaborative tools
  - Collaborative steps
  - Coding the lessons for language production justification

# Context

Late 2022 saw institutionally-encouraged face to face classes return as the learning norm.
Spring & Fall 2020 - Online in Zoom
Spring & Fall 2021 - Hybrid (Simultaneously f2f & Zoom)
Spring 2022 - Month by Month Student Choice (Online or Hybrid)
Fall 2022 - Face to Face

# Learners

91 Korean university students in a mandatory content course for their major, taught in English.

| | |
|---|---|
| What is your favorite kind of activity during face-to-face classes? Why? | Nearly all students report group, team or partner activities as their favorite. |
| | next most popular was speaking, presentation or talking |
| | a few are about ss-t interaction especially about immediate feedback |
| | a few about writing or research |
| Only 6 students reported | Groups were their ‘worst’ work. |

**Student Reported Results**
Midterm
F2f comfort 4.054
Ppl comfort 3.92

Final
F2f 4.27
Ppl 4.22

# Method

Constructivism

- Vygotsky

Instructional methods for collaborative learning strategies:

- Think pair share
- Group discussion
- Peer review - reworked into more think pair share

| | |
|---|---|
| **45 lessons** | 17 collaboration with teacher, partner or group |
| **38%** | Goal was 33% |
| **27%** | without t-ss interviews |
| **44%** | if i include class share as part of the collab work |

# Findings

End of term reflections showed that

- Learners were tapping into the positive aspects of working with others

And I triangulated these reflections with questions about what they thought were their worst work of the semester

Stats : responses, codes, categories; before/after self anxiety rating

| | |
|---|---|
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# My Steps

| | | | |
|---|---|---|---|
| step 1, indiv | homework | research | |
| step 2, indiv | homework | write - opinion, response, analysis, webquest | |
| step 3, collab | class | share (speak/listen) | (to class, group or partner) |
| step 4, high collab | class | interact (new task, focus, duty) | (group or partner) |
| step 5, collab | class/to teacher | present | (individ or rep) |
| step 6, indiv or collab | class/revise, graph, draw, extend (hw) | write, draw | gform (indiv) or handout (collab in class) |
| step 7 indiv | Read - class or hw | t feedback | focused correction |

# Next Steps

My Collaborative Process Detailed Lesson Plans (October at SNU ICER - pending)

An outline of how language learning tools and collaborative steps in an activity system help learners incorporate equitable practices for learners with different emotional and motivational needs. (December at JALT Online - pending)

Learners can be further scaffolded to use collaborative advocacy strategies to address difference, ghosting, slackerism and dissension.

# References & Contact Information

Maria Lisak at gwangjumaria@yahoo.com

Hmelo-Silver, C. E., Chernobilsky, E., & Jordan, R. (2008). Understanding collaborative learning processes in new learning environments. *Instructional Science*, *36*(5), 409-430. https://doi.org/10.1007/s11251-008-9063-8

# Hmelo inspo and My ISD

https://docs.google.com/spreadsheets/d/1ZZqrKdzokaFqVNnmbwvZ2gafiKX4iM5cilvvzlfwADQ/edit#gid=270060391