Transfer between chatting and speaking: A case study

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Research on chatting and speaking

• Text-based chat can support oral language use and development.
  – Comparative studies:
  – Exploratory studies:
  – Anecdotal evidence:

• Often discussed in terms of “transfer.”
  – Empirical work:
    Abrams, 2003a; Compton, 2002; Hirotani, 2009; Lam, 2004; Payne & Whitney; Satar & Özdener.
  – Literature reviews:
Research on transfer

• 100 years of untapped work
  – (Thorndike & Woodworth, 1901; Judd, 1908)

• Objective: “to understand how learning to participate in an activity in one situation can influence (positively or negatively) one's ability to participate in another activity in a different situation.” (Greeno, Smith & Moore, 1993, p. 100).
  – E.g.: How does chatting with classmates influence speaking with an instructor?

• Barnett & Ceci, 2002
  – A robust taxonomy for considering what transferred (content) and from where/when to where/when (context).
Transfer between chatting and speaking on Barnett & Ceci’s taxonomy: Context

• All studies consider transfer across modality.

• Bulk of studies consider transfer from small-group chats in computer labs to individual oral interviews in instructors’ offices at the end of a course.

• Notable exceptions:
  – Oral interactions in the computer lab while chatting (Abrams, 2003b).
  – From computer-lab to immediately following classroom presentation (Compton, 2002).
  – From computer-lab to whole-group, classroom discussion next day (Abrams, 2003a).
  – From computer-lab to small-group, classroom performance 3 days later (Sykes, 2005).
  – From computer-lab to social interactions outside on campus later in the semester (Hudson & Bruckman, 2002).
  – From home to social interactions and interviews with a researcher outside of class at school, ongoing over months (Lam, 2004).
Transfer between chatting and speaking on Barnett & Ceci’s taxonomy: Content

• Many studies do not analyze chat logs.
  – Problematic from transfer perspective: “Initial learning is necessary for transfer” (Bransford, Brown & Cocking, 2000).
  – Impact vs. transfer.

• What has been shown to transfer?
  – Quantity of output (Hirotani, 2009).
  – Communicative functions (Abrams, 2003b; Sykes, 2005).
  – Linguistic content (Compton, 2002).
  – Social positionings (Lam, 2004).
  – Social bonds (Hudson & Bruckman, 2002).

Transfer of dispositions (Bereiter, 1995; Bourdieu, 1977; Packer, 2001).
Methodological issue

Typical transfer study:
Improvement in Activity B must result from transfer from Activity A.
Methodological issue

Chatting/speaking studies:
Students are engaging in oral activities between assessments.

Engagement in chat activities

Engagement in oral activities

Oral assessment
A special type of transfer

• “Collateral transition” (Beach, 1999)
  – E.g.: Engaging in professional development while maintaining a job.

  ![Diagram showing engagement in chat and oral activities]

• Calls for longitudinal and concurrent investigation of both chat and oral language use.
  – Similar to Leander’s (2008) “Connective ethnography of online/offline literacy networks”.

Case study approach

• Describe a student’s trajectory of language development across two communicative practices, one chat-based the other oral.

• Look for evidence of transfer between these two communicative practices.
  – Quantity, communicative functions, linguistic content, social positionings, social bonds, …and more?

• Data and analysis
  – Qualitative data collection: Chat logs, audio and video of oral performance, interviews.
  – Some quantification of this data (i.e.; code and count).
  – Statistical analyses are illustrative at best.
Context of study

• 17 students enrolled in 3rd semester Spanish.
• 6 chat-based activities:
  – Small groups (2-4).
  – On-campus computer lab.
  – Task-based, functional.
• 10 oral discussions of assigned readings:
  – Whole class, instructor-led.
  – Classroom (8) or computer lab (2).
  – Students self-select to respond to open-ended questions.
• I was instructor and researcher ("A" in transcripts).
Reading discussions

• Increasingly common in language instruction (e.g., Paran, 2008).

• Opportunity for extended discourse that supports oral language development, including academic discourse (Swain, 1985).

• Transfer between chat and academic discourse?
  – But, if chat can support development of speech acts (Sykes, 2005), why not acts associated with academic discourse?
Focal student: Elizabeth

• Film major; had also studied some English literature.

• Took Spanish as requirement for major.

• Had taken Spanish in high school, but 3 years had passed.

• Substantial gain in oral proficiency
  – 11-point gain; class avg=3.9, sd=6.9 (next slide).

• Very active participant:
  – Ranked 5th in CRs during chats.
  – Ranked 2nd in turns taken during reading discussions.

• Willingness for interviews: email, focal group chat, f2f.
Improved oral proficiency

Pre-test (translated)
A: What’s your name?
E: (No response)
A: What’s your name?
E: Oh, Elizabeth, sorry, um, for- for me to say Eli in Spanish is okay.

Post-test (translated)
A: How are you?
E: Not very good.
A: Why?
E: Um, it’s a long story, and I don’t have all the vocabulary, but the short version is that I lost my telephone.
A: Ah
E: That’s why I wake up very early to look for it and I didn’t found it.
• No significant difference between means (8.76, 8.14).
• Increases for both communicative practices (Hirotani, 2009).
• Starts higher in chat. Transfer?
• Significantly higher in chat:
  \((1.23, 0.33; t(4)=5.27, p<.01)\)
Quantity: Lexical density

- Significantly higher during discussions: 26.39, 7.81; t(8) = 3.80, p < .01.
- Increasing in chat (r = .78).
- Transfer from reading discussions to chat? Did chat become more academic? (Cummins, 1980; Biber, 1986)
Lexical density illustration

- Longest turn from first chat (Sept. 4th, translated):
  - *my parents want to see the movie a lot, because they are hippies and I like Ang Lee*
  - 14 words, 2 CRs.

- Longest turn from last chat (Nov. 6th, translated):
  - *it’s possible that the captain feels guilty because he has killed lots of people. and that’s why he goes to the barber prepared to die and when he said “it’s no easy to kill” he said that he’s a bigger and stronger man than the barber because he can kill and the barber can’t*
  - 50 words, 5 CRs.

- 2 different genres of chatting?
Communicative Function:
Expressing opinions

- Expressing opinions using “that” to introduce a subordinate clause:
  - Total expressions increase (r=.73; p<.01)
  - Variety of expressions increases (r=.69; p=.01)
- Indicates increasingly academic discourse (Cummins, 1980; Biber, 1986).
### Closer look at October 14th

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<thead>
<tr>
<th>Date</th>
<th>creer que</th>
<th>no que</th>
<th>ser posible que</th>
<th>parecer que</th>
<th>parecer claro que</th>
<th>ser verdad que</th>
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**Turning point in expressing opinions using “that” to introduce a subordinate clause:**

- 8 total expressions, 5 different structures
- Average total before 2.33; from then on 5.57; \(t(9)=2.43, p=.04\).
- Average different before 1.5; from then on 3.42; \(t(11)=3.18, p<.01\).
### First use of subjunctive mood:

- Used correctly in chat 3 times (Oct. 14, 23; Nov. 6) before reading discussion (Nov. 6).
Closer look at October 14th

- Transfer of specific linguistic content (translated):

Oct. 14th chat:
- *I think the book is… how do you say “racist”*
  
  *racist, yeah*

Oct. 14th reading discussion in computer lab:
- A: *Other opinions about the book?*
  
  *E: I think it’s a little racist.*

Oct. 14th chat:
- *it seems clear to me that the author’s point of view is biased.*

Oct. 16th reading discussion in class:
- *It seems clear to me that the play is a critique of society.*
Instruction on October 14th

- Students read “People of the World” as prior homework.
- In chat they shared opinions with classmates (24 min).
- Handout included structures for expressing opinions.

### Algunas estructuras para expresar opiniones

- Creo que / Pienso que / Me parece que + indicativo
- No creo que / No pienso que / No me parece que + subjuntivo
- Me gusta/preocupa/molesta/importa que + subjuntivo
- Es + adjetivo + que + subjuntivo/indicativo
  - Ejemplos:
    - Es cierto/claro/verdad/obvio que + indicativo
    - Es posible/dudoso/bueno/horrible que + subjuntivo
- Me parece + adjetivo + que + subjuntivo/indicativo
  - Ejemplos:
    - Me parece cierto/claro que + indicativo
    - Me parece bien/mal/imposible/probable que + subjuntivo
Instruction on October 14th

- Still in computer lab, whole class discussed text with instructor (20 min).

- Next day in class, students reviewed and corrected expressions of opinions in chat logs.

- Elizabeth (interview):
  “I was really eager to talk about the book because it was so controversial.”
Expressing opinions

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- **Correct use of subjunctive**
- **Incorrect use of subjunctive**

- Difficult to disentangle medium from overall instructional intervention (Warschauer, 2000).
- Oct. 23rd chat included similar handout.
- No specified communicative functions for Nov. 6th chat, nor any reading discussion.
creer que (to think that)

- Increased in chat ($r=.96$)
- Appears with higher frequency much earlier in discussions.
- Transfer from discussion to chat?
creer que (to think that)

- Increased in chat ($r=.96$)
- Appears with higher frequency much earlier in discussions.
- Transfer from discussion to chat?
## Social positioning and bonds: Humor

<table>
<thead>
<tr>
<th>Date</th>
<th>Humor during chat</th>
<th>Humor during discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 4</td>
<td>Makes multiple jokes. Expresses laughter at classmate’s jokes (“haha”).</td>
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<tr>
<td>Sept. 25</td>
<td>Expresses laughter at classmate’s jokes (“haha”).</td>
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<tr>
<td>Oct. 5</td>
<td>Makes joke. She, classmates, and instructor laugh.</td>
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<tr>
<td>Oct. 14</td>
<td>Makes joke and expresses laughter at it (“hehe”).</td>
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<tr>
<td>Oct. 23</td>
<td>Expresses laughter at classmates comment (“haha”).</td>
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<tr>
<td>Nov. 6</td>
<td>Makes joke. She, classmates, and instructor laugh.</td>
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</table>

- Humorous subject position seems to be available in chat before becoming available in reading discussions.
Social positioning and bonds: Humor

<table>
<thead>
<tr>
<th>Example (translated)</th>
<th>Elizabeth’s comments (interview)</th>
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<tbody>
<tr>
<td><strong>Sep. 4</strong></td>
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<tr>
<td>Joke in chat</td>
<td>“In the first chat we didn’t really know what was going on. Making jokes in chat is something people are familiar with, so maybe that was a way to make the activity more familiar.”</td>
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<tr>
<td>E: if I don’t shower in the morning my hair gets “frizzy”</td>
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<td>Classmates: haha</td>
<td></td>
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<tr>
<td><strong>Oct. 5</strong></td>
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<tr>
<td>Joke during reading discussion</td>
<td>“That’s the sort of self-deprecating joke I tend to make…Having a shared sense of awkwardness [with my classmates] made me feel comfortable enough [to make that joke].”</td>
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<tr>
<td>A: What do you think [about the poem]?</td>
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<tr>
<td>E: I think I can express my ideas better in English than in Spanish. ((laughter))</td>
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</table>

- Elizabeth on developing comfort with her classmates:
  “I felt like [chatting] led to some more open communication in general, but I feel like the in person stuff did that even more.”
  “There had probably been more group activities in class [before I made those jokes].”
Social positioning and bonds: Humor

<table>
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<tr>
<th></th>
<th>Jokes</th>
<th>“haha”s</th>
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<td>Nov. 6</td>
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- Joking in chat decreased over the semester
- “When we got to be more friendly with each other, the ‘get to know you, have fun chatting together’ aspect of the chat wasn’t really there anymore because it was so much more immediate in talking… partly because in class… we would switch to English a bit more [which] helped with social interaction.”
- Social bonds transferred from classroom into chat?
## Transfer findings

<table>
<thead>
<tr>
<th>Chat-based activities</th>
<th>Reading discussions</th>
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<tbody>
<tr>
<td>Quantity of output (words/minute)</td>
<td>Lexical density (words/turn)</td>
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<tr>
<td>Diversity and normativity of expressing opinions</td>
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<td>Linguistic content</td>
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<td>Social positioning as humorous.</td>
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<td>Social bonds, comfort with classmates</td>
<td>Social bonds, comfort with classmates</td>
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</table>
Academic chat?

- Increasingly academic characteristics (Cummins, 1980; Biber, 1986).
  - Turns became longer and lexically denser.
  - Subordination increased.
  - Jokes decreased.
  - Elizabeth: “Chatting, because it was an assignment, made it feel less casual… [I was aware that] it was to practice grammar [and] that we would print out the conversations after and go over the grammar. (...) We knew we were being watched.”

- Chat as medium, not a genre (cf. Crystal 2006)
  - Like all communication technologies it can support multiple genres (Finnegan, 1988).
Medium or instruction?

• “Chatting” was embedded in greater units of instruction.
  – Connected to prior and subsequent class and homework activities and topics.
  – Sometimes directly related to oral activities.
  – Involved other instructional materials.
    • Text book, readings, handouts, online resources.

• Disentangling “impact” of chat from overall instructional context may not be possible
  (Warschuaer, 2000).
Thank you!

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