

**Synchronous  
communication  
in a web-based  
senior high  
French course**

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Glen Cake

E-teacher

Center for Distance

Learning and Innovation (CDLI)

# Purpose of presentation

Report on partial results of a qualitative case study of interaction in a context of use of Vclass<sup>TM</sup> synchronous communication tools for instruction in a grade 10, web-based French course in Newfoundland and Labrador

# Presentation plan

## Overview of context

- WBL in NL
- Senior-high French
  - Vclass™

## Overview of study

- Aim
- Methodology
- Findings
- Conclusions

# Web-based learning in NL

- Center for Distance Learning and Innovation (CDLI)
- 2002-2003 18 web-based, senior-high courses in 74 sites
  - Courses designed according to provincial curriculum guidelines
    - E-teachers deliver the courses
  - Location of teachers is independent of the location of students

# Web-based French 2200

- 60% synchronous communication supported by vClass™
- 40% asynchronous component supported by WebCT™
  - 20 students dispersed over seven schools
- Two school districts in Labrador and northern Newfoundland
  - One e-teacher located in St. John's

# Vclass™ overview

- A real-time collaboration environment
- Offers a suite of tools accessed through a graphical interface
  - Low bandwidth requirements (28.8 kbps supported).

# Vclass™ tools overview

- Two-way audio
- Shared whiteboard
- Text-based direct messaging,
- Hand-raising with sequencing
  - Private & public polling
  - Application sharing



# Vclass™ interface

The screenshot displays the Vclass Virtual Classroom interface for a session titled "VClass Virtual Classroom - French 2200". The interface includes a menu bar (File, View, Tools, Window, Help), a toolbar, and several panels:

- Participant Info:** Lists participants: Kayla!, Lindsay, Sarah..., Sheena, Trent..., and Troy &... A "No hands raised." indicator is visible.
- Audio:** Shows microphone and speaker status for user "gcake".
- Direct Messaging:** Shows a message from Moderator[gcake] to \*Samantha\*: "Samantha what are you waiting for".
- Whiteboard:** Displays a table titled "Vocabulaire" with columns for "Vus", "Entendus", and "Connus". The table lists various French phrases with checkmarks indicating their status.

Vocabulaire	Vus	Entendus	Connus
conscient ✓	✓		
sous-estimé ✓	✓	✓	✓
un geste ✓			✓
se croiser les bras ✓	✓		✓
le ton de la voix ✓	✓	✓	✓
hocher la tête ✓	✓	✓	✓
saluer ✓	✓	✓	
le désaccord ✓	✓		
la tristesse ✓	✓		
le dégoût ✓	✓	✓	
l'apparence ✓	✓		✓

At the bottom of the interface, a status bar indicates "Class in session for 1 hour, 3 minutes". The Windows taskbar at the very bottom shows the Start button, several open applications (CDLI v..., Microso..., vClas..., IMP - Mi..., Educati..., Paint S...), and the system clock showing 12:01 PM.

# Direct messaging



# Aim of the study

Describe the interactions  
in relation to the tools'  
affordances and constraints  
& in relation to the  
goals of instruction.

# Aim of the study

Describe the types of interaction according to  
four types:

1. Student - teacher
2. Student (s) – student (s)
3. Student - content
- 4. Students/teacher – tools**

# Data collection

1. Six, semi-structured class observations
2. Three, small-group interviews with students
3. Two interviews with e-teacher

Vclass<sup>TM</sup> used for observations and interviews

DM & WB records saved as printable files

# Affordances & constraints

An affordance is a potential or perceived capacity of an object to enable the assertive will of the actor  
(Ryder & Wilson, 1996).

A user interacts with a tool in an effective way when he/she is able to maximize its affordances and minimize its constraints in relation to the goals for using the tools.

# Goal of instruction using Vclass™

- P2P, S2S interaction
- Aural/oral communication
- Use of French as target language
- Comprehensible input and output

# Affordances of Vclass™

- Private, multiple interaction using text-based DM.  
O2O, P2P, S2S, S2T communication
- Public, unique, interaction using two-way voice.
  - O2M, T2S communication



# Constraints of Vclass™

- Does not support video-conferencing
- Does not support multi, private one-to-one communication with two-way voice
- Does not support use of the microphone by more than one person at a time

# Findings: Student-tool interaction

-Favoured DM

-Communicated in English

- P2P interaction

- S2T for queries re marks, assignments etc.

- Used it spontaneously without instructor  
prompt

# Findings: Student-tool interaction

- Used WB with teacher prompt
- Used WB for P2P interaction when assigned individual WB privileges
- Used 2WV with teacher prompt
- Communicated in French using these tools

# Findings: Teacher-tool interaction

- Favoured use of WB & 2WV
- Used French with these tools except with DM
  - Relied on T2Ss, O2M interaction
- Sometimes used tools in support of one another

# Main findings

- Students favored P2P tools
- Teacher favored T2Ss tools
- Vclass<sup>TM</sup> affords more support for O2M, T2Ss interaction than for P2P
- Vclass<sup>TM</sup> can potentially reinforce traditional teacher-centered approaches

# Conclusions: Maximizing affordances

- Pedagogical approaches, techniques, activities need to be tailored to the context
- Mindful design & choice of types of interaction
  - Use of tools in combination with one another
    - Assignment of tool privileges to students
      - More reliance on DM for instruction

# Conclusions

- Teachers using Vclass™ could benefit from PD opportunities to appreciate the affordances and constraints of the tools in relation to the goals of instruction
- Private audio in new version will potentially support goals
- More bandwidth & two-way video would provide greater support for curriculum goals and outcomes

# References

- **Ryder, M. & Wilson, B. (1996).** *Affordances and Constraints of the Internet for Learning and Instruction.* Paper presented to a joint session of the Association for Educational Communications Technology, Indianapolis.
- **Saloman, G. (1993).** On the nature of pedagogic computer tools: The case of the Writing Partner in Lajoie, S. and Derry, S. (eds). *Computers as cognitive tools.* Lawrence Erlbaum Association. New Jersey.



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**No tool is good or bad in itself:**  
its effectiveness results from and  
contributes to the whole configuration  
of events, activities, contents, and  
interpersonal processes taking place in  
the context of which it is being used.

Salomon (1993)