Video screen capture to scaffold the L2 writing processes - Teachers engaging with new technology

Marie-Josée Hamel
marie-josee.hamel@uottawa.ca

Jérémie Séror
jseror@uottawa.ca

Chantal Dion
cdion@uottleton.ca
Why focus on screen capture technology

• Research interests stemming from her own experiences with this tool
  – As practicing researchers desire to recycle research instruments, methods and pedagogic practices (Caws & Hamel, in press).

• Video screen capture (VSC) technology
  – An innovative way to record and save for later analysis individuals’ on-screen events as well as, if desired, recordings of their voice as they complete tasks on a computers.
  – Combines both visual and aural modalities and provides a dynamic form of observation and training popular on the Internet and increasingly in the field of education (Mathisen, 2012).
Affordances of screen capture technology for research and teaching

• **Documentation/tracking tool** (Fisher, 2007)

• **Retrospection tool** (Guichon, 2011)
  – A chance to enhance opportunities to «see» their behaviour, providing learners with vital information about their performances.

• **Scaffolding tool** (Hampel, 2006)
  – Offers ways to monitor, support and accompany students as learners begin to write independently.
    - e.g., Providing multimodal video commentary (Séror, 2012; Silva, 2012).
Writers in action!

- Research project designed to explore the affordances of VSC for L2 writing development and the promotion of L2 writer autonomy (Ransdell & Barbier, 2002).

2011-2013
- Ethics, training sessions for teachers, recruitment of two focal instructors

2012-2013
- Planning

2014-2015
- Intervention
- Data collection
- Data analysis
- Recommendations

Present
- 2 focal instructors
Frameworks that inform our research

• CALL ergonomics (Rabi 2005; Bertin & Gravé, 2010; Hamel, 2012)
  – Looking at the quality of the user-task-tool interactions at the computer; identifying the various choices, paths students make, take as they use tools for language learning.

• Sociocultural theories of learning (Vygotsky, 1978; Lantolf & Thorne, 2006)
  – Focus on how video screen capture technology mediates students’ understanding and development of:
    • Writing processes (Flower & Hayes, 1981; Hayes, 2000)
    • Metacognitive awareness (Hacker, Dunlosky & Graesser, 1998)
    • Learner autonomy (Little, 2000; Benson, 2007; Dion, 2011)
Tool chosen


- Web-based application (does not need to be installed on a machine).

- Selected for its reliability and ease of use.

- Limit: 15 minute recordings max with free version.
Context of the intervention (Fall 2012)

- **Chantal** (Carleton University)
  - FSL writing course (3h/wk)
  - N = 18 anglophone students (3rd year)
  - B2 writing skills
  - Development of academic and professional literacy in FSL
  - Various types of texts
  - SOM to foster reflection on writing
  - Writing assignments with SOM at home

- **Reza** (University of Ottawa)
  - IEP writing component of a ESL course (3h/wk)
  - N = 18 international students (pre-entry)
  - B2 writing skills
  - Development of academic literacy in ESL
  - The argumentative essay
  - SOM to support the writing process
  - Writing assignments in the computer/language lab
Self-portrait with SOM of our two language teachers

• Chantal

• Reza
Data collection

<table>
<thead>
<tr>
<th>Semi-formal interview conducted with 2 professors</th>
<th>English Second Language Writing Class (EIP)</th>
<th>French Second Language Writing Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>• approximately 12 questions</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>• approximately 1.5 hours per interview.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of recruited students</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Number of answered questionnaires</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Number of students who submitted recordings</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Total number of screen capture videos recorded</td>
<td>116</td>
<td>88</td>
</tr>
<tr>
<td>Total number of hours of screen capture videos recorded</td>
<td>20.41 hours</td>
<td>16.46 hours</td>
</tr>
<tr>
<td>Average number of screen capture videos recorded per students</td>
<td>6.4 (min: 4 max: 10)</td>
<td>5.86 (min: 2 max: 18)</td>
</tr>
<tr>
<td>Average length of screen capture videos recorded per student</td>
<td>9.11 minutes</td>
<td>11.46 minutes</td>
</tr>
<tr>
<td>Maximum length of screen capture videos recorded by students</td>
<td>15 minutes</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Minimum length of screen capture videos recorded by students</td>
<td>4 minutes</td>
<td>7.56 minutes</td>
</tr>
<tr>
<td>Average of total hours of screen capture videos recorded per student</td>
<td>1.07 hours (min. 27.15 minutes - max. 1.43 hours)</td>
<td>1.12 hours (min. 15 minutes - max. 3.25 hours)</td>
</tr>
</tbody>
</table>
Findings from the interviews

• The tool was adopted because each instructor was convinced of the potential of this tool:
  – “c'était quelque chose qui allait permettre de se voir. Pour moi c'était l'intérêt d'avoir cet outil-là. Ça ajoutait un outil à ma boîte d'outils pour rendre les étudiants plus conscients” (Chantal)
  – “Basically what I asked them to do is watch it to see how you can improve your future writing ... What types of mistakes you make? So if you are asking about things that can stand out in Screencast-O-Matic... what I want for them was the process of writing” (Reza)

• Implementation strongly linked to each instructors’ context and overall teaching philosophy and beliefs.
<table>
<thead>
<tr>
<th>Task</th>
<th>Objective</th>
<th>Modality</th>
<th>Student Role</th>
<th>Teacher role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write introduction for a 5-paragraph essay</td>
<td>Practice academic writing</td>
<td>Lab-based/individual</td>
<td>writer/user of SOM/thinker</td>
<td>Process scaffolder</td>
</tr>
<tr>
<td>Write body paragraph</td>
<td>Develop and support written ideas</td>
<td>Lab-based/individual</td>
<td>writer/user of SOM/thinker</td>
<td>Process scaffolder</td>
</tr>
<tr>
<td>Plan an essay</td>
<td>Brainstorm and outline an essay collaboratively</td>
<td>Lab-based/team</td>
<td>Team member/users of SOM/thinkers</td>
<td>Process scaffolder</td>
</tr>
<tr>
<td>Revise</td>
<td>Revise and edit grammatical errors and vocabulary inaccuracies</td>
<td>Lab-based/individual</td>
<td>Reader/editor</td>
<td>Process and product scaffolder</td>
</tr>
<tr>
<td>Prepare lab material (teacher-led task)</td>
<td>Show ss the process of writing (use SOM)</td>
<td>Lab-based</td>
<td>Learner/note-taker</td>
<td>Presenter of an expert model</td>
</tr>
</tbody>
</table>
ESL502
Collaborative writing assignment

Nowadays we are producing more and more rubbish.
Why do you think this is happening?
What can governments do to help reduce the amount of rubbish produced?

Outline:

I.
L:
A:
Anna:
F:
List:
<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Familiarize with SOM and comment in Journal</td>
<td>Familiarize oneself with the instrument and comment about it</td>
<td>Individual, at home</td>
<td>Get to know how to use SOM instrument</td>
<td>Monitor tool usage capacity</td>
</tr>
<tr>
<td>Revision of a cover letter</td>
<td>Revise work in progress, identify focal revision point linked to genre</td>
<td>Individual, at home</td>
<td>Revise and assess revision in relation to one grammar focal point</td>
<td>“Assessor”: Written comments; SOM for revision process</td>
</tr>
<tr>
<td>Revision of a narrative text</td>
<td>Revise work and use SOM to focus on genre. Clearly leave traces of agency as a writer</td>
<td>Individual, at home</td>
<td>Revise and apply specific instructions. Awareness of decision making process</td>
<td>“Assessor”: Using SOM (Casual visual only) to comment choices and editing process</td>
</tr>
<tr>
<td>Revision of an argumentative text</td>
<td>Use SOM to revise and edit with focus on text markers linked to genre</td>
<td>Individual, at home</td>
<td>Reflection on revision process; on SOM in the revision process. Awareness of choices</td>
<td>“Assessor”: Using in text editing and assessment AND SOM to review, detail evaluation and comment on agency</td>
</tr>
<tr>
<td>Writing, editing and revising weekly Reflexive Journal</td>
<td>Individual use of SOM to implement and assess continuous critical in reflexive journal</td>
<td>Individual, at home</td>
<td>Further develop personal use of SOM to implement awareness of writing process and decision making</td>
<td>“Assessor”: General observation and assessment of progress in writing process, production and metacognition</td>
</tr>
</tbody>
</table>
Les origines de Carleton montrent qu'elle avait toujours les étudiants comme une priorité. De son objectif initial d'éduquer les anciens combattants, Carleton développait continuellement pour fournir plus de services et d'espaces pour les étudiants et des programmes pour augmenter l'éducation.

L'institution a été fondée par l'Association d'Ottawa pour la Promotion de l'Apprentissage en 1942. Carleton, qui a été connu sous le nom du Collège Carleton à l'époque, a offert des cours du soir dans certaines disciplines seulement. Une décennie plus tard, Carleton est devenue la première université non-confessionnelle au Ontario. Ce n'est qu'en 1957 que le collège a été accordé le statut d'une université. La construction a commencé en 1959 à son emplacement, entre la rivière Rideau et du canal Rideau au lieu de sa position initiale à Avenue First. Les premiers bâtiments qui seront construits étaient Henry Marshall Tory bâtiment, la bibliothèque Maxwell MacOdrum et la Norman Paterson Hall.

En 1967, le Collège Saint-Patrick a été incorporé Carleton, qui a élargi la faculté des arts et des sciences sociales avec l'école d'assistance social puisqu'il a été reconnu pour son expertise dans ce domaine. Le début des années 80 avait fourni les premières occasions pour les élèves d'étudier officiellement entre Carleton et l'Université d'Ottawa par la Convention d'Échange de Premier Cycle. La prochaine décennie tenait l'exécution de plus de programmes et des départements comme l'institut d'études
Patterns in the task design

• Emergence of two pedagogic uses of SOM in the context of writing
  – SOM for scaffolding - Reza
  – SOM for retrospection – Chantal

• Exciting to see the process involved as teachers adopt and ultimately adapt and experiment with the new tool.

• Balancing act as writing instructors reinterpret traditional writing classroom tasks with a tool that sheds light on the writing process.
Final thoughts

- Successful integration linked to....
  - Optimizing the use of the tool (seeking “good fit”) requires:
    - Creative teachers and risk takers (willing to experiment and engage in this type of action research initiative).
    - Banking on the inherent advantage of this tool

- Signs of teachers appropriating this technology
  - Teachers are willing to go further...
    - “like probably next year I will teach a four skills course so I’d like to use screen capture. That would allow me to work with the four skills, that is have them work on oral skills, use it for oral development and then keep the idea of feedback, reflection, metacognition, planning, choice, decision making and recursivity” (Chantal)
Selected references


Contact information

• Marie-Josée Hamel
  – marie-josee.hamel@uottawa.ca

• Jérémie Séror
  – jseror@uottawa.ca

• Chantal Dion
  – chantal.dion@carleton.ca

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