Scroll, Copy and Paste: Students of Spanish Searching for Information Online

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Abstract

This is a pilot study with a twofold aim: to identify some digital literacy issues at work in the Swedish foreign language classroom that language teachers might need to address and to pilot possible recording techniques in order to collect valid data for such work. To achieve this, the research question asks: what choices, actions and reports do some students make when searching for specific information in a work session about Spanish speaking countries?

A web-searching task was formed in cooperation with two Spanish teachers. Data, collected during one session, include screen cast recordings, video– and sound recordings followed by prompted interviews.

Data is analyzed and discussed within a sociocultural theoretical frame. Some results show that the students "look at" rather than "read" the texts from left to right and top to bottom. They emphasize work product rather than work process, work fast, multitask and select/copy/paste. They prefer to listen to music while working, look for headlines rather than using web site menus and find it difficult to evaluate sources. They choose various sources such as text sites, Wikipedia, image banks or travel agency sites. They use different languages even though they are asked to work in Spanish only and are aware of the fact that the task is not assessed. Translation and vocabulary services were learning resources that were used often, together with quick commands, copy and paste.

Key words: student agency, information searching, foreign language studies

1. Background and literature review

Language education is undergoing great changes in the Nordic countries. More than 200 out of 290 towns in Sweden implement a so-called 1-1 solution where students have their own digital learning device such as computers or iPads and the number of virtual classrooms increases at the same time as the amount of paper course books does the opposite.

Concerning Spanish as a modern language in Sweden, Francia and Riis wrote a recent report that suggests that the development of ICT usage in the classroom could involve some of the answers to the current crisis in language education with too large groups, an increasing number of students that drop out and teachers who are not qualified to teach. Francia and Riis recommend increasing ICT usage at both national, school and teacher level.

Many studies deal with the role of Internet and communication technologies (ICTs) in the language classroom and how these might affect language learning.

Cassany and Ayala discuss the idea that students behave like "digital natives" - comfortable with speed, multitasking and group learning, while their teachers do not (54). Since 2011, there is also explicit demand in the Swedish curricula for studying modern languages that students even at the most basic language levels should search and evaluate sources online. Some also point out that writing and information seeking are some of the most prevalent school activities on the Internet, rather than using the computer to communicate with other people (Selander 267-281) and Lodeira and Matti state the fact that as much of the course contents as possible should be carried out in the target language (36, 38). However, Estling Vannestål and Granath point out the fact that some teachers fear that a "cut and paste pedagogy" may come to dominate the language learning processes if information is not processed but merely copied into a new document (Estling Vannestål and Granath 143-144).

Selwyn claims that much of the research on digital technology and schools has been dominated by a perspective of what *could* or *should* be done and not so much of *actual use* (38). He therefore identifies a need to study: "(…) questions concerning what is *actually* taking place when digital technology meets classroom" (40). Adding to this is the fact that pilot studies are under-reported and much needed in educational research (Teijingen and van Hundley 289-295). This, then, is a pilot study with a twofold aim: to identify digital literacy issues at work in Swedish foreign language high school education and to pilot possible recording techniques in order to collect valid data for such work. In order to achieve this, the research question asks: what choices, actions and reports do the students make when searching for specific information in a work session about Spanish speaking countries?

What follows is first a brief account of a key topic in the sociocultural theory of language learning. The idea of learners' language and sequencing are mentioned. The concepts of 'text' and 'reader' are presented, as are some studies concerning Google Translate and source selection. Then, there is a description of the students' task, the methods of collecting data and data analysis. After discussing some limitations of this study, the results and answers to the research questions are presented. Finally follows a discussion of the results and some digital literacy areas for foreign language teachers and students to consider.

1.1 Mediation, learners' language and sequencing

Sociocultural theory of language learning stresses the idea of mediation. Lantolf & Poehner explain this by writing that the social and physical worlds are not experienced directly, but through signs that are agreed upon as means for communication through cultural and historical use (7-13). Within this theoretical paradigm, Selander and Kress point out how a formal learning sequence can be analyzed at different levels (267-281). For instance, you could look at it from a macro perspective, concerning educational laws, rules and regulations. You could also approach it from a mezzo level, involving for example the school itself, the classroom, course books or the teacher's relationship with the students. The third level is the micro level of the individual learner, dealing with the individual learner making choices in order to construct his or her own learning path. It is the students' choices, actions and reports at the micro-level that are studied in this pilot study.

Ortega stressed the fact that language teachers need to rethink the idea of the 'target language' (TL) as the ultimate learner goal and argues the relevance of seeing 'learner's language' as something as full and relevant as TL (17). In 2010, Selander and Kress mentioned *sequencing* as an important component in learning: to see learning as an ongoing process of trials, composing and participation rather than mechanical mimicking (35). How much and how often you do something often has to do with how much time you have to penetrate a certain area of study and to what extent within that time.

1.2 'Text', 'reader' and 'literacy' when searching for information on the web

Information searching online is a different type of reading than the reading that takes place while searching for information on paper. Concerning print, there is the idea of a model reading of a text. This includes the author's intended reading path of the text; the notion that the text has a logical order, a beginning, middle and end. For instance, it is assumed that we in the West read from top to bottom and from the left to the right. From a teacher's point of view, this could facilitate the discussion of what a "good" and "coherent" text is, as what is efficient reading, related to the task at hand. The concept of model reading also makes it possible to scaffold the reading in terms of for example helping the students to pick out key words, linguistic structures and practice reading strategies with help of context and images.

However, Patterson states that reading online evokes questions like what kind of reading scrolling down and up is, compared to skimming through a paper page (74-80). Searching for information online, what is the beginning or end of a text depends more on the choices of the reader. For instance, how many hyperlinks do you need to click before you come to the end of the text? Do you read the images before you read the text? Do you scroll through the menu and then click directly on to what most interests you?

Björkvall proposes to use the idea of 'resource orientation' rather than 'text' (26). This is aimed at actual potentials of meaning where the analysis stems from the communicative actual situation, and with that the research is aimed at what the learner finds relevant, which could be texts but also other resources such as images or colors.

Although conducting their study in a closed hypermedia context, Akyel and Erçetin studied advanced learners' hypermedia reading strategies (136-152). Their results indicate that students need to read strategically, making decisions about source types. Leu et al. and Bolter show that students also need to be self-monitoring enough to be able to stay with the reading purpose, fast enough to process large amounts of information in a short time and skilled in categorizing and locating information, evaluating the usefulness and relevance of that information, synthesizing information, and then communicating information to others (qt. in Akyel and Erçetin 147).

Brandl presented three different approaches to lesson design "for foreign language learners in developing reading skills by exploring authentic Internet-based materials" (87). The approaches range on a scale from more teacher-centered to more student-centered. He notes that the more student-centered the approach, the higher the students' language proficiency needs to be (87-107).

Källermark Haya showed that it is difficult to label language learners' information searching online as either production or reception, since learners read and type at the same time (121, 126). Discussing what literacy might be for language learners who search for online information she asks if there is: "a need for language researchers and language teachers to partly redefine what literacy is in language learning, considering the fact that a redefinition of text brings new types of reading, and with that new types of literacy? Perhaps it is not whether or not the students are able to search for information and read online in Spanish that is the crux of the matter but the fact that they display a way of communicating and learning (drawing on knowledge and habits traditionally not regarded as subject-specific) that might be more commonly used in other subjects or home practices than in foreign languages?" (129).

1.3 Google Translate, spell checkers and online source selection

Considering the fact that reading and writing blend when students search for information, it also serves to mention some tools usually connected with writing, such as Google Translate and spell checkers. Comparing the quality of individual Spanish beginner students' texts produced with the help of the Internet with texts that were produced without it, Fredholm found as a side result that learners who were explicitly instructed not to use Google Translate ended up using it anyway, translating back and forth through different languages; copying and pasting text. Musk studied the avoidance strategies that were prompted by using Google Translate and found that the target language use decreased when students used Google Translate in project-based ESL learning (110-135). Rimrott and Heift studied language learner's use of spell checkers and discovered that MS Word 2003 spell checkers detected different kinds and different amounts of spelling mistakes whether the writer was typing in their native language or in a foreign language (32). The amount of detected nonnative spelling mistakes were significantly fewer. Their "error data also demonstrate that the spell checker's task is different in foreign language writing where most misspellings are competence based and thus commonly involve greater target deviations" (ibid.).

Partly due to cultural filters, even very advanced language learners have been found to not be able to evaluate the quality of online sources (Radia and Stapleton 9-17). When asking language students what they perceived as the strengths of web based language learning, the ability to obtain vast amounts of information quickly was mentioned, along with the fact that the students felt less anxious since they felt they could work individually and that they themselves were in control of the task (Son 21-36). Among the weaknesses mentioned were tired eyes, that the information online was too complex, the inability to find relevant sources for their task and outdated web sites.

2. Methodology for collecting data

The volunteering participants of this study, Sara and Nils, are 17 year-old students at an inner city public school that has been using ICTs extensively for ten years. They have just completed their fifth year of Spanish studies and use their computers in every lesson. The work they do here is not part of any regular course work at the moment. They work individually in two different 30-minute search sessions and get the oral and written instructions in Spanish to imagine that this is part of a regular language class and to try to, as far as possible, do what they would normally do in such a situation.

Sara and Nils are told that they, together with some other students and through browsing Spanish web sites, will produce a travel brochure about Argentina. Now, their individual part of this work is to put together a concept mind map with key notions about Argentina, on which the group will later base their brochure. The group will then produce this brochure in order to convince more friends to come with them on a trip to Argentina.

On the task paper there is a list of nine Spanish web links to use, ranging from tourist information sites to sites where you can book hotels and a YouTube link where you can listen to the Argentine national anthem while watching video clips from Argentina. These links were chosen by the Spanish teachers at the school, with the motivation that these are the type of sources and texts that students should be able to draw information from at this stage of their language learning. The task itself was inspired by a similar task where the researchers found that web based inquiry was related to levels of motivation (Altstaedter and Jones 640-657). Wu did criticize these types of tasks as trivializing and superficial (Wu 559-562). Nevertheless, they are often conducted in language classrooms (Källermark Haya 15), which was why this task-type was still deemed relevant to explore.

2.1 Recording data

The sessions were screen recorded with the online program screen-cast-o-matic (http://www.screencast-o-matic.com). There was also sound- and video recording. Other data consists of a short background questionnaire used to ensure that both students were at the C1 level according to the Common European Framework of References (CEFR. Council of Europe). The questionnaire also showed that the students did not speak Spanish as their mother tongue and mapped their self-perceived computer usage. A prompted interview took place immediately after the screen recording where the researcher and the student watched the screen recording together. The student was then in charge of the pause- and play button and indicated when something was worthy to note in the screen cast recording, rather than the researcher being the only one to construct data in noticing what was worth pointing out. After recording each interview, the researcher wrote a detailed summary and took unstructured notes of what happened.

2.2 Data analysis

Two days after the last interview the screen casts were watched multiple times. Table 1 shows the data transcription protocol where students' choices were categorized as tempo, web site visited, number of parallel tabs used, language used, visits to their online work document and the action they performed (For the possible categorizing of multimodal interactional data, see Bezemer and Mavers 191-206, Bezemer and Kress 166-195 and Jewitt 250). The categories in this protocol were formed by patterns discovered while watching the screen casts and the video recordings. Video recording information is excluded from table one since there were neither use of non-digital resources, nor were there any changes of work position or gesture.

Table 1. Data transcription protocol of the screen cast.

Time	URL/Work Document	Activity	Other
00:03:40	work document (txt) + www.argentinaturística.com	Types "el peso argentino" in txt. Types "clima" in the search box at the bottom of the page. Scrolls down.	
00:04:49		Types "tradición" in the search button at the bottom of the page. Scrolls down.	
00:04:53	www.google.com: search box (no txt)	Types "argentinian traditions"	Tab no. 3
00:05:02	scrolls the list of search answers from google.com: link list	Clicks the suggestion: "did you mean argentine traditions" – receives a new list.	
00:05:13	search answers: Link list	Spends some time eying the link to wikipedia; scrolls down and up the list.	
00:05:18	www.wikipedia.org (English)	Types "culture of Argentina". Scrolls down the frame in the left margin.	
00:05:35	www.google.com	Uses the serach button on wikipedia for "argentine holidays".	This is the fourth tab.
00:05:39	www.wikipedia.org (English)	Scrolls down.	First link in the web link list from the teachers: "public holidays in Argentina"
00:06:12		Clicks one word in the text: bicentennial. Reads the information about this word, then returns.	
00:06:55		Finds the link for "public holidays in Argentina". Clicks one link but changes his mind and returns to…	
00:07:10		… reading about public holidays.	
00:07:14	www.wikipedia.org + txt	Types "días feriado" in txt.	
00:07:29		Copies a table and info from a box on Wikipedia called "local names"	

The audios from the interviews were listened to twice, transcribed and then categorized according to the interview questions.

2.3 Limitations and ethical concerns

This study acknowledges that individual choices are connected to mezzo- and macro level factors such as for instance the school's ICT policy or pre- and post activities. There is a need to conduct a main study concerning more participants and including more contextual factors. In addition, the fact that the participants volunteered and that the study was performed in such a specific environment affect the results. However, there will always be contextual limitations of any case study. As examples, they are still valuable, as long as the descriptions are thick enough to be transparent. The

case study, even though particular, can inspire new knowledge later to be generalized to theories possible to test (Yin 15).

The results of a future study would be more reliable with inter-scoring raters agreeing on the majority of the categories to make from the data. Due to the fact that collaborative ways of working seem to increase with the use of ICT, the validity of data might seem higher had the students worked collaboratively. However, Källermark Haya found that even though working collaboratively in tasks such as this, students often turn out to perform their searches quite individually (118, 124).

There are more studies made concerning learners of English and their online information searching than there are concerning foreign language learners. The results of those studies that are referred to in this text might have been different had they concerned Spanish as a foreign language. At the same time, this study helps to fill some of this gap in language education research.

According to the guidelines of the Swedish scientific research council, the students were informed orally and in writing of the overall purpose of the research project before the gathering of any data. The students were told that they could interrupt the study at any point, were promised anonymity and gave their written consent to the data collection.

3. Results

First, Sara opened up an empty Word™ document and chose the web browser Safari. Then, she typed in the first link provided by the task sheet, which lead to an Argentine tourist office with much general information. After scrolling down and up she went back and forth between this site and her word document, using quick commands for copying information from the site and pasting it into her text. Sometimes she typed it.

After less than a minute Sara abandoned the provided search list and opened a new window where she started her own link search on Google.com. Finding sites to get information, she alternated between reading, copying, pasting, typing and formatting her document. In total, she visited seven web sites, in Spanish, Swedish and English, not counting the Google search boxes or the search list results. She clicked on 12 links and opened four tabs that she switched between during her work. She used many of the links more than once. Sara did not change her posture at all. She never used the teacher (in this case, the researcher), paper, pencil eraser, pencil sharpener or the Spanish dictionary placed on the table right next to the computer. The longest time Sara stayed active at one web site without flipping to other sites was 99 seconds (this included some instances of copying some information, opening her Word™ document and pasting it in, then going back to the web site in question). The longest time Sara stayed at one site without changing windows to her working text document was 33 seconds. This was when she typed search words in Google search box. Figures 1 and 2 show Sara and Nils working.

Fig. 1. Sara.

Fig. 2. Nils.

Nils started by plugging his earphones into the computer and opened Firefox and a music site (www.soundcloud.com) where he found a playlist with English rock music that he listened to while doing the work. He then opened the computer's text-editing program for note taking, after which he typed in the address of the first link provided by the web site list. He kept the text-editing document open at the same time as the web sites, reading and typing at the same time. Nils visited ten pages – not counting the Google search box or the link lists – and opened 5 different tabs that he flipped between. The total number of used links was 51. Nils, too, did not use the teacher (researcher), paper, pencil, eraser, pencil sharpener or the dictionary. He sat still for most of the time but for occasional glances at the task paper or taking his phone out of the pocket a couple of times, to check or answer messages.

The longest visit at one web site for Nils was 161 seconds. During that time he typed in his text-editing program a couple of times and he checked his phone for e-mail. The longest time he stayed at one site without changing windows was 47 seconds. This was at a hotel site where he encountered a pop up menu where he needed to specify a city, a list of hotels with images, short text and stars for rating, and a calendar to click what dates he wants to book the hotel for. Nils closed this list and in the interview he related that he changed his mind: he decided he wanted to find something to see first, and only after that pick his hotel.

Figure 3 is a still picture of the otherwise dynamic screen cast recording, taken 20 minutes into Nils' surfing session. It shows the different tabs that Nils opened during the session. In the foreground is the text-editing program where Nils chose to gather the information. This was either typed or copied from different web pages and pasted into the text-editing program. Nils related that he prefers to write basic information while browsing, since the text-editing program can "pop up" so he can type in it at the same time as he reads. In figure 3, the currently used web page, different tabs, Google search box on the top right and Google address bar to the top middle and text-editing document are also visible.
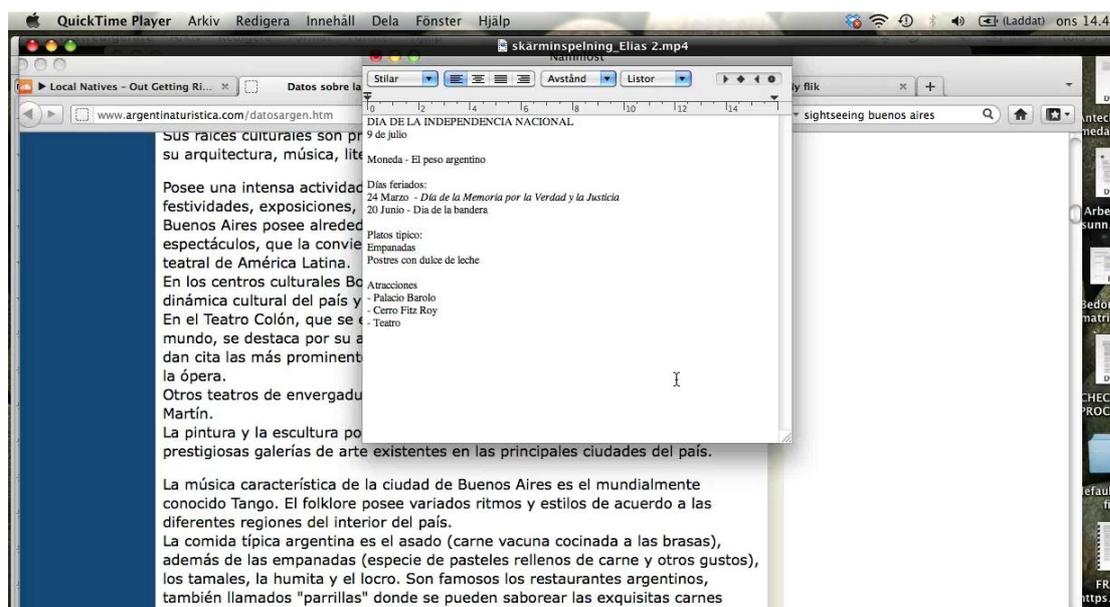

Fig. 3. Example from Nils's web surfing session. Still picture of the otherwise dynamic screen cast recording.

In order to start their browsing, both Sara and Nils chose a Spanish tourist information web page that had a menu bar, marked in a separate box and with blue, to the top left (figure 4). Both of them ignored this menu bar and started looking for headlines located at the center of the page. Nils said in the interview that he "did not even see the menu bar was there". When asked with what intentions they steered away from this first page, the students revealed that it "had too much text", was "boring" and "took too long to read". Nils wanted to visit pages that "did not look like they were made in the nineties". After this, both started to search on their own and went to Wikipedia in Swedish and English.
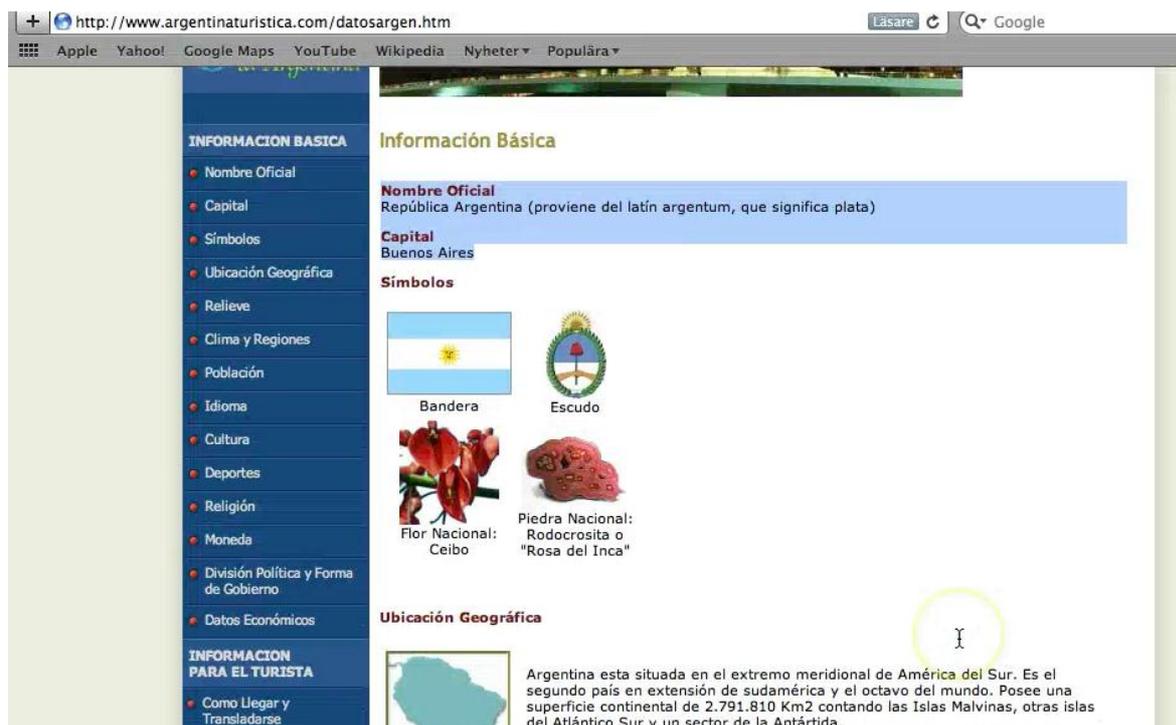
Fig. 4. Spanish tourist page with menu bar to the left.

Both Sara and Nils considered the task to be very representative of earlier language education tasks where the goal was to read about and inform the others of a country. Sara commented that she thought she actually did the exact same task in one of her earlier Spanish courses even though the task was set up uniquely for this study.

Both say working individually on the computer could be negative since it is easy to get distracted but they also say it is important to be able to perform tasks like these. They use Wikipedia and Google Translate but say that they feel very conflicted about this since they say that they know them to be weak sources. Sara expresses the opinion that this is a fun way to learn about different countries. When asked what they would advise a clone that was just about to go through the same task, they mentioned that it is always hard to know where to begin and that providing a link list is a good tip to the teacher. When provided with a link list, either by the teacher or the Google search list, Sara picked the first links, confirming in the interviews that she usually does. Nils, on the other hand, said that he chooses through trying to read the address of the whole link to get an inkling of who made it.

Nils mentioned that the fact that Wikipedia strives to keep the same structure on all its pages makes it easier to read and find information. He also gave examples of what type of information the different tables and columns on Wikipedia usually contain, depending on their placement to the right or the left. Sara said that one reason why she prefers "Googling" in Swedish instead of Spanish, even though she was explicitly asked to work in Spanish only, was that it is too difficult for her to evaluate the sources in Spanish. "If there is, like, a spelling mistake or it looks suspicious I can detect this much more readily in Swedish".

In the pre-questionnaire to this study Sara and Nils stated that they use their computer 6+ hours every day, since they use computers at every lesson and at home. As some weaknesses of these task-types they mentioned tired eyes, sore backs and headaches. Both expressed the opinion that the affordances of the resources used include the use of different and simultaneous tabs, being able to read and write at the same time, and to use Google Translate instead of traditional dictionaries. They say that they like to listen to music while they browse; Sara adds that she often listens to Spanish music if a test is coming up: "to get into it". Sara and Nils say that they use paper and pens in other subjects but never in their language classes. They refer to the need of drawing models in for instance science or when solving math problems, and how this is more difficult on the computer.

Table 2 is a summary of the results found in the data transcription protocol of the web browsing sessions and the answers from the interviews. It is possible to see the number of web sites visited and where the students spent most of their time. Furthermore, table 2 shows how many tabs were opened and switched between at the same time and the use of other artifacts within or outside of the computer.

Table 2. Sara and Nils's surfing sessions.

	Sara	Nils	Comment
Number of unique web sites visited (Google search result lists not included)	7	10	Sara and Nils keep going back and forth between these, their text document and Google Search box with its suggested lists. They also return to a lot of their sites or to their Google search lists multiple times, which is not shown here.
Number of pages in Spanish – English – Swedish, respectively	3 (Spanish: www.argentinaturística.com; www.hotelesyreservas.com; www.destinia.com) 0 (English) 4 (Swedish: www.wikipedia.org www.booking.com www.argentina.nu)	5 (Spanish: www.argentinaturistica.som www.hotelesyreservas.com www.destinia.com www.wikitravel.com www.mujeresdeempresa.com 4 (English) www.soundcloud.com www.en.wikipedia.org www.tripadvisor.com www.wikitravel.com 1 (Swedish) www.tripadvisor.se)	Google search result lists or Google translate not included, hyperlinks within sites not included since they had the same language and main address.
Most time spent			www.argentinaturística.com A

active on pages (while simultaneously working in their own work document)	99 sec.	161 sec.	Spanish tourist information site and the first link in the provided list of links in the task sheet. Both students spent the most time here.
Most time spent active on a page without changing windows	33 sec.	47 sec.	
Number of tabs opened in the same window	2 (used parallel)	6 (5 used parallel)	These are flipped through and re-used during the session.
Most number of hyperlinks clicked within one individual site	6 (www.destinia.com)	7 (En.wikipedia.org)	
Number of links and hyperlinks (link within a text) clicked within the whole search	12	51	Back arrow included, changing between tabs not included
Number of switches back and forth (1= one switch back and forth) between the web and work document	34	23	So, Sara switches form the web to her document and back to the web a total of 34 times.

Use of artifacts as resources	-Task sheet -Computer -Word document -Tabs -Search boxes -Google Translate -Select/Copy/Paste	-Task sheet -Computer -Text editor program -Head phones (twice) -Phone (three times) -Tabs -Search Boxes -Google translate -Select/Copy/Paste	Other than this, both had at their disposal a Spanish teacher (the researcher), Spanish dictionary, blank papers, pencils, erasers, and pencil sharpener. Sara also had some pieces of chocolate and Nils a cup of tea. These artifacts were not used at all. Neither was the teacher.
Instances of on-line vs. off-line activity	Off line: 0	Off line: 4 instances, a total of 92 seconds (sending e-mail by phone, Checking e-mail once, twittering twice)	Reading on the task paper not included
Instances with selected, copied and pasted information found on a web page	19	7	Read: Sara uses the "paste" function 19 times during her session (including using *Google translate)*

6. Discussion and implications for language teachers and students

The research question asked: what choices, actions and reports do some students make when searching for specific information in a work session about Spanish speaking countries? Summing up the answers, the students worked fast and did not use menu bars in their searches. They multitasked and focused more on end product than work process. Both Sara and Nils visited more and different types of sites than asked for by their teachers, for instance Wikipedia, image banks, Google Translate and authentic travel agency sites. Even if they sometimes came back to it, they quickly abandoned the provided web link list in Spanish in favor of their own searches, which were conducted in Swedish,

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English and Spanish. They did not use non-digital resources at all even though they had access to them. They said they like to listen to music when working with these types of tasks and found it difficult to evaluate sources. When making new written representations of the found information Sara and Nils used translation and vocabulary services, quick commands, spell checkers and the copy- and paste command.

Resource orientation was mentioned in 1.2. This enables a discussion of the actual meaning potentials offered to the student through the web surfing session rather than what would have been possible by a traditional text format. Both students, but in particular Nils, who during his surfing time turned to image banks when he wanted to find places of interest to visit, are examples that this perspective could be useful when studying information searching online. The ideas of learner's language and sequencing (cf. 1.1) might also be relevant in the discussion of how language researchers and teachers view students' decisions to use Google Translate and copy/paste. Should this be viewed as mechanical mimicking, as an avoidance strategy of target language or an active ongoing process of learner's language trials? Should it lead to a discussion of task design or a re-evaluation of language-learning views in order to bridge the gap of what language learning is to the digital native compared to what it is to the teacher promoting target-language-only?

Sara's self-perceived difficulty in evaluating the quality of sources is line with the studies by Helms-Park, Radia and Stapleton referred to in 1.2. In this light, it is also interesting that both students quickly abandoned the teacher's provided web link list, choosing to find their own sources rather than to use the pre-evaluated ones. Like Fredholm's participants (cf. 1.3), both students used Google Translate even though they were told not to and they felt conflicted about this. They also used spell checkers and said that these are efficient tools even though they have never learnt formally how to use them (cf. Rimrott and Heift, 1.3). This could be connected to Brandl (cf. 1.2) reminding that the more student-centered the task design is, the higher the language proficiency of the students need to be. In this case, language proficiency level C1 according to the CEFR seems to be too low to design an online reading-task that is mostly student-centered.

Compared to Alstaedter and Jones, Son, Wu and Källermark-Haya (cf. 2), Sara and Nils state that they find the task as very representative of language education tasks, and they expressed that these task types are both negative and positive. On the one hand, they said that it could be hard to work individually but on the other, Nils says that: "You have to be able to do this" and Sara says it is a fun way to learn about Latin American countries.

Considering the fact that one major area of computer usage in language education has to do with online information searches, this study indicates some digital literacy areas for foreign language teachers to consider. First, when using these types of tasks, language teachers have to let go of the idea of a model reading, since the digitally native students are likely to read differently than their teachers. They also raise the need to question whether the online reading ought to be performed in target language only. If a task such as this is constructed by the language teacher with a wish to use as much target-language as possible, instructions and ways of examining might need to focus more on work process than work product – for example, watching and discussing a screen recording of the work process could be the exam rather than producing a travel agency brochure. Secondly, the idea of reading as only a form of perception needs to be questioned, since students read in order to write and vice versa. Third, in order to be able to use the affordances of their digital device, students need to

explicitly learn strategies in order to correctly evaluate sources, spell checkers and digital translation services.

Works Cited

Akyel, Ayse, and Gülcan Erçetin. "Hypermedia Reading Strategies Employed by Advanced Learners of English." *System* 37.1 (2009): 136-52. Print.

Altstaedter, Laura Levi, and Brett Jones. "Motivating Students' Foreign Language and Culture Acquisition through Web-Based Inquiry." *Foreign language annals* 42.4 (2009): 640-57. Print.

Bezemer, Jeff, and Diane Mavers. "Multimodal Transcription as Academic Practice: A Social Semiotic Perspective." *International Journal of Social Research Methodology* 14.3 (2011): 191-206. Print.

Bezemer, Jeff, and Gunther Kress. "Writing in Multimodal Texts A Social Semiotic Account of Designs for Learning." *Written communication* 25.2 (2008): 166-95. Print.

Brandl, Klaus. "Integrating Internet-Based Reading Materials into the Foreign Language Curriculum: From Teacher-to Student-Centered Approaches. "*Language learning & technology* 6.3 (2002): 87-107. Print.

Council of Europe. "Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEFR)." 2011. Web. <http://www.coe.int/t/dg4/education/elp/elp-reg/cefr_EN.asp>.

Estling Vannestål, Maria., and S. Granath. "IKT i Språkundervisningen i Teori Och Praktik." (2008). Print.

Fredholm, Kent. "Online Translation Use in Spanish as a Foreign Language Essay Writing: Effects on Fluency, Complexity and Accuracy." *Revista Nebrija de Lingüística Aplicada a la Enseñanza de Lenguas* (2015). Print.

Jewitt, Carey. "Multimodal Methods for Researching Digital Technologies." *The SAGE Handbook of Digital Technology Research* (2013): 250. Print.

Källermark Haya, Lisa. "Agency in the Spanish Language Classroom. Students and Teachers Choices, Actions and Reports when Students Search for Information Online as Part of a Theme." 2015. *Studies in language education*. Licentiate thesis, Stockholm University. In print.

Musk, Nigel. "Avoiding the Target Language with the Help of Google: Managing Language Choices and Gathering Information for EFL Project Work". *TESOL Quarterly 48*(1), 2014. 110-135. Wiley online Library.

Patterson, Nancy G. "Hypertext and the Changing Roles of Readers." *The English Journal* 90.2 (2000): 74-80. Print.

Radia, Pavlina, and Paul Stapleton. "Unconventional Internet Genres and their Impact on Second Language Undergraduate Students' Writing Process." *The Internet and Higher Education* 11.1 (2008): 9-17. Print.

Selander, Staffan., and Günter. R. Kress. *Design För Lärande: Ett Multimodalt Perspektiv*. Norstedt, 2010. Print.

Selander, Staffan. "Designs of Learning and the Formation and Transformation of Knowledge in an Era of Globalization." *Studies in Philosophy and Education* 27.4 (2008): 267-81. Print.

Son, Jeong-Bae. "Learner Experiences in Web-Based Language Learning." *Computer Assisted Language Learning* 20.1 (2007): 21-36. Print.

Wu, Ping. "The National Standards for Foreign Language Learning: Where's the Beef? A Response to "Motivating Students' Foreign Language and Culture Acquisition through

Web-Based Inquiry" by Levi Altstaedter & Jones." *Foreign Language Annals* 43.4

(2010): 559-62. Print.

Yin, R. K. *Case study research. Design and methods*. 4th ed. (2009). Print.