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CSCL – a tool to motivate foreign language learners: The Finnish application

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Abstract

This article discusses the applications of the theory of Computer Supported Collaborative Learning (CSCL) to teaching and learning a foreign language, in this case, one of the 'Less Commonly Taught Languages', Finnish. The 'Virtually Finnish' project was based on the idea of creating a larger, virtual Finnish learning community among the second-year Finnish language students in five US universities during the fall semester, 2001. CSCL was chosen as a base, as its principal goal is to aid the learners in sharing and distributing their knowledge to the whole learning community. In addition to discussing the set up and the content of the project, the students' feedback about their language learning experience in the CSCL-environment will be examined. Furthermore, the conclusions, and the realization of our goals from the perspective of CSCL, as well as the students' feedback on the collaborative process will be discussed. Based on the knowledge gained from limited feedback, a discussion of tools to aid language students in becoming a part of motivating and authentic collaboration projects on-line will be discussed. Looking at the students' work on-line, as well as the feedback received, it was realized that certain skills crucial for communication have been neglected in teaching. Furthermore, it was realized that teaching on-line learning strategies in addition to teaching the target language is crucial. Future plans, and ideas for research in the area of CSCL will be shared in anticipation of inspiring others to undertake further research.

1 Introduction

Since the population of Finland is a modest five million, the enrollment figures in Finnish classes in North-American universities are quite modest as well. For the most part, the students have an opportunity to use Finnish only in their classrooms for a few hours a week, and are otherwise "surrounded by their own native language" (Hintikka, 1994:163). Our project was based on the idea of creating a larger, virtual Finnish learning community among the Finnish students in North America where long distances further hinder face-to-

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face meetings. Computer networking was decided upon as a vehicle for Finnish communication. Second-year Finnish classes were chosen because it was predicted that the students' level of Finnish would suit the language level required for the project.

In this article we will discuss how the model of CSCL is applied to teaching and learning a foreign language: Finnish. First, the theory of CSCL and the goals for an on-line language course will be briefly described. Second, the course, its contents, principles behind it as well as the participants will be introduced. Third, samples of students' outcomes and the analysis from the perspective of our goals will be examined. Fourth, the students' feedback is discussed and analyzed. Finally, the conclusions, and the realization of our goals from the perspective of CSCL as well as the students' feedback on the collaborative process are discussed.

2 Computer Supported Collaborative Learning (CSCL)

During the last ten years, many kinds of solutions and ideas have been developed to create effective and motivating language learning on-line. The first tutorial drills have given way to interactive and communicative on-line language learning solutions. Maybe the biggest philosophical change in educational technology took place in 1996 when Koschmann (1996) proposed CSCL as an emerging paradigm of educational technology. CSCL does seem to offer answers to many questions concerned with the issues of creating more interactive learning communities on-line. The supporters of CSCL have brought up the positive effects of CSCL for learning, e.g. studying in groups encourages students to ask questions, explain and justify their thoughts and opinions, and achieve higher levels of thought. It is also claimed that cooperative learning encourages students to elaborate and reflect on their own learning. (Wu, Farrell & Singley, 2002). In other words, CSCL should increase communication and interaction between students because the CSCL environment demands that students work together with shared goals. Brown (1994) has stated that "members of the community are critically dependent on each other…collaborative learning is not just nice, it is necessary for survival." The principal goal of CSCL is to aid the learners to share and distribute the knowledge they possess to the whole learning community (Lipponen, 2002), in this case the 'Virtually Finnish' participants. This allows collaboration to be realized.

The theory of collaboration is based on Vygotsky's "social constructivist ideas about learning in a social setting". There are two interpretations of this idea: according to the first one, collaboration is seen as a facilitating factor of individuals' cognitive development, e.g. by collaborating individuals can achieve something that could not be mastered without collaboration. The second interpretation sees collaboration as a tool for constructing knowledge together in a social process: learning is not an individual endeavour; it is a shared goal that can be reached by constructing knowledge together. (Lipponen, 2002; Wu *et al*, 2002).

How is collaboration defined? Many definitions have been offered for the term. It has been used to describe learning situations in which group members work jointly to understand a subject matter (Guzdial and Turns, 2000), to define a special form of interaction, or a process of participating in knowledge communities (Lipponen, 2002). Koschmann himself (1999) suggests that we should stop interpreting collaboration and "simply treat CSCL as a designer of its own right". He suggests that instead of talking about

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"Computer Supported Collaborative Learning" we should talk about "Computer Support for Collaboration and Learning", focusing on how people actually learn in settings characterized by collaboration.

CSCL also realizes Vygotky's idea of the Zone of Proximal Development (ZPD). According to the ZPD, collaborating with a more capable peer may have a positive effect on the weaker student's intellectual development. This interaction is influential because by interacting with the environment, a person constructs his/her own knowledge and understanding. (Warschauer, 1998; Wu *et al*, 2002). Maybe it could be stated that humans have an innate desire to communicate, and doing it collaboratively results in learning.

Could this innate desire to interact also motivate language learners to practise and use their language skills on-line? CSCL-based environments have been used in many scientific fields to encourage and motivate students, e.g. to have problem-based discussions, and to share expertise on-line. At least psychology, natural sciences, and pedagogy have found CSCL a useful tool for teaching and learning.

As CSCL is based on socio-constructivism, and constructivism itself has been "proposed as a basis for the instructional design of technology and as a viable theory for language instruction" (Stepp-Greany, 2002: 167), it seems reasonable to base an on-line language learning project on CSCL. Glisan, Dudt, & Howe (1998) have stated that "a technological environment based on the constructivist learning principals may be ideal for enhancing learner attitude and motivation" because constructivism sees students as active participants in the construction of new knowledge. Students build on their prior knowledge and experiences to construct new knowledge as well as assume responsibility for their learning. Furthermore, if CSCL is used as a basis for on-line language learning, it can bring valuable additions to on-line language learning because it emphasizes shared knowledge, knowledge building in collaboration and increases meaningful interaction in L2 among the participants.

By using collaboration in language learning, students have to use the target language for real life purposes. Students "use language as they would normally, as a mediating tool… they have a single goal, the solving of a problem [and] they solve it through dialogic interaction with another person." (Goss, Ying-Hua & Lantolf, 1994).

3 Project description

3.1. Goals of the project

Reasons were given above to justify the choice of CSCL as a reasonable basis for the project. The benefits of CSCL to on-line language teaching as well as learning in general were also discussed. Our goals for "Virtually Finnish" will be briefly discussed in relation to the principles of CSCL. The goals for the on-line Finnish course are identified in Table 1. With these goals in mind, we hoped to experiment and test the suitability of CSCL for language learning, as well as to test the outcome of our students' learning efforts.

3.2. Participants and the role of the project in the course

At the beginning of the fall term 2001, all the North-American universities where

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Table 1. *The goals of the Finnish course*

The goals of on-line Finnish course	**CSCL**
To create a larger arena for students to use their Finnish skills.	Using a computer, learning in a group (ZPD)
To further motivate the students in their language use	To motivate and encourage students to interact, to construct new knowledge in collaboration and share it.
To provide a new medium for practice.	Computer supported environment.
To improve students' reading and writing skills	To motivate and encourage students to interact, to construct new knowledge in collaboration and share it,to encourage students to elaborate their learning.
To develop students' vocabulary, and to make them analyze their own use of vocabulary.	To construct new knowledge in collaboration and share it, to encourage students to elaborate their learning.
To develop students' collaboration and negotiating skills.	To construct new knowledge in collaboration and share it, to interact with the environment and learn from that in collaboration.
To help students to become more aware of difficult registers.	To encourage students to elaborate their learning, to learn from the environment.

Finnish is taught were contacted. Five universities decided to participate in the project as a part of the second year Finnish course. The participants at each university were:

- four students from the University of California, Berkeley
- five students from Columbia University, NY
- one student from Indiana University, Bloomington
- four students from the University of Oregon, Eugene, plus one private student
- four students from the University of Washington, Seattle.

The project was carried out primarily outside of class time, by students working independently. In addition, some classroom time was devoted to in-class debriefing twice a week. This allowed the students to look at authentic, student produced texts, and analyze them with their teachers. Furthermore, students had the 'Virtually Finnish' help-line for their questions and comments concerning language, technical problems, or their tasks on the project. Students' own teachers gave feedback for the completed tasks, and helped their students in every step of the project.

3.3 Virtually Finnish week by week

'Virtually Finnish' became an integral part of the fall semester Finnish classes in each university as participation was included in the final grade for the course. The actual

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project took place on a Finnish platform, called PedaNet, administered in Finland by Jyväskylä University through its Virtual University. Because the participating Universities followed either semester or quarter calendars, six weeks was the maximum time available for the project, with the result that 'Virtually Finnish' was designed as a six-week interactive, integrated, CSCL project covering the units shown in Table 2. Since the project was based on a mystery as main content (weeks 4, 5 and 6 in Table 2), a closer look at it will be taken.

The Mystery

A mystery was chosen as the main language content of the project for the following reasons:

- Intrinsic motivation was predicted to play a role as students would be able to

Table 2. *The units covered*

Week	Task	Goal
1	A short introduction by each student, posted for everyone.	Getting familiar with the web-sites, practising on the platform,creating a group spirit, practising reading, and informal simple writing.
2	Pairing of students by the program coordinators.	Finding a motivating partner for everyone, based on the information in the introductory letters, e.g. Finnish mothers, hobbies etc. In addition, students' language level was informally assessed.
3	E-mail correspondence between pairs.	Getting familiar with the web-sites, grouping, practising simple informal e-mail writing and reading.
4	Reading of a mystery.	Practising reading, presenting new vocabulary, preparing for the next exercise.
5	Collaborative vocabulary mapping by the pairs with final results posted for all.	Solving vocabulary problems with pairs, and sharing and distributing knowledge, working in collaboration, studying, and learning new vocabulary and analyzing the use of own vocabulary.
6	Collaborative writing: creating an ending to the mystery in pairs, posted for all.	Solving a problem: discussion and negotiation about the content of the writing, sharing knowledge, practising reading and writing, using new vocabulary.

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understand most of the story (Brown, 2001).

- Students were encouraged to become detectives on two levels: the literary level (solving the mystery when writing their own ending), and on a linguistic level, becoming detectives of Finnish language.
- The mystery involved the students' own cities, communities and lecturers which provided nonlinguistic cues in the form of familiar context, allowing students to develop schemata, and use their 'predictive abilities'. (Feuerstein & Scholnik, 1995: 51)
- The students could learn to use effective compensation strategies by detecting or analyzing the cues or structures in the story to fill the gaps in their competence (Brown, 2001).
- The vocabulary study emphasized words in context. Students would further their internalization of the vocabulary by creating original sentences.
- The writing exercise: the ending to the mystery emphasized authentic, real writing (Brown, 2001). Since the students were all studying Finnish, and writing an ending to a story known by everyone involved in the project, they could be expected to predict the audience's language level, cultural and literary schemata, and how their choice of language would be interpreted (Brown, 2001).

4 Students' outcomes: collaborative dialog

As mentioned in section 2, our goals included providing a group learning experience, motivating the students in their language use, and encouraging them to interact, i.e. to construct new knowledge in collaboration, and share it. Interactions are defined by Brown as "collaborative exchange of thoughts, feelings, or ideas between two or more people resulting in a reciprocal effect on each other" (Brown, 2001: 159). We also wanted to create an arena in which our students could "exploit the elasticity of language" as Wilga Rivers (2001: 159) puts it. She further states that "in interaction, students can use all they possess of the language – all they have learned or casually observed - in real-life exchanges".

As language is used in various contexts to negotiate meaning, we wanted to encourage collaborative dialogues and negotiation in the target language by pairing the students, and giving them one common task. Our goal was to have the interactive principles, as stated by Brown (2001): automaticity, intrinsic motivation, strategic involvement, risk-taking, the language-culture connection, inter-language and communicative competence. Furthermore, we expected our students' target language skills to improve since Finnish was used both during the process and in the end product of the project. Merrill Swain states "when using collaborative dialogue the students are involved in problem-solving and knowledge-building, solving linguistic problems and building knowledge about language. Both the process and the product use language as a mediation for learning" (Swain, 2000: 5-6).

4.1 Negotiating meaning

There are claims that negotiation of meaning frequently occurs in electronic communication (Toyoda & Harrison, 2002). However, there are many instances when the

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communication strategies available to students fail. These failures can be seen as pointers for us, language teachers, to develop linguistic units that address the failed strategies (Toyoda & Harrison, 2002). Our students frequently engaged in negotiation of meaning on-line.

4.1.1 Negotiating vocabulary

Next, we will give some examples of how students negotiated vocabulary. Here, two students were negotiating the meaning of a word: mantere ('continent'):

S1 (QUESTION):
Mä luulen että tämä sana on vaikkea substantiivia mantereelle mainland/continent.
I think that this is a difficult noun, mantereelle mainland/continent

S2 (ANSWER):
Niin, manner se on iso maa, ei ole saaria. Lahti eroaa saarista ja mantereesta.
Yeah, manner it is a big land, there are no islands. A bay separates from islands and mantere.

4.1.2 Discussing ideas: initial getting to know your partner e-mails

In another example the students started with a negotiation of the functions of an organization, and ended up with a discussion of personal beliefs.

S1:
Otan osaa yliopiston kristitty, häntä nimitetään Campus Crusade for Christ
I participate in University Christian, he (she) is called Campus Crusade for Christ

S2:
Niin, mitä on Campus Crusade for Christ? Onko se kirkko? Onko se seura? Mä tiedän että meillä on Campus Crusade for Christ IU:ssa,mutta mä en tiedä mitä se on. Mä luulen että se on enneman kuin kirkko.
Well, what is Campus Crusade for Christ? Is it a church? I know that we have Campus Crusade for Christ. but I don't know what it is. I think that it is more than a church.

S1:
Campus Crusade for Christ on kristityn ryhmä. Se ei ole kirkko tai seura. Campus Crusade for Christ on yli koko Amerikassa yliopistossa. Se uskoo Jumalaan ja Jeesus Kristukseen. Mihin sinä uskot? Uskotko Jumalaan vai ei ensinkään?
Campus Crusade for Christ is a Christian's group. It is not a church or a club. Campus Crusade for Christ is all over America in the university. It believes in God and Jesus Christ.What do you believe in? Do you believe in God or not at all?

S2:
Ajaa, mä ymmärrän nyt. Mä uskon Jumalaan ja Jeesus Kristukseen. Mä luulen että

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se on mahdoton että se ei ole Jumala, ja sitten, mä uskon.
Okei, I understand now. I believe in God and Jesus Christ. I think that it is impossible that it is not God, and then I believe.

4.2 Negotiating/explaining grammar rules: using L1 for clarification purposes

Another interesting question that arose was the use of the students' native language, English. We don't necessarily see that as a negative trend since the students did discuss Finnish grammar and vocabulary. This seems to prove that one of our goals: encouraging students to explain, question, and elaborate on their own learning process, was being activated.

Example 1
Han hymyilla (how do you conjugate?) minua.
S/he to smile (how do you conjugate?) me.

Example 2
Mäkeä? It looks like 'sweet' but that doesn't seem right?

Example 3
Ohjelmoijaksi, (ohjelmoija-programmer) +ksi (I don't understand -ksi very well?)

Example 4
Menemme New York Cityyn. (But would it be: Olemme New York Cit(y)ssa?

Example 4
Tappelijoita-I think it means /fighter/ (in partitiivi)

(Muhonen, 2002)

Jean Schultz (2002) comments that L1 has its place in the L2 classroom. Since our project consisted of students taught by five different teachers with different teaching philosophies and approaches, the students' comfort level of predominant L2 use most likely varied greatly. Students in our net project may have stumbled in understanding the subtleties of the language if they were unfamiliar with the grammatical terms or vocabulary of the discussion. Further complication could have been caused by the structural dissimilarities, and a small number of cognates in Finnish, compared to L1 (Schultz, 2002). Obviously, further research in L1 use is needed.

4.3 Negotiating registers

The use of different registers proved interesting. The language used in native Finnish e-mails, and its variation from standard Finnish was discussed in 'Sinulle On Postia! Using Global e-mail to Enhance Students' Mastery of the Finnish language', in which it was concluded that there were no clear rules for e-mail register – since it is changing and developing almost daily (Tuomainen, 2000). Some of the students in our

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study with a Finnish speaking parent, or having spent time in Finland, tended to write informal Finnish, even slang in their introductions and negotiations; actually a very appropriate language use in e-mail correspondence. Other students having learned Finnish in a classroom only, had not necessarily developed their skills in slang, or appropriate registers. That created a comprehension problem. At least in one case, the problem was identified, and a solution negotiated between the partners – all in Finnish:

S1:
Minä huomisin että, kun V. kirjoitti, vähän oli puhekieltä. Onko se hyvää jos kirjoittaisimme puhekieltäkin?
I noticed that when V. wrote, a little was colloquial language. Is it good if we would write also colloquial language?

S2:
En tiedä jos se olisi vaikea lukea X:lle, mutta se olisi helpompi kirjoittaa ainakin minulle. Jos se olisi ongelma, sanokaa.
I don't know if it would be difficult to read for X, but it would be easier to write at least for me. If it is a problem, say so.

S3:
En osaa kirjoittaa puhukieliksi, mutta ymmärrän sitä! Sopisitteko te, kirjoitaisin kirjoitettu kieliski,ja te kirjoitte puhukieliksi?
I don't know how to write colloquial language, but I understand it! Would you agree, I would write written language, and you write in colloquial language?

(Muhonen, 2002)

The obvious lack of fluency in the colloquial registers that some students demonstrated showed that what goes on in a traditional, or in an on-line language learning situation must be further examined to prepare the students for communication in the real and virtual worlds in the 21st century.

5 Students' feedback

After the course, feedback forms were e-mailed to all the participants with simple, open-ended questions. The students were asked to evaluate their own learning in general, followed by more detailed questions about their reading and writing abilities. Furthermore, they were asked to comment on the most positive and negative aspects of the course. In addition, the students had a chance to indicate their interest in taking another Finnish on-line course in the future. (See Appendix 1). Less than half of the students, 7 out of 19, returned the feedback form. Additional feedback forms were received by a graduate student who wrote her MA thesis based on 'Virtually Finnish'. The feedback was analyzed from the perspective of our goals, e.g. how well the goals of the project were verified. Our results are not generalizable, but they can shed some light on the question of the usefulness of CSCL for a language course. They also point out the type of questions that arise from the analysis.

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5.1 Larger arena for students to use their Finnish skills: new medium for practice

Instead of having a group of one to four students in a class we were able to gather together nineteen students around the US, thus creating a new and different environment for Finnish practice. Students also noticed that they were not alone with their Finnish studies; there were others in a similar situation. Furthermore, students shared similar backgrounds and motives.

Even though half of the students (4/7) found working on the Internet difficult and demanding, all the students reported meeting new people enjoyable and interesting. There were comments (4/7) on the new medium itself making studying more interesting than classroom teaching:

> Example 1
> "Learning Finnish on-line is just different and this alone makes it more interesting"

> Example 2
> "There's really not one way to learn a language so trying it from all sorts of different angles might help you discover a new way of learning something or you might be able to learn something better because you tried it in a new context."

Learning via the Internet was seen as a motivational factor because of the flexibility to participate in spite of time and place. The asynchronous medium also allows the students more time to concentrate on the language required for communication than does face-to-face interaction. For most students (6/7) working on the Internet and with a pair or group proved useful. It was also seen as a pleasant way to practise Finnish:

> Example
> "It was interesting to work with a partner because, we each had different skills in the Finnish language. I don't know if she learned anything from me, but I did learn some things from her, and ideally it is a good way for both people to learn from each other. It was sometimes difficult, because we had to write in Finnish, which always takes some thinking, but of course that's why we are doing it! Of course it is more difficult to communicate in Finnish than in English for native speakers of English, but that is the purpose of communicating in Finnish...so we can improve, and it will get easier for us, and our Finnish will improve too."

Students also commented on learning new vocabulary from each other, as well as on their delight in discovering their ability to write in Finnish:

> Example 1
> "I liked writing in Finnish, you practice it a lot more because you are using it constantly. My partner and I wrote in Finnish, it was very good because we both use the basic form so it is not very hard to understand and you also learn from the partner's vocabulary (new words)."

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However, sometimes interacting in target language was found difficult, like in this student's case:

Example 1
"It took a long time! You had to translate everything..."

Teaching different language learning strategies in general would most likely benefit the students. Maybe translating did not promote this student's learning or understanding as much as (s)he thought: it caused more work and made communicating more difficult. The knowledge and use of other strategies could have aided the student to deem studying on the Internet more enjoyable (see section 5.2). Some of the participants (3 of 19) were 'lurkers', which caused frustration for their partners and lowered their motivation for the project. It also caused the partners to dislike the project in general (even though the students with mute pairs were given new partners after three weeks' wait).

Example 1
"I did not like the 'Virtually Finnish' project because it was confusing and the people in my group never wrote or provided anything in the course."

Example 2
"I liked working with the other partner in a way because it was just more fun, like email, but it's very difficult when the partner does not respond on time or just doesn't respond."

Peer interaction has been seen as one of the challenges and weak points of CSCL. How can collaboration take place if some members of the community won't interact at all? The technical difficulties some students encountered during the course could have been one reason for their unwillingness to participate. We can always expect a few students not to be comfortable with technology; they may become confused while online. Shapiro (2001) has reported that many students drop out immediately if a class requires regular computer interaction. There may be several reasons for low participatory motivation; we can only speculate about the reasons for lower participation. The challenging question for the future is how to encourage and motivate everyone to participate in group and pair work.

5.2 Effects on the students' reading and writing skills

5.2.1 Writing

One of our goals was to offer an arena that would encourage students to communicate in written Finnish, focusing on communicative competence instead of grammar rules. We hoped to help students automatize their communication skills because, as Beauvois (1994) claims, the conversational aspect of writing via network can help students routinize a certain amount of expressions, promoting the development of automatic structures that aid speaking.

Shield, Weininger and Lawrence (1999) have collected and presented similar results

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in their article. Also our students provided feedback which corresponds to the above mentioned research results.

Example
"I learned to rely more on what I would say if meeting a stranger in public than I would write if given a lot of time to prepare. Most of what I wrote was simple and not too glamorous, but what I was striving for simple communications and not eloquence."

Most of the students (6 of 7) reported having gained confidence in their writing skills. They also felt less concerned about making mistakes, which was one of our main goals. These results resemble those discussing the effects of on-line language learning in other studies in which students reported having improved their communication skills during the course (see Stepp-Greany, 2002).

As students assessed the improvement in their communication skills during the course, the motivational aspect of learning became important. Most of the students reported improved skills due to a different practising arena, which also resulted in a more enjoyable reading and writing experience. E-mailing was evaluated to be a fun activity as well. Students commented on the value of collaboration in practising writing: "when you speak to someone who makes mistakes like you do and have to explain things then it helps to cement that in your brain."

5.2.2 Reading

Students seemed to enjoy writing and reported progress in writing skills. But only one student wrote that he had learned to read fast. His reading comprehension had also improved as he used new reading strategies. Other students, however, did not comment on reading comprehension. One reason might be the nature of reading from a computer screen which differs significantly from reading from paper. Readers cannot use their 'old' and efficient reading strategies when reading from the screen, which may, in turn, cause reading to become slower and more laborious (Askwall, 1985).

This might be one of the reasons why students did not feel that they had improved in their reading skills. To help the students to utilize the reading skills they possess in the target language, teaching specific reading strategies before an online course, especially strategies designed for reading from the screen, might prove useful. Teaching communication strategies as suggested by Toyoda & Harrison (2002) might also help students to complete required negotiation exercises online.

Reading was, however, reported to have been enjoyable and useful. Three students reported that they learned new vocabulary through reading. They had focused on vocabulary and used different kinds of strategies to learn it. "It's good to read in Finnish. I write down the words I don't know and study them, then I keep reading the text over and over, and I learn words."

5.3 Developing vocabulary and analyzing the use of vocabulary

Half of the students (5 of 9) also stated that they had learned a lot of new words. Having

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to write them down and explain them had helped students learn them. There was also feedback about the value of using target language web-pages: "Somewhat, I learned mostly the words to go around the web site"

New vocabulary was also learned when writing the ending to the mystery which was assessed to be both a fun and useful way to acquire new vocabulary. There were also students (2 of 9) who reported not having learned more vocabulary than during regular classroom teaching. This may have been caused by the lack of repetition. This feedback corresponds to Rockman's & Conrad's (1992) results. They found that "less able learners appear to learn more from drill and tutorial programs than more able learners and beginning students who, in general, appear to value a certain amount of repetition and structure." Most of the students had little foreign language learning experience even though this was their second year of Finnish studies. Most of them reported Finnish to be the first foreign language they had studied.

In many answers, the students emphasized the new vocabulary they had learned. An interesting question arises: do students evaluate their learning only via vocabulary learning, i.e. does language learning equate with vocabulary learning to them? If this is true, our students might focus too much on vocabulary at the expense of other language skills. Vocabulary is essential as communicating in a foreign language is impossible without words, but should all the language learning principles be emphasized more, especially when studying on-line? Students do have more responsibility for their learning and "the nature of an on-line course itself adds the potential for confusion in the use of courseware tools" (Kearsley, 1998). As a consequence, more support is needed. One method of support (as mentioned earlier) might be early training in language learning strategies so that students would not overemphasize or underestimate any skill areas in their study of a foreign language.

5.4 Developing students' collaboration and negotiating skills

Example 1
"We never seemed to get the cooperative aspect of working together."

Example 2
"I wish other students had corresponded more with each other. If they would have written more, this could have been a very good opportunity for us to learn from each other, and to practice writing in Finnish."

The feedback might not be entirely objective because the students who returned feedback forms were probably the active participants. The common point was that the students would have liked to interact more with their partners. 'Virtually Finnish' could have been a great opportunity to learn from each other to use and practise Finnish in communication. Some students wrote that they were frustrated at having to wait for responses from their partners. This, in turn, lowered their motivation to participate.

Sometimes collaborating was not seen in a positive light from the perspective of ZPD, e.g. learning from the more capable peer, which was deemed frustrating or irritating: "I enjoyed writing letters back and forth, but I felt a like my partner knew more Finnish than I and that was intimidating."

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The question of learning from a more capable peer is interesting. Did the students feel a hint of competition here? At least in this case, personality and emotions seem to have influenced the communication abilities of the less capable peer who was placed in a position of apprentice. The situation might have been considered threatening. On the other hand, successful collaboration can take place without an apprentice relationship. Wells (1996, in Swain & Lapkin, 1998) states that "it is not necessary for there to be a more capable group member: when students are solving a difficult task in collaboration, actually, the group as a whole is working at the problem together, and they can construct a solution that none could have achieved alone." However, social interaction does not always create learning and, actually, peer-interaction can vary a lot (Wu *et al*. 2002).

This feedback corresponds to reports of negative aspects of CSCL: one example is unequal participation patterns, which also became apparent in our project. There has also been discussion about the effects of personal and cultural backgrounds, and the effects of those on working and studying CSCL-environments (Lipponen, 2002). That, together with varying peer-interaction, is a question that teachers, researchers and course designers should take into consideration when planning CSCL-based courses. Lipponen, (2002) states that there is a lack of research "on how students participate in network mediated collaboration, and on the consequences of different types of participation patterns, and how these are related to other aspects of CSCL." Also Cho, Stefanone, & Gay (2002) agree with Lipponen and ask for research on interaction and the social mechanisms that exist there. They claim that there has been a trend to focus on students' outcomes instead of interaction; knowledge of interaction would promote our knowledge about CSCL. Even though students did not feel that collaboration with a partner always worked in a satisfactory manner, there are many very creditable and exemplary conversations and negotiations in 'Virtually Finnish' as was seen in section 4.

5.5 Some observations and questions arising from the data

A way to create a larger arena for students of the "Less Commonly Taught Languages" to utilize their newly learned language skills is to offer a CALL-environment. In our study, we were able to gather together nineteen students while a typical class may have one to two. The question evolved of identifying the type of CALL environment which might promote motivation and natural interaction.

The choice of CSCL as a basis for the project aided us in reaching some of the goals we had set. However, some problems surfaced. Students were involved in many types of discussions and negotiations on-line, ranging from personal topics to philosophical discussions. The different types of negotiations: meaning of vocabulary, grammar, and registers prove that even with only elementary knowledge of the target language, motivated students can find ways to express their opinions.

How can more students be motivated to actively participate? How can the volume and quality of discussion be increased? How can students be scaffolded enough? Further investigation is needed. Half of the students reported that working on-line in a foreign language was difficult and demanding. On the other hand, collaboration was found to be fun but also the most demanding and frustrating part of the project, mostly because of the unequal peer-patterns.

Häkkinen, Järvelä & Byman (2002) have studied the quality and nature of virtual

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interaction in web-based conferencing, and state that their previous studies "indicate that the quality of meaningful web-based interaction can vary a lot." One reason for that is the amount of social distance which can be bigger in a virtual environment than in a face-to-face situation. The absence of facial expressions and nonverbal cues results in bigger social distance, and "for people to communicate effectively, they must solve the mutual knowledge problem." In second language communication this question is even more meaningful than in first language. It must be considered when planning any kind of CALL course. Wu, Farrell & Singley (2002) state that instructors need to give tools and instructions to students on how to collaborate on-line. Furthermore, interaction between the peers needs to be strongly encouraged as well. They warn how easy it is for students to become disengaged outside of the social context of the classroom. It is not realistic to expect effective interaction if tools for that are not given beforehand. These claims support Toyoda's & Harrison's (2002) as well as our suggestions to teach specific communication and learning strategies to help reach set goals.

Half of the students found studying Finnish on-line interesting because of the new medium and a larger group. Six out of seven found studying in a collaborating group useful even though that was also regarded as the most difficult and demanding task, as mentioned earlier. Six students out of seven also reported having become more confident in writing, but only one student reported the usefulness of reading. Half of the students reported on having learned a lot of new vocabulary. We suspect some of the students might have focused too much on vocabulary learning. When creating a course based on the theory of CSCL, students are given freedom to choose the content and the strategy for learning. However, we realized that providing support, learning strategies, and sample approaches to studying different language skills are needed as the students may not possess the necessary knowledge. Ultimately, it becomes the teachers' duty to provide their students with the keys to open the door for any learning, virtual learning included.

6 Conclusions

In this article, we discussed the applications of CSCL to language learning and teaching. Our desire was to determine whether natural, authentic discussion and increased interaction among the participants could become products of CSCL. In addition, our goals were to create a larger learning arena for students to practise Finnish language skills, motivate them to use Finnish in meaningful context, and encourage interaction. Furthermore, we desired to aid students to automate their reading and writing skills, and develop their vocabulary. The students were also encouraged to negotiate and work in collaboration. Finally, an awareness of different registers was an additional goal to achieve.

As mentioned earlier, our findings cannot be generalized; there are limitations when using them for research purposes. First, due to the rather small data, the feedback is limited. Only seven feedback forms of nineteen possible were received; additional feedback data was received by an MA student. Secondly, due to the nature of the data, some is analyzed in a simple fashion, with plans for further, more thorough analysis. Thirdly, the information is self-reported. Factors influencing students' outcome and feedback:

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background, prior Finnish language skills, prior experience with technology, personality type, etc. were not taken into consideration. Some of that information was shared when the data was expounded. Realizing the limitations of our data, however, we consider that initiating discussion of the type of tools beneficial to language students for motivated and authentic discussion on-line is important. As there have been few CSCL applications in language teaching and learning, a sample to stimulate discussion is provided here.

'Virtually Finnish', our pilot experiment, provided us with a surprising amount of information, ideas and innovative plans. Future research is called for to find ways to increase student interaction and to support the students in their on-line work. But it should also include a search for answers to help language teaching professionals make decisions about the type of language and registers taught. The students deserve to be provided with the best possible tools for language learning in the 21st century. As CSCL offers many exciting possibilities for language teaching and learning, the applications of its use would be enhanced with the contributions and insights of others in the field of foreign language acquisition.

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Appendix 1

1. Do you think you learned something new during the Nettilehtori-project? If yes, what?
2. Do you think your reading comprehension abilities improved during the course? If yes, how?
3. Do you think your writing abilities improved during the course? If yes, how?
4. What were the worst things about the course?
5. What were the best things about the course?
6. Would you be willing to try another Finnish on-line course in the future? If yes, why? If no, why not?
7. Your idea and comments are very welcome.

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