**ANTWERP CALL 2014: Research Challenges in CALL  
7-9 July 2014, Universiteit Antwerpen, Belgium**

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We are happy to inform you that your submission for our conference has been accepted as a paper presentation.

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May we ask to discuss in your short paper the methodological problems and challenges encountered when designing, conducting and reporting your research.

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**Connecting language theory and learning: Activity theory applied to a connectivist environment for second language acquisition in a social networking site.**

Bio data

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Abstract

Looking for a way to step out of the conventional classroom and to make German language study more relevant Facebook (FB) was used in a German intermediate language class at a tertiary institution. It provided a way for learners to engage in authentic communication in meaningful contexts contexts ([Blattner & Fiori, 2009](#_ENREF_3); [Mills, 2011](#_ENREF_18); [Reinhardt & Zander, 2011](#_ENREF_19); [Wang & Vasquez, 2014](#_ENREF_24)). This ongoing study investigates the use of a social networking site (SNS) to see if it is a pedagogically valuable resource to integrate into a foreign language classroom. FB was chosen because it is (up to now) the most commonly used SNS, and is in line with [Steel and Levy (2013](#_ENREF_9)) who remind the CALL researcher that current research needs to reflect current practice. This part of the study was conducted over a period of 12 weeks using ethnographic methods ([Beaulieu, 2004](#_ENREF_1); [Hakken, 1999](#_ENREF_3); [Hine, 2000](#_ENREF_5); [Markham, 1998](#_ENREF_6); [Markham & Baym, 2009](#_ENREF_7); [Miller & Slater, 2000](#_ENREF_8)) Once the online FB-community was established, the researcher evaluated the connectivist learning environment and analysed the outcomes through activity theory (AT) ([Engeström, 1999](#_ENREF_2)).

A summative evaluation and retrospective analysis was carried out to establish the success and/or outcomes, identified emergent patterns, design and contents preferences, and viewpoints for effective use of FB in the language classroom, through surveys, interviews and online observation. AT was used to identify and clarify constraints. In particular, the AT analysis sought to identify the nature and extent of the contradictions or tensions that constrained the success of the online community. The number of participants was nine.

The details of the findings and its limitations will be discussed in the presentation. Tables and charts will show the quantitative results, excerpts of the interview data will be discussed.

Short paper

Introduction

Looking for a way to step out of the conventional classroom and to make German language study more relevant, Facebook (FB) was used in a German intermediate language class at a tertiary institution. This provided a way for learners to engage in authentic communication in meaningful contexts ([Blattner & Fiori, 2009](#_ENREF_3); [Mills, 2011](#_ENREF_18); [Reinhardt & Zander, 2011](#_ENREF_19); [Wang & Vasquez, 2014](#_ENREF_24)).

This paper examines the ways German language students view the integration of a Facebook (FB) group in their language classroom. This work was part of a 24-month longitudinal study using FB in the German language classroom. This study reports about the initial 12 weeks pilot study. The aim is to describe and understand the effects of the FB environment on the learning and teaching of German at tertiary level in New Zealand and to understand what the implications of using social networking sites may be for students. This ongoing study investigates the use of a social networking site (SNS) to see if it is a pedagogically valuable resource to integrate into a foreign language classroom. The students’ activity on the Facebook group was observed using ethnographic methods ([Beaulieu, 2004](#_ENREF_2); [Hakken, 1999](#_ENREF_12); [Hine, 2005](#_ENREF_13); [Markham & Baym, 2009](#_ENREF_16); [Miller & Slater, 2000](#_ENREF_17)). Activity theory (AT) was the framework for the descriptive analysis of activities, following the ethnographic observation.

In this article I will first look at SNSs and their affordances and then look more specifically at SNSs and Facebook in a learning environment. I will then show the theoretical framework, and will apply the activity theoretical triangle components to the language class under investigation. I then will describe the current study and will present the findings with the activity theory vocabulary, contradictions within the system will be listed and discussed in the final part.

SNSs and its affordances

Networked technologies such as Facebook introduce new affordances for spreading information and connecting students socially, with affordances such as profiles, status updates, shared links, synchronous chats, asynchronous messages, photo- and video sharing ([Chen, 2013](#_ENREF_7)). [Boyd and Ellison (2007](#_ENREF_5)) describe SNSs as “web-based services that allow individuals to: 1. Construct a public or semi-public profile within a bounded system; 2. Articulate a list for other users with whom they share a connection, and; 3. View and traverse their list connections and those of the others within the system”. This study is reporting about a connected network, networking is understood as social networking that occurs entirely online and is using online affordances like video, audio, chats, and blogs. [Lamy, Reinhardt, and Zourou (2013](#_ENREF_14)) claim that pedagogical situations where social networking takes place alongside or outside more traditional online interactions are under-researched. [Blattner and Fiori (2009](#_ENREF_3)) argue that instructors need to capitalize on the fact that Facebook is already an integral part of many students’ e-routine (p.5), meaning the students’ everyday use of electronic devices.

SNS-Facebook used in a learning environment

This study utilizes a Facebook group as part of the language course work. FB was chosen because it is currently the most widely used social network site in New Zealand and worldwide ([Facebook-Statistics, 2013](#_ENREF_11)). This SNS is used as an extension of students’ offline life ([Ellison, Steinfield, & Lampe, 2007](#_ENREF_8)). When Mark Zuckerberg developed FB he wanted to strengthen the on- campus life at Harvard with an additional online extension, which is in line with [Schwartz (2009](#_ENREF_20)) who observes that students’ use of Facebook is truly an extension of the classroom, akin to a graduate student lounge in which all kinds of connections take place.

[Selwyn (2009](#_ENREF_21)) points out that students are learning in ways that are increasingly situated within authentic contexts and webs of knowledge. What young people learn is often transformed by digital technology in ways and places far removed from the concerns of formal settings. Students themselves are changing in the ways they learn and in their expectations for learning. As early as 1997, [Tapscott (1997](#_ENREF_22)) labeled a new learner type who is exposed to online affordances as ‘n-geners’ and presents the following characteristics that are still applicable in today’s SNS environment: 1. high independence and autonomy, 2. intellectual openness, 3. collaboration, 4. internetworking intellect for organizational consciousness, 5. preoccupation with maturity, and 6. corporate skepticism.

Theoretical background of the current study

Activity theory was used to evaluate the online part of the course using Facebook in a German undergraduate class. The structure of the activity system is based on Engeström’s triangular model of human activities (figure 1) ([Engeström, 1987](#_ENREF_9)). Engeström extended the basic triangle model originally proposed by ([Vygotsky, 1978](#_ENREF_23)). Vygostsky’s conceptualisation included ‘subject’, ‘object’, and mediation tools. Engestöm called it the ‘tip of the iceberg’ (p.134). He then added a base to this ‘iceberg’ influenced by [Leont'ev (1981](#_ENREF_15)) research, the cultural components ‘rules’, ‘community’ and ‘division of labour’, that serve as cultural mediation of human activity. Engeström (1987) calls his activity triangle system an expanded activity triangle model. The expanded activity model (figure 1) is used in this study. The components of the activity system used in the German class are as labelled and explained:



Figure 1: Activity system

|  |  |
| --- | --- |
| **Component** | **Definition** |
| Activity | The students’ activity in this model is communicating in German. |
| Object | The object of the activity is the completion of the assignment by the students/subjects in order to gain 5% of final course mark. |
| Subjects | Individual students of the German undergraduate class |
| Tools | The activity takes place in an online environment, students are using computers. The application on the computer is Facebook-group. |
| Rules | The students are given instructions for how to do the assignment and how to use the FB-group environment. |
| Division of labour horizontal and vertical | The students are interacting on a horizontal level, they create a collaborative environment.  The teacher is grading the activity and gives feedback, the teacher is working on a vertical level. |
| Community | The community is the language classroom, online and offline, and also includes all the FB-group members who are part of the enrolled class of students. |
| Outcome | The desired outcome of this activity is the students’ use of informal German language and the creation of a German repertoire of contemporary culture supplementary to the textbook contents. |

Table 1: The components of the activity system

The researcher in this study is interested in exploring the following features within the activity system:

1. How do the students use the tools?
2. How do they apply the rules and regulations?
3. How does the division of labour function?

Contradictions or tensions within an activity system

The eight components of the activity system listed above are in constant interaction. They experience tension. They are continuously working through changes. [Engeström (1987](#_ENREF_9)) calls an activity system ‘a virtual disturbance- and innovation-producing machine (p.11) and emphasizes that contradictions are important. Contradictions can occur between and within each component they are the central role of change and development ([Engeström, 2010](#_ENREF_10)).

Research context and participants

An undergraduate class of German language students participated in an SNS (Facebook) as part of their class assessment (5%). A FB group was especially established for this task. The students autonomously invited fellow students and German-speaking friends to the group, and the environment was closed and controlled by the students. Inviting German-speaking friends was meant to help scaffolding. This group not only functioned as the platform for assessing student contributions but it also enhanced the notion of belonging to the class, and the feeling of collective identity. The students got to know each other faster and more thoroughly as every member of the group had an attached profile. A new type of identity creation had become possible ([Boyd, 2007](#_ENREF_4)). The relatively short offline, face-to-face contact students had with each other in the classroom became more intimate due to the online group contact, which was available 24/7 from their home computers or mobile devices. The students were advised to set their FB sites to German for total immersion.

The assignment required students of the class to make eight contributions spread over one semester (12 weeks). The entries could be anything related to Germany and the German language. Students were encouraged to post contributions related to their personal interests. At the beginning of the course, the students did not know each other and their first postings were short descriptions about themselves. Introductions were either short videos, written form or audio files, posted to the class FB-group site. Each of the following contributions had to be accompanied by at least three sentences written in German, explaining the reason for their choice and the actual item. Students were then asked to respond to postings of their fellow students to develop a more active interaction. The postings allowed students to establish their unique identity within the class structure. This relatively undirected activity developed into a more focused activity during the semester, and led to the context where learning took place.

Twenty-two students were enrolled in a German beginners class at a tertiary institution. Nine of the group agreed to participate in the pilot interviews.

The instructor as the participant observer monitored the activity of the entire group on Facebook during the semester. The observation will be presented in the form of a graph (figure 2). To support the observational data interviews with selected students were conducted.

The time of the assignment was structured into three phases (table 1). The initial introductory phase was followed by the participation phase. After the group was activated the students could enter the third phase of commenting on each others posting. This was dependent on the students’ confidence levels, therefore a relatively long timeframe was given for phase 3.

|  |  |  |
| --- | --- | --- |
| **Phases** | **When** | **What** |
| Phase 1 | First week of term | Personal video had to be posted to introduce themselves. |
| Phase 2 | Week 2-10 | Posting seven contributions related to the student’s personal interest. |
| Phase 3 | Week 2-12 | Students had to comment on at least 3 of the postings. |

Table 2: Time structure of the assignment

Findings

Participant observation was used to explore the activity over a period of 10 weeks during the semester. The observer of this activity was the class instructor of the class. Figure 2 shows the activity of the entire class of enrolled students (n=22) and of their invited friends (n=12). The activity was high in the first weeks of the semester. The students were given their task and familiarized themselves with the platform of Facebook.

They had to perform their first task, posting an introduction about themselves in the first week. The number of the observers was high initially. [[1]](#footnote-1) The participants of the group familiarized themselves with the platform. The observing gradually decreased and was on a low in the beginning of September. The interest in observing the FB-group increased again after the beginning of September, a period when a student teacher started to work in the classroom. A German native who was close in age to the students, the student teacher motivated the students and encouraged them to contribute on the class FB. The last week of the 10-week period shows a sudden increase of comments/contributions and ‘likes’, acknowledging ticks, indicating that the fellow students looked at and enjoyed the contributions. The reason for the increase was most likely the assignment, being due. The students had to post their artifacts before the end of the semester.



Figure 2: Facebook activity of the class over 10 weeks

Contradictions and discussion

Initially the observation of the group was high and the active participation was low. The instructor had hoped for continuous activity and not only at times when assignments were due. The following tensions within components of the system were observed:

rules- subject,

subject-tool-object

subject-division of labour.



Figure 3: Contradictions within the German language activity system

Wavy lines show the contradictions.

The contradictions observed will be discussed and interview data added to gain a deeper understanding of the activity on the FB-group.

Contradiction between rules and subject

The students received a handout explaining how to use the FB-group and the instructions for the assignment in the first week of the semester. Two students who were frequent users of Facebook were identified and nominated to assist students with the assignment in case of problems. The instructor followed the concept of developing the authentic and autonomous language learner ([Armbrüster, 2010](#_ENREF_1)) but also wanted to be as invisible as possible because of her participant observer position in the class ([Beaulieu, 2004](#_ENREF_2)).

Comments made by the students were:

Student comment: FB group was not a familiar environment for me, I never used it in an educational environment.

Student comment: FB- group seemed to intrude into my personal FB. I eventually gained more confidence and trust.

Discussion: In order to be fully confident in using FB-group when the semester starts, the students need to become familiar with the task more thoroughly and if possible with the help of the instructor. Assigned student helpers are a good idea but considering the group who does not know each other, the members may be too shy to seek assistance. The teacher has to take at least in the beginning a more authoritative position. The students need to know why FB-group is a useful tool. They need to be shown the advantages and need to be informed about the privacy issues of FB-group.

Contradiction between subject-tools-object

The graph (figure 2) shows that the students did not use the tool FB-group tool to its full potential. They observed the activity but did not always contribute with comments. The FB-group activity was meant to enable the practicing German of writing and reading, German listening and also spoken German by producing an introductory oral contribution. Observing is a way of passive language acquisition but does not make full use of the opportunity the students might have had ([Brandtzaeg & Heim, 2011](#_ENREF_6)). A contradiction occurred between the FB-group as a learning tool and the subject and consequently the object. Engeström calls this part of the triangle, the ‘tip of the iceberg’ ([2010](#_ENREF_10)), he writes that it is a very common place where contradictions occur (p.134).

Student comment: first I did not like to contribute, I was not sure about my German. I liked it later on.

Student comment: I did not like to add comments. FB as a learning tool was too forced. FB means leisure time for me.

Student comment: I did not add comments because I often thought I was too late.

And another student comments that the FB-group produced information overload.

Student comment: I couldn’t watch all the entries because it was too time-consuming.

Student comment: I only watched the comments I was interested in. It took so long to read the entries, I did not have time to write my own.

Discussion: The students had different reasons for not contributing. The obvious reason was the lack of confidence in contributing in the foreign language. It might be helped to overcome shyness if the class had initially more guidance situated in the formal class situation with producing their first entries to overcome the shyness. The posting of the entries is guided by deadlines throughout the semester but students should not be penalised when a deadline is not met.

Contradiction between division of labour – subject

Division of labour in an activity system is twofold: there is a horizontal level and a vertical level. The horizontal level in this study refers to the students in a non-power related relationship. The vertical relationship is the teacher who is grading the subjects’ work and is in a position of power. There was a change in the division of labour when the student teacher started her work. She took on a mediator role. She was situated on the horizontal level but also the vertical because she influenced the grading. The student teacher helped the students with constructing feedback which was well received. Before the student teacher came the horizontal level and vertical levels were separated and the instructor reluctant to join the group, remained a participant observer. Feedback was given very rarely.

Student comment: I would have liked to receive feedback.

Student comment: It was nice to have the student teacher, she helped us a lot.

Student comment: I felt insecure and did not have help. There are always a few people who are better.

Discussion: in order to establish informal language and to establish a relaxed atmosphere and get to know each other better, the instructor avoided making too much use of the vertical level of division of labour. The assignments were pass/fail and not graded and the feedback kept to a minimum. The intention was that the students find their own voices. Having a student teacher improved the students’ confidence. The student teacher was more accessible because of her position in class, she was able to supply help and feedback and encouraged the students to perform their task.

Conclusion

The findings of this pilot study have raised many issues relating to the use of FB-group as part of the German language-learning curriculum. With regard to the assignment design, the instructor will apply tighter rules and give a more thorough introduction in future. There will be more guiding of the students in the first couple of weeks. The guests to the group, who were meant to be helping with the language improvement in line with zone of proximity development, did not contribute in this FB-group. The next part of the study will eliminate the guests and will focus on the enrolled students. The instructor will make more use of feedback, possibly in a weekly session in the computer lab.

Overall the activity was well received and the students interviewed recommended the use of Facebook in the future.

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1. Observers of a FB-group are not anonymous but can be recognized by name. As soon as a group member clicks on a posting, FB recognizes the name and is listing it under the button ‘seen’. [↑](#footnote-ref-1)