

MOBILE ASSISTED SOCIAL NETWORKING LANGUAGE LEARNING

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ABSTRACT

The present article evaluates how issues faced by students in a foreign language class were resolved. These issues originating from the use of the learning management system were linked to language acquisition, affect and delivery of learning material. Past experience and current literature suggested resolving these issues through the incorporation of a social networking site on mobile devices. A grounded action research method was selected as it provided the researchers with an opportunity to react to changes and adapt their implementation. The implementation consisted of creating a Facebook group to deliver lecture notes. Moreover, this online environment was used to host student-created documents as well as ensuing peer communications in the target language. Online observations and interview data were analysed to provide the researchers with an in-depth understanding of the learning processes and to enable them to rectify their implementation. Findings revealed that students viewed the new system as an improvement as issues were resolved. Motivation to access the platform was increased, thus leading to added exposure to the target language resulting in language acquisition. A model describing the implementation was constructed which links task-based learning, learning with Facebook, mobile assisted language learning to affect and language acquisition/learning. This model should form the basis for future research on language learning with a social networking sites on mobile devices.

Keywords: Second Language Learning; Mobile Classrooms; Social Networks; Integrated Learning System; Action Research; Grounded Theory

To cite this document:

Gabarre, S., Gabarre, C., Din, R., Shah, P. M., & Karim, A. A. (2015). Mobile assisted social networking language learning. *Journal of Personalized Learning*, 1(1): 27-36.

INTRODUCTION

This article relates a grounded action research study which was conducted in the researchers' French as a foreign language classes in a Malaysian public research university. This study originated from difficulties experienced by the students with the learning management system (LMS). These difficulties were identified along three axes: language acquisition, distribution of learning material, and affect. Issues of language acquisition were noted (Gabarre & Gabarre, 2010a) as students did not have administrative privileges in the LMS. This prevented them from uploading documents they produced in the target language and from posting messages in online forums. Issues of delivery were encountered as students were only able access the online resources from a full-fledged web browser accessed on a computer. As a result, this issue confined delivery to language labs and the students' hostels. Consequently, students could not access and share online resources from the LMS while in-class. Furthermore, it was reported that students did not feel motivated to access the LMS, and only logged into the system when informed by their lecturers to do so. Past research in the same institution with comparable cohorts revealed the potential of mobile devices (Gabarre & Gabarre, 2010b) and social networking sites (SNS) (Gabarre & Gabarre, 2010c).

Using precepts described in three publications (Egger et al., 1997; Guzzo et al., 1987; Rosenthal & DiMatteo, 2001), a meta-analysis of the relevant literature was conducted to evaluate the feasibility of utilising the two technologies to foster language learning. Although, this analysis revealed a knowledge gap on the integration of the two technologies and more specifically on the use of SNSs for foreign language learning, it highlighted the pedagogical benefits provided by them when used independently.

The analysis of the literature suggested that the issues encountered by the students could be addressed through three theories. Krashen's (1989, 2009) theory of second language acquisition was particularly appropriate as it dealt with the acquisition-learning distinction, the Monitor hypothesis, and the Affective Filter hypothesis. Second, Sharples et al. (2005, 2007) proposed a theory of m-Learning which guided the study as it made provisions for the use of mobile devices for task-based learning, for distribution of learning material, and the use of a personal tool and its impact on affect. Third, Vygotsky's (1934/1962) social constructivism directed the research with the notion of learning in the zone of proximal development (ZPD). Also, social constructivism provided a framework for SNS-Learning as it dealt with the distribution of learning material and with the notion of affect within the online community.

The combination of language learning, m-Learning and SNS-Learning resulted in four concepts. As language learning and m-Learning overlap, the concept of mobile assisted language learning (MALL) emerges. The intersection of language learning and SNS-learning creates social networking language learning. Although not directly concerned with this study, since language learning is excluded, the combination of SNS and mobile devices provides mobile social networking. The crux resulting from the intersection of language learning, m-Learning and SNS-Learning creates mobile assisted social networking language learning which is condensed with the MAS2L acronym.

The objective of the research was to improve the learning environment in order to resolve the issues which were encountered by the students. A MAS2L implementation was proposed with an emphasis on language acquisition, distribution of learning material and affect. This objective was fulfilled by answering the three following questions. How can a MAS2L implementation improve the students' learning experience in terms of language acquisition, distribution of learning material and affect? What processes do foreign language learners go through when using a MAS2L setup? What are the difficulties encountered in a MAS2L scenario?

METHODOLOGY

In order to answer the research questions, a grounded action research method was selected. This method popularised by Baskerville and Pries-Heje (1999), combines the benefits of action research and grounded theory. The action research approach was based on Kemmis and McTaggart's (1982) design, whereas a systematic grounded theory adhering to Strauss and Corbin's (1990) method was selected. This method offers a cyclical progression which enables practitioner-researchers to improve their implementations, while providing a systematic method of analysis. A six-cycle design was planned over a period of three semesters. This approach enabled the monitoring of one cohort of seventeen students in four different French language courses as they progressed from their third to their fourth semester. An initial survey adapted from a previous study (Gabarre & Gabarre, 2009) revealed that 70% of the students in the group owned a smartphone as defined by Bradley and Holley (2011). Yet, only 12% of these students accessed mobile Internet through a monthly data plan. This was due to the prohibitive cost of mobile Internet as noted by Ally et al. (2007). In order to provide equal

opportunities to all students regardless of their socio-economical background, smartphones were loaned to students who did not own one, and subsidies enabling the purchase of data plans were granted for the duration of the study. The positive impact of this intervention was taken into account in the analysis of the data. The survey also revealed that 94% of the group were active members of the Facebook SNS.

From these findings an action research implementation was planned with a Facebook page to host all online aspects of the MAS2L course. Lecture notes were adapted to fit mobile devices and uploaded to the online platform. Delivery of learning documents was not restricted to lecturer-students interactions, as students shared in-class and out of class productions in the Facebook page with their classmates. These consisted in text, video and multimedia documents created with the students' smartphones. Such documents, which made use of the target language, were produced through individual and collaborative tasks. Student productions were subsequently peer-reviewed and commented upon, thus enabling improvements before being resubmitted.

Two data sources were collected in the present study. First, student artefacts and online observations of interactions on the courses' Facebook pages were recorded. Second, interviews were conducted in order to gain a deep understanding of the students' perception and experience with the MAS2L platform. As can be seen in Figure 1, in the first seven-week cycle, all students were invited to participate in focus group interviews. These enabled the researchers to identify four students cable of providing rich information pertaining to the research questions. During the second cycle, these four students were invited to participate in individual interviews. A snowballing method was applied to identify additional students prone to share their experience. A total of eleven students participated in individual interviews over the course of the six cycles.

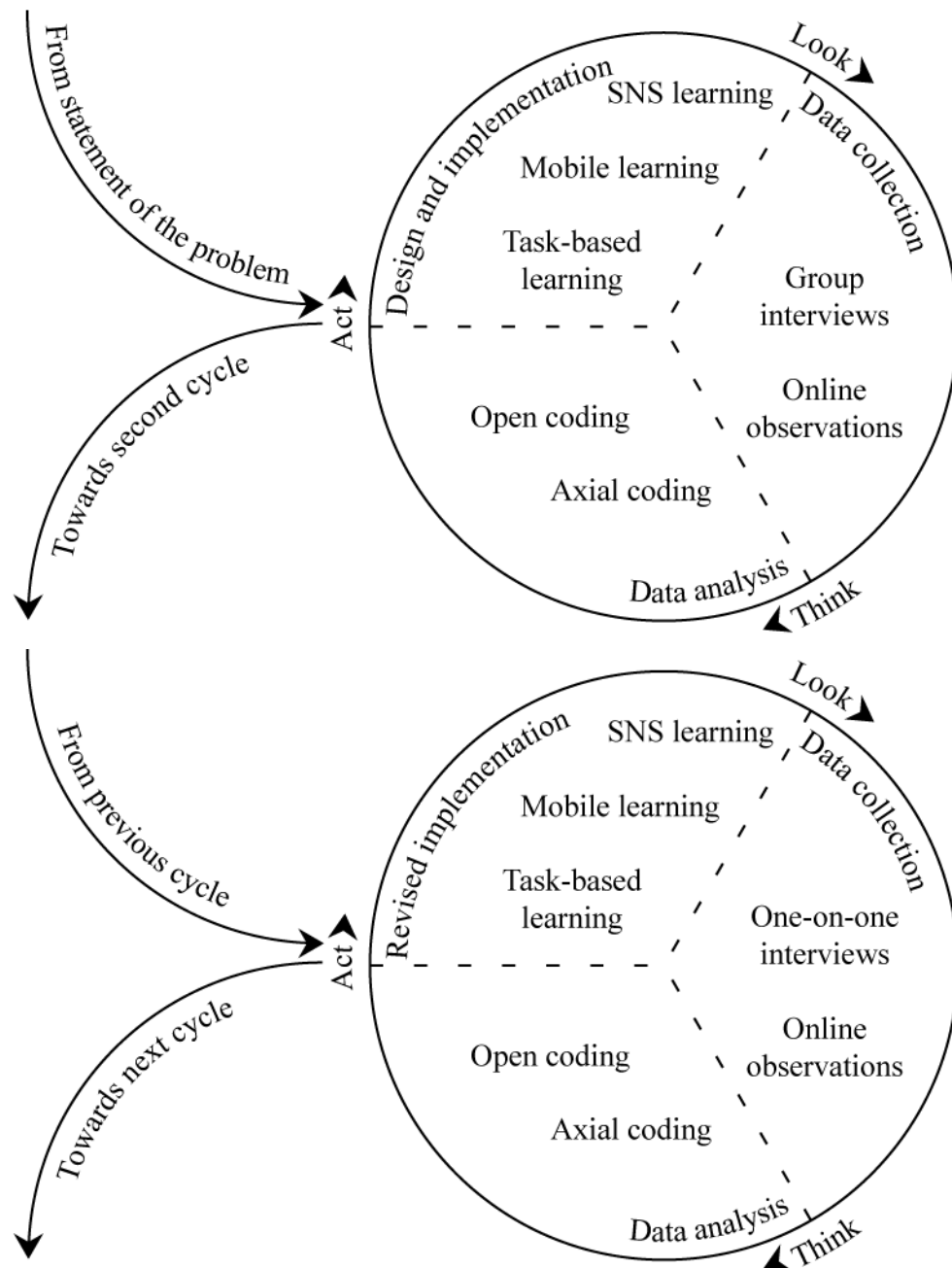


Figure 1. Cyclical Research Design

Data was analysed within each cycle, and thus enabled amendments to the implementation in view of improving the system. A two-level coding scheme taken from Strauss and Corbin's (1990) systematic grounded theory was utilised to analyse the data. First, open coding was used to identify themes within the data. During this process, descriptive themes were merged into abstract categories. Second, axial coding was used to relate different categories through relationships set by the grounded theory method. This process made use of the coding paradigm and involved selecting a central phenomenon under investigation, and identifying categories fitting the context, the causal condition, the intervening condition, the action/interactional strategies, and the consequences. Data analysis was facilitated with the ATLAS.ti software following Friese's (2011) guidelines. In each cycle and when sufficient data was available, diagrams were constructed depicting the open and axial coding relationships.

Reliability and validity were ensured using methods integral to the qualitative paradigm. Three techniques were used throughout the research to ensure quality in every cycle. These were member reflections as described by Tracy (2010), triangulation within the same method as explained by Silverman (2000), and the use of reflexive

memos as audit trails as defined by Strauss and Corbin (1998). Furthermore, the seven general criteria of quality, which were set by Strauss and Corbin in the form of questions, were answered at the end of the study.

FINDINGS AND DISCUSSION

Conducted over three semesters, the present study is divided into six cycles each lasting seven weeks. Data was collected and analysed as it emerged. Sufficient data to answer all questions with an axial coding model did not materialise in each cycle. For this reason, answers to each question were constructed across the six cycles. Table 1 illustrates the construction process of each axial coding model over the course of this study.

Table 1. The Construction of Axial Coding Models in each Research Cycle

	Semester	3		4		5	
	Cycle	1A	1B	2A	2B	3A	3B
Language acquisition			x	x		x	
Distribution of learning material			x			x	
Affect					x		x
Processes		x					x
Difficulties		x		x			

As can be seen in Table 1, data collected during Cycle 1A provided answers to issues of processes and difficulties. In Cycle 1B, data contributed to describe language acquisition and distribution of learning material. Cycle 2A provided further data pertaining to the difficulties encountered with the implementation, as well as additional evidence of language acquisition. Cycle 2B dealt with the affective component. Similarly to Cycle 1B, Cycle 3A provided answers to the language acquisition and distribution of learning material components. Data recorded in Cycle 3B provided axial models pertaining to affect, and to the processes involved with MAS2L.

In Cycle 1B, data contributed to describe language acquisition and distribution of learning material. Language acquisition as a consequence of the intervention was linked to the themes of SNS-learning, college study groups, and learning with peer feedback. Delivery of the lecture notes with the new system was linked to the notions of individualist learning, traditionalist learning, ease of access, and ease of learning. In Cycle 2A, Language acquisition was experienced as a result of the combination of SNS-learning and m-Learning in the context of task-based learning. SNS-learning was perceived as a compulsive behaviour linked to the medium of access. This phenomenon provided exposure to the target language which resulted in language acquisition. During Cycle 2B, foreign language learning with the MAS2L system was interpreted as related to the importance of learning as perceived by the students and to the relationship with their friends within the cohort. This resulted in enjoyment which was linked to an increased in positive affect and a decrease in negative affect. In the course of Cycle 3A, language acquisition was linked to MAS2L, task-based learning, exposure to the foreign language, improving, and language proficiency. The delivery of the course notes with the mobile social platform was related to SNS-learning as a compulsive habit, to the differences between the LMS and the SNS, to the perceived ease of use, and to the acceptance of the technology. Besides MAS2L, four themes linked to affect were identified in Cycle 3B. These were foreign language learning, learning with friends, adaptation, and improvement.

The description of the processes was partially addressed in Cycle 1A. It was discovered that the process of learning with the MAS2L platform was linked to themes of ubiquity of the technologies employed, new ways of learning, enjoyment and motivation. In Cycle 3B, the process of selecting between a phone and a laptop to access the MAS2L platform was linked to location, time, issues of connectivity, delivery, and foreign language learning. The process of using the platform to communicate with the lecturers was linked to the themes of emergency, online student-lecturer relationships, cultural habits, ease, and foreign language learning. Peer correction was identified as related to task-based learning, learning with friends, problems correcting friends, effort, and language acquisition.

The difficulties encountered with the new system were identified as related to the use of the SNS and the mobile devices in Cycle 1A. An axial model describing problems with the SNS linked issues of computer mediated communication, SNS and non-disclosure, the difference between online and real world friendship, the lack of communication on the SNS, and the rejection of the SNS. Problems with the mobile devices were linked to

network problems, limitations of the SNS on the phones, the intrusiveness, frustration, and a rejection of phone in m-Learning in favour of laptops. In Cycle 2A, further themes pertaining to issues faced when using the SNS were linked to stalking, SNS arguments, technological problems, lack of communication leading to the perception that the SNS was boring.

The cyclical approach used in this research involved analysing the data as it was collected in order to rectify the implementation. For this reason the completion of the six-cycle enabled the researchers to review as a whole the data collected during the three semesters. This was achieved through the third level of coding prescribed in Strauss and Corbin's (1990) grounded theory, and which is known as selective coding. This third level employs the same coding paradigm used in axial coding and links themes to a central phenomenon. A total of 34 themes which were evaluated on grounded and density criteria were included in the analysis. As illustrated in Figure 2, these were grouped into categories enabling the construction of a model describing the MAS2L intervention. This model links MAS2L with task-based learning, SNS-learning, MALL, affect and language acquisition/learning. Contributions of this study are discussed from the perspectives of task-based learning, SNS-learning and MALL.

From a task-based learning perspective, MAS2L demonstrated several positive aspects. The MAS2L implementation conducted over the six cycles enabled the students to become more autonomous as a group, as they conducted learning activities with limited support from their lecturers. Peer support over the SNS became a cohesive force which was centred on the practice of peer feedback. In a comparable fashion as experienced by Jacobs et al. (1998), feedback provided after the completion of tasks was positively received, yet at the same time students claimed that they often had reservations to provide negative feedback, particularly when individual tasks were concerned. The technologies used to conduct the tasks provided the students with the mobility to carry out these activities in-class as well as in other settings on the campus. Furthermore as described by Stockwell (2010), the multimodality provided by the tools enabled the lecturers to evaluate the students' progress across several language skills. Moreover online artefacts of social interactions in the target language provided evidence of learning in the ZPD. Using the MAS2L platform to foster peer learning was evaluated as a strong intrinsic motivator which drove the students to excel in their tasks.

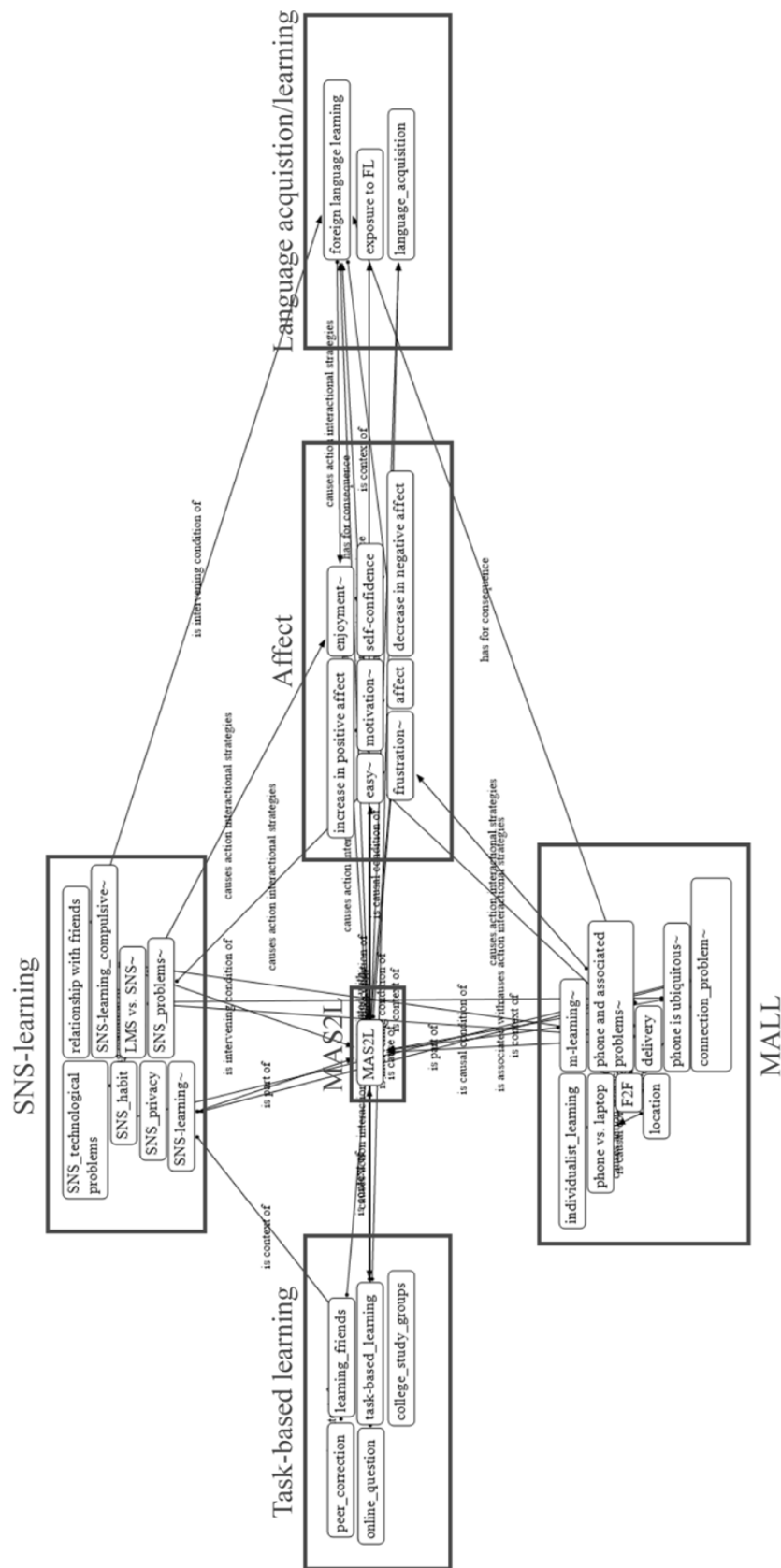


Figure 2. Selective Coding Model of MAS2L

From an SNS-learning perspective, MAS2L provided the combined advantages of a networked learning environment with the added ubiquity afforded by the mobile devices. Although issues of SNS addiction are widely described in the literature (Andreassen et al., 2012), this affliction was not encountered at the time of the study. However, it was noted that the use of the MAS2L platform resulted in a phenomenon of compulsive SNS-learning. Indeed, as students received on their smartphones a notification of any change on the platform, they automatically logged in to review it. Ease of use of the platform was confirmed even with students who were less confident with technology. Issues linked to the SNS were identified and taken into account to improve the pedagogical experience. Although students reported that Facebook had become boring, they were prompt to rectify that learning with their SNS had renewed their interest in the network. The MAS2L platform was perceived as more dynamic than the student-initiated group, and thus was used to host non-pedagogical social interactions. Similarly to reports made in other studies (Meishar-Tal et al., 2012; Selwyn, 2007; Wang et al., 2011), student stressed the advantages of the SNS over the LMS in terms of feedback, interactions, and motivation. Positively altered view of the student-lecturer relationship was seen as a result of the medium used to communicate.

From a MALL perspective, MAS2L offered a ready-made social platform enabling interactions among peer learners and with the lecturers. Moreover, this platform provided a means to ubiquitously deliver learning material, and served as a repository for student-created documents in the target language. However, the selective coding model highlighted the lack of perceived connection between MALL and task-based learning in the MAS2L model. This is in contrast to the duality of MALL being distributed between delivery and task-based learning as described in the literature (Kukulska-Hulme & Shield, 2008). Indeed, students primarily perceived MALL as an application of delivery in spite of the numerous productive tasks conducted with their mobile devices. This is justified by the contrasting perception of MAS2L with the LMS which the students were accustomed to using. Due to the specific context of the study, mobility while in transport was not a predominant feature. However, mobility within the classroom and around the faculty was fully exploited. In spite of issues linked to m-Learning, students coped with device limitations and adapted their learning to the novel approach. Over the course of the study, use of smartphones increasingly replaced laptops as the device of choice to access the platform.

CONCLUSION

The researchers were the primary recipient of this study, as it provided constant feedback enabling the improvement of the implementation. However, implications of MAS2L are not restricted to the researchers. Implications for practitioners and future researchers were identified. Practitioners facing similar issues will benefit from the findings of this study. A six-point list of recommendation was drafted to guide practitioners wishing to implement MAS2L in their classrooms. Adapting the implementation to fit the needs of various contexts should provide similar positive changes to the students' learning experience. Researchers in the field of language learning, m-Learning and SNS-learning should benefit from findings from the present study. These should be viewed as an opportunity to approach the issues from different methodological paradigms, and through the use of different research tools. Four suggested axes of enquiry were identified which would further contribute towards expanding the pool of knowledge in the above mentioned domains. Since the end of this study, other cohorts of French students have benefited from a MAS2L implementation. The positive aspects of this approach have led to the adoption of this method for all subsequent courses. Until a new approach is identified, MAS2L will remain the method used to enhance the students' French language acquisition experience.

Acknowledgment

This work was supported by the Malaysian Ministry of Higher Education under the Exploratory Research Grant ERGS/1/11/SSI/UPM/02/30.

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