Utilising Mobile Assisted Language Learning (MALL) for Vocabulary Acquisition of Refugee Women English Learners

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Abstract— One of the common barriers of resettlement among refugees in Australia is the lack of English language proficiency. Even though there are policies and strategies in place to support resettlement, women refugees are not able to overcome this barrier as quickly as refugee men, due to sociocultural factors and family responsibility. This paper presents the initial data collection stage of a work-in-progress longitudinal case study that investigates how mobile assisted language learning (MALL) can be utilized for vocabulary acquisition of refugee women. First, it discusses the significance of vocabulary acquisition and non-formal learning for these women, and the significance of MALL in this non-formal learning setting. This is then followed by a discussion of the research context: the non-MALL stage is the control group and the MALL stage is where tablets are used as a teaching and learning tool. The MALL stage includes the system that is used to rate participants’ proficiency levels. The paper concludes with a discussion of how the MALL integrated vocabulary lessons are designed, and the potential outcome of the research.

Keywords- MALL; non-formal; refugee; women; vocabulary

I. INTRODUCTION

Australia is ranked one of the top three countries in the world that is contributing to the resettlement of refugees [1]. It has policies and strategies in place to support resettlement and ensure a safe and peaceful future for refugees and their families [2]. Nevertheless, one of the common barriers of resettlement of refugees is the lack of English language proficiency [3-5]. Refugee women are not able to overcome this barrier as quickly as refugee men. This is because, upon arrival, the men’s employment assumes priority within their families. Though they themselves struggle with the language, due to financial necessity and security, they go out into the workforce and interact with society. They also interact with the government and other public and private organisations for basic services. In contrast, the women’s primary responsibility is to facilitate the settlement of the family into the new living environment [6].

Due to sociocultural factors and family responsibility, refugee women’s careers and employment status are often considered secondary or are not considered at all [7]. Some women isolate themselves in their homes and lack support networks or social engagement [8]; some women are only able to take-up non-formal learning that are offered by community and multicultural centres and religious establishments, which are time and resource constrained [2, 9], while others only seek work or go to formal learning after the family has fully settled in (when childcare is taken care of, or when children are more independent).

Mobile assisted language learning (MALL) is a branch of computer-assisted language learning (CALL) where mobile devices, such as smartphones and tablets, are used to support the learning of language [10-12]. It was demonstrated by studies [13, 14] that the use of MALL is feasible for language acquisition within formal learning settings. The accessibility and portability characteristics of the mobile devices allow language learners to access learning materials without time and space constraints. However, the feasibility of MALL in refugee women’s language learning in a non-formal setting is yet to be explored.

This paper presents a discussion of an initial data collection stage of a research, as was proposed in [9], undertaken in a small community centre in Western Australia. The research uses a longitudinal case study design to investigate the factors of MALL that can be integrated into a non-formal learning environment to support refugee women’s English language learning, paying particular attention to vocabulary acquisition. Aided by a mobile device, the tablet, we believe that teaching and learning can be enriched and limited meeting time can be utilised efficiently and meaningfully. The research focuses on non-formal learning because such learning programs fulfil the learning needs of adult migrant learners who, due to a variety of reasons, do not participate in formal learning and schooling.

This paper will first discuss the significance of vocabulary acquisition and non-formal learning for refugee women, and the significance of MALL in this non-formal learning environment. This is followed by a discussion of the research context: the non-MALL stage is the control group and the MALL stage is where tablets are used as a teaching and learning tool. The system that is used to rate participants’ proficiency levels is also discussed. The paper concludes with a discussion of how the MALL integrated vocabulary lessons are designed and the potential outcome of the research.
II. VOCABULARY ACQUISITION AND REFUGEE WOMEN ENGLISH LANGUAGE LEARNING

A. Why Vocabulary Acquisition?

A review of the literature [9] suggests that vocabulary learning is a crucial process for learners to acquire proficiency and competence in a language. Having a rich ‘word bank’ can facilitate fluent and effective speaking and writing [15], whilst integrated language skills (listening, reading, speaking, and writing) will also be enriched. According to [16], vocabulary knowledge refers to the size as well as the depth of vocabulary, which includes knowledge about the contexts in which the word is used, the frequency with which it is used, its morphology, its syntax, whether it has multiple meanings, pronunciation, spelling, and how the word combines with other words.

However, in the context of refugee women, considering their education background, English level, native literacy level, and native language system [9], vocabulary acquisition centering on the speaking and listening branch of language development is seen as more useful and beneficial:

- Knowing a range of vocabulary and being confident with it gives these learners the ability to say what they really mean and be clear when sharing ideas and thoughts or simply when making conversation [15, 17, 18]. This increases the chances of having other people understand what is expressed.
- A diverse vocabulary allows learners to connect with a greater variety of people [19, 20]. For example, knowing some business terms will assist in not being taken advantage of and may make them become proactive in dealing with customer service.
- Vocabulary is essential in comprehending reading materials [20, 21]. Unfamiliar words tend to become little holes in the text, preventing comprehension of what is being read. Vocabulary also assists learners in becoming more informed and involved. For example, learners will have better understanding of news and current events if they understand politics and geography.
- Learners will be able to grasp ideas and think more rationally and incisively. The greater the number of words in a learner’s ‘word bank, the more instruments they have with which to put a point on their own ideas, and dissect and examine those of others [15, 17].

B. Non-formal English Learning Programs for Migrant

In Australia, formal and funded English language learning for refugees is provided by the Department of Immigration and Citizenship. Students who are enrolled in this learning setting enjoy a stable and permanent operation that applies state of the art technology to teaching and learning [22, 23]. However, the review of literature, as in [9], suggests that, due to personal and sociocultural factors, migration histories and fear of engaging in formal education [7, 8, 24], some refugee women opt to attend non-formal learning settings. These programs do not require commitment and run for short durations (for example, two hours per week, in the morning during the school term).

They are intended as a meeting place for migrants to learn and practice English in a relaxed and fear-free environment. The lessons are somewhat structured and no assessments are imposed. Depending on the availability of funding, some of the community centres that provide these environments also provide a crèche facility so that small children can attend while parents participate in the language program. If a crèche is not available, children are allowed to be present in the same venue as parents, usually at a designated space where toys are provided for them to play with. Attending these programs is a valuable way for refugee women to reduce their isolation, interact, engage and socialise with other people while learning English.

III. MOBILE ASSISTED LANGUAGE LEARNING (MALL)

Mobile devices, such as smartphones and tablets, are used within MALL to support and facilitate language learning [10-12]. These devices are appealing for language learning due to their accessibility, convenience, cost efficiency, internet connectivity, multimedia capability, portability, and wide availability as compared to desktop or laptop computers [25]. Language learners find these factors beneficial as they are able to access learning materials and communicate with their facilitators and peers without being restricted by space and time [26, 27].

Within MALL, learning occurs, not at a static and predetermined location, but when the learner takes advantage of opportunities offered by mobile technologies [28]. MALL provides the following learning advantages:

- Blending - the combination of MALL with classroom instruction maximizes the benefits of both in-class and online learning [12, 29]
- Collaboration - mobile devices and technologies are designed to support communication between learners and teachers/facilitators in a collaborative learning activities and environment [13, 30]
- Interactivity - mobile learning settings encourage learners to be proactive and enable varying levels of interaction [30]
- Portability and connectivity - mobile devices are lightweight, easily transportable/movable, and easily accessible to the learner. They are easily connected to the internet during learning activities [13, 30]
- Spontaneity - with MALL, learners can learn language anytime and anywhere [13]

IV. PROPOSED RESEARCH DESIGN AND DATA COLLECTION

A. Proposed Research Design

The research is exploratory in nature. It focuses on a real world phenomenon and studies the phenomenon in all its complexity, to explore and define the issues that prevail [31, 32]. This research addresses issues within the context of refugee women’s English vocabulary acquisition; that is, whether the intervention of MALL affects their learning and whether the vocabulary skill they acquire (if any) through this intervention changes their perception of their conversational
proficiency. Informed by the literature review, the following research questions were generated:

- **RQ1** - What sociocultural factors affect refugee women’s vocabulary acquisition?
- **RQ2** - What are the factors of MALL that affect refugee women’s vocabulary acquisition?
- **RQ3** - What form of visual representation for vocabulary on a mobile device for MALL is most effective for refugee women (e.g. words, audio, pictures or combination of these)?
- **RQ4** - How does vocabulary acquisition impact refugee women’s perception of their English conversational proficiency?

To answer the research questions, a qualitative longitudinal case study is proposed. At the time of writing, the research is at data collection stage. The longitudinal study approach is selected following Yin [33] who states that this type of study enables researchers “to conduct in-depth studies about a broad array of topics […] in plain and everyday terms”; in short, it studies a phenomenon (the “case”) in its real-world context. In addition, this approach is suitable for vocabulary research as acquisition of vocabulary knowledge happens incrementally and is developed due to exposures to new words in various contexts over time [16, 18, 34]. Therefore, a longitudinal case study is the best fit for this research, to identify the changes that might occur to participants over a period of time.

Participants are selected using convenience sampling at the research site, a small community centre in Western Australia that provides a non-formal learning program for women. Twenty participants have been recruited for the control group and another twenty will be recruited for the longitudinal study. According to Creswell [32], for qualitative research that is interpretive and exploratory in nature, a small number of participants allows more focus and in-depth level of details about experiences and perspectives to be captured.

1) **Research Site**

The research site is a small community centre in a suburb in Western Australia. The centre runs a conversational English program that is run once a week, for two hours, during the public school term. The objective of this program is to provide a setting for people to meet and socialise with others who also want to practice their spoken English. The majority of participants in this program are migrant and refugee women from low socioeconomic backgrounds who are full time mothers, have little or no English, and have experienced unique pre-migration histories. They have varying literacy levels interrupted due to wars or a result of educational backgrounds that range from high levels to very little experience of formal education in their home country. Some may be able to speak and write many languages, or may have only a basic knowledge of reading and writing in their first language. The countries of origin of these women include Afghanistan, China, Indonesia, Iran, Iraq, Libya, Myanmar and Sri Lanka.

These women are highly motivated because the learning atmosphere provides a somewhat level playing field for them to practice and improve their conversational English skills. Their motivation is driven by the desire to be proficient in English to enable them to comfortably communicate with neighbours, and be able to go to doctor and government office appointments without needing someone to interpret for them. Some women also hope to further their education or to find work.

2) **Data Collection**

The data collection stage is divided into three consecutive stages (TABLE 1). These stages are conducted following the schedule of the conversational English program at the Centre. Stage 1 runs from Week 1 to Week 10, Stage 2 from Week 11 to Week 20 and Stage 3 from Week 21 to Week 30. Each week, participants are given a two-hour free English lesson. Stage 1 is where lessons are run regularly while Stages 2 and 3, lessons are integrated with MALL. The research has obtained Human Ethics approval and currently is at Stage 1.

In Stage 1, data is collected from the control group on demographics, experience and perception of their own English language learning. Data is collected using semi-structured interviews [32, 33] before and after (pre- and post-) regular non-MALL lessons. This is to see if any change has occurred in participants’ language learning, after taking at least 4 to 5 regular non-MALL lessons. The interview has core questions but provides the flexibility for probing and somewhat extensive follow-up of responses. The researcher writes down participants’ answers for them and, if prior consent was given, the interviews are recorded. Each interview takes approximately 15 to 20 minutes. The researcher also rates participants’ proficiency levels prior and after the non-MALL lesson.

### TABLE 1. STAGES OF DATA COLLECTION

<table>
<thead>
<tr>
<th>Data Collection</th>
<th>Stage 2 MALL Longitudinal Study (LCS I)</th>
<th>Stage 2 MALL Longitudinal Study (LCS II)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 - Non-MALL interview</td>
<td>Pre-MALL interview (new participants complete pre-MALL interview as well)</td>
<td>Proficiency rating 2b - post-MALL lesson</td>
</tr>
<tr>
<td>Stage 1 - Non-MALL Control Group</td>
<td>Pre-MALL interview I</td>
<td>MALL II lessons (Stage 2 participants)</td>
</tr>
<tr>
<td>Stage 1 - Week 1 to Week 10</td>
<td>Proficiency rating 2a - pre-MALL lesson</td>
<td>Post-MALL interview II</td>
</tr>
<tr>
<td>Stage 1 - Week 11 to Week 20</td>
<td>MALL I lessons</td>
<td>Proficiency rating 3b - post-MALL lesson II</td>
</tr>
<tr>
<td>Stage 2 - Community English Program is closed due to school holiday</td>
<td>Proficiency rating 3a - non-MALL interview</td>
<td></td>
</tr>
<tr>
<td>Stage 3 - MALL Longitudinal Study (LCS I)</td>
<td>Proficiency rating 4a - post-MALL lesson</td>
<td></td>
</tr>
<tr>
<td>Stage 3 - MALL Longitudinal Study (LCS II)</td>
<td>Proficiency rating 4b - post-MALL lesson</td>
<td></td>
</tr>
<tr>
<td>Stage 3 - Week 21 to Week 30</td>
<td>Proficiency rating 4c - post-MALL lesson</td>
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</table>
Stage 2 is where the first half of the longitudinal case study (LCS I) takes place. New participants will have to complete a pre-non-MALL and a pre-MALL interview before taking the MALL I lessons. The pre-MALL interview collects data about participants’ familiarity with computer/mobile devices. Participants will be supplied with a tablet as a learning tool during the MALL I lessons. Participants take at least 4 to 5 MALL I lessons and then complete the first post-MALL interview. This post-MALL interview collects data on participants’ opinions and experience: taking part in the MALL lessons; using the tablet; improvement in language learning if any; and their perception on own English proficiency. The researcher also rates participants’ proficiency levels prior and after the MALL lesson.

Stage 3 is where the second half of the longitudinal case study takes place (LCS II). This stage retains the same participants from Stage 2 for continuity of the longitudinal data. Participants complete at least 4–5 MALL II lessons with a tablet as a learning tool. Participants then complete the second post MALL interview.

Participants’ proficiency ratings are collected pre- and post-non-MALL lessons and pre- and post-MALL I and II lessons (TABLE II). These ratings are: ratings 1a and 1b for Stage 1; Ratings 2a and 2b for Stage 2; and Ratings 3b for Stage 3.

<table>
<thead>
<tr>
<th>Proficiency Level</th>
<th>Sample Speaking Abilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>Able to use formulaic language in a very limited capacity within predictable areas of need. Can give own name, age, address, phone number, number of children, nationality, ethnic group or country of origin of the family, and name of first language.</td>
</tr>
<tr>
<td>Elementary</td>
<td>Cannot use English over the telephone. Can indicate time by such phrases as next week, last Friday, in November, three o’clock, and two-twenty.</td>
</tr>
<tr>
<td>Minimum Survival</td>
<td>Able to satisfy everyday transactional needs and limited social needs. Able to maintain very simple conversations on topics that are familiar or of personal interest. Can verbalise inability to understand, ask for slower repetition of utterance, spelling of name or address.</td>
</tr>
<tr>
<td>Survival</td>
<td>Can modify utterances to express uncertainty or the hypothetical or other simple devices (e.g. ‘I think’) and has tentative use of ‘if’ (conditional). Can communicate basic details of unpredictable occurrences, e.g. an accident.</td>
</tr>
<tr>
<td>Minimum Social</td>
<td>Can describe and converse on everyday things in their environment (e.g. suburb, the weather). Can give simple messages over the telephone; can give directions and instructions for simple tasks in his everyday life (e.g. to tradesmen).</td>
</tr>
</tbody>
</table>

The purpose for rating participants’ proficiency level is to identify their ability to use English in dealing with real-life situations. Participants are rated again at Stage 2 (pre- and post-MALL integrated lessons), and again at Stage 3. The researcher bases these ratings on the ISLPR® [35] and the IELTS method of proficiency assessment [36]. However, considering the participants are non-native English speakers with little English, are of low level literacy, and have limited educational experience, only lower ISLPR® and IELTS levels are used as a basis for the rating scheme, focusing only the speaking components.

From assigning a rating to participants, the researcher is able to: know participant’s English knowledge in relation to other learners; approach and communicate better with participants; and tailor the MALL lesson for Stages 2 and 3 to participants’ identified proficiency levels. These ratings also facilitate a before/after comparison to determine any changes in participants’ proficiency levels.

B. MALL-integrated Vocabulary Lessons

There are two approaches to vocabulary learning: incidental and intentional [15, 37, 38]. Incidental vocabulary learning is the process where something is learnt without the intention of doing so. It is also learning one thing while intending to learn another; that is, learning contextually. In contrast, intentional vocabulary learning disregards the context and focuses on word lists or word groups such as antonyms, crossword puzzles, scrambled words, and so forth.

Vocabulary can be learnt and acquired through reading. McDuff and Krashen [39] suggest that encountering and looking at groups of words while reading causes the word to be retained in long term memory. Familiarity with these words could then lead to them being used more confidently in different situations.

Use of flashcards is also a way to learn vocabulary by using a card consisting of a word, a sentence or simple picture. Another way of learning vocabulary is the use of dictionaries. There are three types of dictionaries: monolingual, bilingual and multilingual. Finally, some learners prefer rote learning, which is simply repeating new words until they can be recognized by memory.

For this research, the vocabulary items to be included in the MALL lessons are selected following Krashen’s Input Hypothesis of second language acquisition [20]. The theory asserts that learners acquire language by receiving comprehensible input; that is, by understanding words in context. This research addresses Krashen’s approach that acquiring vocabulary using listening texts and authentic texts provides more impact to participants, especially those who are low literacy learners. Listening texts refer to recorded conversations, while authentic texts are those texts found in our everyday lives, e.g. takeaway menus, advertising flyers and bus timetables.

The MALL vocabulary lessons will expose participants to a variety of everyday functional and conversational language use. The lessons will be developed for Stages 2 and 3 of data collection, when tablets are to be used as learning tools by participants. Teaching and learning resources for the MALL lessons will include:
Lesson plans prepared for 20 MALL lessons, paying particular attention to the vocabulary component and various intentional and incidental approaches

Materials collated from English as a Second Language (ESL) textbooks, ESL mobile apps and ESL websites

Mobile device i.e. tablet as the teaching and learning tool

A sample of the categories of everyday conversational language, developed as a mobile app for the beginner level ESL adult learner is depicted in Table III. This app is used by the Australian Migrant English Services in New South Wales, for their adult migrant students in government funded English programs. In each category, a learner can watch and listen to conversations, practice vocabulary by matching the words with pictures while listening to word pronunciation, and practice speaking in an interactive medium with an audio recording facility.

**TABLE III. CATEGORIES OF SITUATIONS FOR EVERYDAY CONVERSATIONAL LANGUAGE (AMES, 2013)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Sample Situations</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the shops</td>
<td>At the post office, at the chemist, at the library</td>
</tr>
<tr>
<td>Daily life</td>
<td>What’s the weather like, talking to neighbours</td>
</tr>
<tr>
<td>People and places</td>
<td>Describing people, describing a city and country</td>
</tr>
<tr>
<td>Messages</td>
<td>What’s the matter, taking messages, leaving a message</td>
</tr>
<tr>
<td>My news, in the news</td>
<td>The first day, a news story, celebrations</td>
</tr>
</tbody>
</table>

V. CONCLUSION

This paper discussed the initial data collection stage of an ongoing longitudinal case study research undertaken by the researchers. The paper also discussed how MALL should be utilized to benefit vocabulary acquisition of refugee women within a non-formal learning environment. This was then followed by the discussion of the research context; the non-MALL stage for the control group and the MALL stages where tablets are to be used as a teaching and learning tool; and the rating system applied to rate participants’ proficiency levels. The paper concluded with the discussion of the how the MALL integrated vocabulary lessons would be designed.

The potential outcomes of the research will provide indicators on how sociocultural and MALL factors affect refugee women’s vocabulary acquisition, how MALL could be effectively utilised in vocabulary teaching across varying levels of literacy, within a non-formal learning environment, and provide an understanding of the effects of MALL and vocabulary in these women’s perceptions of their English level, particularly their conversational proficiency.

REFERENCES


