Perceptions of Phonics Literacy Strategies in Mobile Assisted Language Learning (MALL) for Non Literate Learners

by Shehnaz Rafiq

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Perceptions of Phonics Literacy Strategies in Mobile Assisted Language Learning (MALL) for Non Literate Learners

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<<And whatever of blessings and good things you have, it is from Allah.>> (Chapter 16:53)

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Abstract

Literacy is not only an important language skill but it is recognised as a fundamental human right by the UN. Despite calls to raise literacy levels worldwide, the number of adults without literacy remains alarmingly high and many who enter the UK are faced with ESOL classrooms that offer no literacy strategies to enable effective participation in society and the workplace. With ESOL cuts, class shortage and class closures, learners who are illiterate in any language and are unable to access online learning through computer-assisted learning are effectively left without an education. The intent of this research is to address the gap between the limited research in literacy teaching for illiterate ESOL learners and pedagogical practices and suggests a means of integrating research-led, theory-based blended learning for non-literate learners in the ESOL classroom. It offers mobile-assisted language learning (MALL) as the most suitable medium to extend literacy learning beyond the limited physical classroom, due to its ease of access and familiarity to the learners. The study emphasises the importance of a systematic phonics program for literacy learning, integrating synthetic phonics into an analytical framework, focusing on larger sound units, syllables and onset-rime analogies. Learner self-report and teacher observations are chosen as a collaborative process for the assessment, owing to the learners' lack of experience in testing procedures. Data is collected and analysed through a mixed methods approach and the extent to which both the learners and the teacher perceive the benefit of various phonics literacy strategies through MALL are analysed, with difficulties identified and ways to overcome these difficulties explored. The findings suggest that MALL is an efficient way of teaching a variety of phonics strategies to integrate literacy into a blended program to assist learners' second language reading development. Whatsapp is an effective e-learning platform to present phonics worksheets, audios and phonics videos. Its voice messaging option effectively allows for learner interaction. The findings outline that non-literate adult learners have the ability to learn new skills in their education provided the correct affordance is available and there seems to be no neural plasticity impediment preventing the learners from accessing unfamiliar affordance. By continual engagement in the research process and allowing their voices to be heard, the study highlights that non-literate learners are agentive in learning new affordances outside the classroom and in helping to refine literacy strategies to suit their needs.

Keywords: literacy, participatory, voice, agency, MALL, ESOL, phonics

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Abbreviations

CEFR	Common European Framework of Reference for Languages. A comprehensive framework of language proficiency.
CALL	Computer-assisted language learning.
CLT	Communicative language teaching.
E-Learning	Electronic learning.
ELL	English language learner.
ESL	English as a Second Language
ESOL	English to Speakers of Other Languages
GPC	Grapheme-Phoneme-Correspondence. Matching a phoneme (sound) to a grapheme (written representation) and vice versa.
L1	First language.
L2	Second language.
MALL	Mobile-assisted language learning.
M-Learning	Mobile learning
NA	Needs Analysis
NLL	Non Literate learner. An adult with no literacy in any language, despite coming from a society with literacy.
SLL	SLL: Second language learners.
SLA	SLA: Second language acquisition.
TESOL	TESOL: Teaching English to speakers of other languages.
TPR	TPR: Total physical response. Learning by enacting physical responses to verbal commands.

1. INTRODUCTION

1.1. Overview of non-literate learners

1.1.1. Contextual background

Illiteracy poses serious challenges and problems for the welfare of individuals and the sustainable development of societies (United Nations, 1961). Both literacy and schooling are recognised as fundamental human rights by UNESCO (Lind, 2008) and its absence has been acknowledged to cause poverty, poor health, and exclusion, both economically and socially, not only for the adults but also for their children (Post, 2016). According to worldwide data from UNESCO (2016), 15% of people, approximately 758 million people, aged 15 years and over are illiterate. The World Literacy Foundation (2018) estimated the monetary effect of illiteracy on the global economy at £800 billion a year and the cost to the UK economy at approximately £80 billion, which includes 5.1 million adults who have limited literacy but are functionally illiterate.

There has been a strong call to reduce illiteracy in poorer countries, especially for children (UNESCO, 2016), and whilst non-literate adult learners are seen as a priority group for education (2016: 242), the success of most adult literacy programs are very modest at best (Abadzi, 2003). This can be attributed to a lack of state support, underfunded and ineffective initiatives (Abadzi, 2004; Barakat, 2016), and also inadequate materials and teaching methods (Kolinsky et al., 2018).

1.1.2. Integration Policy

There has been a long history of migration into the UK of both literate and non-literate individuals and a strong call for integration for all migrants and refugees from the UK government. Recently, the acquisition of the English language has been made the basis of integration and social cohesion (see The Government's Integrated Communities Strategy Green Paper, MHCLG, 2018). However, according to Refugee Action (2018), the strategies for tackling literacy for refugees and immigrants have long been neglected in England.

Whilst Ager and Strang's (2004) report for the Home Office highlighted the importance of integrations, the UN's disability report (OCHCR, 2016) outlines that integration places low-educational level citizens into an existing system without any modification, expecting them to adjust. Whereas, inclusion is the removal of barriers to integration through "systemic reform", achieved through modifying content, strategies, and the teaching approaches for an "equitable and participatory learning experience and environment" (2016:4).

Without such strategies in place, access to social and economical capital is limited and its prevention hinders change and agency (Bourdieu, 1979). Blackledge argues that any gatekeeping mechanism that prevents "the participation in society of some linguistic minorities can be nothing other than discriminatory" (Blackledge, 2006: 77; Cooke and Simpson, 2008), and at worst a tool to maintain a target group as political electioneering scapegoats (Kum, 2018). It is within this ideological backdrop that many migrants and refugees have previously settled or recently entered into the UK and the high demand for ESOL classes signifies the importance migrants and refugees place upon learning the host language to facilitate their inclusion (Baynham et al., 2007).

1.1.3. ESOL provisions

Despite the high demand for English classes, the UK government has cut ESOL provisions in real terms of 60%, from £203m in 2010 to £90m in 2014 (Refugee-Action, 2017). Research conducted by NATECLA (2014) showed that 80% of ESOL providers have waiting lists, with some lists showing up to 1,000 students and a three-year waiting time (NATECLA, 2014; Refugee-Action, 2017). In England, ESOL classes are free only for those on benefits but not for individuals in low-paid employment. Furthermore, all asylum-seekers must wait a minimum of six months for their application to be decided and are only entitled to a 50% reduction. Significantly, there is no literacy strategy in place for low-level learners of ESL, irrespective of recommendations from UNESCO that literacy is a fundamental human right (Lind, 2008).

In contrast, Scotland has an ESOL policy of 'Integration-From-Day-One', which highlights inclusion and they have an established literacy strategy for ESOL, with free lessons for all residents (Scottish Government, 2018). In addition, all refugees can apply for tuition fees for an undergraduate degree or its equivalent and research has shown the benefits in funding "two years ESOL teaching is effectively 'paid back' through taxation within the first eight months of employment" (Refugee Action, 2016: 05).

1.2. Motivation for the study

Throughout my ESOL teaching the lack of literacy provisions for learners with no literacy in any language was a real concern. Shank identifies non-literate learners (NNLs) as 'those who have no reading or writing skills in any language because of a lack of education rather than lack of a print environment' (1986: 3). As a multilingual teacher participating within the

community (Canagarajah, 1999), these learners appealed to me with regards to their desire for literacy. Each learner understood, in rudimentary terms, that they needed to 'learn ABC' and join up the letters, whilst not understanding the letter-sounds relationship to decode this into reading. In return, I was able to give voice to their needs and I was permitted to introduce additional literacy strategies and experiment together with the learners for effective strategies suitable for them.

The short duration of the ESOL classes proved a hindrance to literacy acquisition for the learners. NATECLA (2014) identifies that learners require 1765 hours of teaching, or four years full-time, for those with no or little English to be ready for further study or employment. Colliers (1989) identified the time as 7-10 years for NNLs to be literate. Kurver's (2007) research identified the structure and intensity of contact as more critical than the duration of time. Therefore, it was important to experiment with new and innovative ways to extend learning outside the formal classroom with forms of blended e-learning that were easily accessible for NLLs.

1.3. Choice of Topic

From my experience, NLLs cannot independently navigate computers for computer-assisted language learning (CALL). In contrast, most NLLs have access to smartphones and are able to independently access their simple affordances. Vogel et al. (2010) assert that their lightweight, portable nature can have a bigger potential in learning than the immobility of classroom e-learning. With so many funding cuts to ESOL, limited classes, and fears of closures, there is a need for an effective blended program that extends learning outside the limited classroom for NLLs.

1.4. Aim of the research

Therefore, the aim of this study is to bridge the gap between the learners and the stakeholders and course designers by exploring ways an effective literacy program can be integrated into the ESOL curriculum for NLLs using MALL. This will be accomplished by investigating the following questions:

1. To what extent do non-literate learners and the teacher perceive benefit from being taught different phonics literacy strategies through MALL?

2. What difficulties do the learners and the teacher experience with these strategies?

3. How can these difficulties be overcome?

1.5. The Significance of the research

This research is important not only to pedagogical practices for NLLs but for underlying theories of SLA as outlined by Bigelow and Tarone (2004: 670):

> The failure to investigate illiterate learners has resulted in SLA theory that may not account for the full range of contexts in which human beings learn L2s. If theories are to be viable, they must account for widely accepted findings. If accepted findings describe only literate and educated language learners, then theory has limited applicability and little value in guiding teachers who work with illiterate learners.

Research methods which address socio-cultural complexities, injustices, and inequalities in power can be transformative, providing a foundation for change. Striving to question and challenge the status quo in education and society opens opportunities "for those whose voices have been traditionally excluded"(Merten, 2007: 214, see also Freire, 1970).

By highlighting the importance of literacy for NLLs in ESOL, I hope to raise awareness amongst researchers to include them in their research on language acquisition, and for stakeholders and curriculum designers to provide not only suitable research-based literacy interventions but integrate an effective blended e-learning program for low-literate learners. Furthermore, I seek to raise awareness for teachers to analyse their own attitudes, conscious or subconscious, towards teaching NLLs. Our opinions and attitudes are reflected in our practices which are implicit declarations of power and ideology (Darder, 1991) and many practitioners are unaware of the exclusionary effect of their practice towards low-literacy learners.

1.6. Structure of this study

Chapter one presents a contextual introduction to this study, its significance, and the importance of the research subjects in SLA research. It includes an insight into my personal and professional motivation for the study. The literature review in chapter two is in three main parts. First, it offers a deep theoretical insight into the approaches which are most productive for NLLs when analysing the existing literature on literacy acquisition. Then, it looks at the potential of MALL as a means of teaching literacy to NLLs. Finally, it looks at the importance of the learner's voice in the learning process.

Chapter three explains the methodology used for the research and data collection and justifies their selection for this investigation. It includes details of the participants, problems around ethical issues, and which teaching strategies were selected. The results are presented in chapter four and discussed in line with existing research in chapter five, pulling out relevant themes and identifying which strategies work best for the learners. The

conclusion gives an overall evaluation of the study and contributions to the existing research. It offers recommendations to stakeholders, practitioners, and finally suggests areas of further research.

2. Literature Review

2.1. Reading Development for Non-Literate Learners.

2.1.1. Overview

There is limited research on how NLLs learn to read English as a second language (ESL) and which literacy strategies and instructional practices will be most effective (Young-Scholten, 2015; Bigelow and Schwarz, 2010; Burt, Peyton and Duzer, 2005). Most of the existing research is based on participants who are L1-literate in higher education or based on non-literate students learning L2 other than English, such as Dutch or Portuguese (see Kurvers and her colleagues, 2007, 2010). Whilst there needs to be caution in applying these results to learning English-L2 due to its deeper orthographic depth and more complex grapheme-phoneme-correspondence (GPC- the relationship between the sound and the written representation), importantly, these studies outlined that NLLs followed a similar developmental process in learning to read in L2 as native children (see Craats, Kurvers and Young-Scholten, 2009; Condelli and Cronen, 2009).

They strengthen the theory advocated by Bailey, Madden and Krashen (1974), Vainikka and Young-Scholten (1994, 1996), and Hawkins (2001) that all L2 learners follow the same developmental trajectory as L1 learners, independent of their native language and factors such as age or educational background. This is further affirmed by research from psychology and cognitive sciences. Li, Legault and Litcofsky (2014), Li and Tokowicz (2012), and van Hell and Tokowicz (2010) illustrate that L2-learning can lead to both behavioural and neurological changes similar to the patterns found in native L1-learning, even when later in adulthood. Moreover, this learning trajectory follows common stages of learning as long as

there is no impediment (Meisel, Clahsen and Pienemann, 1981; Spada and Lightbown, 1999; Mackey, Ziegler and Bryfonski, 2016).

According to Meisel et al., (1981), there are variations in each stage which result from socio-psychological differences', citing that attitudes and motivation as probably asserting the most variation (1981: 119). Alternatively, Schmidt (1983) and Schumann (1986) propose the acculturation model as the major cause of differences. Namely, it is the learners' exposure to the language that facilitates reading development, and which results in some fundamental differences between NLLs English language learners (ELLs) and native children. Whilst preschool children and NLLs may follow similar pathways in the mechanics of learning to read, the boundaries of each phase are not clearly delineable (Ehri, 1995) and there are some fundamental differences which teachers of NLLs need to recognise and factor into their teaching (see Schellekens, 2011).

2.1.2. Differences between NLLs and native children

Prior to the start of reading development, there can be a vast difference in spoken language attainment and interaction between NLLs and native children, though not all NLLs have lower levels of spoken language interaction. Native children start the reading process in formal education at similar ages and levels of physical and cognitive development, systematically building up patterns of language and metalanguage awareness. By the time they reach the pre-alphabetic stage (Chall's stage 0; 1967), "we may estimate that they are in contact with the language of their environment for 20,000 hours or more by the time they go to school" (Lightbown and Spada, 2013: 13), enabling automatic recall of everyday

vocabulary, making word order, formulaic language, pronunciation and intonation of the target language more familiar to them (Schellekens, 2011).

Some preschool children will have acquired the alphabet and several letter sounds before schooling (Ehri, 1989) and will have acquired knowledge of rhyming words and sequences prior to reading development. MacLean, Bryant, Bradley (1987) identified that children's early rhyme scores corresponded to successful reading development (see also Goswami, 1999), as rhyming words frequently share similar spelling sequences, helping facilitate coding and memorisation of the learner's mental lexicon (Bradley and Bryant, 1983). Furthermore, a higher level of speaking interaction in the target language helps their development of phonology and morphology of the language (Young-Scholten (2013).

In contrast, many NLLs start the reading process below Chall's 0 Stage (1967) and below CEFR A1 (see Appendix 2), without target language speaking interaction to be able to speak and understand the meaning of everyday vocabulary and without knowledge of word order (Schellekens, 2011) and early rhyming which facilitates vocabulary acquisition (Bradley and Bryant, 1983). They attend class at different ages, physical and mental development, with differences in life experiences, and unlike ESL children, they have fewer educational opportunities and social interaction with native L2 speakers (Young-Scholten, 2013). A lack of reading development in NLLs compromises their ability to further develop phonological awareness (Young-Scholten and Strom, 2006), which comes with tuition (Goswami and Bryan, 1990). This results in a strategic difference in phonological abstraction, which is exceedingly problematic for them (Ardila et al., 2000; Reis and Castro-Caldas, 1997) and should not be taken as markers of acquisition or learning intelligence.

2.1.3. Non-abstract contextualisation

Research from cognitive and neuroscience confirms that non-literate individuals do not activate neural networks for abstract elements (Reis and Castro-Caldas, 1997). Ardila et al. (2000) illustrate that concrete elements such as "If you go to the market and initially buy 12 tomatoes…. later on, you decide to buy 15 additional tomatoes, how many tomatoes will you have in your bag?" "can be notoriously easier" than the abstract element "How much is 12 plus 15?" They argue that all teaching for NLLs should be based on direct concrete information (2000: 789).

Abdazi (2012) suggests that adults do not develop neurological circuits as easily as children and Dehaene et al., (2010) point out that in learning to read, the brain systems require reorganisation, as literacy in childhood influences the functional organisation of the brain (Castro-Caldas et al., 1998). NLLs have not acquired the neurological pathways related to literacy acquisition from childhood (Reis et al., 2001; N.C. Ellis, 2002) but importantly, research shows they are able to do so in later life (Reis et al., 2001). Kolisky et al. (2018) illustrate in their studies that there is no major neural plasticity impediment preventing the acquisition of second language literacy in illiterate-L1 adults, despite poor performances during testing (see also Braga et al.,2017; Abadzi, 2003).

2.1.4. Sensitive Period

Whilst poor performances in tests can lead to confusion over a sensitive period for reading development with NLLs adults, findings from Kolinsky et al. (2018) signify that there is no "sensitive period for reading development during childhood or even until at least middle adulthood" for illiterate adults (2018: 3). Young-Scholten and Strom state that research

"clearly indicates that unschooled NLLs are fundamentally similar to preschool children" with respect to a critical period for learning (2006: 63).

A critical period for NLLs is hypothesised due to the effect of stagnation and poor test results (Kolinsky et al., 2018) Unschooled adults do not have transferable L1 reading skills attained by formal schooling (Koda, 2008, 2014) and so proceed at a slower rate of acquisition than native children, requiring different teaching approaches (Bigelow and Schwarz, 2010). Whilst Ardila et al. (2010) suggest that the effects of poor performance in testing may be the result of a lack of schooling, which develops skills and a predisposition towards achievement in tests, Braga et al. (2017) claim that it may be a result of inadequate teaching methods and/or reading materials.

2.1.5. Literacy strategies: The phonics debate

i) Native children

Learning to read is not the same as learning to speak in a language (Gough and Hillinger, 1980). According to Stanovich, "the idea that learning to read is just like learning to speak is accepted by no responsible linguist, psychologist, or cognitive scientist in the research community" (1994: 286). Speaking can be acquired implicitly through natural exposure and communication (Krashen and Terrrell, 1983; Krashen, 1982), whereas exposure to words in print is not sufficient to acquire reading. According to Share (2008), the debate concerning literacy teaching centres around the complexity and seeming inconsistencies of the GPC for the English writing system, which unlike many alphabetic systems does not have a strict one-grapheme-to-one-phoneme correspondence. Two positions on this debate have been recognised as the sight-word approach and the phonics approach.

The sight-word approach favours a whole-language approach, in which discovering meaning is advocated as the foundation (Goodman, 1967), and decoding without meaning is seen as' barking at print' (Davis, 2013; Samuels, 2007). Proponents for the whole language approach are heavily influenced by the Vygotskian sociocultural theory whereby learners are active agents in meaning-making. Children are taught words as entire units, for example through the use of flashcards and so must learn a pattern-sound correspondence (Katz and Frost, 1992). Coltheart's (2001) dual-route model of reading acquisition advocates that either the lexical 'orthographic' (whole word recognition) route is utilised for inconsistent orthographies such as English, or the non-lexical 'phonological' (recoding) route was utilised based on the consistent orthographies, such as German (Ziegler and Goswami, 2006).

Although English clearly has some of the characteristics of a logography (Treiman et al., 1995) in the pre-alphabetic phase (Frith, 1985), Ehri (2014) argues against maintaining the whole language program throughout the teaching. She critiques both Goodman's (1967) whole language approach and Coltheart's (2006; 2001) dual-route theory, emphasising that central to developing reading and fluency is the *systematic* teaching of phonological decoding (see also Juel, 1991; Castles et al., 2018). Whilst not negating early logographic learning of some sight-words, which Share (1995) claims can kick-start the system, and using sight words integrated into the process to develop read fluency (Chall, 1989; Adams, 1990; Stanovich, 1994), Ehri maintains that it is phonological awareness that leads to success in both learning sight-words and reading acquisition (see also Castles, Rastle and Nation 2018; Lightbown and Spada, 2013; Ziegler and Goswami, 2006). This was illustrated through experiments by Byrne (1998) and Byrne et al. (1989, 2000), highlighting that without the

explicit teaching of the alphabetic principles, children did not succeed in deducing the alphabetic code.

Furthermore, Share asserts that proponents of the whole word approach 'misconstrues the decodability of so-called irregular words and the general phonological regularity of deep orthographies such as English' (1995: 199-200). Treiman et al. (1995) uphold this view, maintaining that pronunciation in deep orthographies still remains strongly controlled by GPC, whilst Coltheart et al. (2001) estimate that 80% of English monosyllables are pronounced phonetically and usually only one grapheme differs in its regular pronunciation in the remaining 20% of the words.

With respect to which phonics approach is most the effective; analytical or synthetic, Ehri et al, (2001) point out that neither the research by the National Reading Panel (2000), nor the meta-analysis by Torgesrson et al. (2006) found evidence to distinguish substantial differences in either method. Their findings confirmed the significant impact of phonics teaching and moreover, the phonics approach should be systematic and explicitly taught to be effective (see Chall, 1967; Ehri, 1989; Adams, 1990; Ehri et al. 2001; Ziegler and Goswami, 2006).

ii) Non-literate learners

Bigelow and Schwarz (2010) and Boon and Kurvers (2007) advocate a balance between phonics and whole-word approach for NLLs rather than using either approach exclusively, whereas Kolinsky et al. (2018) and Craats et al. (2009) argue that phonics elicits the most favourable results in NNLs (see also Spiegel and Sunderland, 2006), whilst integrating some whole-words relevant to the learners. Kruidenier (2002) also highlighted the importance of

learning GPC (Alphabetics) for reading achievement in his examination of 70 research studies on adult literacy, including five studies relating to ESOL. Mariam Burts and her colleagues (2003, 2005, and 2008) recommended that phonics literacy for native children should be adapted and made suitable for NLLs learning ESL.

As for the concern of 'barking at print' without meaning (Samuel, 2007), Schellekens (2011) indicates that simultaneous reading and comprehension in ESL only occur around the upper-intermediate level. Prior to this, there is a trade-off at the initial stages (Stanovich, 2000), whereby occupation with the bottom-up process of decoding leaves little room for processing the meaning (Birch, 2014).

2.1.6. Rhyme and rime analogy strategies: phonological patterning

An area of language patterning which is under-researched in NLL English reading development is the concept of rhyming word patterns and onset-rime which has been assessed to facilitate categorisation and memorisation in English L1 language learning (Bradley and Bryant, 1983; Treiman, 1985; Goswami and Bryant, 1990; Ziegler and Goswami, 2006). Researchers identify that "the rhyme is a very salient phonological unit, and seems to have an organizing function for English phonology", with children seemingly organising their mental lexicon in respect of "syllables, onsets and rimes" (Goswami, 2001: 270). Research from Goswami (1999) and Treiman et al. (1995) indicate a stronger relationship with phonetic awareness of rhyme and spelling patterns of written rime words (e.g. fight, night, light) in L1 reading development with non-transparent orthographies, such as English, than for those with relatively transparent orthographies, such as Norwegian, Swedish and German, where the relationship with rhyme tends to be much weaker.

Goswami argues that “the majority of phonological neighbours for many English words are rhyme neighbours” (2001: 270), making alternate spellings highly predictable (Goswami, 1999; Treiman et al.,1995). Whereas only 52% of English CVC words share a CV spelling (e.g. ‘bea’ in beak and bean), 77% of CVC words, share a VC spelling and with consistent pronunciation (e.g. ’-eak’ in peak and weak). Importantly, children are more likely to make analogies between spelling patterns from a small amount of vocabulary, e.g. using ‘night’ to read ‘light’ and ‘fight’(Goswami, 1999, 2001).

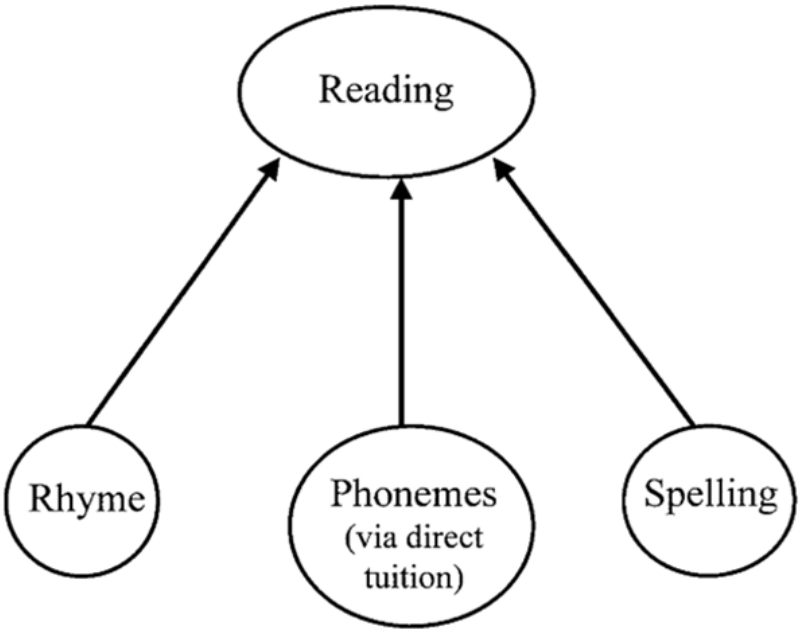


Figure 1: Rhyme and phonemes before reading (Goswami and Bryant, 1990).

Research by MacLean, Bryant, Bradley (1987) illustrated the success of early rhyme awareness in learning English reading (see also Bryant, Maclean, Bradley and Crossland, 1990; Bradley and Bryant, 1983). Bryant and Goswami (1990) identity that children have good rime awareness before formal schooling but poor phonemic awareness, which requires direct tuition (Figure 1). Moreover, children who are sensitive to rhyme appear in turn to be more sensitive to phonemes and better at learning grapheme-phoneme

relationships (Goswami, 1999, Goswami and Bryant, 1990). Goswami stresses that both onsets and rimes and GPC should be taught and emphasises the importance of teaching metacognitive strategies for ways rime analogy and rhyme can aid the acquisition of GPC (Goswami, 1999).

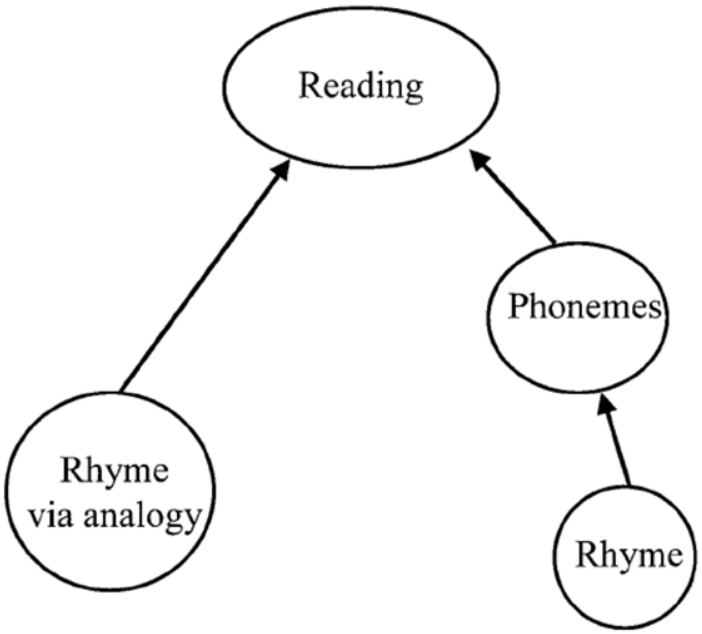


Figure 2: Rhyme and reading (Goswami 1999: 221)

If linguistic rhythm patterns are important for children's reading development, then following the assertion that non-literate adults learn through the same trajectory, it holds that they are important for NLLS in learning to read ESL. Research from Young-Scholten and Strom (2006) confirms that phonemic awareness emerges only with reading for adult ESL learners, whilst they have an existing awareness of syllable, rhyme onset awareness and words, that is independent of reading ability. A series of oral tests for readers and non-readers were conducted by Kurvers et al. (2006) in Dutch as a SL which found clear differences between both sets of learners. Whilst readers segmented phrases phonetically, non-readers segmented phrases into syllables. Therefore, introducing rime units into the

literacy strategies for NLLs provides a reliable intuition about the patterning of language (N.C. Ellis, 2002; Bybee, 2008).

2.2. MALL and Non-Literate Learners

2.2.1. The potential of MALL in language learning

Mobile technology is one of the fastest-growing technologies worldwide (Boretos, 2007), and mobile learning (m-learning) is perhaps the fastest growth area in the whole field of Information and Communication Technology (ICT) in education (Pegrum, Oakley and Faulkner, 2013). Mobile technology is used by both literate and non-literate people alike and it is estimated by Statista (2016) that almost 63% of the global population own a mobile phone, with users expected to surpass five billion by 2019. Most of the market growth is attributed to the rise of smartphones and the multidimensional, portable and ubiquitous nature of mobile-technology gives it the potential of having a big impact on learning (Roschelle, 2003; Sanou, 2016), more so asserts Vogel et al. (2010), than the immobility of classroom technology in electronic learning (e-learning).

Blending learning, by integrating traditional classroom practices with electronic learning (e-learning), has been widely accepted as effective (Evan, 2008). In the field of e-language learning, mobile-assisted language learning (MALL) is a subset of computer-assisted language learning (CALL), and it is distinguished from CALL by its “continuity or spontaneity of access and interaction across different contexts of use” (KukulskaHulme, 2009: 162; Kukulska-Hulme and Shield, 2008; Ozuorcun and Tabak, 2012).

According to Parsons, Thomas and Wishart (2016), m-learning is characterised by five specific affordances; namely portability, data gathering, communication, interaction with the interface, and the environment. Klopfer and Squire (2008) add the affordance of individuality, creating individualised, learner-centred and continuous learning (Sharples,

Taylor and Vavloula, 2005). El-Hussein and Cronje (2010) define mobility in m-learning in three interactive categories, namely; mobility of technology, the mobility of learning, and the mobility of the learner. Mobile-learning identifies not only with the physical device but according to Kukulska-Hulme, it identifies with 'learner mobility' and the ability to engage in learning outside the classroom (2005: 1).

Despite the many theories which have been issued regarding learning throughout human history, almost all have been advanced on the premise that learning occurs in the formal setting of the classroom, mediated by a teacher (Sharples, Taylor and Vavoula, 2005). Few scholars have developed a theory of learning outside of the physical classroom, such as Freire (1972).

A large portion of research in m-learning has been bound to the physical device such as portability, ease and speed of use (So, Kim and Looi, 2008; Lalji, Z and Good, 2008; Orr, 2010). In contrast, Kearney et al. (2012) argue that research needs to foregrounds the centrality of the pedagogy in relation to MALL, as affordance is rooted in the nature of the activity (Tan and So, 2015) and conceptualised in the individualised perspectives of learner's experiences (Kearney et al., 2012; Traxler, 2007) and not the device itself. According to Sharples (2000), increased advances in technology with mobile-technologies can further converge with education for greater success in learning and Park maintains that technologies are 'integral but embedded into the background of daily life' (2011: 80). Weiser states "the most profound technologies are those that disappear '' (1991: 94). Graver (1991), maintains that the importance of MALL is not either the technology or the users alone but the interaction between the two.

2.2.2. The potential of MALL for non-literate learners

Due to cuts to funding and limited class times (Refugee Action, 2018), the idea of extending learning time beyond the physical classroom is particularly important for NLLs. Although CALL has been shown to be effective for low-level learners (Van Craats and Young-Scholten, 2015), the immobility of classroom technology (Vogel et al., 2010) confines the education to a bounded space and time (Peters, 2007; Parks, 2011), whereas research outlines that NLLs require extra teaching time and intensity on each skill due to the lack of prior education (Bell, 1995; Bigelow and Schwarz, 2010).

- M-learning helps learners to improve their literacy and numeracy skills and to recognise their existing abilities;
- M-learning can be used to encourage both independent and colloborative learning experiences;
- M-learning helps learners to identify areas where they need assistance and support
- M-learning helps to combat resistance to use of ICT and can help bridge the gap between mobile phone literacy and ICT literacy;
- M-learning helps to remove some of the formality from the learning exprience and engages reluctant learners;
- M-learning helps learners to remain more focused for longer periods;
- Mobile learnimg helps to raise self-esteem;
- M-learning helps to raise self-confidence (Attewell ,2005).

Figure 3: Benefits of appropriate M-learning (Ozuorcun and Tabak (2012:304)

The list of benefits from Ozuorcun and Tabak (2012: 304, Fig. 3 above) illustrates the versatility of MALL identified in its research. The ubiquitous learning afforded by MALL decreases the dependence on a geographically-bounded place for study and has the ability to reach the most disadvantaged learners (Kukulska-Hulme and Traxler, 2005; Kearney et al., 2012; Tan and So, 2015; Pérez-Paredes et al., 2019). It allows them to engage in learning when the opportunities arise (Kukulska-Hulme and Traxler, 2005), changing the way learners learn (Peters, 2007; Parks, 2011).

M-learning is not limited to learners' physical mobility but is also associated with the agency to create a new learning space or 'impromptu sites of learning' (Sharples et al., 2005: 2), enabling learners to create their own rich contextual experience (Pachler, Bachmair and Cook, 2009). Traxler (2007) argues that the intimate relationship users have with their personal devices can contribute to a deeper connection and ownership of their learning.

Kukulska-Hulme (2016) identified affordance as both 'individualization' and 'personalization, which according to Kearne et al. (2012) is a key element of m-learning, allowing it to be flexible and therefore reduce stress. Researchers with NLLs stress the importance of individualised blended learning and enabling the learners to proceed at their pace (Kurvers, 2007), whilst remaining in a social setting (van Craats and Young-Scholten, 2015).

2.2.3. Lack of MALL research

Despite an increase of research into MALL during the last two decades (such as Sharples, Taylor and Vavoula, 2005; Kukulska-Hulme and Traxler, 2005; Motiwala, 2007; Park, 2011), it still remains in its infancy and is limited (Hsu, 2013; Sharples, 2013). Economides and Grousopoulou (2009) urge that more research is urgently required. Most research on MALL is based on participants with higher academic abilities, such as Epp, (2017) on migrant use, or Demouy et al. (2016), which included some beginners but were participants with higher L1 academic abilities.

Van Craats and Young-Scholten (2015) have demonstrated the effectiveness of using CALL in blended phonics learning for adult NLLs, yet despite its potential, literacy teaching in blended classrooms is still seriously lacking for adult NLLs learners (Cucchiarini et al., 2013). Whilst Kim et al. (2008) argue that mobile-devices are uniquely positioned to play a

significant role in the language teaching of illiterate children, how this can be effectively facilitated for adult NLLs is sadly neglected (Knoche and Huang, 2012).

UNESCO proposed the use of mobile-assisted technology in combating high levels of global illiteracy in an attempt to both transform global inequalities and in addressing emotional and mental issues usually associated with illiteracy and its relation to low income (West and Vosloo, 2013). Their proposals target poor, less developed countries but adult NLLs living in highly literate societies failed to be targeted.

2.2.4. Learning theories and MALL

MALL affordance has the potential to support a number of learning theories in relation to NLLs, from behavioural, with the repetitive learning low-literacy level learners require (van Craats and Young-Scholten, 2015) to socio-constructivist (Vygotsky, 1978) and collaborative learning (Taylor et al., 2006; Traxler, 2007; Kukulska-Hulme, 2009; Kearney et al., 2012). Laurillard argues that a 'theoretical statement about collaborative learning that embraces all forms of learning and teaching, conventional and digital, mobile and classroom-based, formal and informal' would 'both challenge and defend the use of technologies' for all learners, regardless of their educational background (2009: 2).

2.2.5. MALL affordance and the linguistic environment

Most theories in SLA have been advanced on the principle that learning occurs in formal education, within a classroom, with the interaction of a teacher (Sharples, Taylor and Vavoula, 2005). Few scholars such as Freire (1972) called for conceptualising learning within

the physical environment of the learners. Viewing the environment as a possibility for learning was outlined by Gibson in 1979, who first coined the term 'affordance' (see Greeno, 1994). According to his theory, the environment offers contextual opportunities and it needs to be perceived as an affordance to be initiated into action by the agent (Gibson, 1986; Hutchby, 2001).

Tan and So (2015) claim that affordance provided by engaging in m-learning activities in the complex physical environment of the real world can lead to greater learning opportunities and challenges than the controlled learning environment of the classroom. Its "anytime anywhere anyhow learning" creates opportunities for both learners and teachers to extend educational activities outside the classroom (Motiwalla, 2007; Palalas, 2015:37), increasing learner autonomy outside the classroom (Kearney et al., 2012; Reinder and Pegrum, 2016).

According to van Lier, language learning is not a sterile subject to be confined to the classroom. Rather it should be ecologically extended outside the classroom into an environment "mediated by all the semiotic resources that are available in the learning environment" and that such resources must be "actively brought in and created, shared and used", especially if the environment has a 'rich semiotic budget, which may not be true of all classrooms, textbooks, or pedagogical interactions" (2004: 246, 97-98).

Darhower (2008) asserts that learners who are actively engaged are more likely to become aware of linguistic affordances and use them for linguistic action. For others (Schmidt, 1990, 2012; Robinson, Mackey, Gass and Schmidt, 2012), engagement in learning is not sufficient, rather the affordance requires *noticing* (Schmidth, 1990), or made salient to the learner for learning to take place. A meta-analysis from Norris and Ortega (2000) of 20 years of

research into L2-language gains highlighted the success of explicit teaching. This principle has been advocated by many researchers in ELL, such as N.C. Ellis (2002), Spada and Lightbown (1999), Spada (1997), and Long (1991, focus-on-form). N. C. Ellis (2002) highlights its effect in helping build new neurological patterns of language, which is particularly pertinent to NLLs, who, similar to pre-school native children, have yet to develop the neurological pathways related to literacy acquisition from childhood (Reis et al., 2001), and cannot learn to read without being explicitly taught (Adams, 1990; Byrne et al., 2000; Ehri et al., 2001).

2.3. Learner Voice

2.3.1. The absence of non-literate voice in ESOL

In-depth needs analysis (NA) for pre-entry ESOL courses are routinely overlooked with the assumption that low-literate learners require only basic survival skills to live within a literate society (Auerbach, 1986). Based on the communicative language approach, ESOL curriculums focus on the use of language in basic everyday situations (Richards and Rogers, 1986), a pedagogy that only prepares learners for menial employment (Auerbach, 1986). Simpson underlines that it “is an uncomfortable thought that well into the 21st century such a position regarding ESOL learners is being promoted by government inspectors” (2007:4), and it results in “linguistic gate-keeping processes, either implicitly or explicitly designed to control access” (Cooke and Simpson, 2008:22). According to Freire (1985), formal education is political and as such is never neutral. And the existing NA in ESOL presents categories as the only natural choices to be made (Benesch, 1996) and are "influenced by the ideological preconceptions of the analysts" (Robinson, 1991:7).

Neglecting the perspectives of the learners in ESOL curriculums can be seen as means to silence their voices, which according to Kum ‘continue to disappear from social, political, economical and public life’ (2018: 136). From his study on political and media discourse, he argues that they have been made to represent the ‘stratum of people synonymous to human degradation’; recipients of benevolence, whilst in reality are the focus of anti-immigration rhetoric by some right-wing politicians and their supporting media, scapegoats to their ‘electioneering experiments’ (2018: 135).

Confirmation of the erosion of voice and identity for migrants can be seen in the Government's Integrated Communities Strategy Green Paper (MHCLG, 2018). Its analysis uncovers a disturbing pattern of 'othering' (Phillimore and Sigona, 2018) in relation to white British citizens, conceptualised within the paradigm of integration, which is accentuated when compared with papers on integration strategies from Scotland and Wales (see Appendix 1). Possession of the English language is positioned not only as a marker for national identity but also as a marker for British values and morals. The lack of English is identified with extremism (Phillimore and Sigona, 2018) and seen as a justification for exclusion (Cooke and Simpson, 2008).

Whilst claims have been made by the government regarding the English language, British identity and social cohesion (see Goodfellow, 2018), English education for refugees and migrants has long been neglected, eroded, and cut substantially (Refugee Action, 2018). NLLs do not have the means to learn literacy which is crucial for their integration and employment (Schellekens, 2011) and overlooking the learners' desire and need for literacy learning to function effectively in a literate society, existing ESOL courses make no attempt at challenging the "social and cultural inequality in (the) education," (Pennycook, 1994: 691), or bridging the gap between the learners and curriculum development (Dicking and Germaine, 2001). A lack of a pedagogy based on an in-depth NA not only fails to provide appropriate placement in correct classes, suitable syllabuses, and appropriate classroom materials (Brod, 1995), but it ultimately fails to provide an education for the learners.

The need for emancipatory literacy to empower learners has long been advocated by Freire (1972; Friere and Macedo, 2005). Influenced by Freire's participatory perspective, Auerbach (1992) argues for literacy teaching to be placed within an empowerment ideology at the

heart of ESOL curriculum development, arguing for an education that is participatory, starting with what they know, building on their strengths and engaging them in the learning process.

An argument against instructionism is that the content and instructions are designed without the input of the recipient. A knee-jerk reaction to this is the constructionist view, which advocates that the learning needs to be in the hands of the learners (Kafai, 2006). A balance is both teachers and learners acting as key participants in the learning process from the onset, using initial interviews, assessments, classroom diagnostics, and discussions, to form the basis on an in-depth Needs Analysis, which serves to drive the pedagogy.

Those who critique a systematic form of literacy teaching for NLLs overlook the intelligence of NLLs and the emergent nature of learning when learners are positioned as key practitioners. By the continual engagement of learners in problematizing their learning, education is generative, allowing for creative critical thinking and as Freire maintains:

> Speaking the word is not a true act if it is not at the same time associated with the right of self-expression and world-expression, of creating and re-creating, of deciding and choosing and ultimately participating in society's historical process (1970: 212).

For education to be truly participatory and transformative, the learners' voices must be heard and not silenced in the learning process. ESOL curriculums need to cease advocating a top-down curriculum devoid of learner input and remove "the culture of silence" and prohibitions "from learners creatively taking part in the transformations of their society", and recognise that all learners have "the right to have a voice" (Friere, 1970: 213).

Education for NLLs should not remain on the periphery, echoing the marginalisation of peripheral countries whose voice has been surrendered to the Centre (Western Europe, North America and Australasia), which according to Kumaravadivelu "casts a long hegemonic shadow" over ESL teaching (2006: 22). On the contrary, there needs to be an "authentic dialogue between learners and educators as equally knowing subjects" (Freire, 1970: 214), where the learners "must assume from the beginning the role of creative subjects" (1970: 212).

2.3.2 Learner engagement

Learner engagement is a meta-construct of the cognitive, behavioural, social and emotional interaction with learning (Philp and Duchesne 2016; Dao and McDonough, 2018). Cognitive, behavioural and social interactions have traditionally been positioned as directly observable engagement by teachers through time-on-task or active involvement and researchers have investigated the extent to which features of language-related episodes were noticed (Schmidt, 1990; Long, 1991; N.C. Ellis, 2009), how much discussed (Swain and Lapkin, 1998), the gross measurement of learner speech (Dörnyei and Kormos, 2000), interaction with a task (R. Ellis, 2009), or social interaction (Storch, 2008). According to Philps and Duchesne (2016), this limits engagement with the language to cognitive engagement and only captures elements of behavioural engagement.

Other researchers, such as Dao, Nguyen and Iwashita (2019) have been concerned with regards the limitations of observable features of learner engagement and argue that aspects such as emotional engagement are difficult to observe and fully comprehend. Studies can show a stronger correlation between learner and teachers reports of behavioural

engagement than that of emotional engagement. Whilst emotional and cognitive engagement need to be inferred from behaviour (Appleton et al., 2006; Fredricks and McColskey, 2012), learner activity may provide a mask for their true emotions (Skinner et al., 2008).

From my experience, teacher observation of learner engagement in a task alone is not always a reliable indicator of the suitability of the task. A learner may engage actively in a task for many reasons, such as a lack of alternative education or simply because a learner is motivated in studying, but may still find the tasks boring and ineffectual in language learning. Furthermore, in contrast, they may deem a certain methodology or task as a means of learning, which a teacher may think is ineffectual. Therefore, using self-evaluation methods is important in gathering data on NLLs' subjective perceptions, rather than 'just collecting objective data on behavioural indicators' which is highly inferential (Appleton et al., 2006; Fredricks and McColskey, 2012: 765).

2.3.3. Self-report in learner assessment

It is recognised that standard testing methods are inappropriate for students who lack formal education in L1 and have a lack of skills to transfer to L2 learning and testing (MacSwan and Rolstad, 2006). Research from neuropsychologists confirms the difficulties, anxiety and disheartenment NLLs face with testing and assessment (Ardila and Moreno, 2001; Ardila et al., 2000). According to Pettitt and Tarone (2015), the real extent of language learning and acquisition of NLLs is not reflected in the testing system. In light of these studies, it is recommended that different testing methods are used to assess language learning with NLLs (Bigelow and Schwarz, 2010).

Lytle and Wolfe (1989) proposed that testing methods should be participatory and this is in line with research from Fredricks and McColskey (2012) who propose assessing learners through evaluating their engagement measured through their self-report. This allows for insight into language learning from non-literate L1 learners whose voices invariably are silenced in many assessment methods.

3. Methodology

3.1. Introduction

The intent of this chapter is to introduce the research methodology for this study and the rationale behind the choice. It outlines the method of the research, the approaches used for data collection and analysis and it includes details of the participants, problems around ethical issues and also an outline of the strategies selected to be tested. Finally, it will give a brief outline of the research limitations.

3.2. Research design and rationale

Researching with NLLs can be difficult from the point of view of the language barrier, their inexperience with new forms of education, as well as unfamiliarity with the research process. This research used a mixed methods approach, recognised as one of the three major research paradigms, along with quantitative research and qualitative research (Johnson, Onwuegbuzie and Turner 2007). It utilised the strengths of both quantitative and qualitative research to address the complexities from variant angles (Creswell and Creswell, 2017), enhancing the depth of the study by converging and corroborating results (Creswell, 2003, 2014; Teddlie and Yu, 2007; Teddlie and Tashakkori, 2009) and allowed comparison of the two strands to determine patterns identified in the data (Creswell, 2014).

A mixed methods approach allowed for greater flexibility (Dörnyei, 2007), using data of one method to inform the other (Johnson, Onwuegbuzie and Turner 2007), which is of particular importance with NLLs who are unused to research protocols and therefore be unsure of how to respond. Integrating both quantitative and qualitative into a single study can help

decrease the inherent weakness and bias that exist in all methods (Johnsons and Onwuegbuzie, 2004) and enhance the belief that the results are valid and that validity is not the result of the method itself (Johnson, Onwuegbuzie and Turner 2007).

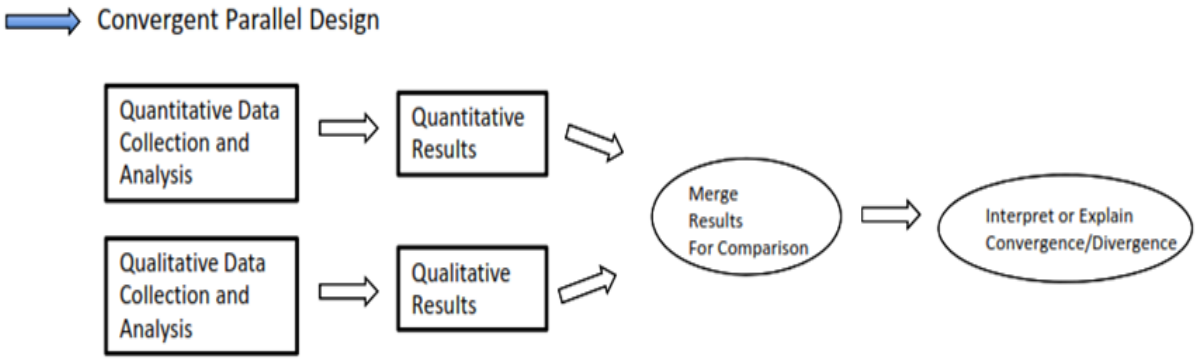


Figure 4: Convergent Parallel Design (Creswell, 2014: 40)

According to Hanson et al. (2005), three considerations should be taken into account when planning a mixed methods design: namely priority, implementation and integration. Priority refers to which of the two methods (quantitative or qualitative) is given greater emphasis in the design. Implementation relates to the stages of execution of the two methods, whether they run sequentially, or concurrently (see also Creswell and Plano-Clark, 2011), and integration describes where in the design does the mixing of the two methods occur.

Both quantitative and qualitative methods were integrated to run parallel at the start of the teaching with MALL when all MALL participants were involved, and they were also used during the selective structured interview stage. The priority in the study was given to the qualitative method, which represented the main component of the data collection and was implemented through teacher observations of the preliminary stage, learners' responses

during the study, and an investigation into learner interviews. It helped give insight into the quantitative data collected from learner feedback during MALL tasks and their interviews.

3.3. Population sample

LEARNER	Country of Origin	Age	Gender	First language	Number of languages	Length of stay in the UK	Formal L1 Education	Proficiency in English speaking (CEFR)	Proficiency in English reading (CEFR)
1. AP	Pakistan	32	F	Punjabi	2	1 year	Limited	Below A1	Below A1
2. FB	Ethiopia	31	F	Amhari	6	4 years	None	B1	Below A1
3. MA	Ethiopia	31	F	Oromo	3	3 years	None	B1	Below A1
4. NT	Afghanistan	43	F	Pushtu	2	2 years	None	Below A1	Below A1
5. IA	Somalia	28	M	Somali	4	1 years	Limited	A1	Below A1
6. CL	Nigeria	28	F	Yoruba	3	5 years	None	A1	Below A1
7. IA	Pakistan	33	F	Punjabi	2	1 year	Limited	Below A1	Below A1
8. ND	Pakistan	61	F	Urdu	2	40 years	None	B1	Below A1
9. NB	Afghanistan	26	F	Farsi	2	1 year	Limited	Below A1	Below A1
10. HK	Pakistan	32	F	Urdu	3	2 years	Limited	A1	Below A1
11. CK	Nigeria	28	F	Yoruba	3	2 years	None	Below A1	Below A1
12. SS	Bhutan	60	F	Nepali	2	5 year	None	A2	Below A1

Table1: Contextual Description of Students

This research used convenience sampling by conducting the research with my students from a pre-entry ESOL class in the UK. The importance of convenience sampling is its non-probability nature when participants need to be chosen that meet the practical criteria required (Dörnyei and Csizer, 2012) and are available and willing to participate in the

research (Teddlie and Yu, 2007). The exclusion criterion for this research was the absence of any literacy, such as literacy in English and in their native language. A second criterion was that all participants had access to smartphones and had taken part in MALL preparatory lessons in the classroom prior to setting up an online group.

The participants were made up of 11 female students and 1 male student, which represents findings from UNESCO (2017) that the majority of the world's non-literate adult population are women (Table 1, above). The age range was 26 to 61 years and the sample was fairly diverse across nationalities with low literacy rates. All learners were below CEFR A1 in literacy (see Appendix 2) and all had limited or no prior formal education. The levels of spoken English varied, with some learners able to communicate well in English (CEFR, 2001), (see Appendix 3 for full contextual description and summary).

For the purpose of the quantitative phase of the study, the convenience sample was the entire MALL group population who had taken part in MALL preparatory classroom lessons prior to setting up a Whatsapp group. For the qualitative phase of the study, a group of 7 participants was selected by "purposeful sampling", those who were "information-rich" from whom we can best learn regarding the research questions (Patton, 1990: 169). The selection of the participants for the qualitative phase did not depend on participant responses from the quantitative phase. Some participants who were not as active in giving responses were interviewed regarding their perception of the literacy strategies to gain multiple perspectives to represent the complexity of their world.

3.4. Ethics

The research ethical guidelines of the University were adhered to and ethical approval was applied for and accepted. With the help of two bilingual translators, all participants were given a translation of the research's general aim and a request for participation (see Appendix 4). Data confidentiality, data protection and the right of withdrawal were carefully explained. Ensuring that learners understood the voluntary nature of the research was important as learners were unable to read the guidelines. Furthermore, it was important they understood that not participating would not impact classroom participation. All relevant data, including conversation transcript, group discussion, researcher's observational notes, translations and recordings were collected and stored securely and the names of the participants were anonymised for confidentiality. Whatsapp data was backed up routinely to avoid any loss of research.

3.5. Method for the study

3.5.1. Summary

The study was conducted over a period of 4 months. The conceptual framework for this study was based on recommendations for systematic phonics instructions in the reading development process from Adams (1990), Ehri (1995, 2014), Kruidenier (2002). It followed the SLA theory elucidated by Bailey, Madden and Krashen (1974), Vainikka and Young-Scholten (1994), and Hawkins (2001) that all L2 learners follow the same developmental trajectory as L1 learners in language acquisition regardless of their native language, age, or educational background, as long as there is no physical or psychological impediment.

Prior to the research, a needs analysis was performed (Appendix 5), also a literacy diagnostic (Appendix 6), and a MALL diagnostic (Appendix 7). The findings from the initial MALL diagnostic lessons supplied the learning objectives for a short preliminary unit on MALL before the research to prepare the participants to use MALL outside the classroom (Appendix 8). It was taken from a larger curriculum I designed and taught.

Preliminary tutorials are important for NLLs to prepare them for their study (Haverson and Haynes, 1982; Krashen and Terrell, 1983; Shank; 1986; Sherwani et al. 2009). This ensures validity in the assessment by removing construct irrelevance, to ensure they are learning the tasks given and not confused by unfamiliar constructs. It also familiarises them to assessment methods and instructions to be used in the research.

The foundation of their preliminary learning was task-based learning (Long, 2014; R. Ellis, 2003) and Asher's (1979) Total Physical Response (TPR). Tasks using their smartphone "became pedagogical in nature", "having a non linguistic outcome" (Nunan, 2004: 2-3) when participants gave TPR to speech simultaneously (see Appendix 9).

At the start of the study, instructions were given in 3 languages covering the native language of the learners. Short tasks were presented to the learners 3 days a week. Graded feedback was elicited after each selected task regarding their perceptions of the tasks for their learning and verbal feedback through voice messages was encouraged following Fredricks and McColskey (2012) recommendations on the importance of self-report in learner engagement. Teacher observations were recorded and interviews were conducted towards the end of the study and the data was collected for analysis.

3.5.2. Materials selected

Selected Phonics
• Short vowel sound/letter correspondence, e.g. *'a'* in *at, 'e'* in *bed* • One sound to one letter, e.g. consonants /b/ / p / / s / / n / / t / • One sound to two letters, e.g. 'gg' / g / in *egg*, 'ch' / tʃ / in *chips* and 'sh' / ʃ / in *cash* • Blending two consonants, e.g. 'fl' in *flat and 'st'* in *stop* • Long vowels, e.g. 'I' /aɪ/ for *I*, 'e' / i:/ in *we, she, he* • One sound for one syllable, e.g. 'at' in *cat, 'in'* in *bin* • Onset and rime, e.g. 'Dan', 'fan' 'man'; 'hop', 'pop', 'shop'

Table 2: Selected Phonics

The literacy selected (shown above) was based on my experience teaching preschool children to read, a thorough investigation of the available research theories on ESL literacy acquisition for NLLs, and also from learner feedback. I synthesized the complimentary elements of all three components into worksheets the learners found suitable at the start of the study. Nation and Deweerdt (2001) argue for simplified graded readers for beginners "using controlled vocabulary and grammar" (2001: 55; Lado, 2012).

	Strategy	Method
1.	**Phonics worksheets and matching audios**	From the teacher to the students, to be read back by the students to the teacher. Verbal responses given by students through voice message
2.	**Phonics videos**	From the teacher to the students. Feedback to be given by students
3.	**Phonics website**	From the teacher to the student. Feedback to be given by the students.
4.	**Photographs**	From the students to the teacher, identifying phonics lessons in the surrounding environment by using worksheets to identify literacy items in their environment

Table 3: Literacy Strategies

Four modes of phonics literacy strategies methods were chosen (see table above): worksheets with matching audios, videos, literacy websites, and photographs. A Whatsapp group was chosen as the main platform for the worksheets, audios, and links to videos, due to its easy access without distractions or excess text. Videos and interactive websites were chosen to visually attract the learners and give variety in recycling materials (Nation 2013; Lynch and Maclean, 2000).

Taking photographs of literacy in the environment was chosen to help make meaning from their own experiences. NLLs have shown difficulty in decoding two-dimensional information and pictures that are a representation of reality (Greenfield, 1997), particularly black-and-white images (Reis et al., 2006; Burt, Peyton and Schaetzel 2008; Buski, 2011). Reis et al. (2001) have identified that formal education influences the comprehension of 2D but not 3D visual information.

3.6. Data Collection

3.6.1. Quantitative strand

The quantitative strand aggregated data from the Likert scales and symbols (emojis) used in the task feedback. It also aggregated patterns that emerged from the verbal responses during feedback and interviews. The quantitative data helped provide a baseline for the research, helping avoid what Sieber (1973) calls the “common pitfall in qualitative data collection” of having an "elite bias" in the selection of informants and in the evaluation of statements (1973: 1352).

3.6.2. Qualitative strand

The qualitative strand consisted of teacher's observations during MALL and literacy diagnostics, the preliminary MALL class studies, and learner engagement in their studies. The qualitative strand also included analysis of learner feedback and response to MALL tasks and the semi-structured interviews through Whatsapp encouraged learners to elaborate as much as they needed in their responses.

3.6.3. Learner perception in the research

Examining learners' perception and self-report was chosen for two reasons. Firstly, it was chosen due to the difficulty in measuring and evaluating progress with NLLs (Bigelow and Schwarz, 2010). Research from Pettitt and Tyrone (2015) identified that formal testing methods do not always effectively assess their actual extent of progress. Rather, alternative testing methods are recommended (Bigelow and Schwarz, 2010). Lytle and Wolfe (1989) propose for the testing to be participatory and Solorzano (1994) suggests learners should be assessed through oral questioning techniques, such as surveys or interviews (Holt, 1992).

Secondly, it allows learners to express their own opinions (Cohen, Manion and Morrison, 2002), giving voice to their viewpoint and unique identity, which is predominantly lacking in the pedagogical process (Tudor, 2001). Fredricks and McColskey (2012) argue that self-report in assessment methods is critical to the participants' subjective perceptions. Collecting objective data that indicate behavioural aspects, such as task completion or observations from teachers, can be highly inferential (Appleton et al.,2006) and so, self-report methods are especially important with regards to assessing cognitive or emotional

engagement which are difficult to be fully inferred from outward actions (Fredricks and McColskey, 2012).

I take the position that learners are key-participants (Allwright and Hanks, 2009) in the research process, helping guide the research through their opinions and suggestions for changes and improvements to the strategies and tasks. This helps maintain their motivation and responsibility for their learning and helps refine course materials (Sandoval et al., 2004). It can be instrumental in overcoming difficulties for both the teacher and NLLs in the research.

3.6.4. The interview process

Generally face-to-face semi-structured interviews with open-ended and probing questions are thought to work best by some researchers, inviting the "interviewees to find and speak in their own 'voices" (Mishler, 1986: 118). Due to class closures at the start of the research, this study changed its approach from face-to-face interviews to a more structured method via Whatsapp. Structured voice messages were chosen rather than video-call when it became evident during the study that asking for replies through voice messages allowed learners time to think and formulate their thoughts and responses and to communicate their own opinions (Cohen, Manion and Morrison, 2002). This helped provide a more detailed insight into thoughts and emotions not directly observed or measured and which are difficult to capture in surveys or observations (Forsey, 2012). This participatory approach positions the learners as participants in 'meaning-making' rather than a simple output 'from which information is retrieved' (DiCicco-Bloom and Crabtree 2006: 314).

Questions were recorded either in English, Urdu and Pashto with the help of interpreters and posted individually on Whatsapp and not in the group to allow privacy in replying. It also maintained the data under each name separately for ease of analysis. They were transcribed into English and organised around the research questions, providing a clear framework of direction and allowing exploration of their main themes (Dörnyei, 2007).

3.6.5. Interview amendment

A second amendment was the removal of abstract language from the interview questions. The study itself formed a pilot for the interview questions. The original questions were in the agree/disagree statement format (see Appendix 10) but this was amended during the study to simpler concrete questions without abstract language, which poses a difficulty for NLLs (Sherwani et al., 2008). They were maintained in a format that was familiar to the learners (see Appendix 11). The questions were centred on the benefits, difficulties and ways to overcome these difficulties with regards the various literacy strategies using MALL.

3.6.6. The transcription process

Data that was not in English was translated before being transcribed verbatim and notes of any emphasis and stress were recorded and salient and recurring themes were identified (Dörnyei, 2007). Themes were grouped together and extracts were selected for inclusion in the Findings section.

3.7. Data Analysis

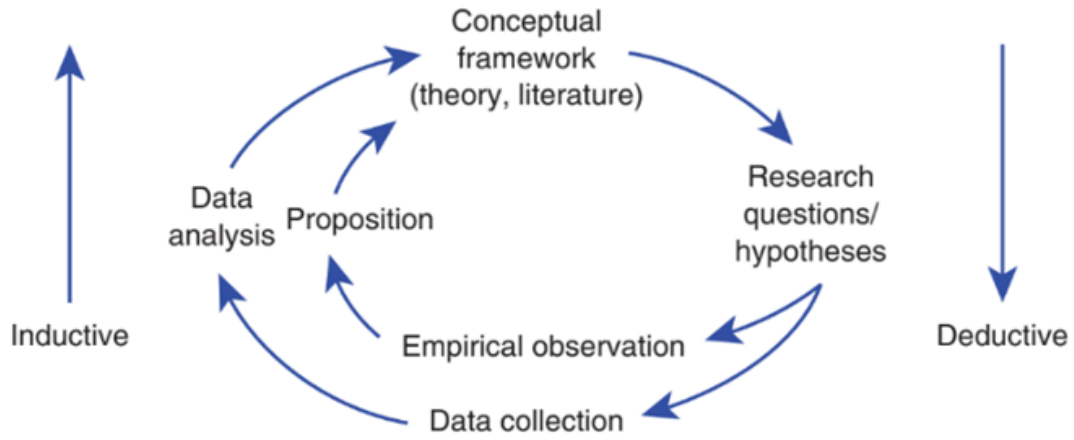


Figure 5: Research Process Cycle (Rudestam and Newton, 2014:5)

In line with Rudestam and Newton's (2014) outline of the potentially iterative cycle of the research process (see figure 5), this analysis did not take an exclusively inductive (bottom-up approach that drew on emergent themes) or deductive approach (a top-down approach that drew on existing theories). It was neither exclusively "theory-driven" nor strictly "data-driven", in reality, the "process of moving between theory and data never operates in only one direction" (Morgan, 2007: 70-71).

Rather, my justification for combining qualitative and quantitative methods took a pragmatic approach (Johnson and Onwuegbuzie, 2004) that moved "back and forth between induction and deduction", placing "emphasis on shared meanings and joint action" (Morgan, 2007: 71, 67). It was participatory and aimed to be transformative (Mertens, 2007). Seeking to understand the extent two subjects or two research fields understood each other "and to what extent can they demonstrate the success of that shared meaning by working together on common projects" (Morgan, 2007: 67).

Data from the parallel quantitative and qualitative strands were analysed and then converged together in the Findings section (Creswell, 2014). This cross-validation proves the results and goals are similar to the different methods (Morgan, 2007). Patterns of meaning and recurring themes were drawn out of the data as it related to the research questions and its analysis is presented in the next section.

3.8. Limitations

Research with NLLs can be inherently difficult due to the ethical issues surrounding their understanding of the research process, the idea of questioning and assessing their behaviour and responses. This is not from any lack of intelligence, as those who interact with NLLs can testify. Rather it comes from a lack of experience with formal study and research. Therefore, bilingual teachers or interpreters are important for this type of research (Lin, 2013), so that the research is not hindered or ignored as they are an underrepresented group in SLA research and theories.

4. Results

Phonics literacy strategies using MALL	Average % Worksheets on Whatsapp	Youtube videos	Phonics website
The lessons were enjoyable.	100	100	N/A
The lessons were useful.	100	100	N/A
The contents were what the learner wanted to learn.	100	100	N/A
The lessons were easy using the mobile phone.	100	100	N/A
The lessons were difficult using the mobile phone	0	0	N/A

Results Table 1: Learner feedback for different literacy strategies using MALL

Phonics literacy strategies with MALL	Average % Taking Photographs
Finding the letters and taking pictures from the worksheets was easy.	0
Taking pictures of the letters from the worksheets was useful.	0
Finding pictures of the letters was difficult.	100
Found the pictures from other students useful.	N/A
The pictures from other students were difficult to understand.	N/A

Results Table 2: Learner feedback on taking photographs of literacy items with MALL.

Results on voice message interaction with MALL	Average % Voice Messaging
Sending voice messages on the Whatsapp group was easy.	85.71%
Using voice messages to do homework was easy.	85.71%
Had problems with using the voice note on Whatsapp.	14.29%
Did not like using the voice note on Whatsapp.	14.29%
Preferred to send private voice messages to the teacher.	28.57%

Results Table 3: Learner feedback on voice message interaction with MALL.

Summary

The quantitative strand from learner responses and lesson feedback on the Whatsapp group proved difficult to collect (see 5.5.3 in Findings) and so instead, it relied upon the learner interviews. The average results from the interview questions for the phonics literacy strategies are presented in the results tables above. From result table 1, it is clear that there was 100% positive feedback on the literacy strategies using the worksheets on Whatsapp and on the Youtube videos. All students responded with positive affirmation on enjoying them, on their usefulness, and that the content was what they wanted to learn. Furthermore, all the students found the lessons easy to access on Whatsapp and Youtube.

The results for voice message interaction on Whatsapp are presented in results table 3 and the majority of the students gave positive responses to voice messaging on Whatsapp to complete the given tasks. No learners were able to do the lessons requiring them to take

pictures of selected literacy items and upload to the Whatsapp group and the responses were all negative. Learning literacy from websites was abandoned as I could not find websites that could give easy access to literacy lessons for the learners to study independently without difficulty in navigating extra text, symbols or logging in procedures.

Teacher's Observations	Yes	Maybe yes	No	Maybe no
The lessons were easy to deliver on Whatsapp	✓			
The students enjoyed the literacy strategies on Whatsapp	✓			
The students found the literacy strategies beneficial on Whatsapp	✓			
Interacting through voice messages was easy	✓			
Giving instructions through voice messages was easy.	✓			
Using voice messages for homework was easy for the learners.	✓			
The students enjoyed the literacy videos.		✓		
The students found the literacy videos beneficial.		✓		
The students enjoyed the literacy strategy on websites	N/A	N/A	N/A	N/A
The students enjoyed the literacy strategies through taking pictures			✓	
Taking pictures of the literacy was beneficial.			✓	

Result Table 4: Teacher's observations

The results for the teacher's observation diary are presented in table three and correspond predominantly with the learners' results above. Insight into the uncertainty in the teacher's observations with regards the literacy videos were clarified by the learners' positive self-report. The Needs Analysis, Literacy Diagnostics and MALL Diagnostics were all included in the teacher's observations (see Appendices 5, 6 and 7). Although these results may look

simplistic at a casual glance, the findings which emerged from in-depth qualitative research on the learners' and teacher's perceptions of literacy learning with MALL, proved to be highly insightful. The extent to which the learners and the teacher found certain strategies beneficial or difficult and how these were overcome is discussed below.

5. Findings and discussion

5.1. Introduction

The intent of this chapter is to analyse the findings in line with existing research from the literature review, drawing out relevant themes, and identifying which strategies best fulfil the research aims.

5.2. 'ABC' literacy

The preliminary classroom practice, as well as early classroom diagnostic and NA (see Appendix 5) highlighted two important findings. First, the learners wanted to learn the alphabetic principle, and second, they understood its acquisition to be the basis of reading development. Although all were ignorant of phonemic awareness at this stage similar to native children (Goswami, 2001), their understanding of literacy acquisition involved the alphabetic principle, as outlined in the Kruidenier Report (2002). This was further confirmed from their feedback during the m-learning and later in the interviews.

Choosing phonics as the literacy strategy outlined the importance of teaching learners in the manner they consider learning. Student MA mentioned "proper" in "this is proper teaching...this is good, we need teachers to teach ABC." This was echoed by HK who said 'this is *proper* learning', 'this is what I want to learn...I want to learn ABC and how it joins up' (see Appendix 12). Student FB stated that "no one teaches me this. I go to many classes and no one teaches me to read." The learners understood that acquiring literacy is similar to how native children start their reading acquisition (Kruidenier, 2002; Spiegel and Sunderland, 2006).

5.3. MALL for non-literate learners

5.3.1. The benefit of using MALL

The MALL classroom diagnostics (Appendix 7) found that all participants were familiar with their smartphones and through rote memorization "mastered important functionality through rote learning" and were able to traverse the phone menus at the same speed as literate people (Knoche and Huang, 2012). Smartphone technology was clearly embedded in their daily life (Park, 2011: 80) and they readily recognised logographic features on their phones, such as numbers, icons for the camera, picture gallery, Whatsapp messenger service for some learners, text messaging service, the green call button.

This corroborates research that all L2 learners follow the same developmental trajectory as L1 learners Bailey, Madden and Krashen (1974), Vainikka and Young-Scholten (1994, 1996) and Hawkins (2001) by following the trajectory outlined by Ehri (1994, 1995) and Frith (1985), namely, for reading development in native children there is an initial pre-alphabetic phase. Salient cues make meaning in a manner that recognises contextual 'non-alphabetic, visually salient features' (Ehri, 1995: 122, Ehri and McCormick, 1998). It transfers successfully to Share's (1995) claim that initially teaching logographically can kick-start reading development.

It highlights that there was no lack of neural plasticity to impede new learning for NLLs, provided learning was concrete (Ardila et al., 2000). It also confirms findings from Kolinsky et al. (2018) that there seems to be no sensitive period in starting literacy acquisition up to middle adulthood and older learners were able to learn new skills with MALL.

5.3.2. The importance of preliminary practices

There were two main findings with having preliminary practice for NLLs. It highlighted that NLLs were able to learn new affordances quickly given sufficient input and practice (N.C. Ellis, 2002). And secondly, through trial and practice, it defined the types of literacy worksheets the learners considered most appropriate and beneficial.

It was apparent from the MALL diagnostic in class that the students were not able to participate in MALL until they had mastered certain skills that would be considered 'normal' to literate learners. These included downloading Whatsapp for those without it, uploading pictures and sharing them on Whatsapp, clicking links, and navigating videos. Contrary to research from Knoche and Huang (2012) on the ability of NLLs to use the voice message function, only one learner knew how to send voice messages on their mobile device. This required explicit teaching as the ability to use voice messaging was vital for completing tasks and giving periodic feedback during the course. This confirmed the observations by Sherwani et al. (2009) that NLLs were better prepared with incremental tutorials prior to the study (see also Krashen and Terrell, 1983; Haverson and Haynes, 1982; Shank, 1986).

Classroom observations found that the preliminary trials on literacy strategies, contrary to those who consider phonics literacy teaching to be counter to the communicative approach, demonstrated many of the core fundamentals of communicative learning, such as affective and cognitive engagement, focus-on-form, and the *noticing of* linguistic elements. By discussing and making meaning of the language events, the learners took an interactive approach with their engagement and responses. They sought clarification and interacted with the input, to make meaning of what they are learning, in order to produce meaningful

output and develop productive skills (Mackey, Ziegler and Bryfonski, 2016; Long, 2014; Swain, 2000, 2013).

The foundation of their preliminary learning was task-based learning (Long, 2014; R. Ellis, 2003) and Asher's (1979) Total Physical Response (TPR). Tasks using their smartphone "became pedagogical in nature", "having a non linguistic outcome" (Nunan, 2004: 2-3) when participants gave TPR to speech simultaneously (see Appendix 9). This illustrates how MALL can be effectively integrated as part of a communicative task-based syllabus and a blended curriculum.

5.3.3. Early MALL instructions

The importance of early MALL instructions became apparent when there were unexpected class closures. The learners had the ability to transfer their learning online which would have been impossible to accomplish with other forms of e-learning such as CALL. The class closed before the end of the MALL unit (see Appendix 8) and the learners proceeded with the knowledge they had acquired and any untaught literacy strategies, such as phonics apps, were omitted from the online teaching and the research.

All learners except one gave a positive response to the voice messaging option for feedback and homework (see Results Table 3 below). The one learner who gave negative responses had missed some of the preparatory work in the classroom around voice messaging, which may have contributed to the difficulty they experienced, illustrating the importance of preparatory study before using MALL. One learner gave voice messages to the teacher in private in response to tasks, which was easy to respond to individually. AB mentioned she didn't want to ask questions on the group but was comfortable and active with responding

verbally to homework on the group. The MALL affordance clearly allows for such flexibility (Kukulska-Hulme, 2016; Kearne et al., 2012) and individualisation of learning (Kukulska-Hulme, 2016; van Craats and Young-Scholten, 2015).

5.3.4. Voice messaging: learner engagement and agency

Results on voice message interaction with MALL	Average % Voice Messaging
Sending voice messages on the Whatsapp group was easy.	85.71%
Using voice messages to do homework was easy.	85.71%
Had problems with using the voice note on Whatsapp.	14.29%
Did not like using the voice note on Whatsapp.	14.29%
Preferred to send private voice messages to the teacher.	28.57%

Results Table 3: Learner feedback on voice message interaction with MALL.

An important and unexpected finding was the learners' ability to refine the worksheets through their feedback with voice messaging, in response to the literacy lessons. Prior to research, a variety of literacy worksheets were designed through an iterative cycle of enactment and evaluation when presented to the learners during classroom practice. As commercial materials suitable for NLLs are extremely limited it was necessary to make the resources (Haverson and Haynes, 1982; Bigelow and Schwarz, 2010), but it was through learner feedback using MALL that the worksheets were refined to a style and content that they considered suitable (see Appendices 13 and 14).

During the course, CL said, “Some I find too difficult to do and some I find easy,” indicating that the level of some worksheets was too high (see Appendix 13). This occurred with all learners half-way through the study, demonstrating that what I considered suitable for the learners were not what they considered suitable for themselves.

MA commented during the interview:

> “I like it simple so that I will be able to understand it... *light* and *simple* please.”
>
> “I like it one by line, please. That would be easy for me to learn and it would be easy for me to answer the question and send it back to you.”
>
> “And if you post it and it is too much or something like that, then it’s not easy for me to quickly know...doing it one by one...teach us properly...then we would be doing it one by one, one by one, so that we can get it properly.... if you can be doing it little by little, just not quickly...it is a little bit hard.”

This came as a result of ignoring the feedback and self-report process and assessing the learners to have had sufficient time to progress to a more complex level without taking into consideration that the rate of acquisition is slower for NLLs (Bell, 1995; Bigelow and Schwarz, 2010). This could have been a result of an egoistic desire to witness a manifest sign of quick physical improvement, which I and other teachers need to guard against.

The literacy worksheets were redesigned (see Appendix 14), creating learning that was relevant to the learners’ needs (Freire, 1972; Macalister, 2011; Graves, 2000), bridging the gap between the learners and course designers (Dickins and Germaine, 2001) by giving voice to their opinions regarding their own learning. Tudor (2001) rightly points out that the learners’ voice needs to be accommodated in the pedagogical process. Importantly, it

highlights that NLLS are more than capable of critically evaluating their teaching experience and their teacher's interventions.

Part of the process of opening the space for learner voices to be heard in both the teaching and research is establishing an empathetic approach (Dörnyei, 2007. This opens a safe space for learners to freely engage, helping remove the problem of 'social desirability bias' whereby participants give socially desirable responses rather than responses that reflect their true feelings (Dörnyei, 2010).

Furthermore, from their feedback and the observed active responses to worksheets, it was clear the learners favoured syllable segmentation and rhyme. This corroborated research from Morais, Bertelson, Cary and Alegria (1987), which highlighted higher positive performance with syllable units with rhyme recognition rather than single phonemes, and the work by MacLean, Bryant, Bradley (1987) and Goswami (1999) on the importance of rhyme for English reading development.

5.3.5. Silencing: "I did not talk for 3 years"

The silencing of NLLs' voices is not only in the field of social, political, economical and public life as according to Kum (2018), but it seems to be suppressed in the education system and the classroom. During the preliminary class study and the interviews, the aspect of remaining silent in the ESOL classroom was sadly all too common. ND said, "I didn't talk for 3 years (in class). I sat in the classes and I did not talk...Then slowly I teach myself ABC and one teacher help." This was confirmed by a vocal student (NT) who said, "My lessons last year... I didn't talk. I didn't understand the teacher and I couldn't do the work...the lessons were too hard for me. I didn't talk to my teacher. His is not the same...I just stayed quiet."

FB said, “I didn’t tell my teacher I want ABC. She gives us lessons... worksheets...but they are too hard for me. I want to start at the beginning.”

Student MA highlighted the importance of learning literacy for her. Despite having a communicable level of verbal English, MA is still unable to obtain employment higher than a cleaner. “This cleaning is too much for me....It is a little bit hard for me, that is why I am looking for something… if I can read, I can be able to write a little bit...I’ll be able to get, maybe a carer or something that can help me,” (Interview transcript, Appendix 12), linking her reading acquisition with writing development (Grabe, 2003).

From my experience, in-depth needs analysis for pre-entry ESOL courses is routinely neglected, with learners not asked regarding literacy learning. It is assumed that low-literate learners only require basic communicative survival skills to live within a literate society (Auerbach, 1986). Only menial employment is discussed in the ESOL curriculum and yet there are inadequate teaching methods and/or reading materials for NLLs (Braga et al. (2017) to acquire the literacy they require for even low-level employment (Schellekens, 2001), regardless of spoken language fluency.

5.4. Benefit of phonics literacy strategies through MALL

Phonics literacy strategies using MALL	Average %		
	Worksheets on Whatsapp	Youtube videos	Phonics website
The lessons were enjoyable.	100	100	N/A
The lessons were useful.	100	100	N/A
The contents were what the learner wanted to learn.	100	100	N/A
The lessons were easy using the mobile phone.	100	100	N/A
The lessons were difficult using the mobile phone	0	0	N/A

Results Table 1: Learner feedback for different literacy strategies using MALL

5.4.1. Literacy worksheets and audios on Whatsapp

All the learners gave positive feedback on the phonics literacy worksheets and audios via the Whatsapp group through voice messages and symbols which included love hearts, smiley faces and thumbs up. This was further confirmed during the post-research interviews where learners confirmed they liked phonics literacy worksheets and the strategies were what they wanted to learn (see table above). Students FB and MA linked the literacy strategies to their past experience of learning English. FB said, “This is what I like. I want to put ABC together and join together like this. I have been learning English for a long time... many classes...but this is the first time I learn this” and MA confirmed, “you know that opportunity is not there.” Though, as mentioned above in 4.2.6., the worksheets were redesigned to retain simplicity in line with Nation and Deweerdt’s (2001) argument for graded simplified reading for low-level learners.

5.4.2. 'Safe' learning space and learner agency

Interestingly, despite asking if they like the Whatsapp group, no learners mentioned the actual platform. Rather, they all spoke about the lessons and their learning on Whatsapp. This brings to mind the statement of Weiser that "the most profound technologies are those that disappear '' (1991: 94) and smartphone technology is important for the learners but is "embedded into the background" (Park, 2011: 80). This highlighted that in learning it was the affordance intrinsic in the activity that was important (Tan and So, 2015) and their learning experience (Traxler, 2007; Kearney et al., 2012; Reinder and Pegrum, 2016).

The positive response to voice messaging (see Results table 3) highlighting one of the main benefits observed with using Whatsapp was how "these devices allow for complete ubiquity and constant connectivity between teacher and learner" (Perez-Paredes, 2019), opening a safe space for communication. Any participant not active in the group could be contacted separately and privately. Furthermore, it was not intrusive, as students understood the unspoken rule of mobile communication that recipients will reply to messages when they were free and at a time suitable for them.

Its 'anytime-anyplace-anyhow" nature could also be seen in the research process. The audios from some of the interviews suggested the learners were responding from outside of their homes (see Appendix 12), creating opportunities (Motiwalla, 2007; Palalas, 2015:37), and increasing learner autonomy (Kearney et al., 2012; Reinder and Pegrum, 2016).

Developing learner autonomy helps develop learner agency and taking responsibility for their learning (Freire, 1970, 1972; Sharples et al., 2005). Frequent voice messages were left for one task as the students self-corrected their responses to improve with each successive

message at their own pace (see picture below). This contributed to a stronger ownership of their learning (Traxler, 2007) and helped individualise their learning as recommended by van de Craats and Young-Scholten (2015).

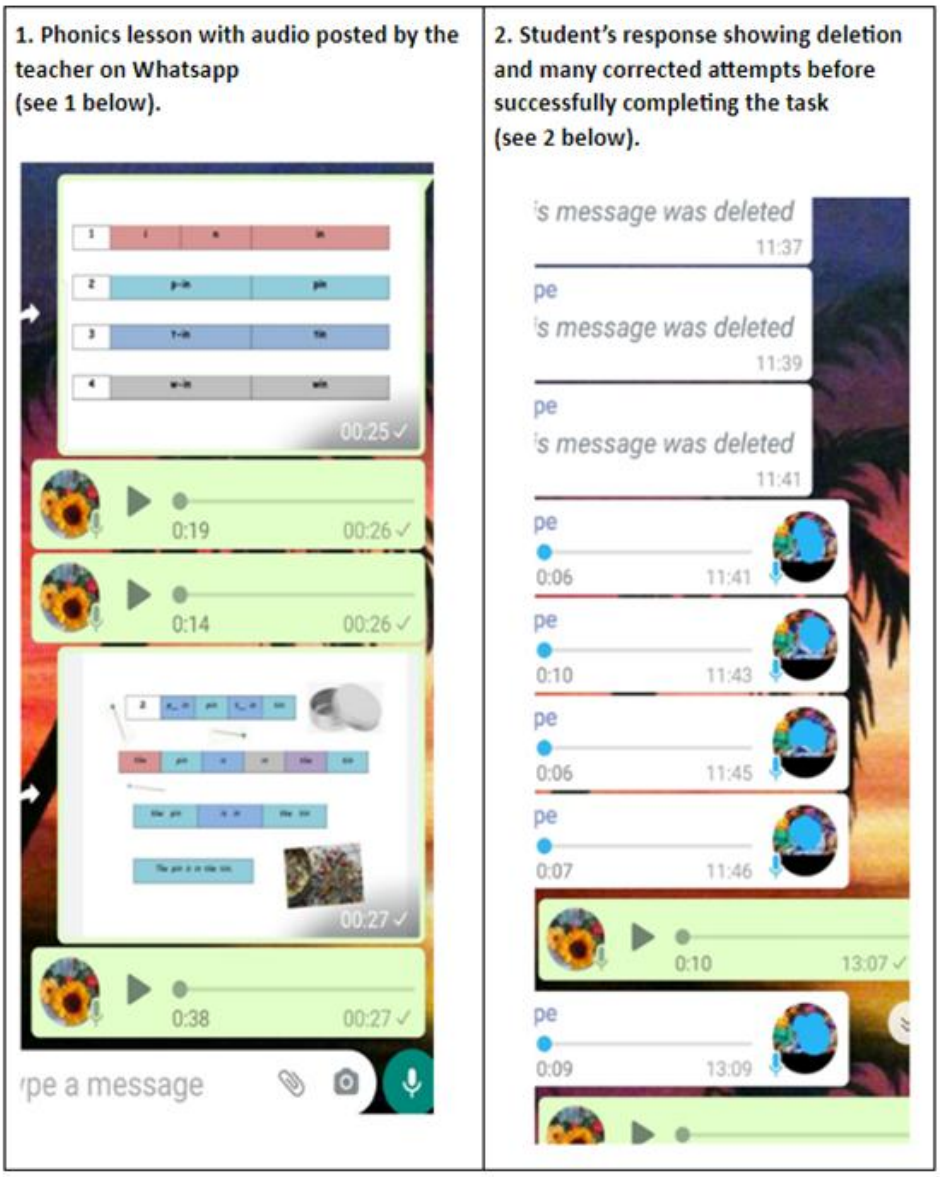
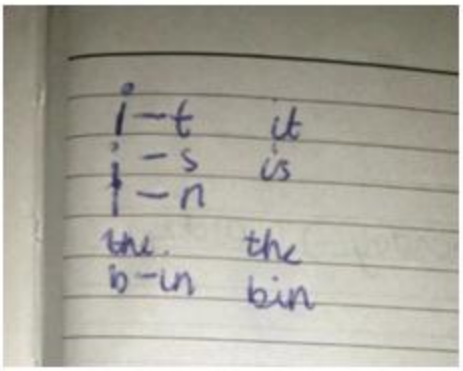


Figure 6: Voice message interaction and self-correction

Despite lacking the features of a communicative face-to-face online classroom, this research found that the Whatsapp platform created a new learning space that was easily accessible, helping provide a "safe environment" (Bigelow and Schwarz, 2010: 12) where "literacy and

other basic skills can be introduced more slowly" when classes do not have mixed low literacy learners (2010: 13). NLLs are a unique group of learners who require space to study at their own pace and repeat activities and content for successful learning (Lynch and Maclean, 2000; Williams and Chapman, 2007).

Although all the students expressed enjoyment and satisfaction with the worksheets, HK reported she preferred doing the worksheets in the classroom where she could also do some writing. "I like the lessons on the phone...yes…but I miss my lessons in the class. I like to write. First, my writing was ugly and now it is so much better." As a result of this feedback, writing was introduced to help strengthen the reading process (Grabe, 2003) but was not made part of the research questions as it was not pre-taught and so the results would be unreliable. It raised interesting findings, as not all learners participated in writing activities, highlighting again the importance of pre-teaching all activities to be used with MALL for NLLs. It would have been a useful literacy element to have included from the onset, as learners generally use writing to help the learning process. This is an area that requires further research for NLLs and MALL.



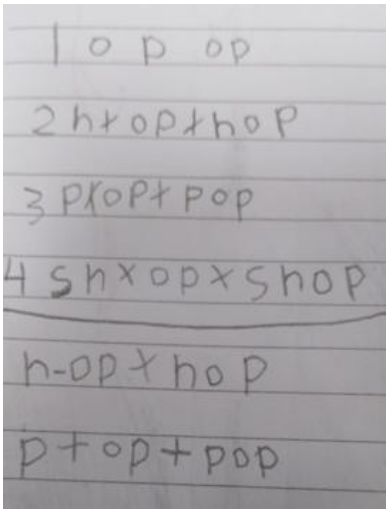


Figure 7: Samples of learners' written work

5.4.3. Phonics videos

During the preliminary MALL learning, it was evident that Youtube was the easiest platform for the students to access literacy videos. It was used exclusively as the source for phonics videos due to its ease of access compared to navigating extra text on websites and other platforms. Despite some researchers viewing YouTube as a rich and useful source of materials in language teaching (Britisch, 2009; Warschauer and Grimes, 2007), which helps improve students' language skills (Pong, 2010; Warschauer and Grimes, 2007), it was difficult to find suitable phonics literacy videos that would appeal to adult NLLs and so the videos were limited.

The video which received the most positive feedback from all participants was an adult phonology video that showed only the speaker's face saying the basic sounds of each letter carefully, with no other speech surrounding the lesson. This highlighted the learners' desire for phonics and also the importance of differentiating from children's materials by the removal of excess print, speech, or white noise, which can cause obstruction to the knowledge.

5.4.4. Literacy website

Learners did not receive benefit from literacy websites (see 5.6.4. below)

5.4.5. Taking pictures

Although the preliminary practice confirmed findings from Lalji and Good (2008) that the learners could identify the camera options successfully, access the picture gallery, and take

pictures, they were unable to complete the task of taking photographs of literacy items (see 5.6.5. below).

5.5. Difficulties with using MALL and ways to overcome

5.5.1. Difficulties using the smartphone

MALL was taught in Unit 4 (see Appendix 8) and it became clear before the end of the unit that there was insufficient time to learn all the affordances required for their MALL. Downloading and accessing literacy apps was inadequately taught due to a lack of time and so omitted from the study. Time spent on navigating links to websites was also inadequate. General affordances that literate learners would take for granted required continuous help to learn and time to practice (Knoche and Huang, 2012). Prior to MALL, the learners experienced the following difficulties accessing affordance with their devices:

Difficulties using the Smartphone
• Click X to remove unwanted items or advertisements. • Clicked X to go back to the proceeding page or the menu. • Click the arrow to proceed forward to the next item or page. • Tap and drag items. • Expand the page using thumb and forefinger. • Click 'Skip Add' to remove unwanted advertising on YouTube videos. • Difficulty with unwanted text on websites. • Difficulty logging into websites.

Figure 8: Difficulties with using Smartphone for MALL.

Contrary to Knoche and Huang's (2012) findings that non-literate mobile phone users had a high reliance on voice messaging, the converse was true for these participants prior to the research. During MALL classroom practice, all learners except one required explicit teaching on using the voice messaging function. This was a crucial ability for the learners to master to enable them to engage with MALL on the Whatsapp group.

5.5.2. Overcoming difficulties with smartphones

Researchers have differed as to whether the user-interface in technologies should be changed and made easier for NLLs users to overcome difficulties of excess text. Medhi, Prasad and Toyama confirm 'with some confidence, that voice annotation and semi-abstract drawings are ideal for non-literate users of computing devices' (2007: 878). Chipchase argues against making specific phones for non-literate adults, such as designing a text-free user interface, 'to avoid the potential social stigma associated with textual illiteracy, the phone should not be noticeably different to other products on the market' (2008: 88) as user-interfaces are often visible to others (Knoche and Huang, 2012).

This present study agrees with the latter position. The learners were able to access affordance on their mobile phones as they are currently designed but required explicit teaching and time to practice what they did not know. During the memorisation stage, they repeated the procedures as many times as required with assistance, confirming research from Knoche and Huang that 'continuous help was necessary for smartphone owners to download apps, games, music, ringtones, install customizations (2012: 3).

The students were able to successfully, and sometimes quickly, learn new skills that were used regularly thereafter. Skills not used regularly, such as accessing websites, took longer

to learn and were easily forgotten, highlighting the importance of the procedural aspect of learning based on concrete situations (Ardila et al.,1999). It also highlighted that NLLs have a slower rate of learning and require a longer time to practice unfamiliar tasks (Bell, 1995; Kurvers, 2007; Bigelow and Schwarz, 2010). This has significant implications for ESOL curriculum design, on the length and intensity of the courses, teaching approaches and strategies utilised by practitioners.

5.5.3. Difficulty in obtaining research results and ways to overcome this

i) Quantitative data

Obtaining quantitative data was difficult in some areas of the research method. Students did not give graded feedback to tasks using the Likert scale on the Whatsapp group, although it was instructed and simplified for them. Upon critical reflection, this was most probably a result of insufficient explanation and practice during classroom teaching. It further confirmed the importance of thorough preliminary teaching and practicing methods of self-report, before the start of the research, to enable all participants are familiar with the techniques.

Only two students consistently rated tasks with symbols (emojis) such as thumbs-up or thumbs-down. All other students were sporadic with rating selected tasks, making empirical data difficult to collect and unreliable as it did not reflect the whole cohort, and so this method was omitted from the research. This again was most probably a failure in thoroughly teaching these techniques during preliminary studies, or it could be a result of 'social desirability bias', whereby participants did not want to give responses that reflect

their true feelings (Dörnyei, 2010), therefore qualitative interviews were crucial in understanding learner's thoughts.

ii) Interviews

Questions were originally worded as 'agree/disagree statements (see Appendix 10). Through the process of asking questions on the Whatsapp group and eliciting feedback for tasks, it became clear that all feedback questions had to be clear and simple, without any abstract language (Sherwani et al., 2008) and familiar with methods used in the classroom. Despite concerns on testing procedures influencing teaching and syllabuses (Shohamy, 2001), for NLLs it was important that all assessment methods were pre-taught in the classroom. Therefore, the interview questions were changed to simple direct question forms and prompt, which were familiar from classroom practice, and abstract language was avoided (Ardilla et al.,1999), (see Appendix 11).

5.6. Difficulties teaching literacy strategies using MALL and ways to overcome them

5.6.1. Difficulties with instructions

During the first week it became clear that despite what I thought were basic instructions for simple tasks, there were too many Initial instructions in each individual task. The initial instructions were:

1. Give a verbal response to the task by reading the letters and copying the audio provided.
2. Post pictures from their environment of any letters given in the task.

3. Rate each task after its completion.

Learners were unable to respond until this was simplified. The instructions for each task were separated and given one at a time, after each preceding instruction was completed. These findings correlated with research from Sherwani et al. (2009), Lalji and Good (2008), and Prasad et al. (2008) that NLLs users need clear and brief instructions, whilst any instructions consisting of multiple steps should be avoided. When multiple steps were given the students performed either the first or the last instructions, corresponding with research from Friscira, Knoche and Huang (2012), or none.

Giving instructions beyond the experience and ability of the learners can have a negative effect on the perception of their own ability, affecting their confidence and learning. NNLs invariably blame their own lack of knowledge and understanding when unable to complete a task. Student B.H. remarked that "I never went to school" a few times in her interview when talking about her lack of ability to read and complete tasks. This continues the negative perceptual cycle of their own incompetence instead of looking at external factors such as non-compatible materials and instructions. Regrettably, it is common for teachers working with NLLs to continue this cycle.

Argyris's (1991) learning model from the field of business is apt in this situation whereby I reflect critically on my own behaviour and identify ways I have inadvertently contributed to problems, making me part of the learning process with the students (Allwright and Hanks, 2009). According to Argyris, most professionals 'have never learned how to learn from failure' and thus, any problems they encounter in their practice become associated with others. Rather they should be reflective on their own part in the process in what he calls 'double-loop' learning and not 'avoid learning' (1991: 1).

5.6.2. Worksheets and audios

During course feedback and the interviews, many students identified the quantity of work presented on the worksheets as a factor in not being able to respond to some and recommended that the work should be presented a small amount at a time. Student MA said, “one by one, one by one,” “if you can be doing it little by little” (see Appendix 12).

Despite teaching non-literate learners for a few years and understanding the research on the slower rates of acquisition, I fell into the mistake of increasing the complexity of the worksheets in an aim to push progression (see Appendix 13). Five of the learners mentioned that these worksheets were too difficult for them to complete and they had to elicit help from their family members. When asked why the tasks weren’t completed through the voice messages on the Whatsapp group, student FB said,

“This thing is little bit hard, up for me, that’s why I don’t do it. The last time I ask my daughter to be telling me and I’m saying it...it’s not...you know...have to know it myself that is.” Student ND said,“ I’m trying to do it Miss. It was too much...too hard...all together” and at another time “some are easy and some are difficult.”

This mistake was a result of treating NLLs parallel to the age and skills category of native children who had already been exposed to literacy and oral English. It was also a result of preparing worksheets based on theoretical advice from researchers such as Pettitt and Tyrone (2015), who outlined how the production of work does not reflect the student’s growing knowledge of English, whilst neglecting feedback from the learners. This can have serious repercussions on the learner’s interpretation of their ability to learn as their self-perception becomes negative (van Lier, 2004; Gibson, 1986), leading to the silencing of their

voice (Kum, 2018), all too common in ESOL classrooms. After learner feedback, the worksheets were adjusted (see Appendix 14) and a positive reaction was given by the learners on the group through symbols and an increased rate of responses.

5.6.3. Videos

Access to videos was given a positive response and whilst YouTube is a rich and useful source of materials in language teaching (Britisch, 2009; Warschauer and Grimes, 2007), helping improve students' language skills (Pong, 2010; Warschauer and Grimes, 2007), it was difficult to find suitable phonics literacy videos that would appeal to non-literate adults and so limited children's videos were used. There is a need to fill the gap in this area.

5.6.4. Literacy websites

Despite searching for websites that could give potential affordance without distractions from unnecessary words, sounds, or symbols, there were no websites that did not have barriers preventing learners from direct access to the lessons they required. Studies from van de Craats and Young-Scholten (2016) show the effectiveness of using Computer Assisted Language Learning (CALL) in the classroom for NLLS with regards to systematic phonics instructions, allowing learners to study at their own pace whilst receiving individualised digital feedback. These findings were difficult to transfer to MALL as outside intervention is required to help students navigate barriers, such as logging into a website, finding relevant sections and excess text. To access literacy websites such as DigLin (van de Craats and Young-Scholten, 2016), requires time-on-task in classroom practice (Nation, 2001) to fully memorise functions which are new and rarely used. Due to this, literacy websites were not

used with MALL and to understand the extent literacy websites can benefit NLLs through MALL requires further research.

5.6.5. Photographs and Noticing hypothesis

Recognising literacy affordance in the environment to take pictures was not sufficiently taught in the classroom. This study was built on a premise that as well as literacy interventions from the teacher, the students would make use of the rich literacy potential in their environment to help extend learning ecologically outside the classroom (van Lier, 2004). Contrary to my expectation, they did not take pictures of literacy affordance in their environment and it did not serve as an effective literacy tool for them. Instructions were abandoned quite early in the research. It appeared that either their level of phonemic awareness was too low to understand the letters in their environment or they could not make the connection between the sounds in their lessons and the letters in the environment without an explicit demonstration.

MA explained: “Sometimes this picture I may not have it and it...I will do it but like the one you sent last time (example of literacy items to be found), I don’t have it at home that time, that’s why I don’t send it.” Another pertinent reason was given by AP in the interview, “I didn't know what you wanted” highlighting once again the importance of pre-teaching relevant instructions and tasks before MALL can be used outside the classroom.

FB said “I didn’t find the letters” and CL said, “I didn’t see them”, highlighting that perhaps they were unable to notice the letters in their environment without explicit indication to give them affordance. During classroom practice, Schmidt’s Noticing Hypothesis theory (1990) seemed to apply strongly to the students who were able to notice language items

when made salient (Robinson, Mackey, Gass and Schmidt, 2012). This underscores Gough and Hillinger's (1980) assertion that learning to read does not come naturally like acquired speech but rather it needs to be explicitly taught (N.C. Ellis, 2002; Ammar and Spada 2006; Kolinsky et al., 2018; Ehri, 2014). Similar to native children in the early stage of reading development who need explicit teaching to become meta linguistically aware (Ehri, 2014; Castles et al., 2018), NLLs also need explicit teaching of metacognitive strategies to develop metalinguistic awareness for reading development (N.C. Ellis, 2002; Bigelow and Schwarz, 2010).

The lack of progress in this task also confirms Vygotsky's (1980) theory of Zone of Proximal Development and the need for assistance at certain stages for successful learning. This highlights Swain's (2000) Comprehensible-Output Hypothesis and Long's Interaction Hypothesis that it is through social negotiation when learners pay attention to language for it to be effective (see Mackey and Philp, 1998). Despite Darhower (2008) claim that learners are more aware of affordances when they are actively engaged, this research found that despite their active engagement in many tasks, the students were not able to obtain linguistic affordance from the environment around them without assistance.

6. Conclusion

6.1. Summary

This study investigated to what extent learners illiterate in L1 perceived benefit in being taught literacy strategies using MALL. There were two main objectives for this study. First, it looked at which types of literacy strategies were most suitable for non-literate learners. Secondly, it explored how these strategies were best taught through MALL, examining the benefits and difficulties for both learners and the teacher and exploring how these difficulties could be overcome.

Several key findings emerged during this research which met these objectives. Firstly, in light of class shortages, time constraints, and class closures, there was a pressing need for an effective blended learning program for NLLs to extend formal classrooms online. Whilst some researchers advocated using CALL in blended learning for ESL, this continues to confine education to a bounded space for NLLs, who have difficulty accessing it independently outside the formal classroom. Any move towards blended e-learning or full e-learning outside the classroom through CALL renders NLLs without access to learning.

In contrast, this study found that NLLs were able to utilise basic smartphone affordances and extend their learning beyond the formal classroom using MALL. Whatsapp was chosen as the platform for posting the worksheets, accompanying audios, and links to videos and websites due to the ease with which the learners were able to access information without distraction.

This study outlined the ability of NLLs to learn new skills in their education provided they had the correct affordance. All learners were able to be autonomous in the time and pace of

their learning, confirming results from Kolinsky et al. (2018) that there seemed to be no sensitive period in beginning to learn literacy up to middle adulthood. Although the duration of the study was too short to ascertain long term reading development, it supports the view that there seemed to be no neural plasticity impediment to prevent adult NLLs from learning, despite having no formal schooling or L1 literacy.

A second key outcome of this study was identifying which type of literacy strategies should be used for MALL in the absence of clear national guidelines for ESOL literacy in England. A review of the available literature outlining L2 language acquisition highlighted that L2 learners acquired reading in a similar trajectory as native L1 children, with notable differences related to age, worldly experience and exposure to the target language.

Analysing the reading development of native children and the limited literature on L2 literacy acquisition for NLLs, which identified phonemic awareness as playing a crucial role in their reading development, this study developed a systematic phonics approach by integrating synthetic phonics into an analytical framework, focusing on larger sound units, syllables and onset-rime analogies. The needs analysis of the learners affirmed that their understanding of reading acquisition was based on the alphabetic principle and so the literacy strategies matched their expectations and understanding of how they should learn. Furthermore, their feedback and engagement were higher with onset-rime strategies.

An unexpected finding in the study was the extent to which NLL were agentive in acting as key practitioners in the research process and instrumental in critically evaluating their learning experience and refining the worksheets to their satisfaction. Not only were learners able to give oral responses to set lessons but were able to use voice message as a tool to communicate with the teacher at their own time and pace. Through task feedback and

responses, the learners were able to critique the worksheets if they were too difficult and offer suggestions to improve them. Through this process of cyclic feedback, it was apparent that the learners favoured phonics to a whole word approach on MALL.

They gave a similar response to phonics videos and were positive with regards to accessing them through Whatsapp. Whilst supplementing the worksheets with phonics videos gave favourable results, this was severely limited as there were few literacy videos suitable for adult NLLs. The majority were for children with excess speech around the construct to be learned and most NLLs do not have the same exposure to the target language as native children to understand the excess speech.

Contrary to expectations, ecologically extending the learning into the linguistic environment outside the classroom, by taking pictures of selected linguistic items, proved to be difficult for learners. None were able to notice the items independently until they were made salient for them and this appeared to confirm the noticing hypothesis for NLLs. It could also be the result of a lack of classroom training on this task during the preliminary practice. Further research needed to be conducted to ascertain the reason for this lack of task completion.

This study highlighted the danger of advancing the lessons quickly in levels of difficulty before the learners have understood the previous tasks. For NLLs who have no formal schooling and prior understanding of assessment methods, the progress is notably slow and often outwardly unnoticeable. Teachers require patience in acquiring feedback from the learners' self-report, as well as careful observations before advancing the lessons in difficulty.

This study outlined that all forms of teaching instructions and research questions need to be understood prior to the start of research, so that the learners were able to concentrate on the literacy learning and not the learning of new constructs. It was necessary that instructions were given separately and not combined, allowing learners to complete each task before proceeding to the next instruction. A lack of awareness of some instructions in the research process led to difficulty in collecting empirical data from the NLLS participants.

There were drawbacks to using a platform such as Whatsapp and not an online classroom that learners could attend. Spoken interactions were limited to voice messages, highlighting that MALL would be useful as part of a blended literacy curriculum to supplement a communicative classroom approach and not as a tool itself to learn English comprehensively. This research highlighted the lack of suitable online classrooms for real-time interaction for NLLs and outlined that such teaching platforms required seamless navigation without obstructions and excess text on the screen. With NLLs residing in literate societies requiring access to health, employment and education, this study underlined the importance of developing suitable online platforms.

6.2. Recommendations

There were many recommendations that came to light during the research and teaching of MALL to NLLs. Firstly, In light of government cuts in ESOL, limited class times and fears of class closures, the urgent need for an effective blended and online program for NLLs becomes more imperative to ensure they are not left without an education. It is essential to explore and implement technologies which are easily accessible to them, and this study

strongly recommends that course designers and practitioners look to MALL for NLLs and introduce it early in the ESOL curriculum. Not only do they have access to smartphones, are familiar with their affordances, and are able to learn new affordances quickly, but it also opens up a personal learning space that helps build autonomy and extend education beyond the formal classroom. NLLs are a unique group of learners who require their own learning environment and curriculum to study at a duration and intensity best suited to them (see NATECLA , 2014 and Kurvers (2007).

Secondly, there should be systematic phonics literacy strategies implemented for NLLS, both in the classroom and through MALL. These should be contextualised and concrete, integrating basic phonemic awareness and rime analogies with familiar whole-words, similar to pre-school children but adapted and made suitable for adults. These strategies should also be part of an effective training program for practitioners and course designers and the learners' silence should be removed from both course design and research methodologies. NLLs should not be faced with a form of education incompatible with their expectations and understanding of how they should learn. They are adults with a vast array of knowledge and experiences and it should not be assumed that we know what is best for them. Rather, their language education, and especially literacy needs, should be based on established SLA theories and grounded research.

6.3. Further research

There are many unanswered questions with regards to the use of MALL for NLLs and literacy acquisition. This study is small in scale and limited in duration and it requires longitudinal studies to explore the effectiveness of literacy acquisition using MALL for NLLs in more

detail. Furthermore, different areas of MALL need to be explored to understand which ones are most the effective for them, such as integrating speaking and writing into a literacy program. There is also a pressing need to develop suitable interactive online classrooms, literacy apps and literacy websites.

In addition, there needs to be in-depth research into how NLLs acquire literacy and how a systematic literacy program can best be implemented, taking into account that NLLs start gaining knowledge with vastly more worldly experience than pre-literate children, and those from literate societies already have a perception of English literacy based on learning the alphabetic principle. Their perceptions, opinions and viewpoints have long been neglected and for all pedagogies to be effective and theories to be viable in the field of SLA they must take into account all types of learners.

(word count 16,498)

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Ziegler, J. C., & Goswami, U. (2006). Becoming literate in different languages: similar problems, different solutions. Developmental science, 9(5), 429-436.

Appendices

Appendix 1

A brief comparison of the **The Government's Integrated Communities Strategy Green Paper** (2018) for England (p16) with strategy papers from Scotland and Wales, uncovering a disturbing pattern of '*othering*' and *'white normalisation',* conceptualised within the paradigm of integration.

Key Words	Scotland	Wales	Green Paper 2018 (for England)
White	0	0	25
Non-White	0	0	4
Extremism	0	1	12
Pakistani	0	0	14
Bangladeshi	0	0	11
White British	0	0	15
British Pakistani	0	0	1
British Bangladeshi	0	0	0
British Muslim	0	0	1
Comparison of ethnic communities with white communities	0	0	18
English and English language	15	1	130

In the column for England, the word 'white' is referenced with regards to the colour of a people 25 times and the word 'British' is referenced as 'white British' 15 times. In comparison, the long term Bangladeshi and Pakistani communities are mentioned 11 and 14 times respectively, but not referenced as 'British' except by the one phrase 'Pakistani British' (p56). Extremism is mentioned 12 times.

MHCLG., (2018). *Government's* Integrated Communities Strategy Green Paper.

Scottish Government., (2018). New Scots Refugee Integration Strategy *2018-2022.* [Online]: [accessed July 2020] https://www.gov.scot/publications/new-scots-refugee-integration-strategy-2018-2022/

Wales: *Prosperity for All: the national strategy Annual Report* 2018. Online]: [accessed July 2020] https://gov.wales/docs/strategies/181002-prosperity-for-all-annual-report-en.pdf

Appendix 2. **A1 / A2 / B1 (CEFR)** Common European Framework of Reference for Languages: learning, teaching, assessment

Common Reference Levels*: self-assessment grid*

		A1	A2	B1
UNDERSTANDING	**Listening**	I can recognise familiar words and very basic phrases concerning myself, my family and immediate concrete surroundings when people speak slowly and clearly.	I can understand phrases and the highest frequency vocabulary related to areas of most immediate personal relevance (e.g. very basic personal and family information, shopping, local area, employment). I can catch the main point in short, clear, simple messages and announcements.	I can understand the main points of clear standard speech on familiar matters regularly encountered in work, school, leisure, etc. I can understand the main point of many radio or TV programmes on current affairs or topics of personal or professional interest when the delivery is relatively slow and clear.
	Reading	I can understand familiar names, words and very simple sentences, for example on notices and posters or in catalogues.	I can read very short, simple texts. I can find specific, predictable information in simple everyday material such as advertisements, prospectuses, menus and timetables and I can understand short simple personal letters.	I can understand texts that consist mainly of high frequency everyday or job-related language. I can understand the description of events, feelings and wishes in personal letters.
SPEAKING	**Spoken Interaction**	I can interact in a simple way provided the other person is prepared to repeat or rephrase things at a slower rate of speech and help me formulate what I'm trying to say. I can ask and answer simple questions in areas of immediate need or on very familiar topics.	I can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities. I can handle very short social exchanges, even though I can't usually understand enough to keep the conversation going myself.	I can deal with most situations likely to arise whilst travelling in an area where the language is spoken. I can enter unprepared into conversation on topics that are familiar, of personal interest or pertinent to everyday life (e.g. family, hobbies, work, travel and current events).
	Spoken Production	I can use simple phrases and sentences to describe where I live and people I know.	I can use a series of phrases and sentences to describe in simple terms my family and other people, living conditions, my educational background and my present or most recent job.	I can connect phrases in a simple way in order to describe experiences and events, my dreams, hopes and ambitions. I can briefly give reasons and explanations for opinions and plans. I can narrate a story or relate the plot of a book or film and describe my reactions.
WRITING	**Writing**	I can write a short, simple postcard, for example sending holiday greetings. I can fill in forms with personal details, for example entering my name, nationality and address on a hotel registration form.	I can write short, simple notes and messages relating to matters in areas of immediate need. I can write a very simple personal letter, for example thanking someone for something.	I can write simple connected text on topics which are familiar or of personal interest. I can write personal letters describing experiences and impressions.

Appendix 3 **Contextual Description of Students**

Class: Pre-Entry	Pre-Entry		
Number of students	12	**Male/female ratio**	11-1
Age ranges	26-61		
Duration and frequency of full course	Two hours per week for 40 weeks.		
Proficiency level	All illiterate / mixed profiles in speaking English		

LEARNER	Country of Origin	Age	Gender	First language	Number of languages	Length of stay in the UK	Formal L1 Education	Proficiency in English speaking (CEFR)	Proficiency in English reading (CEFR)
1. AP	Pakistan	32	F	Punjabi	2	1 year	Limited	Below A1	Below A1
2. FB	Ethiopia	31	F	Amhari	6	4 years	None	B1	Below A1
3. MA	Ethiopia	31	F	Oromo	3	3 years	None	B1	Below A1
4. NT	Afghanistan	43	F	Pushtu	2	2 years	None	Below A1	Below A1
5. IA	Somalia	28	M	Somali	4	1 years	Limited	A1	Below A1
6. CL	Nigeria	28	F	Yoruba	3	5 years	None	A1	Below A1
7. IA	Pakistan	33	F	Punjabi	2	1 year	Limited	Below A1	Below A1
8. ND	Pakistan	61	F	Urdu	2	40 years	None	B1	Below A1
9. NB	Afghanistan	26	F	Farsi	2	1 year	Limited	Below A1	Below A1
10. HK	Pakistan	32	F	Urdu	3	2 years	Limited	A1	Below A1
11. CK	Nigeria	28	F	Yoruba	3	2 years	None	Below A1	Below A1
12. SS	Bhutan	60	F	Nepali	2	5 year	None	A2	Below A1

Summary	
Students' needs	All learners are below CEFR A1 and need to learn literacy skills to read and write. 3 learners can hold a sustained conversation in English for a length of time. 9 need to improve communication skills in all areas of listening and speaking.
Motivation	All are highly motivated, though not confident in their abilities to succeed. All are studying to improve literacy, some to communicate with school staff and neighbours, many to open opportunities for career and independence such as driving and interacting with a wider group of people. All want to remove the stigma of illiteracy.
Health	1 student has trauma-induced insomnia 2 students have suffered depression 6 students are on medication
Other factors	1 student has no time for homework due to extended family responsibilities

Appendix 4.

Shehnaz Rafiq
Masters in TESOL and Applied Linguistics
Department of Arts and Humanities
Manchester Metropolitan University

Perceptions of Phonics Literacy Interventions in Mobile-Assisted Language Learning

Participation Information Form *

**(to be used with appropriate interpreter)*

1. Invitation to research

My name is ***Shehnaz Rafiq*** and I am a student of MA TESOL and Applied Linguistics at Manchester Metropolitan University (MMU). I am conducting research in learners' perceptions of literacy interventions in the *Mobile-Assisted Language Learning* in the ESOL classroom. This is with regards learning to read in a second language whilst being illiterate in the first language.

2. Why have I been invited?

I am looking for adult learners who are illiterate in both their first language and English and as you fulfil this requirement I would like to invite you to help with this research.

3. Do I have to take part?

It is up to you to decide. We will describe the study and go through the information sheet, which we will give to you. We will then ask you to sign a consent form to show you agreed to take part. You are free to withdraw at any time, without giving a reason.

This will not affect your studies in the classroom.

4. What will I be asked to do?

The research will last for 4 months, from March, 2020 to August, 2020**.** During classroom teaching, you will be asked for feedback on selected interventions. Data will be collected through forms and teacher's written notes.

You will be asked for your feedback regarding mobile-assisted literacy interventions given outside the classroom. This will be explained to you in detail in the classroom. Data will be collected through a written record by the teacher and through the mobile phone.

Any pictures /images taken by the students will be stored in a separate folder on the teacher's phone, which has security protection, and also uploaded to a secure internet location.

5. Are there any risks if I participate?
There are no risks involved in the research except divulging any personal mobile numbers of other students in the class who are participating in the research. All participants need to agree not to divulge mobile numbers of other participants on the Whatsapp group.

6. Are there any advantages if I participate?
Research on feedback from nonliterate students is extremely limited and does not inform syllabus and course designs for beginners and illiterate students. It is hoped through your participation that better course design and teacher training can be implemented for illiterate students.

7. What will happen with the data I provide?
When you agree to participate in this research, we will collect from you personally-identifiable information such as name, telephone numbers and age. These will be protected.

The Manchester Metropolitan University ('the University') is the Data Controller in respect of this research and any personal data that you provide as a research participant. It is registered with the Information Commissioner's Office (ICO) and manages personal data in accordance with the General Data Protection Regulation (GDPR) and the University's Data Protection Policy.

Your right to access change or move your information is limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained.

If your data is shared this will be under the terms of a Research Collaboration Agreement which defines use, and agrees confidentiality and information security provisions. It is the University's policy to only publish anonymised data unless you have given your explicit written consent to be identified in the research. The University never sells personal data to third parties.

We will only retain your personal data for as long as is necessary to achieve the research purpose.

8. What will happen to the results of the research study?
The results of the research study will be written up as part of my dissertation project and presented to the University.

9. Who do I contact if I have concerns about this study or I wish to complain?
If you have any questions or concerns then you can contact myself, Shehnaz Rafiq (the teacher / researcher), or speak to any admin staff at _____. The admin staff can log all complaints and contact MMU if needed.

Or you can contact Faculty ethics directly if you have any concerns regarding the personal data collected from you. Our Data Protection Officer can be contacted using the legal@mmu.ac.uk e-mail address, by calling _____ or in writing to: Data Protection Officer, Legal Services, All Saints Building, Manchester Metropolitan University, Manchester, M15 6BH. You also have a right to lodge a complaint in respect of the processing of your personal data with the Information Commissioner's Office as the supervisory authority. Please see: https://ico.org.uk/global/contact-us/

Thank you for participating in this study.

Shehnaz Rafiq
Masters in TESOL and Applied Linguistics
Department of Arts and Humanities
Manchester Metropolitan University

Perceptions of Phonics Literacy Strategies in Mobile-Assisted Language Learning

Participation Consent Form *

**(to be used with appropriate interpreter)*

I agree to participate in the above research and give my consent freely.	☐
I understand that the research will be conducted as described in the information sheet, a copy of which I have retained.	☐
I understand that I can withdraw from the research at any time and I do not need to give a reason for withdrawing.	☐
I understand that my personal details will be maintained in confidence by the researchers.	☐
I have had the opportunity to have questions answered to my satisfaction.	☐

I consent to:

1. Complete the tests involved in the study.	☐
2. Give both written and oral feedback and complete any questionnaires to obtain research data	☐
3. Not give out mobile phone numbers of other participants to any third party.	☐

Participant			
Full name			
Signed		Date	

Researcher			
I have used an interpreter where needed and I have informed the above person about the research and I am sure they understand the consent of the information statement			
Full name			
Signed		Date	

Manchester Metropolitan University

Shehnaz Rafiq
Masters in TESOL and Applied Linguistics
Department of Arts and Humanities
Manchester Metropolitan University

Perceptions of Phonics Literacy Strategies in Mobile-Assisted Language Learning

Participation Consent Form *

**(to be used with appropriate interpreter)*

I agree to participate in the above research and give my consent freely. ☑

I understand that the research will be conducted as described in the information sheet, a copy of which I have retained. ☑

I understand that I can withdraw from the research at any time and I do not need to give a reason for withdrawing. ☑

I understand that my personal details will be maintained in confidence by the researchers. ☑

I have had the opportunity to have questions answered to my satisfaction. ☑

I consent to:

1. Complete the tests involved in the study. ☑
2. Give both written and oral feedback and complete any questionnaires to obtain research data ☑
3. Not give out mobile phone numbers of other participants to any third party. ☑

Participant

Full name	[redacted]
Signed	[redacted] 09. 03. 2020.

Researcher

I have used an interpreter where needed and I have informed the above person about the research and I am sure they understand the consent of the information statement

Full name			
Signed	[redacted]	Date	09. 03. 2020

Appendix 5. **Needs Analysis**

Class: Pre-Entry LLT	Date:
Number of Students	12

Motivation	**No.**
To talk to family and friends.	12
To talk to neighbours and English speaking people.	7
To learn to read.	12
So I can learn about Britain and its people.	2
To get paid work.	7
To learn to drive.	7
Because my husband / wife / parents want me to learn.	3
To prepare for further study	8
To help with shopping.	9
To get voluntary work.	2
To be more independent.	12
To watch English TV (with family)	10
To make living in the UK easier.	12
To help support children's education.	9
Visa requirements	3
For fun /personal enjoyment	5
To understand the News.	6
To make more friends	3

Top 7 in order of priority	
Motivation	**No.**
To talk to family and friends.	12
To learn to read.	12
To be more independent.	12
To make living in the UK easier.	12
To watch English TV (with family)	10
To help support children's education.	9
To talk to neighbours and English speaking people.	8

Summary of Results:
All the students wanted to learn to read for various reasons. All wanted to be more independent and make life easier in the UK. 9 students wanted to read to help support their children's education. Not mentioned here but raised by the students was the importance of learning to read medical and professional letters.

Appendix 6. **LITERACY DIAGNOSTIC**

Diagnostic Results			
Reading	**Yes**	**No**	**partially**
Recognise own name	7	3	2
Recognise letters of the alphabet	5	2	5
Recognise own address	5	2	5
Recognise basic letter sounds	0	7	5
Recognise some common whole words	0	9	3
Recognise numbers from 1 to 10	12	0	0
Writing	**Yes**	**No**	**partially**
Write letters of the alphabet independently	2	3	7
Write own name independently	8	0	4
Write numbers 1-10 independently	7	1	4
Write address independently	3	5	4
Write out some whole words independently	0	9	3
Can write left to right	12	0	0
Has good motor skills	5	4	3

Summary of Results:
Half the students could not recognise all the letters of the alphabet. Most students did not know letter sounds; few knew some of the letter sounds. All students were more confident with numbers than the alphabet. Most students could not write the alphabet independently. 4 students could only write their first name. Only 3 could write their address independently.

Appendix 7. **MALL DIAGNOSTIC**

Diagnostic Results	Before unit study		After unit study	
Can dial numbers	12	0	12	0
Can access the address book	12	0	12	0
Can take pictures	12	0	12	0
Can access picture gallery	12	0	12	0
Can use Whatsapp	5	7	12	0
Can leave voice messages on Whatsapp	1	11	12	0
Can upload pictures on Whatsapp	3	9	12	0
Know how to click on video links on Whatsapp	12	0	12	0
Can access emoticons and symbols on Whatsapp	4	8	12	0
Can click open website links on Whatsapp	0	12	12	0
Can use literacy apps	1	11	1	n/a

Summary of Results:

- Before the unit, all students knew how to access the call dial, address book through pictures, take pictures and access the photo gallery.
- Only 5 could use Whatsapp before the study and only 3 knew how to upload pictures and just 1 could use the voice option.
- After the MALL unit all students could access Whatsapp, upload pictures, open video and website links, use emoticons and symbols and send voice messages.
- There was no time to teach literacy apps.

Appendix 8 **Unit 4: MALL / Technology**

UNIT 4		**Technology in our lives**	
Skills	**Activities**	**Objectives:** *In these classes students will...*	**Materials**
Listening Integrated phonics	TPR, Task-based Conversation Vocabulary practice Phonics task	Listen to commands in a TPR activities regarding typing out a text message, taking pictures, download and open apps, access Whatsapp, access Youtube for learning, access gallery, take and upload pictures on Whatsapp, taking down phone numbers and saving them.	Mobile phones
Speaking	Discussion, Mini presentation, Voice recording and sending voice messages. Give commands, Request and ask for assistance.	Discuss the tasks performed (see above) and their usefulness. Relate back commands to each other. Describe the pictures they took. Learn how to request information. Learn how to use voice recorder	Whiteboard Mobile phones
Reading	Read text messages Read activity sheets, flashcards. Environmental tasks	Learn to read basic text messages, symbols (emojis, lol, etc.) Read letters and words in their environment and take pictures for class discussion	Whiteboard Mobile phones Worksheets, flashcards
Writing	Using mobile phones (computers if available) Activity sheets	Learn how to write out names and numbers in their phones. Learn how to write out basic messages. Complete worksheets	Whiteboard Mobile phone, worksheets,
Integrated Grammar	Integrated into fluency and controlled stage.	Ask questions and requesting information: How do I ___?', 'What does ___ mean?', 'Can you ___', 'I need ___' etc.	Whiteboard Mobile phones
Vocabulary	Vocabulary drills Spelling tests	Orally learn basic mobile phone vocabulary (eg. Screen, keyboard, home page, upper-case, lower-case, shift, delete, send, Whatsapp, apps, Youtube)	Whiteboard, flashcards, mobile phones, pictures
Critical Thinking Aim:	**Where are we?** Creating awareness of how to use technology to their advantage. **Seeing the bigger picture?** Technology – the good, the bad and the beautiful.		
Teacher's Aims	To help develop learner's agency and abilities by helping them to be confident in using technology in their lives. To perform continuous needs assessment through informal class discussions / group interviews/ feedback request. Complete a reflective evaluation after each lesson and activity.		

Appendix 9. Example of a **TPR** (Total Physical Response) lesson for MALL.

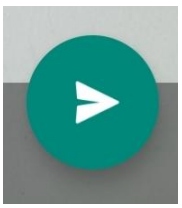
LET'S LEARN TOGETHER

Picture Lesson 1: Taking pictures on Whatsapp

Teacher's Instructions

1. Go to Whatsapp and **click** to open.
2. **Scroll** down and **find** the 'ABC English' group and **click** to open.

3. **Look** to where you write the messages and **find** the camera icon.

4. **Tap** the camera icon to **open** the camera.
5. **Point** your phone and **take** a picture.
6. **Press** the green arrow button  and **send** on the group.

LET'S LEARN TOGETHER

Picture Lesson 2: Uploading pictures on Whatsapp step

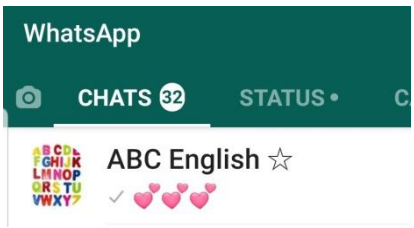
Teacher's Instructions

1. **Open** the **gallery.**
2. **Scroll** through and **find** your picture.
3. **Click** on the picture

4. **Find** the **share** button at the bottom and **click**.

5. **Find Whatsapp** in the list and **click.**

6. **Find** the ABC English group



7. **Press** the green arrow to **upload**.

Appendix 10

Semi-structured Interview questions (AGREE / DISAGREE)

Though the statements are structured they are intended to generate open answers and prompts and time should be given to allow students to expand on their answers and give reasons why.

Part A

1. Ask each questions for the following literacy strategies:

1. Phonics worksheets on the Whatsapp group
2. Phonics videos
3. Using phonic's websites

Here is the set of questions for the phonics worksheets on Whatsapp:

Would you agree or disagree with the following statements and please briefly explain your answers and give reasons why?

i. I enjoyed the worksheets on Whatsapp and I found them useful.
ii. The contents were what I wanted to learn.
iii. The lessons were easy through the mobile phone.
iv. The lessons were difficult on the Whatsapp group
v. How can we remove the difficulties and make the lessons better?

2. Ask the following questions about taking photographs for the literacy strategies

Would you agree or disagree with the following statements and please briefly explain your answers.

i. I enjoyed finding the letters and taking pictures of them.
ii. It was useful to take pictures of the letters from the worksheets.
iii. It was difficult to find pictures of the letters.
iv. I liked the pictures from other students and found them useful.
v. It was difficult to understand the pictures from other students.

Part B

Would you agree or disagree with the following statements and please briefly explain your answers.

1. Communicating through voice text messages

i. It was easy to send voice messages on the Whatsapp group.
ii. I liked using the voice note to do my homework.
iii. I had a problem with using the voice note on Whatsapp.
iv. I did not like using the voice note on Whatsapp.
v. I preferred to send private voice messages to the teacher.

Appendix 11

Amended Questions for Interviews

Part A: Literacy Strategies

Ask questions for the following literacy strategies:

1. Phonics worksheets on the Whatsapp group

a. Do you enjoy the worksheets on the Whatsapp group.
b. Are these worksheets useful?
c. Are these the types of lessons you want to learn?
d. How often do you like the lessons? Do you like them every day or a few times a week?
e. Are the lessons difficult or are they easy?
f. How can I make the lessons easier for you all?
(Show a worksheet with more advanced phonics given during week)
g. Tell me about this worksheet I sent on the group, is this too difficult?

2. Phonics videos

a. Do you like the phonics videos?
b. Are the videos useful?
c. Are they easy or difficult?
d. Are these the types of lessons you want to learn?

3. Phonics websites

Same as above

4. Taking literacy pictures

a. Did you like taking pictures of the homework?
b. Was pictures of the letters from the worksheets was useful?
c. Was it easy to find the letters from the worksheets, or difficult?
d. Were the pictures from other students useful or difficult to understand?

Part B: Voice messaging

a. Is it easy to send voice messages on the Whatsapp group or difficult?
b. Is it easy to use voice messages to do homework or difficult?
c. Did you have any problems with using the voice note on Whatsapp?
d. Do you like using the voice note on Whatsapp?
e. Do you like using the voice note on the group or did you prefer to send private voice messages to the teacher?

OVERALL SUMMARY: Have you been able to learn on the Whatsapp group? Has the group been useful overall?

Appendix 12 **Interview Transcript with Learner MA**

SR = Shehnaz Rafiq - Researcher
MA = Student

MA is an ESOL student who has lived in the UK for 3 years. She is originally from Ethiopia. Her first language is Oromo and she can communicate fairly well in spoken English, so no interpreter was required for this interview.

The interviews were conducted through voice notes and the learner replied in her own time during the day. This interview took two days to complete. Despite what seems like a lengthier process, the voice notes were short and easy to post and they gave the learner time to think on the answers and make her reply.
Questions about the websites were omitted due to abandoned strategy and questions about the photographs were shorted, due to limited activity on the group.

SR	(Greeted student and explained some of the process of asking questions and requesting if the student would mind answering a few questions about the lesson).
MA	I don't mind if you have some any questions. I love it, I love...and I don't really mind it...I really like it, you know. If you have any questions, you can ask me sister
SR	Thank you so much, I really appreciate it. Okay, so the first question: Do you enjoy the worksheets on the Whatsapp group?
MA	Sister, oh yeah, Shehnaz. I *liked* it so much and I like it simple so that I will be able to understand it...I want it simple. It's good, I don't mind how you give it to us but *light* and *simple* please. Thank you so much for your understanding.
SR	(reassurances that lessons will be kept simple) So the lesson I sent this morning are these the types of lessons you want to learn?
MA	....message, I love it, there's hap, map, nap, cap, there's a lot of questions there i really love it. It's good for me. The one you sent me this morning it's a little bit harder but at the same time I'm trying to learn it because if I learn it more, more, more, everyday and ...I'll be able to catch up from there that is it. Thank you so much for your concern, Thank you so much, I love you... Thank you so much. So I like it, it will be okay for me every day, because tomorrow I am going to start my work but I am still happy about this. I am trying to look for another job because I need this teaching...because I really need it, so that I can be able to get a good job. This cleaning is too much for me (explains the amount of cleaning she does morning and afternoon at work). It is a little bit hard for me, that is why I am looking for something… if I can read, I

	can be able to write a little bit..I'll be able to get, maybe a carer or something that can help me... sister, I really love you, love you, cus you are someone who really cares for us all, thanks thanks....
SR	(Replied showing my appreciation and affection) How often do you like the lessons sis? Do you like them every day or a few times a week?
MA	You promised me, do I like everyday learn? Then I said yes, It's okay by me. I don't mind if I am working, if this is not going to affect you, I don't mind. Once I come back from home or early in the morning, if I have the opportunity, or any time. I will make sure that I will do it please, if you don't mind, send it to me. But if this thing is going to affect you, leave it please. Thank you.
SR	Are the lessons difficult or are they easy?
MA	It's easy for me, even though it's hard I just have to do it because I am learning. Yes, it's easy for me.
SR	How can I make the lessons easier for you all?
MA	Yes, please. I like it one by line, please. That would be easy for me to learn and it would be easy for me to answer the question and send it back to you. Thank you so much.
SR	(showed a worksheet with more advanced phonics given during week) So sis, tell me about this worksheet I sent on the group, was this too difficult?
MA	This is a little bit difficult for me...like the 'chicken'* that you sent to me, I don't have it, that's why I don't do it. And if you post it and it is too much or something like that, then it's not easy for me to quickly know. I know when i do it like this...doing it one by one..teach us properly...then we would be doing it one by one, one by one, so that we can get it properly...you know that opportunity is not there. That is why...that is why if you can be doing it little by little, just not quickly...just go like that and we go through (unclear)...that is why it is a little bit hard, nothing else. Don't be offended sister (unclear)...how to teach us properly. [*'chicken' refers to the worsheets with /ch/ sounds]
SR	(Reassurance I am not offended and I want her honest opinions).

	So sis, tell me about taking photographs of the letters you learnt on Whatsapp. Was this difficult?
MA	...Number 1, I like mix up but sometimes just picture I may not have it and if I have it, anyone you sent, if I have it, I will do it but like the one you sent last time I don't have it at home that time, that's why I don't send it,
SR	Ok sis, a question about the voice messages, is it easy for you and do you have any problems using the voice message?
MA	Yes, I do it. I like it...doing it on voice note.
SR	Is it hard for you or is it easy for you?
MA	It is easy for me, even though it is hard for me, I just have to do it because I am learning. Yes I will do it...yes it is easy for me.
SR	Do you like doing the homework on the group or would you prefer to send them to me privately?
MA	I like the question on the group, yes I do, I like the question on the group. It's ok for me, not private, thanks you.
SR	Last question, do you think you have been able to learn on the Whatsapp group? Has the group been useful?
MA	The group has been useful for me, thank you.
SR	(asked for any elaboration)
MA	Useful for me in many ways. There's something I don't understand they explain it in the group then I know it. I listen to others and I know what is going on. The group is very good for me I'm enjoying the classes that is why I'm doing it.
SR	Thanked the student for her answers and time.

AUDIO LINK ... (removed)

Short O o sound ***given one part at a time.**

Part 1

1. ob	Bob	cob	dob	job	gob	lob	mob	rob	sob
2. od	odd	cod	god	mod	nod	pod	rod	sod	Tod
3. og	bog	dog	fog	hog	jog	log	blog	frog	slog

Part 2

4. op	cop	hop	mop	pop	top	chop	drop	shop	stop
5. ot	cot	dot	got	hot	jot	lot	not	pot	rot
6. ock	block	clock	dock	frock	rock	sock	shock	stock	clock
7. oss	boss	cross	floss	gloss	loss	Moss	Ross	boss	floss

Part 3

Bob	odd	dog	cot	pod	mop
got	shop	nod	not	top	stop
cod	job	top	hot	pot	lot
fog	boss	sock	jog	pop	blog

Is it hot ?

Jog to the shop to buy some pop.

I've got a lot...yum yum yum.

It is hot, I've got to stop.

It's too hot to shop !

LET'S LEARN TOGETHER

Lesson: 'sh' sounds

1	fish		fish sh
2	sushi		sushi sh
3	sheesh kebab		sheesh sh kebab

1	Shabaz ♡ loves fish and sushi.	Shabaz loves fish and sushi.
2	Shazia ♡ loves sheesh kebab.	Shazia loves sheesh kebab.

Appendix 14 **Examples of some amended worksheets the learners found easier** ***gven one part at a time.***

I	N

LET'S LEARN TOGETHER

PART 1

1	i	n	in
2	b-in		bin
3	f-in		fin
4	m-in		min

PART 2

b - in	*bin*

it	*is*	*in*	*the*	*bin*

it is in	*the bin*

It is in the bin.

PART 3

1	i	n	in
2	p-in		pin
3	t-in		tin
4	w-in		win

PART 4

p - in	pin	t - in	tin

the	pin	is	in	the	tin

the pin	is in	the tin

The pin is in the tin.

LET'S LEARN TOGETHER

Part 1 **Short O sound**

1	o	p	op
2	h	op	hop
3	p	op	pop
4	sh	op	shop

Part 2

h.....op	hop
p.....op	pop

Hop to the shop.

Pop to the shop.

LET'S LEARN TOGETHER

Part 1 **Short O sound**

1	o	p	op
2	m	op	mop
3	t	op	top
4	sh	op	shop

Part 2

mop

shop

m.....op	mop	sh.....op	shop

the	mop	is	in	the	shop

The mop is in the shop.

LET'S LEARN TOGETHER

Part 1 'an' sound

1	a	n	an
2	c	an	can
3	f	an	fan
4	p	an	pan

Part 2

D.....an	Dan	J.....an	Jan

Dan	has	a	can

Jan	has	a	pan

Jan has a yam  in a pan.

PART 1) **Short ‘o’ sound** *‘ot’*

1	o	t	ot
2	g	ot	got
3	h	ot	hot
4	p	ot	pot

(PART 2)

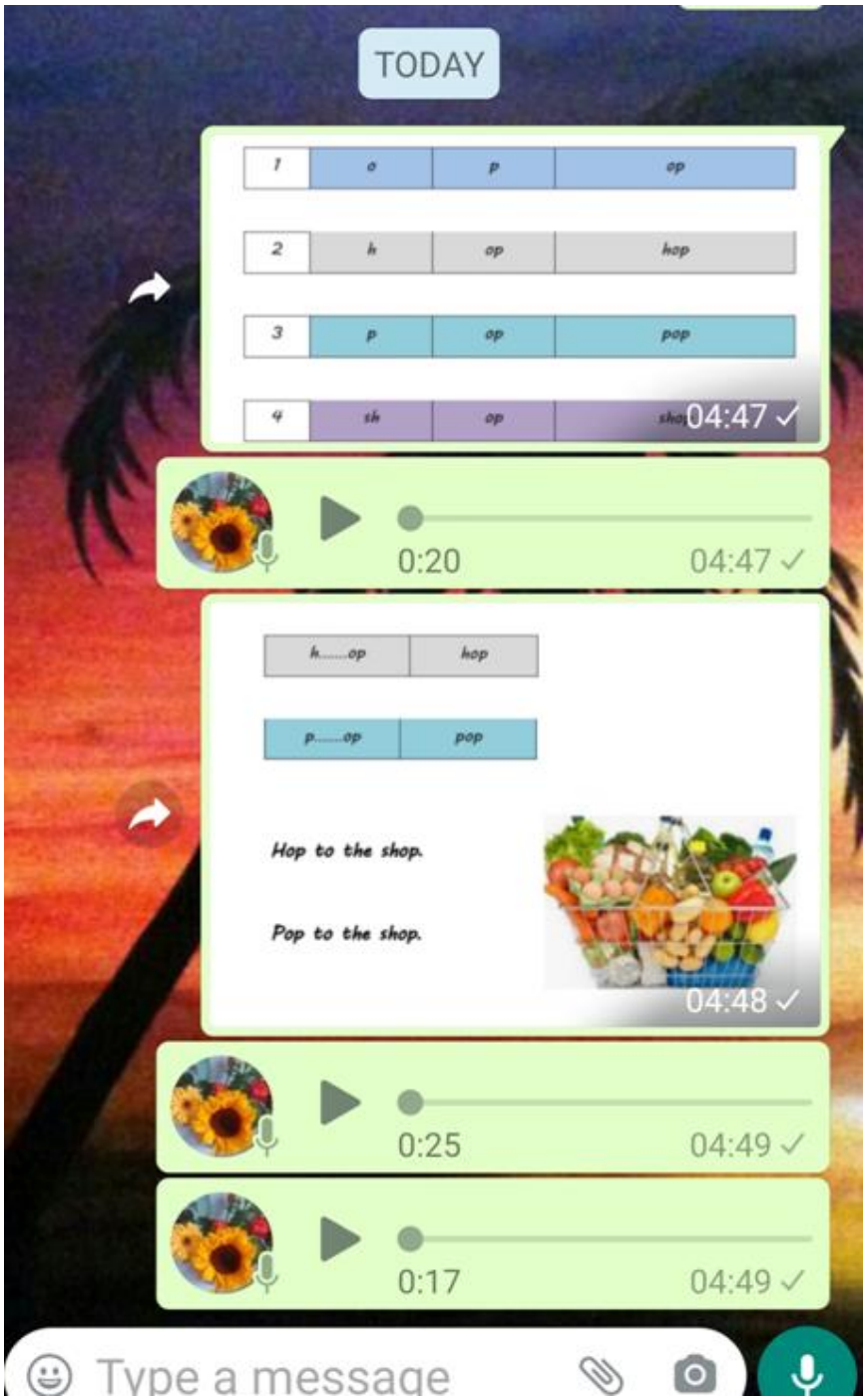
1	is		it
2	h	ot	hot
3	y	es	yes

is	it	hot	yes	it	is	hot

is it hot ?	Yes it is hot

Is it hot? Yes it is hot!

Appendix 14 **Example of an amended worksheet given on the Whatsapp group in smaller sections**



Appendix 15

04/06/2020

Project Title: Learner Perception of Literacy Interventions in Mobile-Assisted Language Learning

EthOS Reference Number: .....

Ethical Opinion

Dear Shehnaz Rafiq,

The above application was reviewed by MR ANTHONY PICOT and on the 04/06/2020, was given a favourable ethical opinion. The approval is in place until six months after the end date recorded in your application documentation (03/08/2020).

Approved Documents

Document Type	File Name	Date	Version
Project Protocol	Shehnaz Rafiq..... Protocol-Template-	10/03/2020	2.0
Letter to Gatekeeper	Letter to ---------- for consent	10/03/2020	1
Information Sheet	Participant-Information-Sheet	04/06/2020	1
Consent Form	Shehnaz Rafiq..... Participation consent form	04/06/2020	1

Conditions of favourable ethical opinion

The favourable ethical opinion is granted with the following conditions

Approval is in place for your UG/PGT project

This approval is only valid for Undergraduate (UG) and Post Graduate Taught (PGT) projects and does not grant approval for any Staff or PGR projects.

Adherence to Manchester Metropolitan University's Policies and procedures

This ethical approval is conditional on adherence to Manchester Metropolitan University's Policies, Procedures, guidance and Standard Operating procedures. These can be found on the Manchester Metropolitan University Research Ethics and Governance webpages.

Amendments

If you wish to make a change to this approved application, you will be required to submit an amendment. Please visit the Manchester Metropolitan University Research Ethics and Governance webpages or contact your Faculty research officer for advice around how to do this.

We wish you every success with your project.

Art and Humanities Research Ethics and Governance Committee.