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An early start to French literacy: learning the spoken and written word simultaneously in English primary schools
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by

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ABSTRACT

The Primary MFL curriculum (DfE, 2013: 1-3) calls for the development of reading and writing in a foreign language in primary schools. Specific attainment targets refer to "accurate reading aloud..for understanding" and the ability to "describe people, places, things and actions orally and in writing" (DfE, 2013: 2). Research, however, has shown both the teaching and learning of MFL literacy to be most problematic. Observation-derived evidence noted that writing was the "least developed skill" in primary MFL provision (Ofsted, 2011: 10, 25) and that written work tended to provide consolidation and support for oral learning (Cable, Driscoll, Mitchell, Sing, Cremin, Earl, Eyres, Holmes, Martin & Heins, 2010: 87). Meanwhile, empirical evidence holds that a lack achievement and motivation in school-based language learning is a reflection of limited progression in second language literacy and decoding (Erler, 2003; Macaro & Erler, 2008; 2011).

Despite these findings, research has yet to identify teaching and learning approaches which could shape pedagogical practice and deliver the "substantial progress" that the curriculum expects (DfE, 2013: 2). This action research study, conducted over 23 weeks, presents an empirically-derived, principled and systematic approach to teaching MFL literacy and oracy simultaneously. Qualitative and quantitative data, collected throughout the intervention and at pre-, post- and delayed post-test allowed for both detailed statistical analyses of learning outcomes and the exploration of the learning process.

The study finds that, in this beginner learner setting, MFL oracy is not disrupted by the simultaneous introduction of MFL literacy. It notes that both L1 reading age and verbal working memory proficiency are highly influential in L2 oracy and literacy learning but reports that learners across the L1 ability range can participate in L2 learning and make meaningful progress. It further suggests that the development of L2 sound/spelling links (through systematic phonics instruction) is slow and that familiar words are more likely to be successfully recoded. These findings together

with evidence of an ever-dominant L1, support an argument for an early start to MFL literacy.

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DECLARATION OF AUTHORSHIP

I, Alison Porter

declare that the thesis entitled

An early start to French literacy: learning the spoken and written word simultaneously in English primary schools

and the work presented in the thesis are both my own, and have been generated by me as the result of my own original research. I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this University;
- where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- where I have consulted the published work of others, this is always clearly attributed;
- where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
- I have acknowledged all main sources of help;
- where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
- none of this work has been published before submission.

Signed: ……..

Date:……

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Definitions and abbreviations

DfE	Department for Education (from May 2010)
DCSF	Department for Children, Schools and Families (2007-2010)
DfES	Department for Education & Skills (pre 2007)
Decoding	Mapping correspondences between letters and sounds; conscious and deliberate or automatic; using symbols to interpret a unit that bears meaning (Beck & Juel, 1995)
GPC	Grapheme/phoneme link – letters to sounds
KS1	Key Stage 1 – Years R-2 – Ages 5-7
KS2	Key Stage 2 – Years 3-6 – Ages 7-11
L1	First Language
L2	Second Language
L3/L4 etc.	Third/fourth Languages etc.
L1RAge	L1 Reading Age (measured through New Group Reading Test)
L2RA	L2 Reading Aloud
L2RC	L2 Reading Comprehension
L2EI	L2 Elicited Imitation
L2RV	L2 Receptive Vocabulary
Literacy	Reading and Writing
MFL	Modern Foreign Languages
National Curriculum	Published curriculum currently mandatory for all local authority controlled stated schools (but not private and free schools or academies)
OFSTED	Office for Standards in Education
OFQUAL	Office of Qualifications and Examinations Regulation
Onset	Intra-syllabic unit of a spoken syllable: the sound pattern before a vowel (e.g. SWing - /sw/ = onset) (Wyse & Goswami, 2013: 382)
Oracy	Speaking and Listening

PGC	Phoneme/grapheme link – sounds to letter
Phoneme	Individual sounds in spoken words
Phonemic Awareness	Conscious awareness that words are made up of sounds that can be isolated and manipulated (Scharer & Zutell, 2013: 468)
Phonological Awareness	Conscious awareness of aspects of spoken language: words, syllables, onsets, rimes, phonemes (Scharer & Zutell, 2013: 468)
Recoding	Mapping of print to sound and vice versa (Wyse & Goswami, 2013: 385)
Rime	Intra-syllabic unit of a spoken syllable: the sound pattern after a vowel (e.g. swING – /ɪŋ/ = rime) (Wyse & Goswami, 2013: 382)
Verbal Working Memory	Temporary storage and rehearsal (including manipulation) of phonology (through verbal or written input) (Miller & Kupfermann, 2009: 13-14; Swanson, Saez & Gerber, 2006: 247-8
Working Memory	Limited capacity system for storing and processing information simultaneously in real time (Hummel & French, 2010: 372)

1. MFL Teaching and Learning in English Schools

The fundamental aim of this study concerns the design, implementation and exploration of a novel MFL teaching and learning approach which incorporates systematic and principled MFL literacy instruction. This study was inspired by both empirical and observation-based research conducted over the last decade which raised significant issues relating to MFL literacy achievement and instruction and how these impacted upon the future of MFL in English schools generally. However, the current status-quo with respect to MFL and the teaching and learning of MFL literacy, extends way beyond this period. The interaction of social and political events with a historical range of language learning approaches has resulted in contemporary policy and curricula (certainly within England) which adopts hybrid pedagogical principles resulting in methodological inconsistencies and conflicting aims in current second language teaching practice. This chapter will first define and explore this historical context alongside the emergent problematic nature of English MFL literacy pedagogy and practice. Next, it will present MFL literacy research conducted over the last decade in order to contextualise and examine the core research problem. The final section will then describe the rationale which supports the current study which will aim to respond to some of the prevailing MFL literacy teaching and learning concerns.

1.1 A Brief History of English MFL Teaching and Learning

In order to better understand MFL literacy pedagogy in English schools, it will first be necessary to examine social and political developments over the last century which have shaped the evolution in language teaching. It can be argued that the problematic nature of English language learning originates from two key themes: an "educational" perspective concerning changes in the nature of schooling primarily within England and an "instrumental" slant which relates to the wider philosophical and motivational

implications of foreign language learning in Anglophone countries when English is often perceived as a global lingua franca (Hawkins, 2005: 4).

Despite calls throughout history which appear to support an instrumental approach to FL learning in the England, the idea of "languages for all in an English-dominant context" remains problematic (Mitchell, 2002). Political events, for example, the 1973 entry into the Common Market (EEC) and the creation of a Single European Market in 1993 have, at times, increased awareness of a need for school-leavers with foreign language skills. Indeed, Reeves (1996: 35) suggests that the inclusion of modern foreign languages in the National Curriculum (1998) was driven, in part, by beliefs about the potential benefits for the UK economy and, in 2000, the subsequent Nuffield Language Inquiry maintained this instrumental rationale for languages in English Education (Mitchell, 2002). Researchers, on the other hand, report that "FL instrumental motivation is relatively weak" in English L1 contexts (Mitchell, 2002) and suggest that this extends across the school system - "an instrumental rationale at age 11 or 7 is a false prospectus" (Hawkins, 2005: 6). Regardless of these kind of concerns voiced by the research community, it would be fair to say that an instrumental narrative for MFL learning continues to the present day. Rhetoric which promotes the idea of a "global race" is often linked to educational objectives generally and, more specifically, to a dearth of suitably linguistically qualified British students entering the workplace (e.g. The British Council Report – Languages for the Future: Which languages the UK needs most and why, Tinsley & Board, 2013). Nevertheless, proposals about MFL for Anglophones in an English-dominant, increasingly globalised world give even greater resonance to Hawkins' question "which languages?" and "to do what?" (Hawkins, 2005).

This problematic instrumental rationale for language learning has emerged alongside and interacted with a major educational shift which occurred in the 1960s, the effects of which continue until the present day. In 1965, a step change in the form of comprehensive re-organization (i.e. the end of selection by ability) was introduced which radically altered the nature of state education in England and had profound implications for MFL instruction. Historically, languages had been taught across the

ability range until 1904 when the abolition of curricular overlap between primary (elementary) schools and secondary schools resulted in the discontinuation of an inclusive approach to language learning (Whitehead, 1996: 179). For over sixty years, most schoolchildren had no access to MFL provision. The subsequent transition from languages for the elite to languages for all heralded both philosophical and instructional issues which have never been adequately addressed.

The introduction of comprehensive education, coupled with advances in technology (e.g. wider availability of tape recorders) and re-formed 'O' levels allowed for the spread of foreign language learning beyond the confines of strictly academic study and a re-examination of teaching methods. The focus for teaching and learning was now more on the spoken rather than written form and followed a situational method where the four skills were developed through the rehearsal of structures (e.g. c'est – *it is*) in sentences (Green, 1996; Whitehead, 1996). It is acknowledged that between 1965-1975 teachers of languages were facing a "twofold challenge". Firstly, teaching had shifted from "selected, able pupils" to *all* pupils often in mixed ability groups and also, the emphasis of teaching had shifted from the written to the oral (Moys, 1996: 84). These kind of teaching and learning issues were highlighted in an extensive study designed to evaluate the feasibility of introducing MFL into English primary schools (NFER Primary French Pilot Scheme, 1963). Noting that repetition and mimicry were unproblematic for most learners (Hawkins, 1999), audio-lingual/audio-visual approaches (termed "situational" in England) were often perceived as solutions for mixed ability settings. These, however, had been developed for adults (e.g. in private language schools and colleges with high instrumental value for language learning) and were, therefore, not necessarily suitable for different learning environments. Real change in provision remained elusive. Despite ground-breaking policy initiatives and methodological experimentation, foreign language learning beyond elementary levels was still an elitist affair being offered primarily to grammar school pupils and the "ablest third" of secondary modern students (Whitehead, 1996: 180). Beyond individual classrooms, the poor state of language learning in England was represented both through the publication of two prominent reports (Hawkins,

1981: 11). The Nuffield Foundation for Educational Research (NFER) presented findings in 1974 which, for the most part, painted an uninspiring picture for primary modern foreign languages; noting that there was no distinct advantage (with the exception of listening comprehension) for starting MFL instruction at 8 rather than 11 (Burstall, Jamieson, Cohen & Hargreaves,1974). Subsequently, an HMI (Her Majesty's Inspectorate) review of language teaching in 83 comprehensive schools (HMI, 1977) noted real concerns with extending language provision across the ability range (Moys, 1996: 85).

MFL instruction across the ability range and the problematic nature of an instrumental case for language learning in an Anglophone society presented a distinct opportunity for redesigning curricula. Some researchers, having maintained that the vocational case for "slower learners" was weak, advocated a departure from conventional approaches to MFL learning, preferring to begin language learning with a grounding in language awareness which could also be applied across languages including to the L1 (Hawkins, 1981: 46). Indeed, language awareness, the study of language in its own right, has been proposed, in different incarnations since the late 1950s when the Central Advisory Council for Education (England) recognised a gap in the curriculum caused by universities' reconsidering the importance of Latin as a requirement for entry (Hawkins, 1999). This view, broadly speaking, conceives of language education as "liberation….lighting fires of curiosity" alongside the opportunity to "awaken linguistic awareness" (Hawkins, 1981: 47). It also recognises the importance of achievement, language learning success and reward. Meanwhile, the unchanged, academic format of GCE 'O' levels and CSEs which both privileged a more academic approach to language learning through "written work and grammatical accuracy" (Page, 1996: 99) continued to drive a sizeable proportion of schoolchildren away from language learning as soon as it became optional (in the late 1970s over 70% of students ceased language learning at 14 - Moys, 1996: 84).

The role of state examinations in shaping MFL provision in schools is undeniable and led, in the 1980s, to considerable developments in designing curricula and assessments for mixed ability foreign language learning through the "Graded

Objectives Movement" where teachers and advisers "shaped localised, bespoke assessment structures and were involved in syllabus and course design" (Moys, 1996: 85). There were in total 3-4 levels of graded objectives which could be achieved over 5 years with the idea of "language for communication" underpinning teaching, learning and assessment and included clearly defined objectives for each level (Page, 1996: 100-101). However, this impetus was short-lived and its failure can, to some extent, be attributed to the launch of the National Curriculum in 1988 followed by the unified GCSE (also 1988) (Mitchell, 2002).

The influence of the GCSE and National Curriculum aims and objectives continue to reverberate across pedagogy and practice in England. Mitchell (2002) notes that whilst the National Curriculum embraces a wide range of rationales (she identified six in total) including: communication, instrumental, cultural, language awareness and learning skills, attainment targets focus purely on "instrumental practical communication" through a four skills model of: listening, speaking, reading and writing. Despite a wide range of curricular aims, it is assessment that tends to drive practice and this is especially noticeable in the later years of secondary MFL education where skills tend to be separated out, practised and tested individually in preparation for GCSE examinations. It has also been argued that the resulting focus on accuracy in performance has marginalised risk-taking, creativity and complexity and actually counters the second language learning process identified by research which shows that mistakes are an inevitable part of the learning process (Mitchell, 2002). It is also counter to the view developed in the 1980s in applied linguistics that the optimum teaching and learning environment will allow for the development of accuracy, fluency and complexity through a balance of guided practice and free language use (Brumfit, 1984).

Hawkins proposed that the future of foreign languages in the curriculum depends largely on the ability to create "conditions for success" across the ability range (1981: 247). This, he argued, would involve not only redesign of curricula to offer both language awareness followed by language-specific instruction but also a complete overhaul of the teaching methods, materials and assessment through which

this kind of instruction could be delivered and, furthermore, different objectives for pupils with differing interests and abilities (1981: 247). However, the launch of the National Curriculum in 1988 has been viewed as a missed opportunity to both "explore and re-define language learning rationales (especially in an Anglophone context)" and to identify feasible language learning levels of attainment (Mitchell, 2002). Premature setting of National Curriculum attainment levels have led to teaching which privileges memorisation and accurate production of a limited range of target language forms in order to best facilitate achievement (Mitchell, 2002). History has, more recently, repeated itself. Language learning curricula produced as a result of the National Curriculum Review (2013) promote an increasingly disparate range of rationales whilst their related learning objectives and core aims remain embedded in a four skills model. Whilst GCSEs are generally under review, it appears that MFL GCSEs will remain unchanged for the foreseeable future.

Having problematised MFL policy, curricula and assessment in an Anglophone context in general terms, the next section will examine how research conducted over the last decade has attempted to elucidate and define teaching and learning concerns with a view to improving MFL provision and sustaining the place of language in the National Curriculum. Empirical evidence relating to foreign languages in English schools is scant but nevertheless will help to underpin, inform and develop this study's attempt to devise a novel approach to teaching modern foreign languages in primary school classrooms.

1.2 MFL Research in English Schools

Modern language learning and teaching in English schools is clearly of on-going concern and there have been calls for research-based solutions and initiatives which might improve the "parlous state" of second language learning in English schools (Macaro & Mutton, 2009: 117). MFL literacy in particular appears to cause considerable problems for both learner and teacher. Even though education policy and curricula continue to promote literacy as an integral part of second language learning in both secondary (Key Stage 3 & 4 – hereinafter KS3 & KS4) and primary

schools (Key Stage 1 & 2 – hereinafter KS1 & KS2) (DfES, 2003; DfES, 2005), there is little research evidence about and limited guidance on effective MFL literacy practice in England. School-based second language learning research paints a far from positive picture, showing evidence of limited progression and achievement in second language literacy (Cable, Driscoll, Mitchell, Sing, Cremin, Earl, Eyres, Holmes, Martin & Heins, 2010; Erler, 2003; Erler, 2004; Macaro & Erler, 2008; Mutton & Bartley, 2006; Woore, 2007; Woore, 2009) and identifying dilemmas concerning both the content of primary modern foreign language instruction (Cable et al., 2010; Macaro & Mutton, 2009: 167) and the nature of current L2 literacy practices in both KS2 and KS3 classrooms (Ofsted, 2011: 24, 27).

It seems possible that some of the concerns regarding progression in MFL across all key stages derive from the way foreign language literacy is taught and learned which essentially has remained unchanged for the last fifty years. The Nuffield Foundation Pilot Scheme (1966) which aimed to establish good language learning habits before secondary school concluded that care should be taken with the introduction of L2 literacy as pupils with a lower level of achievement generally found the oral phase of language learning hard and therefore reading would be an "almost insuperable obstacle" to further progress (Burstall, 1970: 24; The Schools Council, 1966: 24; 48-9). Whilst an audio-lingual/audio-visual approach to learning which involved mimicry, repetition (listen, repeat, see and write) and speech-first was deemed useful in addressing the emerging challenge of providing MFL instruction across the ability range, historically speaking, this has often led to assumptions that MFL literacy pedagogy and practice is a support for oral development rather than worthy of development and investigation in its own right (Jones & Coffey, 2006: 46, 50). In this tradition, the introduction of reading and writing was often delayed in order to avoid "dire mispronunciations" and spelling errors (Hurrell, 1999: 80, 83). Following this method, the printed word was always already known orally and, as most European languages share an alphabetic orthography with occasional shared sound/spelling mappings (therefore facilitating a degree of access to the written word), FL literacy instruction remained relatively under-developed. This has been

exacerbated, to some extent by accuracy-driven assessment criteria for GCSEs which adopts a criterion-referenced model that tends to be delivered by targeting development of the four skills (listening, speaking, reading and writing) in isolation. As has already been stated, a lack of reflection, reinterpretation and revision of learning outcomes to reflect what is achievable in the time available has led to objectives relating to each skill being taught principally through memorisation of set pieces and formulaic utterances.

Second language literacy research in English schools has, to date, focused on secondary school-age participants and adopted two principal, yet to some extent contradictory, lines of investigation. Research focussing on strategy use appears to have evolved from a shift in MFL pedagogy that involved a transition from a focus on teaching to an emphasis on learning (Johnstone, 1994: 31) and is associated with MFL literacy instruction which has historically emphasised top-down processes (e.g. contextual cues; cognates) in order to compensate for L2 learner vocabulary deficiencies (Mitchell I, 2002). L2 literacy strategy research has thus attempted to explore the effectiveness of strategy-based solutions to L2 reading issues as a compensatory-type mechanism, in the same way that weaker L1 readers use top-down processing (e.g. the role attributed to contextual cues in Stanovich's 1980 Interactive-Compensatory Model). Macaro & Erler (2008) also suggest that appropriate strategic behaviour can result in comprehending texts above the competence level of the learner.

On the other hand, studies exploring the role for and effectiveness of bottom-up processes involving L2 phonics instruction have also emerged. Again views have been divided: Grabe & Stoller (2002: 43) claim that the benefits of L2 decoding are limited and that sounding out only leads to word recognition if the word is already known. However, other language learning research in English instructional settings has shown that learners can use decoding as a tool for word access (Erler, 2003). This increasing interest in L2 phonics could be related to policy and pedagogic changes in L1 literacy instruction (documented in more detail in Chapter 2). More specifically, phonics instruction (i.e. sound/spelling links) and sounding words out has been consistently

promoted in English schools as the primary means to L1 word recognition for several years. It therefore seems possible that learners in this setting will expect to use sub-lexical processes when encountering unfamiliar words in L2 text. In practice, however, whilst they will find that they can have a relative degree of success when applying such a strategy (e.g. many alphabetic languages will share sound/spelling correspondences) they may nevertheless experience difficulties when encountering L2-specific mappings. That is, whilst learners report "sounding out" as a strategy for working out unfamiliar L2 words, unless they have received specific L2 GPC instruction, this is unlikely to be particularly useful.

The predominantly quasi-experimental studies reviewed in the next section have examined both the role of systematic phonics instruction in supporting L2 literacy development and also the effects of strategy-based instructional approaches for L2 reading. Whilst both types of investigations are limited in number, they have produced interesting and complex findings.

1.2.1 Reading Strategy Instruction

Accelerated reading development and increased motivation through reading strategy instruction has been explored by a small group of researchers (Macaro and associates). Macaro & Erler (2008) found that a strategy instruction group of 14 year old students outperformed the comparison group on both word recognition (bottom-up processes) and ideas units (top-down processes) measures. They postulated that strategy instruction had resulted in the use of more independent approaches to reading rather than teacher-driven access to L2 text (2008: 110) and increased positivity with respect to L2 reading (2008: 111). Later research involving primary school age participants noted gains in reading comprehension for participants learning through inferencing strategies compared with graded readers, with improved performance on inferencing ability and learning of function words for the inferencing group (Macaro & Mutton, 2009: 165). Whilst this research has been extremely useful in providing insights into pedagogical approaches to L2 literacy development, the authors have noted issues concerning the measurement of L2 reading comprehension in younger learners. In

other words, using "ideas units" to indicate understanding proved both difficult to teach and difficult for the learner to recognise and, therefore, to articulate as a strategy of choice (Macaro & Mutton, 2009: 175).

1.2.2 Systematic Phonics Instruction

The importance of decoding in L2 reading has been supported by classroom research findings in England which suggested that fostering L2 sound/spelling links could affect vocabulary acquisition, reading comprehension and learner motivation (Macaro & Erler, 2008; 2011), that decoding is a reliable self-teaching mechanism (Woore 2009) and, therefore, that it is an important skill to secure in the early stages of language learning (Mutton & Bartley 2006: 58). Yet limited decoding ability in secondary school L2 literacy in England is well-documented (Erler, 2004; Erler, 2008; Macaro & Erler, 2011; Mutton & Bartley, 2006; Woore, 2007; 2009; 2010). Evidence which showed that current L2 teaching practice did not support the acquisition of L2 sound/spelling links and confirmed that decoding still remained a "neglected skill in the teaching of L2 French in English secondary school", led to a call for explicit and coherent decoding instruction (Erler, 2004; Woore, 2009). Studies involving younger, primary school aged children and second language learning confirm the problematic nature of teaching and learning L2 decoding. Cable et al. (2010: 115-124) noted limited development of phoneme/grapheme correspondence knowledge (sound to letter relationships hereinafter PGCs). Three years of observation and testing across different cohorts showed that only 18% of the groups tested showed good, independent knowledge of L2 sound/spelling links. Furthermore, particular difficulties were noted for those children learning French PGCs (which, like English, are complex and inconsistent). Most of the schools learning this particular second language were rated zero for sound/spelling links knowledge by Cable et al. (2010: 116-117).

The teaching of sound/spelling links also appears to be a complex affair. Research investigating grapheme/phoneme instruction (hereinafter GPC – spelling to sound relationships) using a strategy approach based on analogy through memorised poems led to a small but significant improvement (mean increase 0.22) in year 7

learners (n=28 Woore, 2007). Despite this gain, in Woore's study, the experimental group did not outperform the comparison group on a read-aloud test involving unknown words. In other words, particular, "known" GPCs might be highly context-dependent e.g. moins /mwɛ̃/ was produced as /mɔin/ in different contexts. Nevertheless sub-lexical processes appear to have a role; a more recent study showed that secondary school learners used both analogy-type strategies (likening a word's graphemic representation to an already known word) and segmentation techniques (breaking up a word, usually into syllables) when approaching L2 text (Woore, 2010). Following a larger-scale secondary school based teaching intervention (n=186) involving two types of GPC instruction (phonics and analogy) conducted over approximately 30 lessons in short instructional "blocks" of 10-15 minutes, Woore, 2011) noted that whilst explicit instruction of both types significantly improved performance in decoding tests, learner progression followed a "more complex trajectory than simply moving from incorrect to correct forms". In addition, both longitudinal and cross-sectional research in schools concludes that the learning of PGCs is a "slow business" (Cable et al., 2010: 117; Macaro & Erler, 2011) with limited progress noted across various cohorts aged between 7 and 14.

1.3 Teaching Approaches in English Schools

Behind much research in English schools, is the underlying awareness that contemporary pedagogical approaches to teaching MFL might need refinement (Erler, 2003; Woore, 2007, 2010). In other words, pedagogy has relied on a "tacit assumption" (Woore, 2007: 175-176), implied through the omission of decoding skills from language learning curricula and resources, that over time learners will develop the ability to decode second language orthography automatically and without the need for explicit and systematic instruction. As previously identified, it appears that such views reflect Behaviourist language learning theory (and an audio-lingual/audio-visual approach) which advocated mastery of phonological and grammatical structures through speech first in order to avoid errors and led to good language habits (Richards & Rodgers, 2001: 56). This, it was believed, would also deal with the problematic issue

of delivering MFL instruction across the ability range. However, the current evidence that MFL literacy progression is extremely limited could show that relegating L2 literacy instruction to a supporting role has had a negative effect on L2 learning overall. This study will attempt to explore the idea that L2 literacy can develop simultaneously with oracy (even in beginner learners) and therefore does not have to wait for a proficiency threshold to be reached or for good language habits to be acquired. This premise will also be supported by international developments in transfer theory and second language literacy (to be explored in Chapter 4).

Alongside concerns related to specific instructional techniques (i.e. decoding and strategy use), there has also been a call by researchers and inspectors in England for broader change "on the ground" following observation of classroom practice. Qualitative, observational data highlight a lack of "independence and exploration" in primary school L2 literacy activities (Cable et al., 2010: 88). This view is supported by recent inspection evidence, which recommends incorporating a more creative and imaginative approach to second language reading and writing in both primary and secondary schools while offering little practical guidance for teachers (Ofsted, 2011). Instead, isolated examples of "good practice" in L2 literacy teaching are identified and include at primary level: writing words and phrases (rather than single words) accurately, using a framework to write about a familiar topic, describing daily routines joining sentences with connectives and comprehending text by using good L1-based reading strategies (e.g. cognates). Meanwhile, in secondary schools, "good practice" as described by Ofsted involved observations of children using reading to develop intercultural understanding by comparing places in French/English towns and different types of holiday accommodation and using text as a model to prepare for examination questions. Ofsted recommendations include that reading should be extended beyond textbooks to more "authentic" materials e.g. comics. It was also suggested that reading for interest and pleasure could be promoted by encouraging cross-phase reading sessions (e.g. between older and younger students) (Ofsted, 2011: 9-10 & 43-45). Overall, these pragmatic suggestions may promote motivation and stress ambition in L2 reading (and writing), but they do not amount to an all-sided and principled

pedagogy for L2 literacy. This study asserts that limited development of imaginative and creative MFL literacy instruction is the product of an evaluative (i.e. assessment-led) system which promotes neither. The Primary National Curriculum (DfE, 2013) embraces a broad range of rationales for primary language learning yet promotes the development of four separate language skills and discrete learning objectives such as writing words and phrases from memory (in other words, explicitly cultivating an assessment-led, accuracy focused approach). The demands of GCSE in secondary schools prove equally restrictive and focus on accuracy at the expense of "risk-taking, creativity and complexity" (Mitchell, 2002). It should be noted that the call from research for creative teaching and learning opportunities is long-standing and extends from "independence and exploration" (Cable et al., 2010: 88), "reinstatement of creativity, imagination and risk-taking (Mitchell, 2002), back to "engaging in active use…for purposes that matter" (Hawkins, 1996) and "freedom of language use which allows for the development of accuracy, fluency and complexity in a supportive environment" (Brumfit, 1984). The current study will respond to these views through the implementation of a holistic approach to teaching MFL literacy and oracy which also combines explicit and systematic instruction with independent and autonomous opportunities for language use.

1.4 This Study's Rationale

This study adds to the small body of evidence concerning the development of L2 literacy in English schools and, in this way, will inform the debate regarding potential models of L2 literacy instruction and the development of L2 literacy in younger learners. Firstly, as the participants in this study are beginner learners, this project will attempt to simultaneously develop literacy (reading and writing) and oracy (speaking and listening). In other words, new language will be heard and spoken (sound) and seen and written (print) right from the start. In addition, the intervention will incorporate a principled and systematic attempt to teach MFL literacy through both explicit instruction and language use. Research has already identified that simultaneous teaching of speech and print is consistent with the "wide notion of

acquiring language in use" and has added that the written form could require systematic (rather than incidental) presentation (Clyne, Jenkins, Chen, Tsokalidou & Wallner, 1995: 13). More specifically, it can be argued that in the absence of written cues; learners will devise their own spelling system (or expectations) based on the L1, that the lack of written language may be demotivating (van Els, Bongaerts, Extra, van Os & Janssen-van Dieten, 1984: 256), that this may also affect memorisation (Rivers, 1964: 159; Hawkins, 1981: 83) and that frequent exposure to text could contribute "substantially to the efficient development of productive ability" (van Ek & Trim, 1991: 8). This study will also update the latter argument in line with memorisation theory which supports the idea that multimodal techniques in memorisation can lead to richer, deeper and therefore longer-lasting memory traces (Quinn Allen, 1995). From this viewpoint, the introduction of text acts as another memory-enhancing modality.

Furthermore, whilst previous research has mostly focused on examining L2 reading through the lens of word recognition using sub-lexical processes (decoding) or strategy use; this study plans to embrace a more holistic representation of learning to read (and write) in a second language. This is based in an understanding of L2 literacy teaching and learning as a complex, "multi-sensory experience", and following the view that literacy embodies "language use for expressing and sharing meaning", an equal role for oracy is acknowledged due to strong links between reading and oral skills (Cameron, 2001: 142, 145). In addition, L1 reading instruction research calls for "integrated" instruction (Adams, 1990) involving both top-down and bottom-up processing. Therefore, whilst an element of phonics instruction will form part of the teaching intervention, this will be accompanied by both language awareness raising and meaning based activities. This holistic approach will allow for the exploration of the *development* of L2 literacy in each learner, thereby offering an insight into the learning process instead of purely the effects of a particular instructional technique. It is envisaged that this will shed light on the difficulties and problems that early L2 learners face over time when learning to read in another language.

Chapters 2-4 will detail a theoretical framework which supports this study. Firstly, the theoretical debate relating to learning to read in alphabetic languages will

be explored in order to identify a core philosophy for L2 literacy instruction in this intervention. Next, educational policy with respect to L1 and L2 literacy in the United Kingdom (this study's L1), France (this study's L2) and Canada (English/French dual language - Ontario) will be explored and contrasted in order to examine how learning to read theories are put into practice and to identify similarities and differences across these contexts in the design and implementation of pedagogical principles. Following this, recent theoretical advances in the field of second language literacy including evolving ideas relating to transfer and cross-linguistic influence will be presented. It is anticipated that this will shed light on the skills and aptitudes that this study's learners, already literate in their L1, might bring to L2 literacy and also consider how L1 literacy might influence and interact with the development of L2 literacy. Finally, in Chapter 5 the design of the teaching intervention will be explored including pedagogical principles informed by both theoretical and empirical evidence.

2. Learning to Read

In this chapter, current theoretical approaches to learning to read (in alphabetic languages) will be explored in order to evaluate the nature of reading (in any alphabetic language) as a process. In addition, a range of empirical evidence will be presented in order to support the learning to read theoretical framework that this teaching intervention adopts.

2.1 An Overview

Whilst both sides recognise that the ultimate goal of reading is comprehension, a fierce debate, conducted over many decades, has centred around how reading is acquired (Stanovich & Stanovich, 1999). The core differences between competing philosophies appear to emanate from the view on the one hand that reading is a "natural" human process akin to speaking and, by extension, that word recognition which is central to comprehension, can be acquired "naturally" through exposure to a print-rich environment (Stanovich & Stanovich, 1999: 19). Opposing views posit that reading is an unnatural skill which requires explicit instruction (Stanovich & Stanovich, 1999: 21). In much of the 20th century these philosophies were framed by a debate concerning whether reading instruction should concern teaching "the code" (phonics-based) or whether the code is inferred through meaning-driven encounters with a variety of text (whole language). The following paragraphs will briefly explore both philosophies and show how, since the 1990's, the argument has tended towards a more central position which embraces aspects of both approaches and their associated instructional practices.

2.2 Whole Language

A "natural" view of learning to read holds that reading ability develops like spoken language and therefore that children are primed, from their experiences with speech, to make sense of engagement with text. This expectation means that readers actively "predict their way through text" by guessing forthcoming words based on both the

meaning of the text itself and their own bank of knowledge about the world (Goodman, 1982: 37). The approach prioritises "top-down processes".

These core arguments gave rise to the Psycholinguistic Guessing Game Model of Reading that privileges the use of syntactic and semantic cues to form hypotheses about text content, rather than orthography which plays a minimal role in this process. This secondary role for orthography arose from Goodman's view that reading processes were "selective" rather than "precise" and therefore the ability which distinguished less able readers from the more able was the capacity to make a selection of "the fewest, most productive cues" rather than precise letter identification skills (Goodman, 1982: 33-34). In this way, "deep structure" (or meaning) could be accessed with limited use of "surface structure" (sounds and letters) (Goodman, 1982: 56). The idea that meaning-making directly underpinned reading processes was supported by "miscue analysis" or the study of reader mistakes, which noted that readers were most likely to reflect on and correct miscues which interfered with meaning-making or grammar (Goodman, 1982: 35).

Goodman argued that, in order to inform decisions about forthcoming text, oral reading involved processing three kinds of graphic information: graphic input, syntactic information and semantic information (Goodman, 1982: 38). Such views resulted in a Three Cueing Systems Approach to reading (Adams, 1998) which held that "multiple cues" such as semantics, syntax and (minimally) grapho-phonic cues were used by both novice and expert readers in processing text. In addition, it was suggested that the use of semantic and syntactic cues might be enhanced through richer text which would then promote better predictions (Snow & Juel, 2005: 507) and that reading was made harder by isolating print from its functional use and teaching skills out of context (Stanovich, 2000: 364).

Clearly, these ideas have distinct implications for teachers and learners. The emphasis is placed on authentic children's literature with meaning driven encounters with text. A holistic view of language systems, which assumed the interdependence of phonology, grammar and lexicon supported the view that teaching should not "fractionate" or reduce words to their component parts (syllables and phonemes)

(Goodman, 1982: 29) and that "the code only operates in relationship to meaning" (Goodman, 1982: 59). Whilst this might appear an "imprecise" philosophy when considering models of literacy instruction, Stanovich & Stanovich (1999: 28) note that research evidence indeed shows that meaning-making (comprehension) does not depend entirely on word recognition abilities. In other words, it has been shown that adequate word recognition skills can still lead to poor comprehension and reading concerns more than merely recognising words (Grundin, 1994). Nevertheless, research also demonstrates that comprehension rarely occurs with poor word recognition skills (Stanovich and Stanovich 1999: 28) and therefore would appear to confirm that word recognition is an important factor in learning to read.

Translating Goodman's 'whole language' reading philosophy into an instructional programme can be problematic. Key concerns centre around the potential lack of systematicity in instructional techniques. In other words, learning letter/sound correspondences through meaningful but possibly ad-hoc encounters (e.g. exploring phoneme/grapheme correspondences within whole texts) could lack structure and systematicity (Snow & Juel, 2005: 508). In this way, childhood reading success might be more dependent on individual teacher capability (in providing the essential rich and varied print environment) than on adherence to a rigorous and planned instructional programme (Snow & Juel, 2005: 508, 519). This is accompanied by concerns that children not raised in print-rich home environments will be less likely to develop sophisticated sampling techniques due to less frequent exposure to text and, therefore, that explicit instruction in the "code" will be needed to boost literacy skills especially in these cases. The resurgence of instructional methods incorporating explicit phonics in the last twenty years, in both the United Kingdom and the United States of America, was partially the result of concern about these issues.

2.3 Phonics

Supporters of phonics-based approaches view reading as an "unnatural task" (Gough & Hillinger, 1980) and claim that learners will, therefore, require explicit instruction in word recognition techniques which are central to the reading acquisition process

(Stanovich & Stanovich, 1999: 28). Whilst the existence of multiple cues is not denied, one cue (the code) is seen as superior (Snow & Juel, 2005: 507). These approaches are often regarded as "bottom up"; in other words, that reading is print-driven and that meaning is obtained through precise word recognition achieved by applying knowledge of links between graphemes (letters) and phonemes (sounds). In response to early criticisms that evaluations of phonics instruction placed more emphasis on word recognition than meaning-making, Oakhill & Beard (1999: 28) note that much research into phonological sensitivity and decoding skills has focused on their effect on text reading or comprehension. Furthermore, Snow & Juel (2005: 507) support Perfetti, Landi & Oakhill's (2005) view that, through code, meaning will be accessed with or without the support of syntax, semantics and context.

There is plenty of empirical evidence to support the importance of teaching the alphabetic code. The training in awareness relating to the segmental structure of language and sensitivity to sub-word units (phonological processing) has been linked to faster rates of word recognition and spelling acquisition in pre-school children (Stanovich, 2000: 365; 367). Furthermore, instructional-comparison studies with school-age children noted the importance of "code emphasis" in early reading instruction which was deemed especially beneficial for weaker readers (Stanovich, 2000: 367). The claim that reading is a psycholinguistic guessing game is refuted by research which demonstrates that good readers identify words swiftly and efficiently (Vellutino & Fletcher, 2005) and research has also shown that using context for word identification is not particularly efficient. Beginner readers need to decode words initially, thereby accessing pre-stored phonological representations, though eventually, this strategy becomes less relevant as a lexical access is achieved by a more graphemically based route (Hoover & Gough, 1990). From a phonics perspective, the central goal of all reading instruction – comprehension – depends critically, then, on the ability to recognise letters, spelling patterns and whole words effortlessly, automatically and visually (Adams, 1990: 53-54; Oakhill & Beard, 1999:29). That is to say that alphabetic coding is the essential sub-process that results in fluent reading.

Whilst the empirical evidence relating to the importance of bottom-up processes in reading appears indisputable, the nature of phonics instruction requires careful consideration. Firstly, letter/sound pairs are "meaningless" and often difficult to perceive for learner readers. The teaching of individual letter/sound correspondences requires extensive practice and repetition and, in order to fully master the alphabetic principle, knowledge of hundreds of correspondences is required (Adams, 1990: 239). Furthermore, the awareness that words can be sub-divided into phonemes is thought to develop only gradually as reading is acquired. There are different phonics-based approaches to instruction which might impact differently on learning reading. For example, synthetic phonics holds that word reading is achieved through the blending of constituent parts (graphemes and phonemes) whilst analytic phonics instruction relies on presentation of the word which is then deconstructed (Wyse & Styles, 2007: 35). Johnston & Watson (2005) and Ofsted (2011a: 14) explain that synthetic phonics focusses on blending individual sounds "left to right" whilst analytic phonics instruction concentrates on presenting focus phonemes firstly in word initial position (i.e. mat, men, met) then word-final (pat, wet, lot) and finally as middle letters (still, patter). Hall (2006) emphasises that analytic phonics involves "inferring sound-symbol relationships" through common spelling patterns (and therefore mapping print onto larger phonological units).

Due to relatively recent research-based interventions, synthetic phonics is rapidly gaining support. A large scale study conducted in Clackmannanshire, Scotland attempted to evaluate the effectiveness of synthetic phonics instruction. Results showed that, having received synthetic phonics instruction between Primary 2 and Primary 7, the synthetic phonics group were 3 years 6 months ahead of chronological age for word reading, 1 year 9 months ahead of chronological age for spelling ability and 3.5 months ahead for reading comprehension: this lesser gain was attributed by the authors to below average levels of vocabulary knowledge (Johnston & Watson, 2005). An earlier study had contrasted synthetic and analytic phonics over the course of a 16 week intervention in Primary 1. This study found that the synthetic phonics group were 7 months ahead of other groups (analytic phonics and analytic phonics

plus phonological awareness training) in word reading and 8 months ahead for spelling. However, Wyse & Styles (2007:37), who identified several methodological concerns with this study, conclude that while plenty of evidence supports systematic phonics instruction, there is no clear evidence that one "branch" of phonics instruction is significantly more effective than another. Hall (2006) concludes that as reading involves decoding of both small and larger phonological units (i.e. both phonemes and onset-rime) neither approach is superior.

2.4 The Integrated Approach

So far the weight of empirical research appears to support an analytic, bottom-up, phonics based approach to reading acquisition though, of course, it is important to note that phonics, as a systematic and structured mode of instruction, lends itself more easily to empirical investigation. Nevertheless, supporters of phonics find it impossible not to acknowledge the role of the "authentic literary event" (Stanovich, 2000: 364) in reading acquisition. Adams (1990: 3-5 & 53-54) argued that, rather than presenting ideas relating to "bottom-up" and "top-down" processing as philosophical opponents, both activities are, in fact, interdependent and as such, contribute to a notion of reading as a "complex system" rather than a "unitary skill". With this in mind, Adams called for adjustment and combination in reading instruction programmes, based on earlier research in the USA which had shown that those with the best achievement scores (Distar – Direct Instructional System for Teaching and Re-mediation) involved both explicit phonics instruction and story reading and interpretation. Adams cited Chall's conclusion that "an early opportunity to do meaningful connected reading in addition to learning how to decode is needed to integrate both abilities" (Adams, 1990: 45).

This emphasis on a "balanced" view of reading instruction was later changed to "integrated" in order to emphasise that instruction in the "code" and "meaning" should form part of an "overall, coherent approach" rather than the two strands being separated out and treated as discrete skills. Integrated reading instruction involved: the mechanics of reading (i.e. the alphabetic principle), comprehension, writing,

reading practice and motivation to read (Snow & Juel, 2005:511). Adams (1990: 275) also warned that teaching phonics alone (without connected reading) could "amount to useless mechanics" lacking both purpose and direction. She recommended that reading programmes should be "consistently and carefully designed" to support both phonics instruction and stories. Snow & Juel (2005: 513-517) also acknowledge there are other factors which influence reading outcomes, regardless of the instructional approach used. More specifically, they consider aspects relating to the learning environment (feedback, responding to individual differences and maintaining a warm and cooperative atmosphere) which are particularly influential in teaching and learning of all kinds.

2.5 Developing Sub-Lexical Skills

Learning to read words (word recognition) involves turning "listeners into readers" (Stuart, Masterson & Dixon, 1999: 100) and therefore, phonology (speech sounds) is implicated at some level (Hu & Catts, 1998). "Lower level verbal processing mechanisms" are essential to reading acquisition (Koda, 1992: 52-57) and form part of the "fluent and automatic processing systems for recognising, understanding and pronouncing printed words" which children are required to develop in order to access text meaning (Stuart, Masterson et al. 1999: 110). Phonological processing, which implicates phonological awareness, phonological recoding and verbal working memory, mediates the mapping of speech sounds to written symbols (McBride Chang and Ho 2005: 119).

Research suggests that phonological awareness is consistently related to the successful development of phonological processing and is also influential in learning sight vocabulary (Stuart, Masterson et al. 1999: 110). The term "phonological awareness" involves the ability to: divide words into syllables and phonemes; recognise rhymes and alliteration; use phonemes and syllables to form words and substitute/delete phonemes in words (Verhoeven, 2011). Two competing theoretical frameworks attempt to account for the development of phonological awareness (Anthony, Solari, Williams, Schoger, Zhang, Branum-Martin & Francis, 2009: 537)

which, it is believed, is either triggered through vocabulary growth (the Lexical Restructuring Model (Metsala & Whalley, 1998; Whalley, 1993) or through instructional techniques coupled with repeated exposure to a language's phonological characteristics (The Psycholinguistic Grain Size Theory: Ziegler & Goswami, 2005 – hereinafter PGST). The former posits that expanding lexical inventories necessitate the development of refined speech-based representations of words and that these increasingly segmental representations of words lead, in turn, to more sensitive phonological awareness. The latter suggests that phonological awareness is, partially, a by-product of literacy instruction which is supported by evidence that poor readers have limited phonological awareness but also that L1 vocabulary range accounted for only 2% of variance in L1 and L2 phonological awareness (Anthony, Solari et al. 2009: 537).

This kind of sensitivity to phonology is believed to comprise multiple skills which either involve awareness of linguistic complexity (e.g. syllables, onset-rime, phonemes) or cognitive operations performed on phonological information (e.g. segmentation, blending, deletion, substitution) (Antony, Lonigan, Driscoll, Phillips, Burgess & Cantor, 2002: 68, 87). The development of phonological sensitivity is similar across all languages; in most languages, young children generally identify the constituent sounds in spoken words first by segmentation at syllable level, then identify onset and rime (onset relates to the consonants at the beginning of each written syllable; rime represents the remaining sound in the syllable) and finally come to determine phonemes (Goswami 1999: 176-178). This developmental progression appears to be supported through instructional approaches which employ explicit linguistic and cognitive techniques to develop phonological awareness. These include the use with beginner learners, of a range of techniques which include: awareness of rhyme, the phonemic structure of speech, letters, sounding out and blending and listening to sounds then writing down what is heard (Stuart, Masterson & Dixon, 1999: 127).

Alongside facilitating the ability to segment speech sounds ready to relate to print, phonological awareness has other facilitative roles in reading. It is believed to

facilitate use of analogy (using known words to access pronunciation of unknown words) in word reading (Goswami 1999: 176) and is thought to be accessible between the full and consolidated alphabetic phases in word reading, to be explored in more detail in the next paragraph (Ehri 1999: 101). Analogy-based skills are deemed especially useful in an orthographically opaque language (e.g. English) where the pronunciation of vowels is often dependent on which consonants follow them (Goswami, 1999: 181. Nevertheless, the overarching importance of phonological awareness for reading in alphabetic languages lies in the ability of beginner readers to "tune in" to the phonological level of language so that they can recognise the sounds that letters symbolize in words (Ehri, 1999: 102). In this way, the successful beginner reader eventually acquires, supported by phonological awareness, good "graphonic" skills which allow for and support phonological recoding processes.

Linking sounds and letters (phonological recoding) involves conversion from oral to written codes and vice versa. Ehri (1999: 82-83) suggests that phonological recoding development involves the formation of different types of connections between sound and print. More specifically, Ehri has identified "phases" in learning the alphabetic code (the formation of links between sound and print) which starts with the partial alphabetic phase involving connections between a few letters/sounds (usually initial and final consonants). Learners next move to the full alphabetic stage which involves complete decoding (as well as some sight word recognition) and, therefore, full knowledge of the alphabetic code. The final "consolidated" alphabetic phase comprises the consolidation of letters into "multi-letter units" which become part of a "generalized knowledge of the spelling system" (Ehri 1999: 88-96) and comprises the "sight word" stage of reading. This, it should be clarified, concerns direct access to the word in memory via printed form rather than "indirectly through pronunciation" (Ehri, 1992: 108). Learning sight vocabulary is believed to allow for the inference of "more complex and conditional sub-lexical correspondences" and an enlarged rule system which facilitates the pronunciation of unfamiliar words which then form part of the sight vocabulary "database" (Stuart, Masterson et al. 1999: 121) and, of course,

contributes to the ability to read rapidly and fluently with understanding by accessing single words (including words out of context) in memory (Ehri, 1992: 117).

Clearly phonological recoding is fundamental in learning to read and yet, opinion remains divided with respect to the benefits of explicit phonics instruction. First and foremost, it is argued that, in an orthographically opaque language (e.g. English) where 26 single letters represent 44 phonemes and the consistency of one to one mappings is therefore compromised, the potential combinations are too numerous and too varied to be learned as the result of systematic instruction alone (Gough and Wren 1999: 74) Smith, 1971: 166; Venezky, 1970: 35-36). Indeed Hall (2006) posits that systematic instruction for each and every phoneme may not be necessary due to the ability of the human brain to detect patterns. Ehri's reconceptualization of sight word reading (examined above) where eventually skilled readers establish "systematic, multi-letter connections between spellings and pronunciation" that enable rapid word identification notes that, whilst few readers will infer the system alone without help, no particular instructional method (phonics or whole word) will suffice for the development of strong sight vocabularies (Ehri, 1992: 137-138). Additional concerns about explicit phonics (GPC) instruction centre around the "unconscious" nature of code rules contrasted with "conscious" teaching methodologies (Gough and Wren 1999: 74). In other words, explicit phonics instruction might allow for the learning of certain common sound and spelling links but few readers can articulate the precise conditions when CH is /k/, /ʃ/ or /tʃ/ for example. There is, furthermore, a concern that phonics instruction "instils" rather than "installs" the code which can only really be learned (or internalised) through reading, accompanied by phonemic awareness (Gough & Wren, 1999: 75). Indeed Gough & Wren go on to assert that it is essential to accompany phonemic awareness training (linking sounds with letters and segmenting words into individual phonemes) with frequency (through practice) in order to internalise the code.

Research (albeit mostly involving learning to read English as L1) has identified that, alongside instruction, both frequency and regularity might also influence the learning of sound/spelling links. Stuart, Masterson, Dixon & Quinlan (1999) suggested

that children are able to infer previously untaught digraphs for example learning that /i:/ = EA; EE) from text (i.e. without explicit instruction) when these GPCs appear frequently in text. However, using sub-lexical processes appeared to invoke regularity effects. In other words, those digraphs most consistently representing a particular phoneme e.g. EE=/i:/ were more successfully learned (by the able readers). It was further suggested that preferences for utilising whole word recognition strategies (over phonological recoding) meant that weaker readers were less affected by consistency.

The role of frequency and regularity in phonological recoding and the formation of sight vocabularies fits with the concept of a connection-forming process which links the written form of words, to pronunciation and meaning in memory (Ehri 1999: 82) and could be supported by a connectionist model for word recognition which involves the simultaneous interaction of orthographic, phonological and semantic units governed by weighted connections (Plaut, McClelland, Seidenberg & Patterson, 1996: 58-60). In such a model frequency and consistency contribute independently to word reading; whilst frequency "directly amplifies" weight changes which benefit a particular word, consistency increases the weighting for words containing the particular sound/spelling correspondence. In this way, it is suggested that weight changes for inconsistent words will directly hinder consistent PGC weightings (Plaut et al., 1996: 72). Instructionally speaking, Ehri (1999: 96) argues specifically for a frequency-based approach which acknowledges that reading and spelling practice is essential to detect common patterns incidentally alongside instruction explicitly promoting pattern detection. Others suggest that integrated reading and writing is the optimal means (other than direct instruction) of promoting phonemic awareness through allowing learners to induce and therefore "internalize" sound/letter correspondences (Gough & Wren, 1999: 75). Either way sub-lexical processes play a primordial role: the acquisition of sight vocabulary in older learners, when supported by developed phonological recoding is noted to be a much quicker affair, than in younger learners with little access to such processes (Stuart, Masterson & Dixon, 1999: 119-121).

To summarise, the debate surrounding learning to read in the first alphabetic language is still evolving. Empirically speaking, much evidence now favours an

integrated view of teaching reading which combines phonics instruction and meaning-based encounters with text. This is supported by recognition of the importance of "emergent literacy skills": phonological processing, print knowledge, and oral language (vocabulary and grammar) in reading acquisition (Antony et al., 2002: 66).. More specifically, this chapter has detailed the role for phonological processing in learning to read; the ability to segment speech sounds into sub-lexical units (phonological awareness) and to then relate those units to print (phonological recoding) is central. Furthermore, whilst there is clearly a role for instruction in both these types of phonological processing, research has also noted that frequency and regularity can affect their development. Philosophically speaking, this study will acknowledge a role for both explicit and systematic phonics instruction in the development of MFL literacy but, just as importantly and in line with an integrated approach to L1 reading acquisition, there will be consistent and equally systematic opportunities to have rich, meaning-based encounters with text through both reading and writing activities. This is grounded in the belief that the study's participants are already literate in one language and, therefore, may have both bottom-up (e.g. phonological awareness) and top-down (e.g. cognate use) skills which could be ready for mobilization in the task of L2 reading (to be explored in Chapter 4) but that there will also be "missing" skills (e.g. L2 specific PGC/GPC links) which will require instruction.

Of course, it is also important, when designing a novel teaching approach for MFL literacy, to consider existing L1 and MFL policy and curricula as this will develop an understanding firstly of how the study's participants have developed literacy in their first language and also identify and evaluate existing pedagogical requirements for MFL teaching and learning. Furthermore, the importance of identifying the extent to which empirical evidence has informed and shaped both L1 and L2 literacy learning policy and practice was deemed useful. Chapter 3 will present L1 and L2 literacy curricula across three separate contexts. These have been identified in order to represent literacy instruction where: English is the L1 (i.e. the literacy background of this study's participants - England), French is the L1 (to identify language-specific

instructional issues - France) and where both English and French have dual status yet the learners have an L1 English literacy background (e.g. Ontario, Canada).

3. Models of Literacy Instruction

3.1 Introduction

This study's central concern, as outlined in Chapter 1, is the problematic nature of L2 literacy instruction in English schools and the call from research to re-examine current practices and to evaluate their outcomes (Woore, 2011). This study's theoretical framework has already identified that an integrated approach (combining top-down and bottom-up processes) is important in L2 literacy instruction but that there may be existing literacy skills which are available for use and therefore do not require instruction. These findings will now be contrasted against current first and second language literacy policy and practice in different, yet relevant contexts. Firstly, this chapter will examine models of literacy instruction (L1 and L2) in the United Kingdom as this will give an overview of both the literacy "background" of the participants in this study and the expectations for second language literacy. Next, literacy policy in France will be considered as it is envisaged that this could shed light on specific issues concerning learning to read French. Finally literacy instruction policy and teaching advice in Canada (specifically Ontario) will be explored which, it is anticipated, will offer additional insight into the teaching of French and English literacy (in a dual language context) and with learners for whom French is an additional/second language.

3.2 Literacy Instruction in the United Kingdom

State education, compulsory until the age of 16, is currently divided into five distinct "stages" and delivered across three school phases: pre-school, primary school and secondary school. This teaching intervention concerns delivering French second language instruction to young learners in the upper primary school, i.e. in the last two year of Key Stage 2 and aged between 9 and 11, (see Table 3.1 highlighted in red).

School Phase:	Stage:	School Year:	Age:
Pre-School	Early Years Foundation Stage (EYFS)	(no name)	3-4
Primary School		Reception*	4-5
	Key Stage 1 (KS1)	Year 1	5-6
		Year 2	6-7
	Key Stage 2 (KS2)	Year 3	7-8
		Year 4	8-9
		Year 5	9-10
		Year 6	10-11
Secondary School	Key Stage 3 (KS3)	Year 7	11-12
		Year 8	12-13
		Year 9	13-14
	Key Stage 4 (KS4)	Year 10	14-15
		Year 11	15-16

Table 3.1: Overview of the English education system

3.2.1 First Language Literacy Instruction in England

The Rose Report (2009) which was the result of an independent review of the primary curriculum commissioned by the Department for Children, Schools & Families promoted the "simple view of reading" (previously developed by Gough & Tunmer, 1986). In other words, that skilled reading required two processes: word recognition and development of language comprehension. Furthermore, it set out a clear recommendation that phonics should be taught "first and fast", presumably as the route to developing word recognition early. Indeed, the subsequent "Getting them reading early" report (Ofsted, 2011a) which aimed to give guidance to Ofsted inspectors assessing early literacy provision in Early Years Foundation Stage (EYFS)

settings, appears to equate word recognition with decoding ability (Ofsted, 2011a: 9). It should, however, be recalled that there is a sizeable voice within the reading instruction community which, at least, ascribes limitations to phonics instruction and, at most, argues that word recognition can be achieved without systematic phonics instruction (see Chapter 2). Nevertheless, whilst official guidance notes that phonics is a "means to an end" (in other words only a part of the reading acquisition process), a clear commitment has been made, not only to systematic phonics instruction but to systematic, synthetic phonics instruction supported by "matched funding" to encourage the purchase of commercial phonics based reading instruction programmes for use in primary schools (Independent Review of the Primary Curriculum, 2009; Ofsted, 2011a). The Department for Education's website (2012) provides evidence to support their preference for synthetic phonics which includes Johnston & Watson's Clackmannanshire study (2005).

Decoding strategies are promoted in the EYFS revised Statutory Framework (DfE, 2012: 8-9) with the expectation that, by the end of Year R (age 5), children will be able to read and understand simple sentences and use phonic knowledge to decode regular words and read them aloud accurately. Whilst the framework acknowledges the importance of access to a wide range of reading materials to promote reading for interest/pleasure (DfE, 2012: 5), the clear phonics first stance has been given increasing prominence by the introduction in June 2012 of a countrywide Year 1 Phonics Screening Test for 6 year olds which will assess the decoding of 40 words (including nonwords). Interestingly, the Ofsted guidance for inspectors (2011a: 17-19) does address "popular" concerns with respect to phonics instruction programme but does so without reference to research evidence. In this text, claims are made that most of English is regular (orthographically speaking), that regional accents will minimally affect word reading as phonics "starts with sounds" and that phonemic awareness (rather than phonological awareness which, it is argued by researchers, develops alongside learning to read) is "a skill needed for spelling not reading" although no further explanation is offered. The Department for Education also states that skilled readers should be able to identify a word just from the combination of

letters and that context-related cues are used after this process to understand meaning (DfE, 2012: 4). It is further posited that confident reading of a range of texts can only come after confident decoding of every word, as comprehension depends on freeing up resources otherwise used for decoding.

To summarise then, reading instruction in England, whilst apparently embracing an integrated approach (in that it acknowledges a role for experience with text and reading enjoyment) places a heavy emphasis not just on phonics instruction but on synthetic phonics instruction. Recent literacy instruction policy rests on the understanding that phonics instruction is a pre-requisite for accessing text.

3.2.2 MFL Literacy Instruction in England

The Key Stage 2 Framework for Languages, published by the Department for Education and Skills in October 2005, sets out recommendations for second language instruction in primary schools. Whilst there is "technically speaking" an entitlement (but not an obligation) for all children in state-school education aged 7-11 to learn a modern foreign language (National Strategy for Languages: Languages for All, Languages for Life DfES, 2002), due to the ever-changing political landscape, the status of modern foreign languages in English state primary education is uncertain. In the absence of detailed official guidance relating to primary MFL policy and practice, most practitioners continue to refer to the KS2 Framework for Languages, even though this document is no longer in force. More recently, the current government which recommends an early start to language learning, has included modern foreign languages provision for KS2 in the revised primary curriculum published on 11 September 2013. This curriculum will be adopted in all maintained schools from September 2014. Curricula for secondary schools (Key Stage 3) language teaching and learning have also been redesigned (with the same launch date). However, students may still opt out of MFL at 14. Concerns relating to low uptake at Key Stage 4 (secondary school) have been partially addressed by the introduction of the Ebacc (English Baccalaureate) which requires schools to report pass rates for students across a wide range of subjects (English, Maths, two Science subjects, one Humanities subject

and a Modern Foreign Language). Most recent data appears to show positive effects for the 2013 Year 11 cohort with GCSE entries up by 19% (French), 12% (German) and 29% (Spanish) (Ofqual, 2013).

Primary school MFL has continued in existence during the recent period of uncertainty caused by protracted curriculum review, and the Key Stage 2 Framework for Languages remains "in-situ" in practice, if not officially. This core documentary guidance for primary MFL practice, despite an emphasis on facilitation and description rather than dictation and prescription, appears to promote a standards and attainment based approach which was reinforced by the introduction in 2010 of MFL assessment opportunities (Asset & CILT, 2010). Literacy is presented within the framework as a "core strand" of second language learning and a range of approaches to literacy instruction is promoted.

However, it is very difficult to detect a particular theoretical foundation to the initial literacy recommendations for the KS2 framework. For example, whilst there is encouragement to "make links" between phonemes and spellings and "pronounce accurately" commonly used letters and letter strings (DfES, 2005: 19), other learning objectives promote the idea of whole-word type strategies through the requirement to write some simple words from memory. Internal inconsistences are compounded by the inclusion of objectives relating to "phonemes" (phonics) and the use of rhymes (which implies phonological awareness) reminiscent of a phonics-orientated philosophy, whilst others require the ability to read only "familiar" words and text which seems to support a requirement for meaningful encounters with the written word, thereby reflecting a whole language approach. Certainly, the requirement to apply decoding, "sub-lexical" skills is contradicted by the including of familiarity as a condition of reading at word or sentence level. In terms of word recognition, "familiarity" could represent sight reading at the partial alphabetic phase (Ehri, 1999: 87). In this way, "phonetic cue reading" involves forming connections between a few letters in each word (in other words, limited active decoding), thereby accessing full pronunciation. This would signal a return to inferring links between speech and sound along with use of L1-based strategies (e.g. context). However, whilst this approach

might be a useful stepping-stone to literacy, there are limitations: connections are unsystematic, arbitrary and often, therefore, harder to remember and independent reading is only achievable with familiar words (Ehri, 1999: 90). In Ehri's view, the full alphabetic phase in sight reading is achieved when the learner masters differing orthographic representations of the same sound and the decoding of unfamiliar words (Ehri, 1999: 92-95), the latter is never addressed in the Key Stage 2 Framework. It appears, on reflection, that the inconsistences portrayed above in the recommendations for primary school MFL literacy are a reflection of the limited amount of research into second language learning in this context (previously highlighted in Chapter 1) and, until relatively recently, in instructional settings generally. In the absence of empirical data which explores and portrays the nature and the process of L2 literacy development, assumptions have been made (by necessity) and pedagogical principles effectively borrowed from other disciplines (e.g. L1 literacy – phonics; whole word recognition) without consideration of the possibility that developing literacy in a subsequent language may require modifying what is known about the L1 process to reflect knowledge and skills already acquired and those which require additional instruction. This study will aim, to some extent, to compensate for this lack of evidence by shedding light on the development of L2 literacy in younger, primary school learners.

3.3 Literacy Instruction in France

School Phase:	Stage:	School Year:	Age:
Maternelle	Cycle des apprentissages premiers Cycle 1	Petite Section	3-4
		Moyenne Section	4-5
	Cycle des apprentissages fondamentaux	Grande Section	5-6
École primaire	Cycle 2	Cours Préparatoire (CP)	6-7
		Cours Elémentaire (CE1)	7-8
	Cycle des approfondissements Cycle 3	Cours Elémentaire (CE2)	8-9
		Cours Moyen (CM1)	9-10
		Cours Moyen (CM2)	10-11

Table 3.2: Overview of the French primary education system

(NB: Equivalent year groups for this study are highlighted in red)

3.3.1 First Language Literacy Instruction in France

First language literacy policy and pedagogical advice in France will now be reviewed in order to explore how literacy is taught when French (this study's language of instruction) is the L1.

France explicitly embraces a phonics-led approach to teaching reading: « L'opposition entre globale et syllabique est dépassée » (*opposing arguments between whole word and sub-lexical are over* - Observatoire national de la Lecture, 2005: 10). Nevertheless, reading instruction policy in France places considerable weight on three broad themes which are believed to underpin reading acquisition: comprehension,

decoding skills and breadth of vocabulary. Training in decoding skills is sub-divided into: the alphabetic principle (the realisation that written marks are letters which relate to sounds) and later, the alphabetic code (the development of an awareness of the sounds within words at both phoneme and syllable level) starting with simple correspondences and leading to the more complex (Observatoire national de la Lecture, 2005:13). Primarily, a synthetic phonics approach seems to be recommended, as the inspection suggests that decoding should start at the minimum unit of the phoneme using blending techniques to combine phonemes into syllables. Yet frequent encounters with text are also recommended in order to automatise written word recognition (Observatoire national de la Lecture, 2005: 13). Bulletin Officiel no. 2 (Ministère de l'éducation nationale, 2006), however, carefully points out that automatised word recognition involves systematic practice at linking letters and sounds and ***is not*** the result of a "photographic" type style of memorisation of whole words which it states is characterised by an "Approche Globale" to literacy. Progression at the start of primary school includes moving from the decoding of words with regular correspondences (e.g. un lac – a lake) to more complex GPCs (ph; au), and finally to decoding unknown words and reading high frequency words (cycle des apprentissages fondamentaux – progressions pour le CP et le CE1 – bulletin officiel no. 3, 2008 – Ministère de l'éducation nationale).

Throughout cycle I, instruction in decoding skills is accompanied by progressive development of the knowledge and competencies which are said to support reading comprehension, for example: the syntactic organization of sentences, reformulating the main points of a text to demonstrate understanding and the development of an awareness of literary culture (Ministère de l'éducation nationale, Bulletin Officiel no 3. 2008). It is further posited that once this level of reading is reached, access to age-appropriate text will give purpose to reading thereby extending a child's cultural knowledge and increasing their desire to access meaning from print (Ministère de l'éducation nationale, Bulletin Officiel no. 2, 2006).

If decoding and its automatisation are at the heart of learning to read in France, once this has been achieved, it seems the emphasis moves to providing a rich textual

environment which will encourage and support reading for meaning. Decoding, whilst essential, is not the only skill required for reading (Ministère de l'éducation nationale, Bulletin Officiel no. 2, 2006).

3.3.2 MFL (langues étrangères) Literacy Instruction in France

Exploration of this aspect of French education policy and practice will offer the opportunity to contrast second language provision across contexts. The French government have made a clear commitment to primary modern foreign languages ("langues vivantes"). More recently, progression in second language learning was formalized in France through the creation of "Progressions pour l'école élémentaire" (published 5th January 2012). Like its English counterpart, suggested activities and expected outcomes are linked to external standards (in the French case, the Common European Framework for Languages level A1) starting with the Cours Préparatoire (CP).

Whilst both countries commit to second language learning outcomes from the age of 6 (in France) and 7 (in England), comparison of the "Framework" and the "Progressions" shows clear differences in expectation. The French system warns specifically against written English for the whole of the Cours Préparatoire, due to anticipated difficulties for French speakers working from sound to print and vice versa, and formative assessment is recommended only for oral production, to engender positivity in the classroom (implying motivational/self-efficacy concerns). However the English approach recommends the opposite (albeit from 7 years old) – starting straight away with the development of awareness of different sounds and their respective graphemic representations (Progression, 2012: 2; DfES, 2005:19). Both documents, though, appear to share aspects of approaches to the written word, articulated differently. Whereas the English advice concentrates on reading and writing "familiar" words early, the French promotes the idea that children should be used to oral forms (production and understanding) before the written form is introduced in Cycle 3 (i.e. from 9 years old). In other words, England implies sub-lexical work (i.e. phonics) yet makes frequent references to "familiar" which, in line with the French "oracy first" approach, seems either grounded in a whole language approach or implicates sight reading at the partial alphabetic phase.

During Cours Moyen 1 and 2 (equivalent of years 5 & 6 in England), L2 reading and writing skills are introduced with no reference to sub-lexical processes in reading and/or phonics instruction. In fact, the rationale underpinning text choice for L2 reading (i.e. principally instrumental texts) states that pupils must be able to rely on known cues to assist in meaning making. Writing activities at this level include: copying, dictation and independent work (starting at word level). By the end of CM2, pupils are expected to write five sentences independently, write familiar expressions (presumably from memory) and copy short texts. Broadly speaking, the desired knowledge and skills for each area (sustained speaking, reading and writing) remain constant throughout the cycle and progression is observed through increasingly extended use. In other words, a given objective for reading is enhanced by extending both the length of the text and the range of text types i.e. understanding a short simple text (1 or 2 lines long) in a known format (sign, email, postcard) is, by CM2, increased to at least 5 sentences and the format widened to include recipes, maps and street plans. Nevertheless, the range of texts proposed remains predominantly instrumental and could, therefore, imply that meaning can be accessed using top-down type strategies rather than active decoding (bottom-up processes). This is supported by the omission of phonics or bottom-up strategies from all French primary L2 curricula. Writing instruction focuses on copying and follows the same philosophy of progression through expanding genre and length throughout the cycle.

With respect to L1 literacy, approaches are broadly similar between England and France, the most fundamental being an emphasis on sub-lexical processes in L1 reading. Whilst the French avoids a "phonics first and fast" philosophy, an integrated approach (phonics and meaning-based encounters with text) is at the core of both countries' policies. However, this harmony is not always replicated in the instructional recommendations and expectations for second language learning. Both frameworks allow for progression in language learning, which is expected to follow a linear trajectory and which, with respect to literacy, privileges access to text based on length rather than language complexity. In this way, teachers are exhorted to increase text length and range of genre rather than language or syntactic complexity. However, in

terms of the instructional technique for learning to read in a foreign language, the English Framework explicitly, if at times inconsistently, promotes sub-lexical (phonics) approaches alongside text experience whilst the French Progressions avoids committing to either theoretical stance, preferring instead to delay the presentation of print to beginner learners of languages with inconsistent orthographies (e.g. English).

3.4 L1 Literacy Instruction in Canada (Ontario)

Finally, first and second (dual) language policy and practice will be explored in Ontario where French and English (this study's L2 and L1 respectively) are dual languages and both have official status. This will complete the comparison of language education policy and practice across three contexts concerning instruction in French and English literacy. Ontario, in respect of this study, is a setting which will illustrate an approach to French literacy instruction for a majority English speaking population: 77% of Ontarians speak English as their first language, while 5.4% of the Ontarian population are Franco-Ontarian (Ontario Ministry of Education and Training, Early Reading Strategy, 2003).

School Phase:	Stage:	School Year:	Age:
Pre-school	Early Childhood Education	Junior Kindergarten (Ontario only)	4-5
		Kindergarten	5-6
Primary School	Elementary Education	Grade 1	6-7
		Grade 2	7-8
		Grade 3	8-9
		Grade 4	9-10
		Grade 5	10-11

Table 3.3: Overview of the Ontarian primary education system
NB: Equivalent year groups for this study are highlighted in red

The 2010 Ontario Full Day Early Learning Kindergarten Program (Ontario Ministry of Education and Training, 2010), like the other contexts presented in this chapter, adopts an integrated approach to L1 literacy instruction but from a much earlier age. Children are taught the alphabetic principle, and alphabetic code and are also exposed to a rich literacy environment viewed as an integral part of early literacy. Frequent opportunities to listen to and respond to stories are proposed as a means of motivating children to "learn the functions and features of print" (Ontario Ministry of Education and Training, 2010: 19). Furthermore, there is a requirement to develop metacognition through the promotion of "higher-order thinking skills" (such as, asking and answering questions about the text, participation in discussions and classification of information: Ontario Ministry of Education and Training, 2010: 19).

Explicit support for reading instruction is given to teachers in the form of The Guide to Effective Instruction in Reading, Kindergarten to Grade 3 (Ontario Ministry of Education and Training, 2003). Three developmental stages of reading are noted: emergent, early, and fluent, and goals are broken down into instructional strategies, knowledge, skills and teaching practices. Like the other settings presented here, Ontario places great importance on oral abilities (vocabulary range, semantics and syntactic knowledge) and prior world knowledge and experience. Key skills appear to be predominantly "phonics" based – for example, phonemic awareness, the alphabetic principle and code; yet the guide also promotes a "three cueing systems" approach which favours use of a whole language derived cluster of semantic, syntactic and grapho-phonic tools to construct meaning. The Effective Instruction Guide (Ontario Ministry of Education and Training, 2003: 49 & 51) also insists on instruction in reading strategies, word study activities (presumably recognition of high frequency words), exposure to a variety of genres and authentic, motivating literacy experiences combined with learning activities.

Again, Ontario appears to promote phonics and requires its children to start learning the code early in their school careers. However, policy-based insistence on the development of higher-order thinking skills, and the acknowledgement of a role for multiple cues, appear to imply an emphasis on integration right from the start,

rather than the phonics-first, integrated instruction later approach which seems to be favoured by the other contexts explored in this section.

3.4.1 French Language Literacy Instruction in Ontario

French language instruction across Ontario is delivered through two broad contexts.

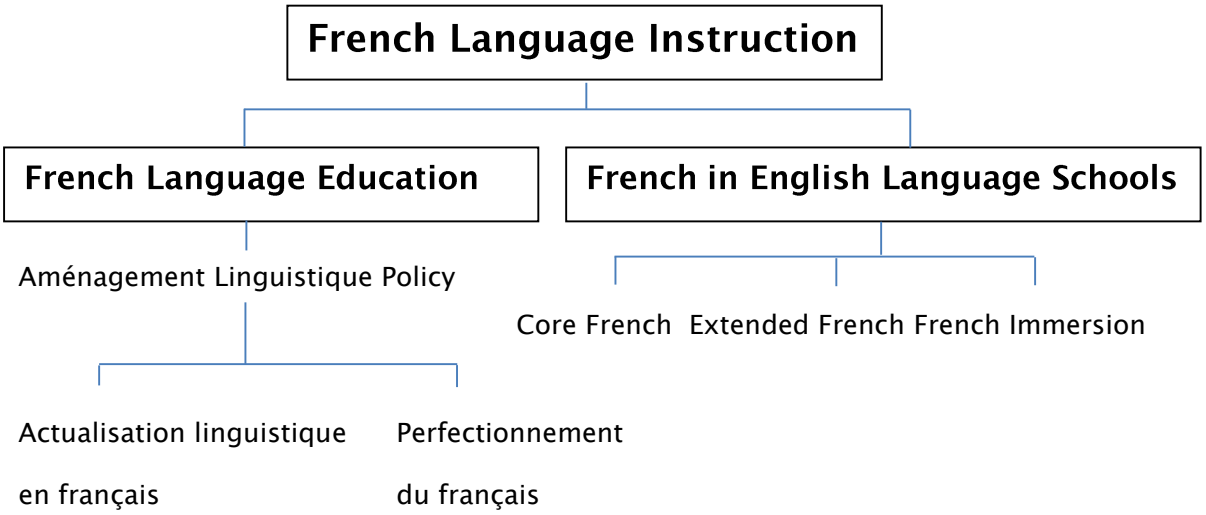

Figure 3.1: French language provision in Ontario

An estimated 96% of children in Ontario attend public (state provided) education (Ontario Ministry of Education and Training, 2003). More recent statistics provided by the Ontario Ministry of Education show that in 2009-10, 95% (n=1,275,288) of Ontarian Elementary school children were enrolled in English Language schools. The remaining 5% (n=68,015) attended French Language Education schools delivered through the Aménagement Linguistique policy (Ontario Ministry of Education and Training, 2005) which was developed to "protect, support and enhance the French language…to take into account the impact of the English language dominant environment" and intended to promote and sustain the linguistic and cultural development of the minority francophone community.

The vast majority of Ontarian children, however, attend English Language school and receive French instruction through The Ontario Curriculum which is divided into three distinct pathways: Core French (mandatory and uninterrupted) for all students between grades 4-8), Extended French and Immersion French (Ontario Ministry of

Education and Training, 1998; 2001). The difference between each pathway is set out below and it is important to note that, even in Immersion French, a minimum of only 50% of the total curriculum should be in the second language. Every pathway, however, is required to use French as the language of communication in French language class and in French-medium subjects.

Mode:	Minimum hours/mode:	Method of Delivery:		
		% overall curriculum in French		Discrete instruction
Core French	600	----	+	French language
Extended French	1260	25% (at least 1 subject)	+	French language
French Immersion	3800	50% (at least 2 subjects)	+	French language

Table 3.4: Provision of French in Ontarian schools

Like the English and French L2 models (KS2 Framework and Progressions) each Canadian French L2 mode has its own curriculum which sets out expectations and achievement levels relating to each year group, describing the knowledge and skills that students are expected to develop and demonstrate through class observation, tests and other activities. Achievement levels focus on four key areas: communication, comprehension, organization of ideas and application of language knowledge, and students are graded between Level 1 (requiring constant teacher support and constant major errors) and Level 4 (no teacher support required and few or no errors). Despite discrete curricula, each mode of instruction shares three strands of language learning (oral communication, reading and writing) which have similarities to the English model for modern foreign language instruction. This study will focus on

the Core French model as it most similar to the second language provision in the other settings already described.

Like the Progressions, Core French emphasises the development of oral communication skills as a priority with "gradual introduction" to reading and writing in a second language. Both settings (France and Ontario) therefore share a "speech-first" belief. In other words, they hold that oral communication (presumably oral vocabulary) is the bedrock of reading acquisition, i.e. that children learn to read and write through relating written text to existing knowledge and oral communication skills (Ministry of Education and Training, 1998: 9 & 10). As previously discussed, this advice might be directly linked to audio-lingual methods and behaviourist learning theories. However overall the curriculum seems to adopt an integrated approach to L2 literacy, encompassing both phonics and whole language type instruction. This is supported through the end of year expectations which make clear reference to specific types of cue use (knowledge of sounds, context, visual), reading aloud and understanding. L2 progression, between grade 4 and grade 5, is implied, for example, through transition from reading aloud using correct pronunciation and intonation to reading aloud using expression and intonation. Achievement and progress are measured in terms of text length: read at least six simple passages or stories (grade 4) to read at least nine simple passages or stories (grade 5). Between grades 4 and 5, children are (presumably) expected to have automatised the decoding process (with "correct pronunciation" being supplanted by "expression" in the outcomes), and the reading of unfamiliar words, signalled by the removal of the words "familiar materials" from the Grade 5 expectations. Finally, clear development of reading strategies is suggested by the "use of all available cues" in Grade 4 which is replaced by more specific "reading strategies" in Grade 5.

It appears, then, that there are similarities and differences in policy and practice across all three contexts for second language literacy instruction. All promote a phonics-based approach with varying emphasis on the role of text-based literacy activities. Whilst both France and Ontario adopt a speech-first approach, the English advice appears to recommend developing sound/spelling links from Year 3 onwards

i.e. from the beginning of L2 study (DfES, 2005). On the other hand, the English Framework for Languages only ever "aspires" to recognition/reading of familiar words whereas, in both other contexts, there is a clear objective to access unknown written forms (and this therefore implies independent access to text). In all contexts, progression is linked to expanding text length and genre range rather than linguistic complexity. Plenty of advice is given which relates to literacy activities but there are no specific details concerning which phonemes and their respective graphemes should be taught first, when a role for phonics-type instruction is recommended (even though advice relating to both choice of grapheme and order is available for learning to read in a first language). Finally, despite specific milestones which appear related to those already identified principally by L1 reading research, there does not appear to be research evidence clarifying whether the amount of instructional time proposed by the curricula in all of these contexts (England, France and Canada) will indeed result in progression and attainment of the kind proposed by each context's policy, especially when access to text outside the classroom may well be limited. Indeed, the Aménagement Linguistique (Ontario Ministry of Education and Training, 2005) holds that research indicates that two years of exposure to the language of instruction is required to develop enough basic communication skills to hold a conversation in a social setting (Ontario Ministry of Education and Training, 2005) and, as such, might suggest that the development of reading skills using all available cues within one year might be optimistic. On the other hand, L2 reading instruction does not start with a blank canvas and, as such, progression in learning to read an L2 could be more rapid (to be explored in Chapter 4). Nevertheless, account will need to be made for limitations in oral vocabulary which, policy has already noted, plays an important part in both first and second language reading development (e.g. Progressions, 2012 and The Ontario Curriculum Core French, 1998).

To summarise, both policy and practical advice for second language literacy instruction therefore presents a mixed picture which, it would appear, is grounded (although not explicitly), in aspects of L1 reading research (bottom-up and top-down processes, familiar words) and L2 language learning methods and theory (accurate oral

production, oracy-first). In this way, the learning (and teaching) of L2 reading is viewed as an integrated process which demands both experience with text and sub-lexical processes/instruction coupled with an emphasis on meaning. The "speech-first" approach could also aim to mimic the conditions of L1 literacy acquisition where the learner reader approaches text with a solid base of phonological representations of words which might then be mapped on to print. Research, however, suggests that this is an almost impossible task in instructional settings, identifying that it could take over 19 years of instruction in MFL classrooms (at 4 hours per week) to reach this kind of linguistic base (based on an assumption of between 3000-5000 hours of L1 learning when school starts - Muñoz, 2010). Oral proficiency in a second language has also been linked to transfer theory which held that existing L1 reading-related skills would only become available for use when a sufficient level of spoken proficiency had been reached. More recently, different notions related to "transfer" between languages have been explored. Now transfer, especially in second language reading, is seen as "cross linguistic influence" which is held to be a more dynamic and evolving process. The following chapter will explore recent theoretical developments in the field of cross-linguistic influence with a view to assessing how these might impact on the current instructional methods employed in second language classrooms.

4. Learning to Read in an L2

4.1 Introduction

Recent research concerning learning to read in a second language argues that L2 literacy is influenced by both universal and language-specific typological issues (Geva, 2006: 1). The "universal" or "central processing" framework proposed by Geva allows for underlying literacy related cognitive and linguistic component skills that will influence L2 literacy development, whilst the typological perspective accounts for the possibility that the specific orthographic requirements of any one language, will have tailored and shaped the cognitive and linguistic resources used to acquire L1 literacy in that language (Geva, 2006: 2). It is therefore assumed that the language-specific demands of L1 literacy development will "hone" certain literacy skills and possibly frame and guide learners' approaches to L2 literacy depending on their L1 background.

The Universal Framework covers the concept of "transfer" which was initially viewed as the mobilization of existing L1 knowledge and skills once a certain level of L2 proficiency was reached. This utilisation of existing L1 competencies was viewed as compensatory (e.g. due to insufficient L2 knowledge); it was assumed that, once L2 knowledge was sufficiently developed, L1 transfer would cease (Koda 2007). "Transfer" or "cross-linguistic influence" is now regarded as "preparedness for future learning" (Genesee, Geva, Dressler & Kamil, 2008: 68) and concerns the utilisation of "previously acquired resources and experience" that form a "reservoir of knowledge, skills and abilities" (Koda, 2008: 70-71). This knowledge "reservoir" is accessible throughout literacy development, involves "complex processes which interact dynamically across grade levels" (Genesee, Geva et al., 2008: 68) and, as such, is not necessarily linked to reaching a required level of L2 proficiency. This refined interpretation of transfer allows, then, not just for application of specific linguistic knowledge (e.g. sound/letter correspondences, cognates) but also for the influence of pre-existing cognitive abilities (e.g. inferencing skills and knowledge of genre), acquired in L1 literacy and available for use throughout L2 literacy development. Koda (2007: 17) further argues that L2 input (e.g. print) triggers "automatic activation of established L1

competencies". This potentially has implications for the development of L2 literacy with L2 mappings necessarily being developed to "compete" with highly influential, existing L1 automatised competencies because, otherwise, L1 mappings will be utilised in a "non-volitional" (automatised) and "non-selective" (not easily controlled) manner (Koda, 2007: 18).

The Typological Framework, on the other hand, allows for the idea that the L1 reading acquisition process has been affected by L1-specific orthography so that, as a result of L1 literacy development, L2 reading could be approached by the learner with "preferred" strategies for word recognition. The Orthographic Depth Hypothesis (Katz & Frost, 1992) supports the idea that pronunciation of the printed word relies on either "pre-lexical" letter/sound correspondences or "visual-orthographic" identification where whole word/morpheme spelling is matched with its stored phonological representations (therefore adopting a "dual-route" type model for word recognition: Coltheart, 1978). Katz & Frost (1992) go on to conclude that one of these strategies will be "preferred" depending on the learners' L1 orthography. For example, "pre-lexical analysis" will be more functional in shallow orthographies (where sounds and letters form reliable links) and, therefore, this level of analysis will be more readily applied in L2 reading from such L1 backgrounds. Subsequent cross-linguistic reading research has broadly supported such ideas. Ellis, Natsume, Stavropoulou, Hoxhallari, Van Daal, Polyzoe, Tsipa & Petalas (2004) found relationships between L1 reading strategy (assessed through both word length/response latency and error analysis) and orthographic depth in children aged between 6-15 years. Readers of transparent orthographies (e.g. Hiragana and Greek) were deemed more likely to use sub-lexical word recognition processes due to evidence of longer word reading latencies; whilst error analysis supported the idea that readers of deep orthographies (e.g. English and Kanji) tended towards whole word type strategies. Ellis & Hooper (2001) had previously found that young readers of Welsh (transparent orthography) were more likely to use alphabetic strategies than similarly aged readers of English (deep orthography).

Clearly, views about cross-linguistic influence variation in reading strategies could affect L2 literacy pedagogy. From this perspective, programmes designed to support L2 literacy should assess what kind of L1 skills and knowledge will be at a learner's disposal (e.g. the "universals" that are employed through having learnt to read in a first language) and also how their particular first language might have tailored and shaped these resources (the typological aspect of reading). So, for example, it can be assumed that the learners in this study will be ready to decode (i.e. apply sub-lexical analysis to word reading) but will also have learned, due to the complex nature of sound/spelling links in English, that trusting the code will not be enough. More generally these recent theoretical developments accord a lesser role to L2 oral proficiency in that it is assumed that existing L1 linguistic and cognitive resources (for example, sub-lexical and lexical processes, orthographic, phonological, vocabulary and morphological knowledge) can be accessed throughout the acquisition of L2 literacy. They therefore offer support for the essence of the present investigation - developing both sound and print with beginner learners. With this in mind, this chapter will continue to explore in more detail research relating to both the universal and typological frameworks in order to attempt to refine an understanding of the potential skills and knowledge these learners will bring to L2 literacy.

4.2 Typological Considerations – Learning to Read English

Due to complexities and irregularities in phoneme/grapheme relationships it seems possible that decoding strategies have limitations when learning to read English. Perfetti & Dunlap (2008: 24) comment on the fact that English has 26 individual graphemes which relate to 44 phonemes. These relationships can appear somewhat arbitrary; one grapheme can relate to several different sounds or, indeed, no sound at all for example: **G** = ***g****arage* or ***g****iraffe* or *thin****g*** or ***g****nome* (silent). Furthermore, phonemes and graphemes do not always share one to one correspondences and GPC mappings above one-to-one level can still be unreliable - ***give****/****five***. As a result of such inconsistencies, Perfetti & Dunlap (2008: 26) posit that whole word or sight recognition strategies end up outweighing letter-sound mappings in learning to read

English and that, in turn, this has implications for generalization of the alphabetic procedure when encountering new words.

The "psycholinguistic grain-size" theory of reading (Goswami, 2006), like the Orthographic Depth Hypothesis (Katz & Frost, 1992) argues more generally that typological differences could affect the way in which phonemes are mapped to graphemes. Both Perfetti & Dunlap (2008: 26) and Goswami (2006: 463-4) assert that inconsistencies necessitate the mapping of "larger sub-lexical units" (e.g. rimes and whole words) onto their corresponding graphemes which, in turn, will slow the development of phonemic awareness. Learners with English L1, therefore, might be expected to map "grain size" or larger portions of the printed word onto the spoken word, instead of decoding letter by letter. The likelihood of a variety of mapping strategies is supported by the observation that correct decoding of the 3000 most frequent English monosyllabic words at rime level would involve the learning of approximately 600 different orthographic patterns and 400 phonological rime mappings (Ziegler & Goswami, 2006: 431). This kind of evidence adds to the already well-researched view that reading acquisition is slower in orthographies with both feed-back and feed-forward inconsistencies (Ellis et al., 2004; Goswami, 2006). Feedback inconsistency relates to phonemes which have multiple graphemic representations (e.g. French), whilst feed-forward inconsistency concerns relatively limited graphemic representations which relate to a plethora of possible phonemic representations (e.g. English).

The phonological structure of a language is also believed to influence reading acquisition and reading strategy development. Research shows that development of both phonemic and phonological awareness might be influenced by the syllabic perceptibility of languages. Languages with many simple or open syllables (e.g. Spanish) will more readily permit mappings as phonemes and onset-rimes in many words are equivalent (casa and mama - CVCV) and segmentation is therefore easier (Goswami, 2006: 470). On the other hand, it takes children longer to learn about phonemes and therefore develop skills relating to segmentation in other languages (e.g. English, French) which have complex syllabic structures (e.g. CVCC and CCVC)

(Waxman & Goswami, 2012). Morphology is also an important factor in cross-language phonological development (Goswami & Ziegler, 2006) and will be explored in Section 4.3.

4.3 Typological Considerations – Learning to Read French

Like English, high polyvalence in French (35 phonemes = 130 graphemes - Catach, 1980) is assumed to have real implications for reading strategies which rely on the alphabetic code. In line with previous observations, Landerl (2006: 513) notes feedback consistency influences writing (phoneme/grapheme correspondences) rather than reading (grapheme/phoneme correspondences). Nevertheless, reading in French can pose considerable problems for beginner learners. French PGCs are, like English, inconsistent but graphemes in French also serve various additional functions which can add to the complexity of French orthography. For example, morphophonograms are graphic units which map onto phonemes and have a morphological role e.g. il savait – AI = /ɛ/ and imperfect tense marker, morphograms are graphic units which have a morphological role only and are generally found in verbs and nouns e.g. il savait – T – is unspoken but acts as a person marker and logograms which allow for distinction between homophones e.g. cent, sang, sans= /sɑ̃/ (Jaffré & Fayol, 2006: 83). Morphograms and logograms are found to present particular difficulty to learners (Jaffré & Fayol, 2006: 83-4); morphograms in particular rely on an abstract appreciation of the way a language works (Jaffré & Fayol, 2006: 85).

Whilst Jaffré & Fayol (2006: 89) argue that French reading starts by learning the simple and consistent phoneme/grapheme relationships they go on to assert that the next step in learning to read involves the identification of more complex associations relating to morphological representations. They posit that patterns of frequency in PGC and GPC correspondences build "infra-lexical associations" between phonographic and orthographic configuration which, particularly in French, often correspond to morphological features. It is these aspects which could represent difficulty for English L1 learners of French, as English morphology is "practically transparent" whereas French is "remarkably opaque" (Jaffré & Fayol, 2006: 94; 99).

Of course, the key factor in overcoming the difficulties Jaffré & Fayol present in learning to read French, is frequency. Whether acquiring morphological features or complex GPC associations in learning to read, the idea of "association" building must involve frequency of encountering such forms and, with respect to morphology, understanding the meaning behind them which has real implications for beginner learners in instructional settings learning to read French as an L2. For example recognising that "lent" is sounded /lā/ but chantent is /ʃāt/ (e.g. Gregory, 2008) involves more than just mapping sound onto graphemic representations (in this case the trigraph 'ent'). Successful recoding involves awareness that "ent" in the latter example represents inflectional morphology (3rd person plural present indicative) which as an entire suffix, remains unmarked phonologically but also that the penultimate "t" (which would usually be unmarked in word-final position) is marked orally due to the unmarked "e" which forms part of the "ent" suffix.

Evidence presented thus far which relates to reading in a second language has shown that certain universal skills will be available to learners who are already literate in one language but also that other skills will have been influenced by first language typology. The learners in this study will expect to analyse words sub-lexically but will also know as readers of a deep orthography that, for many words, decoding is not effective. In these cases, learners will have relied on larger size mappings possibly at either whole word or rime level. Of course, French is equally complex, orthographically speaking, so these kind of compensatory skills may be particularly useful in learning to read French as a foreign language. Having identified a recent theoretical re-evaluation of cross-linguistic influence, leading to the idea that language universals could form part of the "reservoir" of knowledge that is available to L2 learners, Section 4.4 will explore recent L2 reading development research which documents which "universals" relate specifically to reading. A theoretical framework will then be presented which accounts for how these might interact with developing second language skills and influence L2 literacy development.

4.4 Learning to Read in a Second Language – Universal Skills

Previously, a holistic view of reading posited that, as a process, reading was similar across all languages and, therefore, research focusing on reading across languages explored an idea of transfer as the mobilization of a "single, unitary construct" (Koda, 2008: 70). In this way, poor L2 reading competence was attributed to inhibited transfer of L1 competencies due to language deficiencies (Koda, 2008: 71) and the L1 was seen as a support to be utilised in instances of limitations in L2 language or processing (Grabe, 2009: 122).

However, an alternative view of reading across languages is emerging which examines more analytically which reading-related skills are transferred and how these might influence second language reading development. Now, notions of L1 influence on L2 reading are approached from a "componential" view where reading is seen as a "constellation of closely related yet separate mental operations each entailing a unique set of sub-skills" (Koda, 2008: 72; Lesaux, Geva, Koda, Siegel & Shanahan, 2008: 28). The idea of literacy development as a componential process is supported by Lesaux et al., 2008: 3) who argue that, not only is L2 literacy development componential involving the use of "multiple skills in tandem" (Koda, 2008: 70), it is also cumulative and influenced by individual, contextual and instructional factors which start before school and continue into adulthood. The study of cross-linguistic influence then is concerned with an interaction between L1 and L2 literacy skills as a dynamic and ongoing process. Furthermore, Koda suggests that L1 reading experience not only impacts on L2 reading development but also "systematically alters processing procedures for second language print information". This contrasts markedly with previously held notions of "transfer" which imply that, in order to access the skills necessary for successful L2 reading, a threshold of oral language ability must be reached and that the influence of L1 literacy skills will recede as L2 literacy develops

The idea that second language literacy is a "repeated process" and therefore, to some extent, involves "exploitation of accumulated resources" (Koda, 2008: 74) supports the understanding that, in learning to read a second language, there are "reading universals" for example, general mapping principles (an awareness that print

is linked to speech and the understanding that each letter can represent a distinct sound (Koda, 2008: 73). Metalinguistic awareness, or the ability to "reflect on and manipulate the structural features of languages" (Kuo & Anderson, 2008: 39) is acknowledged in Koda's Transfer Facilitation Model where, for example, L1 metalinguistic awareness predicts L2 decoding whilst L1 metalinguistic sophistication and interaction with L2 print strongly predict the rate of development of L2 metalinguistic awareness (Koda, 2008: 78). Others add that already literate L2 learner/readers could bring metalinguistic awareness *and* metacognitive awareness to the task (Grabe & Stoller, 2002: 38-39; 54). Research exploring specific aspects of L1 metalinguistic awareness and their influence across languages started to emerge towards the end of the last decade. The following sections will explore particular studies and findings in more detail.

4.4.1 Cross-Linguistic Effects - Phonological Awareness

Consistent evidence of cross-language effects with respect to literacy-related aspects of oral development has been found. Phonological awareness was shown to improve across both French and English following an intervention which comprised 12 weeks of explicit instruction in French letter/sound relationships, segmentation and blending activities with Early Immersion Kindergarten students (MacCoubrey, Wade-Woolley, Klinger & Kirby, 2005). High levels of L1 phonological awareness could be linked to high levels of L2 phonological awareness in language-minority children (with limited evidence that this is more likely among younger learners) (Genesee, Geva, Dressler & Kamil, 2008: 69-71). Strong phonological awareness and decoding skills in the L1 were also linked to strong beginner-level L2 word decoding in Spanish L1 First Grade children learning English with a mean age of 85.3 months (Durgunogly, Nagy & Hancin-Bhatt, 1993). However, research has also noted that learners with previous literacy experience of shallow orthographies have greater confidence in using the alphabetic code for decoding strategies (Landerl, 2006: 518) and that phonological awareness might be linked to the orthographic depth of the scripts in children's "language backgrounds" (Rickard Liow & Poon, 1998: 354). Durgunogly et al.'s (1993)

finding could, then, originate in typological differences (as Spanish is a shallow orthography and English deep) and therefore, in the long term, advantages shown initially by reliance on highly developed decoding skills might be less influential. A transparent L1 orthography seemed to promote phonological strategies (decoding) rather than visual approaches (whole word recognition) (Genesee et al., 2008: 74). Conversely, other research has noted that English L1 readers (low orthographic consistency) tend to use complex, error-prone strategies when approaching L2 text (Frith, Wimmer & Landerl, 1998).

Sub-lexical or phonological reading skills explain more unique variance in L2 word reading than oral language proficiency (Lesaux et al., 2008: 37). However, these findings depend on how language proficiency is defined, given that some aspects of language proficiency might influence word reading more than others (lexical knowledge will be more predictive than syntactic knowledge). More research is needed to determine whether phonological skills are better predictors of L2 reading skills than oral language proficiency with learners of all levels (Lesaux et al., 2008: 51). A review of research in this area suggested relationships between L1 phonological processing skills (oral development: rhyme detection, grapheme/phoneme correspondence knowledge, segmentation/blending and matching, rapid naming of discrete items and working memory) and L2 word reading skills (Genesee et al., 2008: 72-73). However, others have noted that variation in cross-linguistic word reading effects could also be linked to other factors, for example "language distance" and participant age (Genesee et al., 2008: 72-23). This need for caution was echoed by Lesaux et al. (2008: 36) who, whilst acknowledging superior performance on phonological tasks for L2 learners (when compared with monolinguals), suggest that this is a complex relationship which may be influenced by age, stage of L2 development of the learner, relative proficiency in L1 and L2 and early language and literacy experiences.

Clearly, then, research supports Koda's view that metalinguistic awareness (in the form of phonological awareness) transfers across languages and supports L2 phonological awareness. Equally, learners with well-developed L1 phonological skills

are likely to perform better at L2 word reading, with necessary caveats included for wider factors (e.g. age, shared orthographic conventions, language and literacy experience). Of course, it should be recognised that there are other aptitudes (e.g. working memory) likely to support phonological processing abilities which will be explored in more detail later in Chapter 4. In the meantime, Koda's model and the importance of metalinguistic awareness in L2 reading acquisition requires further consideration. Essentially, Koda argues that the ability to manipulate the structural features of an L1 will support and to some extent predict the same ability in the L2 and L2 decoding. This can be supported by L1 reading research explored in Chapter 2 which identifies that aspects of metalinguistic awareness (e.g. phonological awareness - Gillon, 2007) are particularly influential in the development of some sub-lexical skills (i.e. decoding). In other words, cross-linguistic influence (in the form of Koda's Transfer Facilitation Model, 2007) refers just to the ability to "dissect" the L2 spoken word into chunks (of various sizes, depending on the orthography) ready to link to their print-related counterparts. So far only the universal aspects of the reading process - those of learning to link sound to print - have successfully been accounted for by this view.

The following sub-sections will aim to explore additional research into metalinguistic awareness but also those studies which ascribe a prominent role for a more global construct of L1 literacy and its potential effects on reading in another language.

4.4.2 Cross-Linguistic Effects – Strategy Use

As previously identified, metalinguistic awareness also embraces the potential for strategy-based skills to be employed across languages and numerous studies provide evidence for cross-language transfer of reading comprehension ability in bilinguals (Genesee et al., 2008: 76). However, research into reading strategy use amongst students not proficient in the L2 has produced conflicting results, particularly that metacognition only influenced L2 reading performance amongst higher L2 proficiency participants (Schoonen, Hulstijn & Bossers, 1998), and that no strategy use was available below a threshold of language ability. L1 vocabulary knowledge was found to

significantly influence L2 reading comprehension, and fluency (Proctor, August, Carlo & Snow 2006). Of course, it is quite possible that L1 vocabulary knowledge is a direct result of high L1 reading proficiency and there is indeed evidence that factors affecting comprehension can be either individual (reading readiness, word-level skills, background knowledge and motivation) or contextual (socio-economic status and text attributes) (Lesaux et al., 2008: 43).

4.4.3 Cross-linguistic Effects - L1 literacy as a global construct

One of the most interesting, recent developments is the research-based finding that proficient L1 readers are likely to be proficient L2 readers. More specifically, first language literacy ability is more strongly related to subsequent L2 proficiency than L1 cognitive mechanisms. This finding extends way beyond transfer of universal aspects of reading and places a particular emphasis on the importance of L1 proficiency for: word decoding, spelling, reading comprehension, phonological awareness, vocabulary and listening comprehension. As far back as grade 2 (ages 7-8), these skills are believed to be predictors for L2 reading development (Sparks, Patton, Ganschow & Humback, 2009). However, L2 proficiency scores across French, Spanish and German were combined in this research and therefore did not reveal how orthographic depth (for example) might have affected results so that e.g. scores (in reading comprehension, writing, speaking and listening) might have been "bolstered" by results from shallower orthographies (Spanish and German). Earlier research which explored relationships between first and second language literacy proposed a Linguistic Coding Deficit Hypothesis (hereinafter LCDH - Sparks & Ganschow - 1991) which allowed for a role for L1 linguistic "codes" (phonological, syntactic and semantic) in L2 reading and spelling. Poor L1 readers, habitually deficient in phonological coding, were most likely to experience difficulty developing L2 literacy. This supported the view that development of L2 phonology was an essential part of L2 literacy development. The LCDH hypothesis, however, went beyond a simplistic claim that poor L1 readers made poor L2 readers. Following previous observations involving undergraduates who had experienced "unusual" difficulty learning to read and spell a second language, Ganschow & Sparks (1991) proposed that L1 coding deficits might be hidden through

the adoption of learner-initiated compensation strategies which become unworkable when faced with a new (i.e. L2) linguistic coding system. This proposal might account for aspects of inter-individual variation in the development of L2 literacy.

4.5 Learning to Read in a Second Language: Language-Specific Skills

Research notes that whilst the "broad principles" (i.e. reading universals) might work across languages (e.g. the notion that letters relate to sounds), the operationalization of these principles will differ across individual languages (e.g. language-specific phoneme/grapheme correspondences) (Grabe, 2009: 123). Whilst Koda maintains an important role here for metalinguistic awareness, asserting that even the acquisition of non-universals (e.g. L2-specific mapping details) might be facilitated through prior literacy experience due to "an explicit understanding of what is to be accomplished in the task" and that L2 learners, through L1 literacy experience, will be "more reflective and strategic" (Koda, 2008: 73), it seems likely that some kind of frequency-based approach will offer a better model for understanding this aspect of L2 reading development. Indeed, Koda also allows for frequency-based learning (interaction with L2 print) in developing L2 metalinguistic awareness, which gradually reaches "optimal utility" (Koda, 2008: 78). Interestingly, her model of reading in a second language holds that L2 reading principally concerns the *alteration* of existing L1 mappings (language elements and graphic symbols) in order to form additional L2 mappings. Learning of L2-specific information is explained, in this instance, by connectionist theory which sees frequency at the heart of the internalization of form-function relationships (i.e. the more frequently a particular mapping is experienced, the stronger the links become). In this way, Koda perceives knowledge as a gradual transition and a dynamic rather than static state, supporting opinions of transfer as an ongoing and evolving process. Koda argued that an "interplay" between L2 print and L1 competencies ("well-rehearsed to the point of automaticity") would lead to the emergence of L2 competencies which had been refined to accommodate "the linguistic

and orthographic properties specific to the second language" (Koda, 2008: 78-9). This implies that, as long as learners had automatised L1 reading competencies, these would be "ready" to interact with L2 print and, would therefore available for development regardless of L2 language proficiency. The crucial element in this portrayal of the development of language-specific competencies concerns the view that these involved alteration of existing L1 mappings.

Cognitive learning theory, however, has a more detailed view of learning, in this case, of L2 mappings which can be related to both implicit (unconscious) and explicit (conscious) learning mechanisms. Implicit learning theories focus on both input (e.g. the information to be learned) and processing (i.e. internal processes or what learners do with this information).

Input related implicit learning theories follow an emergentist perspective which argues that learning involves "extracting structure and patterns from language input" (Mitchell, Myles & Marsden, 2013: 99). The Competition Model (Macwhinney, 2012) proposes that cue strength in input is important and that this is influenced by expectations entrenched by the L1 (Mitchell, Myles & Marsden, 2013: 103). From the perspective of the learner, it is argued that regularities in input are abstracted through usage (Ellis, 2006a, 2006b, 2006c, 2007) thereby according an important role for the learner's use of frequency in input (Mitchell, Myles & Marsden, 2013: 103). Ellis (2006b: 5) asserts that if a stimulus is encountered often, it is processed faster and more accurately. Equally, connectionist theory states that links between nodes are strengthened through repeated activation and weakened through non-activation. A network of nodes predicts outcomes (on the next layer) which is based on the statistical likelihood of a particular outcome (Mitchell, Myles & Marsden, 2013: 103-108). Whilst frequency will assist learning, sensitivity to cues can be affected by increased reliance on another (possibly stronger) cue (Mitchell, Myles & Marsden (2013: 105-6). In other words, in order to explain a variable end state in L2 learning (i.e. frequency alone will not lead to a native-like outcome), ideas relating to overshadowing or blocking are proposed. More frequently activated features will overshadow less frequent features and lead to processing failure. Frequency would

also promote the formation of additional mappings which would develop sufficient "cue strength" to compete with (and suppress) existent L1 mappings (Mitchell, Myles & Marsden, 2013).

Koda's idea of automatised L1 competencies which can then be transferred and assist the development of L2 competencies is, to some extent, problematic when considering, for example, explicit and systematic classroom-based instruction which will undoubtedly invoke conscious learning mechanisms and therefore accord a central role for memorization (Mitchell, Myles & Marsden, 2013: 99, 131). Ullman's (2001a, 2005, 2006) view of memory and L2 learning acknowledges both declarative and procedural systems which can support and/or compete with each other. The declarative system is seen as "quick to learn" whilst the procedural system is slower (Mitchell, Myles & Marsden, 2013: 132). Previously, theorists had asserted that procedural memory handled implicit knowledge whilst declarative memory stored explicit knowledge. Ullman refuted this, arguing that declarative knowledge can involve either. In other words, a learner may articulate and explain knowledge that has been acquired without conscious awareness. Research has noted that children appear to rely on procedural memory rather than declarative (for learning in general), that during adolescence this reliance shifts to the declarative system and that, for language learning in particular (e.g. processing of vocabulary, morphology and syntax) adults and children use both systems with the age of acquisition relating to a tendency to use declarative systems (Mitchell, Myles & Marsden, 2013: 133). In addition, it is held that explicit knowledge (held in the declarative system) is more inaccurate, more prone to individual differences and affected by anxiety (Mitchell, Myles & Marsden, 2013: 136).

Explicit knowledge, however, does not account for fluent use (Ellis, R 2002) and the conversion of explicit, declarative knowledge into automatised knowledge through proceduralisation (or practice) is supported by Skill Acquisition Theory (e.g. Anderson, 1983, 1993; Altarriba & Basnight-Brown, 2009; Byrne, 1986; McLaughlin & Heredia 1996; Schneider & Schiffrin, 1977). However, once knowledge is automatised, it is deemed difficult to change or delete as it is outside of attentional control and therefore highly resistant to conscious manipulation (Mitchell, Myles & Marsden, 2013: 140-

141). This appears to ascribe limitations to Koda's model. In other words, whilst reading universals might be dependent on automatised competencies being available for transfer, highly automatised L1 mapping details might be particularly resistant to change or adaptation and therefore require even greater levels of frequency to create equal strength cues to compete with existing L1 sound/spelling links.

It is important, finally, to add that Grabe (2009) posits the operationalization of mapping details is not the only source of difference. Even higher order comprehension strategies may be refined by language-specific properties, which may be just as resistant to development. Similar concerns are voiced by Grabe and Stoller who describe L2 reading as depending on a "two language processing system" (Grabe and Stoller 2002: 35). More specifically, they assert that the L2 learner is unable to "turn off" their L1 processing system. Presumably then, the ultimate goal of second language literacy development (and to some extent, instruction) is to successfully "manage" both systems so that the best or most useful resources are mobilized from each. Whilst Grabe & Stoller (2002: 44) recommend developing "enough vocabulary, reading practice and processing fluency in the L2" presumably to counteract more dominant L1 resources, the nature of "enough" is not clearly specified. In addition, linguistic knowledge must be an important part of L2 literacy development. Clearly, the beginner L2 reader (unlike the beginner L1 reader) will immediately lack vocabulary range but also a "tacit knowledge" of basic grammatical structures (Grabe & Stoller, 2002: 36).

So far the potential for cross-linguistic influence in L2 reading has been considered by examining both language universal and language-specific concerns. The influence of metalinguistic awareness (through phonological awareness and strategy knowledge) has been explored and research has also identified that other, more specific L1 literacy related constructs are influential in L2 literacy development (e.g. Sparks et al., 2009). However, with the exception of the latter study, the role of metalinguistic awareness is confined to supporting reading universals rather than L2 specific skills. The acquisition of L2 reading skills (e.g. L2 mapping details) has been explored related to implicit and explicit learning mechanisms and their role in input

and learner-related factors. It is, nevertheless, important to acknowledge that other aptitudes could constrain and influence the process of L2 literacy development such as the ability to deal effectively with incoming input. The following section will explore working memory which is deemed to be key in both reading acquisition and second language learning in general.

4.6 Working Memory

4.6.1 Working memory: the construct

The concept of working memory has evolved considerably over the last four decades and, at the time of writing, the most widely adopted model is believed to consist of a central executive (a controlling attentional system) that supervises and controls other slave systems (Baddeley, 1986; Baddeley, 1997; Baddeley & Hitch, 1974). The first of these, the phonological loop, is concerned with speech information whilst the visuo-spatial sketchpad, assumes responsibility for visual images. The phonological loop consists of two components: the phonological store (PS) which holds speech-based information and a kind of server, the articulatory control process (ACP), which temporarily maintains acoustic or verbal-based information through sub-vocal rehearsal (inner speech) in the ACP (Baddeley, 1997; Hummel & French, 2010: 373). Unless encoded information or representations are rehearsed sub-vocally, they tend to decay rapidly (usually within two seconds) (Hummel & French, 2010: 373); so the phonological loop holds verbal information for short periods of time and allows for sub-vocal rehearsal (articulatory control process) and reactivation of fading memory traces (temporarily held in the phonological store) (Révész, 2012: 101). Whilst not shown in the model (Figure 4.1), it is important to note that later working memory models assume an episodic buffer which supports the binding together of visuo-spatial and phonological representations into a single, episodic unit (Baddeley, 2003).

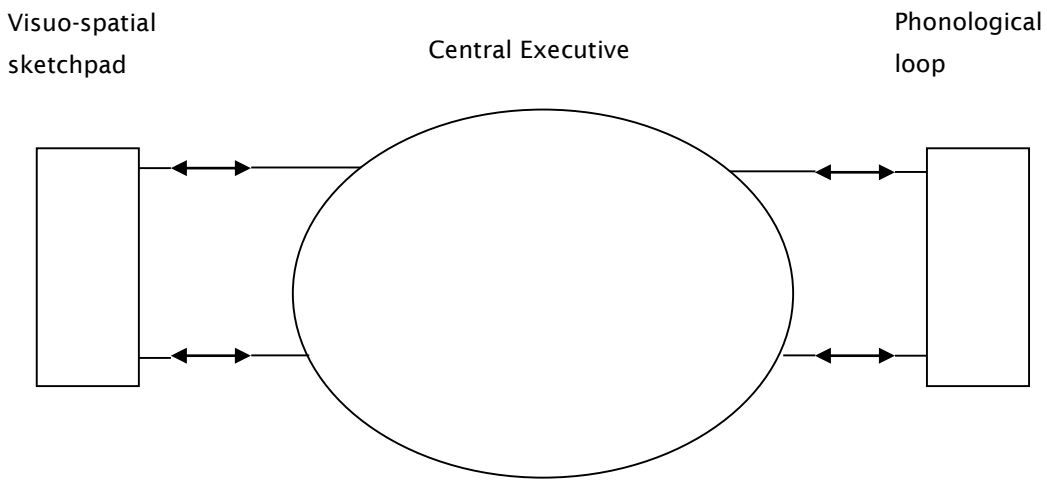

Figure 4.1: A simplified representation of the working memory model (Baddeley, 1997:52)

Working memory is widely believed to be a "limited capacity system that stores and processes information simultaneously in real time" (Hummel & French, 2010: 372). In addition, Révesz (2012: 101) suggests that the executive "controls complex cognitive operations" and concerns the ability to "divide and switch attention", to activate and inhibit processing routes and to regulate the flow of information from short-term and long-term memory systems. This study will first focus on the "crucial sub-component" referred to in the diagram as the phonological loop but also known as: verbal working memory, verbal short-term memory, phonological working memory, phonological short-term memory and the phonological memory (Hummel & French, 2010: 373) and later briefly explore a wider notion of working memory which, nevertheless, still implicates phonology to some extent.

4.6.2 Working memory and L2 learning

Working memory (including verbal working memory), is believed to be an important factor in complex cognitive tasks, which, in terms of second language learning, include both reading and vocabulary acquisition. Its importance in learning (in general) centres around the conceptualization and categorization of new information along with the building of associations between this new information and existing, stored information (Pae & Sevcik, 2011: 47). Swanson, Saez & Gerber (2006: 247-248) posit

two different systems: short term memory, which taps into the phonological system for storage and rehearsal of phonology and working memory which involves the "active manipulation" of information during storage and therefore alternates between the processing of new and referring to pre-stored information. Pae & Sevcik (2011: 48) argue that working memory allows for both storage (of a transitory nature) and manipulation of incoming verbal or written input; suggesting that the phonological loop performs the role of verbal short-term memory and, as such, functions as a "sub-set" of working memory performance. For Miller & Kupfermann (2009: 13-14), verbal working memory concerns the ability to temporarily store and manipulate verbal or written input whilst processing incoming information and retrieving existing phonological information from the long term lexicon. As previously mentioned, it is widely assumed to have an important role in second language acquisition (Service, 1992) and is fundamental to reading acquisition (Baddeley, Gathercole & Papagno, 1998) due to the "multiple processes" involved in reading (e.g. the encoding and retrieval of phonological, orthographic and semantic information) (Pae & Sevcik, 2011: 40). It is also believed that "regular" (i.e. non-dyslexic) readers have a "natural propensity" for phonologically encoding the written word, thereby optimizing its processing in working memory (Miller & Kupferman, 2009: 28).

L1 working memory abilities, operationalised as both verbal short-term memory (as measured by digit span) and simultaneous storage and processing have been found to predict both level and rate of growth in L2 reading skills (Swanson, Saez & Gerber, 2006). Their study, involving bilingual children (Spanish L1/English L2 – mean age 6.21 years) whose L2 word reading abilities were measured in grade 1 and grade 3, concluded that L1 working memory was the best predictor of performance and growth in L2 reading and that the monitoring component was more important than phonological storage (2006: 261-262). However Pae & Sevcik (2011: 40) argued that the orthographic demands of particular languages could influence the importance of working memory in L2 reading. In their study, English speaking children learning to read Korean (mean age 91.82 months) performed better in phonological and verbal memory tasks than Korean speaking children (mean age 87.66 months) learning

English L2 literacy who showed only a weak relationship between verbal memory and reading comprehension. The researchers concluded that a deep orthography (like English), is more reliant on phonological working memory due to the importance of phonological mediation in reading, whereas Korean (shallow) allows automatic and direct access to stored phonological and orthographic representations and is therefore less cognitively demanding (Pae & Sevcik, 2011: 60-61; Stone & Van Orden, 1993).

It appears, then, that the exact relationship between second language learning and working memory is complex. Révész (2012) posits that, in Hungarian beginner learners of English L2, different components of working memory influenced particular language sub-skills. In this study, phonological short term memory, measured by digit span and non-word repetition, was linked to oral performance ability whilst "complex working memory capacity", exemplified by reading span score (final word recall of sets of sentences), was more likely to predict written test scores including grammaticality judgements (Révész, 2012: 122-123). However, in this study, findings related principally to an experimental group which had been exposed to recasts (both control and non-recast groups did not show significant correlations between working memory measures and L2 performance). The idea that working memory consists of "distinct constructs" which can be separated out and applied to differing L2 skills is also supported by research which showed no intra-individual correlation between scores on two working memory measures: non-word repetition and backward digit span (Kormos & Sáfár, 2008: 267). Furthermore, this study's backward digit span scores (representative of working memory and the ability to maintain phonology whilst conducting other cognitive operations) correlated with L2 general proficiency measures of reading, writing, listening and speaking whilst phonological short-term memory (maintaining phonological traces) did not. It was also suggested that the ability to marshal attention was central in noticing and therefore important for learning L2 words and grammar (Kormos & Sáfár, 2008: 268). Finally, Sunderman & Kroll (2009) found that their measure of "complex" working memory, measured by a reading span task (after Waters & Caplan, 1996 and similar to Révész, 2012), also tapped into the ability to control attentional resources and suppress competing information and found

that it was this aspect, rather than memory per se, which was the key to difference in language learning success. These findings have been noted by others who accord an additional "sifting" function to working memory which is linked to conscious learning (Mitchell, Myles & Marsden, 2013: 157) and includes ideas related to "noticing" (conscious awareness), attention or "resistance to distraction" (Juffs & Harrington, 2011: 160), the ability for non-bilinguals participants to inhibit L1 competing information when producing unfamiliar FL words (Trude & Tokowicz, 2011) and finally the potential for working memory in general to inhibit L1 (and to a lesser extent) L2 competing information (Gass & Lee, 2011: 76).

A more refined measure of working memory, verbal working memory, when tested through the repetition of non-words, is deemed to measure the ability to perceive, store, recall and produce phonological sequences which, in turn, are considered important elements in word learning (Juffs & Harrington, 2011: 141). It therefore seems likely that the ability to temporarily store novel verbal representations of language, in order that they may then be processed further (leading to long-term learning), could be a key part of second language learning and this is confirmed by research. Verbal working memory was linked to L2 reading and listening comprehension and L2 writing in beginner Finnish EFL learners aged between 9 and 10 (Service, 1992), to L2 reading comprehension and vocabulary acquisition in Finnish EFL learners aged 9-12 (Service & Kohonen, 1995) and L2 (English) listening comprehension and vocabulary acquisition in Finnish 9-10 year olds (Dufva & Voeten, 1999). Some further research has also shown a clear role for verbal working memory in both productive and receptive vocabulary learning (English L2) (French, 2006). However, others have reported no correlation between STM (word span) and L2 vocabulary learning (Akamatsu, 2008; French & O'Brien, 2008). Verbal working memory has also been shown to be linked with the development of English L2 morpho-syntactic knowledge (e.g. tense, aspect, inflections, negation, question formation) after a five month intensive ESL programme (French & O'Brien, 2008). These findings led to the assertion that working memory influences morpho-syntactic development (tested through multiple choice grammar), as in line with an emergentist

view grammar learning is a similar process to learning new vocabulary (French & O'Brien, 2008).

However, there are other factors which affect the role of verbal working memory in second language learning. As previously mentioned, Pae & Sevcik (2011: 53-60) noted that the relationship between phonological working memory (measured through forward digit span) and reading ability is linked to orthographic depth of the target L2. The performance on reading fluency and comprehension of English bilingual children (6-7 years old) reading Korean (L2) was more dependent on verbal working memory scores than Korean bilingual children of the same age reading English (L2). This, they suggested, could be linked to the idea that readers of a shallow orthography (Korean) access stored orthographic and phonological representations in a direct manner (due to GPC consistency) whilst readers of a deep orthography (English) tend to use phonological mediation or sub-lexical routes (Pae & Sevcik, 2011: 62). This, however, appears to contradict other L2 reading research which shows that L2 readers with a shallow L1 orthography are more likely to "trust" the code and therefore utilise sub-lexical mappings as their strategy of choice (Ellis et al., 2004; Weber & Longhi-Chirlin, 2001). It is suggested, however, that the measure this study used to obtain verbal working memory scores (e.g. forward digit span) failed to isolate verbal working memory from a more general working memory construct. This possibility is supported by the study's finding that working memory is less influential in reading a shallow L2 orthography, on the grounds that as sound/spelling links are consistent, words can be decoded easily and therefore fluent reading does not constitute a significant working memory load (Pae & Sevcik, 2011: 60).

Despite strong evidence for the influence of verbal working memory in second language learning, it is important to note that its influence tends to decline as a result of increases in L2 proficiency (French, 2006: 125-127; Hummel, 2009). It is, therefore, argued that phonological memory tests are robust predictors only of early language (lexical) development (Juffs & Harrington, 2011: 158) and also that growth in L2 vocabulary size reduces the effect of phonological memory in L2 learning and may even be the "catalyst" for a change in processing techniques (French, 2006: 127).

In summary, there is a wealth of evidence which supports a relationship between working memory and/or verbal working memory and second language learning but attempts to clarify the exact nature of this link are, to some extent, "clouded" by differentiation between types of working memory, how these might be "isolated" in test situations and the exact language sub-skills each facet of memory could influence.

4.7 Summary and Evaluation

The recent shift in theoretical perspectives relating to cross-linguistic influence has relevance for this study in several ways. Firstly, rather than L2 proficiency being viewed the catalyst for transfer of L1 reading skills, the emphasis is now on the degree of prior automatisation of L1 skills. It therefore follows that the existing level of L1 literacy of this study's participants could be more relevant to their potential to develop L2 literacy than more general measures of L2 proficiency: that is, that there should be a relationship between L1 literacy ability (e.g. measured by reading age) and developing L2 literacy ability. Secondly, as universals or general principles are taken to be the same across languages, this study will be an opportunity to explore the mapping details, or how existing L1 skills might be altered to form additional L2 representations (for example, L2 print/sound mappings). Issues surrounding language distance could support the idea that novel L2 phonemes and their respective graphemes might be less easily acquired than shared phonemes, though the learnability of shared phonemes with different graphemic representations and frequency (in relation to connectionist-type formation of mappings) could also be explored. Finally, as previous research has shown, other individual characteristics (e.g. verbal working memory) may be highly influential in L2 literacy development (Genesee et al., 2008: 72-73).

Having established a theoretical framework for this study, Chapter 5 will focus on presenting distinct pedagogical principles on which the teaching intervention will be based. These will be linked back to the theory already presented and will be supplemented, wherever possible, by empirical research with similar learners and settings. Following the presentation of the pedagogical principles underpinning the

study, there will be an explanation of the teaching practice in order to show how these principles were operationalised in a primary school classroom.

5. The Intervention Design

5.1 Introduction

Previous theoretical stances, including the assumptions that access to L1-related skills will initially be impeded due to proficiency related issues, and that already literate learners eventually make connections between sound and print themselves (Woore, 2007: 175), led to L2 literacy instruction grounded in a speech first print later perspective. More recent theoretical considerations and empirical research reviewed in the last chapter have led to the understanding that "transfer" of L1-related skills and sub-skills might not be dependent solely or mainly on L2 proficiency (componential view of reading). In other words, even younger learners (with developing first language literacy) might have recourse to existing skills (e.g. the alphabetic principle, phonological awareness) which will support and interact with their second language literacy learning. These newer theoretical and empirical developments have significant implications for change in L2 pedagogy and practice.

The principal aim of this study was to develop a novel pedagogical approach for primary school modern foreign language learners which rests on both theoretical advances in the understanding of cross-linguistic influence, empirical evidence related to learning to read and recent studies observing aspects of L2 literacy development in young learners. The approach was operationalised as a 23 week long intervention with learners of French in years 5 and 6, and the effect on specific domains primarily relating to L2 literacy would then be monitored. Furthermore, this attempt to "stimulate" L2 literacy also responded to previously identified observation-based reports that there was little opportunity for "independence and exploration" in primary L2 literacy (Cable et al., 2010: 88), and demands for a more creative and imaginative approach to L2 reading and writing (Ofsted, 2011: 9-10 & 43-45). Finally, it was anticipated that the collection of detailed longitudinal data would offer the potential for the qualitative exploration of L2 literacy development in beginner learners.

5.2 The Pedagogical Principles

Four fundamental principles were proposed which would underpin planning at all levels (long term schemes of work, mid-range plans and weekly lesson plans) and which were developed through consideration of research-based evidence. These are outlined below alongside the research evidence and context-based decisions which influenced them.

5.2.1 Principle 1: Simultaneous oracy and literacy.

Current instructional methods rely on developing oral proficiency first and presenting the written word later (Jones & Coffey, 2006: 46). The written word is viewed as a "support" when presenting new language (Jones & Coffey, 2006: 50) and L2 literacy is not necessarily considered a skill which requires explicit instruction. As shown in Chapter 3, the KS2 Framework for Modern Languages echoes this view by calling for the development of literacy skills to support and reinforce oracy (DfES, 2005: 8). Jones & Coffey (2006: 46) advise integration of literacy skills to support oracy "at the appropriate stage" but with the written form introduced last. As previously stated, both views appear to be grounded in behaviourist learning theories which underpinned the audio-lingual/audio-visual method in which language teaching prioritized the spoken word, and in older views of "transfer" through which L1 skills and abilities (i.e. literacy related strategies) become available to the learner once a threshold of ability is reached in the L2. More recent research argues that cross-linguistic influence affects L2 acquisition in a dynamic and ongoing manner (Koda, 2008) and suggests that already L1 literate students should receive reading instruction that builds on this knowledge and is not delayed until a high level of proficiency is reached (Pang & Kamil, 2004). This is, in turn, supported by both implicit and explicit learning theory (Chapter 4) which accords a key role for frequency in input in the development of sound/spelling mappings and plenty of practice opportunities to move from declarative to procedural knowledge.

There is a small, but growing body of research which documents the possibility that beginner L2 learners can acquire L2 literacy, although most focus on acquisition

of sub-lexical skills. Geva's study (1995) states that L2 literacy can be developed in child, beginner learners (English L1/Hebrew L2). The study argued that vowel related GPCs in Hebrew (a relatively shallow orthography) are not complex and therefore can be acquired "even in the absence of linguistic proficiency". Of course, from a classroom-based perspective, this could be driven by necessity as much as proficiency-related concerns. More specifically, it could be harder to delay L2 literacy instruction for an L2 with different alphabetic orthographies (English/Hebrew), than it would be for L1/L2 shared writing systems (e.g. English/French). Furthermore, whilst the beginner-learner participants in Geva's study learned novel, regular GPCs successfully, and could, therefore, access word recognition through recoding, it is important to reiterate that decoding is not reading and does not necessarily lead to reading comprehension – the ultimate goal of any kind of reading instruction. In another paper, Geva (2000: 18) argues that whilst L2 oral language proficiency has a positive relationship with L2 reading comprehension, there is a less compelling case for its influence in "word-based processes" (e.g. whole word reading and decoding). She suggests that, with appropriate literacy instruction, learners should be able to tackle L2 decoding whilst their oral proficiency is developing. She therefore recommends concurrent development of L2 oral language proficiency, L2 word recognition and L2 reading comprehension skills, adding that this is particularly important when considering the role that exists between reading and vocabulary growth in any language.

Other studies have noted that decoding skills are available for use in L2 learning even when learners have less developed L2 oral language proficiency (Weber & Longhi-Chirlin, 2001). Two six year old Spanish speaking children, in an English-speaking school which grouped children on their ability to understand the concept of print in Spanish, both developed highly accurate L2 decoding skills with smooth and steady oral reading, though it was also noted that neither of them could apply other skills e.g. prediction, or expression of own ideas in writing which would have been beyond their scope in their native language.

There is also some evidence which suggests more directly that, in young learners, L2 literacy can support the development of L2 oracy. A study by Kim (2008: 431) found that integrating oral and written language instruction with two very young (6 years 8 months and 5 years 3 months) ESL learners, led to greater gains in oral language development based on five key areas for each utterance produced: the total number of words, pragmatic acceptability, semantic acceptability, syntactic acceptability and the absence of prompts. Whilst research concerning combining sound and print in second language instruction is limited, studies relating to first language literacy and oral development also support the possibility of a more pro-active role for literacy in spoken language. Garton & Pratt (1989: 2) assert that whilst literacy is "parasitic" on spoken language development, the development of written language skills can influence spoken language ability as new language structures and functions are learned for writing and later adopted for speaking. Furthermore, a role for writing in the promotion of phonemic awareness (Gough & Wren, 1999: 75), a key skill in successful reading, has already been noted in Chapter 2.

As a result, language presented orally was also experienced in print throughout the course of this intervention. Oracy and literacy were developed simultaneously through varied activities which led to the creation of a class book and video documentary. Careful consideration was given to planning lessons that gave equal favour to both sound and print activities. When novel L2 lexical items were learned, both the spoken and written form were presented and practised together.

5.2.2 Principle 2: Focus on L2 sounds.

One of the beginning steps in reading for understanding is the ability to decode written words into spoken ones (Cameron, 2001: 125) and as discussed in Chapter 2, lower level verbal processing mechanisms including phonological processing are considered essential to reading acquisition (Koda, 1992; Stuart, Masterson et al. 1999: 110) alongside the ability to "tune in" to the phonological level of language in order to recognise the sounds that letters represent (Goswami, 1999: 212). Research has demonstrated that, unless otherwise instructed, L2 sound production and discrimination will reflect the L1 (Genesee et al., 2008). Furthermore, cross-linguistic

influence studies show that aspects of metalinguistic awareness - phonological awareness and phonemic awareness may, if automatised, be available to learners (see Chapter 4). Pang & Kamil (2004) suggest, therefore, that L2 students who are already literate should receive reading instruction that builds on existing L1 phonological knowledge (though as we have seen, the degree of transfer will depend on individual differences as well as linguistic and orthographic overlap between languages). L2 reading research has already shown that phonological awareness correlates significantly with word reading (Durgunoglu, Nagy & Hancin-Bhatt, 1993; Gottardo, Yan, Siegel & Wade-Woolley, 2001).

Other studies have shown that phonemic awareness is generally important in L2 reading. Walter (2008: 455) argues that unreliable mental L2 phonological inventories in learners contribute to reading comprehension problems and, therefore, that the improvement of L2 phonological inventories is more important than, for example, attempting to teach "components of a cognitive skill" that learners already possess. Her study involving French learners of English (mean age 14 years 7 months), showed firstly that good L2 comprehenders recalled similar and dissimilar L2 word sequences as effectively as L1 participants but that poor comprehenders fared much worse on similar English sequences which Walter attributed to a lack of L2 phonemic discrimination. A subsequent intervention showed that poor comprehenders' performance was not due to difficulties with grapheme-phoneme conversion but due to weaker or less detailed representations of English L2 phonemes. Verhoeven (2011) also argued that impaired auditory discrimination of phonemes could hamper the accurate development of PGCs which might result in difficulties pronouncing even orthographically regular words in L2 text. Yeong & Liow (2010: 400) extended examination of the influence of L1 phonology to conclude that, in 5-6 year old unbalanced bilinguals (i.e. one language more dominant than the other), the spelling of low frequency L2 words (which included English specific L2 phonemes) was accomplished using recourse to stored L1 phonological knowledge but that high frequency word production was not affected by L2-only phonemes and that these words were therefore spelled using visual/logographic retrieval processes (rather than

phonemic skills). Further analysis identified that spelling performance was considerably worse when the L2-specific phonemes were in word-final (rather than word-initial) position.

Alongside the growing body of evidence which supports the idea that the quality of L2 phonological representations affects L2 reading ability (Chiappe, Glaeser & Ferko, 2007), it has also been found that bilingual children usually have one phonological system which is stronger than the other (Thorn & Gathercole, 1999) and that acquisition of L2 phonology is a long and frequency-dependent process. Chiappe et al. (2007: 155) suggest that dominant L1 phonological representations mediate the perception of L2 phonology and therefore have the potential to adversely influence acquisition of L2 phonemes. It is posited that inaccurate L2 phonological representations "interfere with" L2 reading acquisition both directly (through impoverished L2 phonological memory) and indirectly (through limited verbal working memory and vocabulary development: Chiappe et al., 2007: 155). This, naturally, has profound implications for L2 learners in instructed settings who lack the rich input available to other bilingual learners. Research has shown that bilingual (Chinese-Cantonese L1/English L2) children (aged 6) in Toronto took at least two years in English schooling to develop sufficient phonemic awareness in L2 specific phonemes (/ʃ/=sh and /θ/=th) to allow decoding of spellings in three high frequency English words (ship, think, teeth) (Wang & Geva, 2003). However, it would also appear that whilst repeated exposure to the target language phonemes (in the form of attendance at English-language schools as ESL students) can facilitate acquisition (Wang & Geva, 2003: 344), exposure alone will not counter deeper-rooted L1 related issues. Ongoing phonological awareness deficits (attributed to a lack of L1 phonological awareness training) have been found to impact even on university-aged learners' ability to recognise unfamiliar L2 words (Holm & Dodd, 1996).

Stuart (1999) found that phonemic awareness instruction accelerated its acquisition and application in 5 year olds in UK education settings who were learning English as L2. A more recent study by Johnson & Tweedie (2010) also aimed to clarify whether the acquisition of phonemic awareness could be accelerated through direct

phonemic awareness instruction (i.e. grapheme-phoneme manipulation) with young learners of English as a second language in rural Malaysia (i.e. an input-poor environment). Whilst both the control and experimental group made gains between pre and post-test across five constructs: sounds fluency, basic reading, number awareness, non-word reading and simple writing, the performance of the phonemic awareness instruction group was significantly greater on all counts, and this instruction was a more influential factor than whether the children had attended pre-school. The authors concluded that phonemic awareness training is also relevant where access to the target language is limited.

For the purposes of this study it is assumed, that explicit instruction will be required for the production of L2-specific phonemes, and in a bid to develop discrete phonological representations of L2 sounds, the instruction will focus on both discrimination and production. The ability to discriminate between these selected L2 specific-sounds will be taught and L2 sound production will focus on articulatory properties. In line with recently developed phonics instruction programmes (Jolly Phonics – Lloyd & Wernham, 1995; Le Manuel Phonique – Molzan & Lloyd, 2001), gestures will be used as retrieval cues. Seven L2-specific phonemes were identified for instruction within this programme and are detailed in Table 5.1 below. Nasal vowels and the front, rounded /y/ sounds were chosen as previous research had identified that learners found these particularly problematic (Cable et al., 2010: 88). In addition, nasal vowels represented entirely novel L2 phonology. Others vowels: /y/, /e/ and /o/ had close counterparts in the L1 and were possibly less distinctive than L2 nasal vowels. For example, /y/ would require adaptation and shortening of /u:/ and it was also considered that /e/ would necessitate attempting to avoid diphthongization, this being a characteristic of the corresponding phonological representation in the L1. Finally /j/ was chosen as this required no modification phonologically, merely an adaptation of the mapping of this sound to the appropriate TL grapheme (LL). These phoneme choices would then allow exploration of the acquisition process for GPCs with a variety of properties which might help or hinder their development.

L2 phoneme	Articulatory Properties (after Tranel, 1987: 221)
/ɔ̃/	Back, rounded nasal vowel
/ɑ̃/	Back, unrounded nasal vowel
/ɛ̃/	Front, unrounded nasal vowel
/y/	Front, rounded, closed oral vowel
/j/	Front, unrounded glide
/o/	Back, rounded, half closed oral vowel
/e/	Front, unrounded, half closed oral vowel

Table 5.1: Instructional L2 phonemes

5.3.2 Principle 3: Systematic and explicit phonics instruction.

A role, in integrated literacy instruction, for systematic and explicit instruction about the code has been identified in Chapter 2. This is supported despite previous advice which suggests that second language phonics instruction is best avoided in an EFL context (Nuttall, 1982: 66); later research suggests that, without systematic and explicit phonics instruction, learners will tend to revert to L1 PGCs/GPCs when writing and reading the L2 (Jones & Coffey, 2006: 51; Cable et al., 2010). Furthermore, empirical evidence suggests that exposure to L2 text, without specific PGC/GPC focus, is not necessarily enough for learners to deduce the L2 code (Woore, 2009) and that PGC/GPC instruction should be conducted over an extended period of time (Woore, 2007). Gregory (2008) also proposed that instruction relating to "grapho-phonic cues" can start before children can speak the L2 fluently and that many children would apply phonics principles from their previous literacy experience (possibly including shared GPCs). This view is supported by research relating to metalinguistic awareness which notes that learners with good L1 phonological awareness perform better in aspects of second language development (see Chapter 4). Research has shown that as learners of two opaque orthographies (English L1/French L2); it is possible that participants will

have an expectation to access the lexicon and meaning via the word's visual orthographic structure rather than only the alphabetic code (Katz & Frost, 1992; Ellis et al., 2004) and that this will, in fact, be essential for those words which do not conform to sound/spelling links. As a consequence and, as is customary with phonics instruction in opaque orthographic languages, "tricky" words (i.e. high frequency, irregular words (e.g. il est – *he/it is* – /ilɛ/) will be taught alongside the sound/spelling links identified below.

This study aimed to contrast the acquisition of novel L2 phonemes and their written representations (e.g. back unrounded nasal vowel /ɑ̃/ = AN/EN in French) with existing phonemes found in both L1 and L2 and their differing graphemic representations (e.g. /j/ = LL in French). In order to reliably acquire novel sounds, focus would be needed on their specific articulatory properties in order to create novel L2 phonological representations which could then be linked to particular spelling/s. Furthermore, it was anticipated that L1 based phonology would be easier to acquire as this would involve adaptation of existing first language PGCs. Clearly, there was not enough time in this teaching intervention to teach all PGCs though it was anticipated that a "minimum level of phonemic awareness and letter-sound skill" might act as a springboard into more frequent literacy encounters which, in turn, became a "self-sustaining, self-teaching" system within which skills would develop (Share, 1999). (It should be noted, however, that Ellis et al. (2004: 19) suggest that self-teaching might be more difficult in orthographically opaque scripts.

Where sounds had several graphemic options, the representations were selected in order of predicted frequency i.e. those which most likely to occur in the input relating to this intervention. In addition, four word-final silent letters (Appendix 1) were taught as previous classroom teaching experience had identified the potential problematic nature of silent letters in accessing word recognition through bottom up processes. The full list of instructional PGCs is given in Table 5.2 alongside examples of words and gestures which were used to aid their acquisition (after Le Manuel Phonique – Molzan & Lloyd, 2001):-

Phoneme	Grapheme/s	Example Word	Gesture	L2/L1 relation?
/ɔ̃/	ON	Cochon	Finger on nose	L2
/ɑ̃/	AN/EN	Enfant	Arms rocking baby	L2
/ɛ̃/	IN/AIN/IEN/EIN	Singe	Arms bent at sides	L2
/y/	U/û	Putois	Fingers pinching nose	L2
/e/	É	Éléphant	Arm imitating trunk	L1 /ei/
/o/	O/ô/AU/EAU	Océan	Arm moving up and down across body	L1 /o/
/j/	LL	Billet	Hand taking ticket	L1 /j/

Table 5.2: Target L2 phonemes/exemplars/gestures

5.2.4 Principle 4: Experiencing L2 sound and print.

As discussed in Chapter 2, L1 reading research demonstrated that meaningful encounters with text are intrinsic to the idea of multiple cueing systems (Snow & Juel, 2005), and a balanced or integrated approach to literacy instruction (Adams, 1990). Accordingly, short texts were composed which would not only present some of the language and structures practised in the lessons but also, a wider range of "untaught" vocabulary. The proposed instructional programme would also include meaning-based encounters with print in the form of both stories and word/sentence level activities where focus would be given to identifying potential strategies to assist in meaning-making. Both sound and print guided the teaching through the development of a class "book" and the creation of a class "video documentary".

It was envisaged that the chosen theme - "Animals and Insects" would allow for a small amount of core vocabulary to be introduced which could then be extended and "personalised" through the use of adjectives, adverbs and connectives. In other words, simple sentences (e.g. le dauphin est gris - *the dolphin is grey*) could be extended with the use of conjunctions, adjectives and additional nouns (le dauphin gris a une grande

nageoire pectorale – *the grey dolphin has a large pectoral fin*). It was believed that this kind of approach would generate language for "real" communication and could be taught as a "dynamic system" allowing learners to "create (language) rather than reproduce it" (Johnstone, 1994: 22). In addition, it was anticipated that the young participants would find this topic engaging through referring to their existing knowledge of animals and insects, in combination with the use of puppets as props to aid spoken language production (i.e. the puppet could deflect attention, and therefore potentially move pressure away from the child's performance). It could also be argued that this "use" of written language would mirror these children's experience of L1 literacy learning and instruction. The Primary Framework for Literacy and Mathematics (DfES, 2006) year 6 transition learning objectives include writing and presenting a text with readers and purpose in mind and the National Curriculum for English (DfE, 2013) for year 5 & 6 learners includes the following objectives: "reflecting an understanding of audience for and purpose of writing in selecting appropriate vocabulary and grammar" and, at micro-level, "using a wide range of devices to build cohesion within and across paragraphs". Finally, the short, personalized factual "books" in the target language would then be kept as a school resource and read aloud to younger children within the school.

This overall approach to developing literacy was influenced by recent research with young L2 English learners in multilingual settings in London (Gregory, 2008: 124-148) which, in line with broader integrated approaches to teaching reading, eschewed stand alone top-down or bottom-up approaches favouring instead "simultaneous input" synthesized from four "knowledge centres": grapho-phonic, lexical knowledge, syntactic knowledge and semantic knowledge. Gregory's core premise (which relates to recent empirical evidence relating to cross-linguistic influence) states that, within each knowledge centre, the "same cues" can be used "differently". In addition, awareness raising activities (e.g. noticing position of adjectives, noun gender, negation, adjectival agreements), phonics instruction and text work would focus learners' attention on L2 features in order to counteract the inevitability that learners

might instinctively use the L1 grammar and salient cues to understand the L2 (Cameron, 2001: 14).

Overall, this study involved the exploration of a bespoke pedagogical intervention designed to teach both literacy and oracy simultaneously in English primary school classrooms. Whilst this appears to be the only primary MFL literacy and oracy based study in England to date, there is another exploratory study which adopted a similar philosophical and pedagogical premise albeit in a different context. A small body of work emerged, principally in Denmark, in the mid 1990's which has documented a similar style of teaching from the perspective of the "autonomy classroom" (Little, 2011). In this instance, the "philosophy" embraced the notion that all MFL teaching and learning had target language production in speech or writing as the end goal. Specific pedagogical principles supported the idea that learner autonomy and growth of target language proficiency were "mutually supporting and fully integrated with each other", and that an "autonomous classroom" would, therefore, promote learner involvement, learner reflection and target language use (Little, 2007). Learner involvement was related to shared responsibility and active engagement in all aspects of the learning process (i.e. task selection, setting the learning agenda) whilst learner reflection demanded both incidental and planned monitoring and evaluation of the "process and content of learning" (Little, 2007: 23-24). Finally, in terms of target language use, Little (2011) posited that the very act of producing written language involved the production of external speech (embracing a Vygotskian approach to learning) which also had the benefit of being available for further learning (i.e. through evaluation, correction, extension or imitation). Indeed, Little (2007: 24) also stated that withholding print actively denied "learners a useful support" positing that "writing in order to speak and speaking in order to write" simultaneously involves interacting learner roles of language "communicators", "experimentors" and "intentional learners". Whilst the empirical framework to this study has not explored sociocultural learning theories, it was felt important to note the existence of an equally exploratory study and also, an alternative theoretical lens through which these teaching and learning activities could be viewed in the future.

5.3 The Intervention Practice

As previously noted, the pedagogical principles which underpinned this study's intervention were translated into specific teaching and learning activities. This section will explore the detail of how the pedagogical philosophy and principles were operationalized on a weekly basis.

It was firstly deemed important to fully embrace the idea that sound and print would be learned simultaneously and, with this in mind, each time a new L2 lexical item was heard, the written word was viewed whilst the spoken form was presented. This was intended firstly to differentiate the novel teaching approach from a more ad-hoc presentation of the written form but also to both explicitly and implicitly acknowledge an equal role for sound and print in the learning of new L2 lexical items. At this stage of the teaching, the print was enhanced in an attempt to optimise its visual impact and to support learning of noun gender and final, silent letters. The former was represented through colour coded definite articles and nouns (later extended to exemplify adjectival agreements) whilst the latter were shown as smaller, italicized print. Powerpoint presentations were devised to facilitate this and in order to enhance memorization, an adapted three stage questioning approach was utilised (Jones & Coffey, 2006: 48). Three stage questioning allows for assisting the learner to move from recognition of spoken forms to retrieval (reproduction) of spoken forms when the visual cue (a picture or action) is presented. This intervention adapted this approach to incorporate the written form and to offer an opportunity either to retrieve the whole written word form (in writing) or to possibly invoke sound/spelling links when attempting to recreate the written L2 lexical item from memory. The key learning activity for production of these kind of written forms was labelled "écrivez" (*write*). By the time this stage was reached, the word had been viewed at three previous stages. The teaching protocol for teaching and practicing new L2 lexical items was as follows:

Stage 1: Repetition: teacher showed picture, elicited L1 word, gave French equivalent orally whilst simultaneously revealing written representation (see example slide – Figure 5.1), class repetition.

Stage 2: Recognition: teacher revealed picture, gave French equivalent orally (occasionally incorrectly), asked class "oui ou non?" (*yes or no?*) Whole class responded. Teacher revealed written word as check for class response. Class then self-assessed orally using "oui ou non" as confirmation.

Stage 3: Recognition and Immediate Production: teacher revealed picture, gave two French words orally (one correct and one incorrect), and asked the class "choissisez" *(choose).* Either one selected respondent or the whole class chose a form. Teacher revealed written word as check for class response and the class confirmed the success of the cue choice orally.

Stage 4: Retrieval and Production: teacher revealed picture, asked class "qu'est-ce que c'est?" Generally, one respondent produced the form. If a respondent produced an incorrect form, the teacher attempted to elicit the correct form from another child. Once this was received, the teacher responded "écrivez" (*write*). The children then attempted to recreate the written form of the orally elicited word. The teacher repeated the word several times whilst they were attempting to reproduce the item so that they were focused solely on the written form rather than remembering the correct oral form for the visual cue. The teacher the revealed the written word as check for response and the class either ticked a correct answer or wrote the correct form in a column alongside the incorrect form. The children were encouraged but not explicitly required to write the meanings of each lexical item alongside the correct L2 written word.

Figure 5.1: Sample language presentation slide

Alongside the weekly teaching (50 minute lesson) of new or existing lexical items, the intervention was designed to focus equally on phonics instruction and meaning based activities. To this extent lessons were planned on alternate weeks. One week's lesson would focus on phonics instruction (which included sound work and decoding) with a short segment on meaning-related activities whilst the following week the emphasis would be on text-based work (reading and writing) for meaning with a mini phonics session. The phonics instruction comprised presentations which first focused on articulation and practicing L2 sounds. Following these initial presentations, a Jolly Phonics style approach was employed which presented graphemes whilst sounds were elicited/practised alongside, using both exemplar words and gestures as retrieval cues. The slides below (Figure 5.2) illustrates both kinds of presentation. The gesture used for this GPC involved pushing up the end of the nose to model a snout which most usefully also had the potential to act as a retrieval cue for L2 nasalization of the phoneme /ɔ̃/.

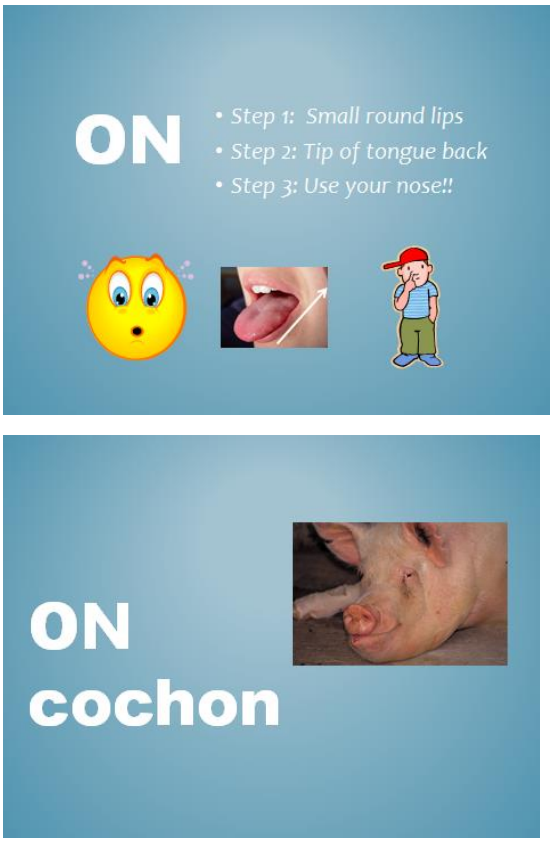

Figure 5.2: Example GPC/PGC presentation

This presentation of GPCs was accompanied by games designed to offer practice (and therefore automatise) sound/spelling links, details are presented in Table 5.3.

Game:	Description:	Learning Outcome:
Hot & Cold Phonics	Graphemes hidden around the classroom with unidentified children. Class modelled a phoneme, varying volume to direct the finders (usually two children). They also used gestures. Once children deduced who was holding a grapheme card, the grapheme was revealed and they had	Listening carefully and distinguishing L2 phonemes. Identifying the corresponding grapheme. Class practice of L2 phonemes.

	to decide if it is the correct card for the phoneme. If correct, they kept the card and carried on. If not, they gave up their turn and two more children became finders.	
Phonics Spotting	Table of hidden, selected L2 graphemes relating to phonics instruction shown on interactive whiteboard. Each one revealed at random, individually under time pressure (2 minutes for a minimum of 20 graphemes). Class shouted out corresponding L2 phoneme.	Recall, under time pressure, of novel L2 GPC links. Children see graphemes and recall target-like phonemes.
Phonics Swatting	All core L2 graphemes shown in different places on the interactive whiteboard. Two children at front of class with fly swatters. Teacher modelled list of familiar and unfamiliar words (some words contain two L2 phonemes). Children tapped which letters they heard. Whole class acted as judging panel – thumbs up for correct answer, thumbs	Recall, under time pressure, of PGCs. Children hear phonemes and find target-like grapheme.

	down for incorrect. Teacher revealed correct answer	
Grapheme Modelling	Teacher modelled random L2 phonemes. Children formed graphemic representations in playdough, under time pressure.	Recall of GPCs. Multimodal activity.

Table 5.3: Details of supplementary phonics games

In terms of meaning-based encounters with text, starter activities included hangman games with core vocabulary items - L2 letter names had been pre-taught at the beginning of the intervention and their use was encouraged. Writing was attempted at word and sentence level simultaneously; some gap fill exercises were used but when working at sentence level (e.g. descriptions and interrogatives), the children were given banks of words to choose from to create their own work. Similarly, reading activities were designed around both familiar and unfamiliar vocabulary. Sentences were read in pairs and peer assessed as well as stories which were shared and read aloud as a whole class (see Appendices 29-31).

This teaching cycle continued until the end of each mid-range plan (i.e. half way through the intervention) when the structure of the weekly lesson was adapted to allow for extended, independent creative writing and speaking which were developed through the creation of book chapters and video documentaries. A lesson was spent planning, eliciting and writing up (in draft form) firstly for the written chapters and then for the documentary which relied upon the written chapters as "back-up" scripts. For some children this meant that the oral production data this activity was intended to elicit, actually reflected L2 reading aloud data. Others, however, focused on less complex oral production but tended to use their written notes less. From the middle of January, however, several concerns had emerged relating to learner motivation (the

"écrivez" stage was particularly hard), whether students noticed the print (difficulties applying L2 GPC/PGC knowledge in class) and pace (the "écrivez" stage took a considerable amount of time). Extracts from the teacher diary (Figure 5.3) reflect some of these concerns.

WEEK 4:

5.10.11: School 2: I'm worried about two things: 1: the difference in time it takes across the cohort to copy the words in the écrivez stage and the effect this has on pace. It also gives a slightly "passive" feel to the lesson. 2: this passive feel is fuelled by the fact that it takes most of the lesson to teach them the core vocabulary and the written work is completed very slowly by some.

WEEK 6:

19.10.11: School 2: The écrivez stage was a bit quicker and they were more pro-active but I might need to make a choice. This provides a perfect opportunity to focus on sounds and letters but affects pace and could reduce the amount of words I can teach. Is it better to extend the vocabulary instruction as much as possible or keep the core vocabulary narrow and focus in on the sounds?

WEEK 16:

12.1.12: School 1: I've started doing the écrivez stage under time pressure – 10 seconds to spell nager, 5 seconds to check against revealed form, 10 seconds to copy correct form – just to keep pace and momentum…I've been thinking, MFL is a hard classroom dynamic to manage as it has to be pacey and upbeat and demands involvement and yet you have to very quickly contain them when you need them to focus in on written work or detail. I've got used to doing this over the years but this class (school 1) find it harder to cope with the transition than many I've worked with – even though they know the routine by now.

Figure 5.3: Teacher diary extracts – 5.10.11, 19.10.11 and 12.1.12

Following these dilemmas, a decision was made to alter Stage 4 of the teaching protocol for new words to "corrigez" *(correct).* This was loosely based around the previously mentioned teaching/learning activity "three stage questioning" (Jones & Coffey, 2006: 48), in particular that memorization of spoken forms required a "recognition phase" (detailed above) before a retrieval/production phase. Bearing in mind the slow and tentative development of L2 PGCs, it was considered that memorization of whole word written forms might be a way to start the development of L2 GPC/PGCs (by whole words acting as exemplars) and would also give a greater impression of progress to the learners. The extracts in Figure 5.4 from the teacher diary illustrate the perceived benefits from this adaptation.

WEEK 17:

18.1.12: School 2: The recognition of vocabulary through corrigez appeared successful. The pace is good (better than with écrivez). This was a good lesson. Corrigez was too easy but at least gave a feelgood factor! A few struggled when the alternative representations used L1 PGCs but interesting that the unfamiliar graphemic representation "krashe" (for crache) was rejected by all and yet, would probably have been presented by some had we been using the écrivez (recall) stage. So even though they come up with some wild suggestions when working without cues, they can distinguish sufficiently between presented cues. Interesting!?

19.1.12: School 1: The corrigez game was too easy (just like school 2). I will need to make the differences less pronounced. This activity is staying!! It's snappier and quicker than écrivez, gets them noticing and gives great feel-good. Something for everyone!

Figure 5.4: Teacher diary extracts – 18.1.12 & 19.1.12

"Corrigez" allowed for a choice between two written forms: one correct, one incorrect. Furthermore, whilst initially the erroneous form respected either L1-related or wild sound/spelling links (which the learners were often using), these altered as the teaching progressed and differences became more nuanced, sometimes with multiple

options available. From a teacher's perspective, the problematic nature of developing sound/spelling links had required further investigation. Whilst it was anticipated that developing strong enough L2 mappings to compete with existing L1 mappings would be time-consuming and difficult, a nagging doubt remained that the learners may not be noticing the print during this part of the learning process, instead preferring to focus on memorizing oral forms. It was envisaged that this activity might shed light on just how much of the print each participant was noticing. A sample slide is presented in Figure 5.5 (more examples are included in Appendix 50).

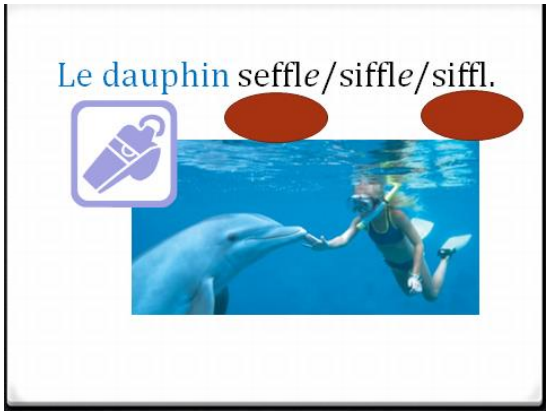

Figure 5.5: Sample "corrigez" slide

Full details of the teaching intervention in the form of one scheme of work, four mid-range plans and weekly lesson plans which are included in the appendix (Appendices 2-28).

5.4 Potential Novel Aspects and Contribution to the Field

Because of the writer's dual role as both researcher and teacher in this study, the opportunity was available to conduct a detailed exploration of the development of L2 literacy in young learners in English schools using a mixed methods approach. Firstly, the effect of this teaching intervention could be studied using quantitative data across specific language constructs (i.e. L2 reading aloud, L2 reading comprehension) and building upon previous research which has explored the effects of L2 phonics and strategy instruction. A second aim was however to offer a more detailed, qualitative exploration of aspects of L2 literacy development. For example, qualitative analysis

could shed more light on the learning of L2 GPCs (Cable et al., 2010; Woore, 2007; 2011), refining past pioneering research to emphasise particular areas of complexity and adding to the limited empirical evidence on the implementation and implications of whole language and phonics principles in foreign language literacy classrooms (Liaw 2003: 20).

On a broader perspective, research has noted a mismatch between language education policies (with respect to ELT for younger learners) and their implementation in daily classroom practice (Garton, Copland & Burns, 2011: 1). More specifically the global initiative to introduce foreign language learning (mostly English) in primary schools, which is seen as "possibly the world's biggest policy development in education" (Johnstone, 2009: 33), is often not informed by research and instead formulated with "limited knowledge and understanding of teaching practices in the field of young learners" (Garton et al., 2011: 1). For example, in terms of global practice in primary languages (English), research across 144 countries noted that pedagogies regularly involved: repetition (74.4%), reading aloud (70.3%), games (69.9%), song (66.9%) and exercises/gap fill (64.8%) but less often practised: silent reading (37.3%), dictation (36.8%), children telling stories (33.5%) or creative writing (30.7%) (Garton et al., 2011: 43-44). Teacher interview data showed that the less prevalent classroom activities were avoided due to large classes, mixed level groups, discipline, children with learning disabilities and motivational issues. This study offers the opportunity to explore the effects and potential utility of these lesser practised teaching techniques/activities with younger MFL learners, and how they impact upon professional concerns (cited in the research mentioned previously).

The development of sound and print together will allow for the implementation of an alternative approach to L2 literacy instruction which embraces "independence and exploration", "creativity and imagination" yet also offers "substantive" MFL provision in one language (Cable et al., 2010; Macaro & Mutton, 2009: 117; Ofsted, 2011: 24, 27). This is coupled with the possible evaluation of an instructional approach which focuses on explicitly developing L2 literacy (Pang & Kamil, 2004). Most importantly, whilst test performance against core L2 constructs will evaluate the

effects of the teaching, one of the key, novel objectives of this study will be to "get behind" the data in order to explore aspects of L2 literacy development through a variety of data-derived "angles" (teacher diaries, child workbooks, classroom video). Chapter 6 will examine in more detail the exact methodology this study adopted and the breadth of data collected.

The theoretical framework presented in Chapters 1-5 has provided a detailed backdrop which problematises MFL instruction (and specifically progression in MFL literacy), compares and contrasts current teaching policy and practice in various contexts and explores the evidence relating to learning to read in first and subsequent languages. This led both to the design of an evidence-based teaching intervention to investigate this research problem and to the following research questions.

5.4.1 Research Question 1: What are the effects, for younger children, of learning the L2 spoken and written word simultaneously?

This question will allow for exploration of this study's novel teaching approach which assumes that it might not be necessary to wait for learners to reach a certain level of proficiency before beginning L2 literacy (see Chapters 4 and 5). It is envisaged that this could also inform the long-standing debate concerning the provision of MFL in the England (Chapters 1 & 3).

5.4.2 Research Question 2: Do individual differences (i.e. L1 reading age and verbal working memory) influence L2 development?

Empirical evidence has shown the possibility that learners may bring L1 literacy-related skills and other aptitudes to the task of language learning (Chapter 4). This research question will aim to add to the theoretical evidence relating to learning to read in an L2 and to better inform the debate around teaching MFL (and specifically MFL literacy) to learners of all abilities (Chapters 1 & 3).

5.4.3 Research Question 3: How successfully are specific L2 grapheme/phoneme links learned during the course of the intervention?

Following the latest empirical evidence regarding learning to read in an L1 (Chapter 2), MFL teaching-related advice (including policy) often includes explicit and systematic phonics instruction (Chapter 3). On the other hand, recent research notes that the development of sound/spelling links is slow and problematic. Research question 3 intends to add to the existing yet limited body of evidence regarding the teaching and learning of L2 sound/spelling links in a primary school setting.

6. Methodology

This chapter will outline the study's methodology. First it will clearly state the research questions and will then examine the research setting in detail. Consideration of ethical issues will follow, as this study involves young participants and the researcher is also the L2 teacher. Next, the research paradigm will be discussed and a detailed examination of the research procedure, data collection and analysis procedures will be undertaken including attempts to justify decisions and to identify possible shortcomings. Finally, the formal and informal test battery will be presented and explored.

6.1 The Research Questions

1. What are the effects, for younger children, of learning the L2 spoken and written word simultaneously?

2. Do individual differences (i.e. L1 reading age and verbal working memory) influence L2 development?

3. How successfully are specific L2 grapheme/phoneme links learned during the course of the intervention?

6.2 The Research Setting

This research was conducted in two mixed-year classes within two, small (number on roll in each case <90), rural, primary schools in South-East England. The sample details were as follows (Table 6.1)

	Participants (n= 45)				Total
School	**One**		**Two**		
Class	**23**		**22**		**45**
Year	**Year 5**	**Year 6**	**Year 5**	**Year 6**	
	14 (60.9%)	9 (39.1%)	6 (27.3%)	16 (72.7%)	45
Male	7 (50%)	5 (55.6%)	3 (50%)	9 (56.2%)	24 (53.3%)
Female	7 (50%)	4 (44.4%)	3 (50%)	7 (43.8%)	21 (46.7%)

Table 6.1: Breakdown of sample by school, year group and gender

The sample mean age was 9.98 years; minimum age 9.01 years maximum age 11.0 years. The modal age was 9.10 years. In both schools, the gender split amongst participants was almost identical, however, the divisions between year groups was almost directly reversed. That is, in school 2, 72.7% of the sample were from year 6 (aged 10-11) and 27.3% were from year 5 (aged 9-10). On the other hand in school 1, the sample was more weighted towards the younger age range i.e. year 5 (60.9%). Overall, though, there were slightly more year 6 children (n=25 or 56%) than year 5 children (n=20 or 44%) in the sample.

All of the children spoke English as their L1. Although some had access/exposure to other languages at home (Nepalese, Arabic, Dutch, French) none of these children spoke these as home languages. The participants with Nepalese and Dutch backgrounds reported that their parents used their first languages as a means of private discussion. In other words, the parents conversed in the additional language so that the children could not understand (one child illustrated this using Christmas presents as an example). The child who lived in the French-orientated household had a French step-parent who did not speak French with the child concerned and finally, the Arabic aware child had an Arabic L1 parent and had a beginner's knowledge of Arabic (e.g. numbers 1-10 and greetings).

The history relating to MFL provision differed by school. In school 1, due to staff turnover and long-term absences, provision of MFL had been intermittent over the course of this cohort's primary school life. School 2, on the other hand, had had consistent MFL provision delivered by the same person (this teacher-researcher) with one term's instruction in KS1 (ages 5-7) and two terms' provision from age 7 onwards. In common with many primary schools in England, previous instruction had focused primarily on developing spoken language with limited emphasis on L2 literacy. It is most likely that school provision was the only access these children have to the target language (even in the case of the child with a French-speaking step-parent). The communities in which the schools were located were relatively advantaged socially, so that only two children across the sample were in receipt of free school meals (used as an indicator of a low-income status i.e. <£16,000 p.a.). Six children (all from school 2) were designated as having special educational needs (and a further two children from school 1 had individual education plans for school action).

In order to assess L1 literacy, a range of data was collected from both schools at the start of the study: L1 reading age, L1 spelling age and National Curriculum reading and writing levels (which were converted through cross-referencing to a continuous numerical scale ranging from 0=Level 1c to 15=Level 6c). Independent samples t-tests revealed no significant differences between schools on any of the L1 literacy measures. The maximum possible score for the non-word repetition test was 28. First language data across the sample is presented in Table 6.2.

Measure:	Mean	s.d.	Min	Max	Range
L1 reading age	11.32 yrs	2.25	6.08 yrs	15.00 yrs	8.92 yrs
L1 spelling age	10.05 yrs	2.20	7.00 yrs	17.04 yrs	10.04 yrs
NC reading	9.36 (NC 4c)	2.55	4 (NC 2b)	14 (NC 5a)	10
NC writing	8.47 (NC 3a)	2.32	3 (NC 2c)	13 (NC 5b)	10
Working Memory	26	2.77	16	28	12

Table 6.2: Whole sample first language literacy data

NC reading and writing levels were obtained by teacher assessment and have been converted into a continuous scale for analysis using SPSS. National Curriculum levels across the sample ranged from levels 2c to 5a. Within each numbered level are three attainment tiers which are marked a-c (c being the bottom tier of a numbered level and a being the top tier). As a benchmark, level 4b, initially considered the *average* attainment level for pupils aged 11 taking SATs, is now set as the *expected* level for primary school leavers. It is, however important to remember that this sample comprises two mixed-year classes (i.e. years 5 and 6) and therefore the year 5 proportion of this sample would be expected to have reached level 3a by the end of year 5.

The histograms below (figures 6.1 and 6.2) show the spread of reading age across the sample, sorted by gender and school.

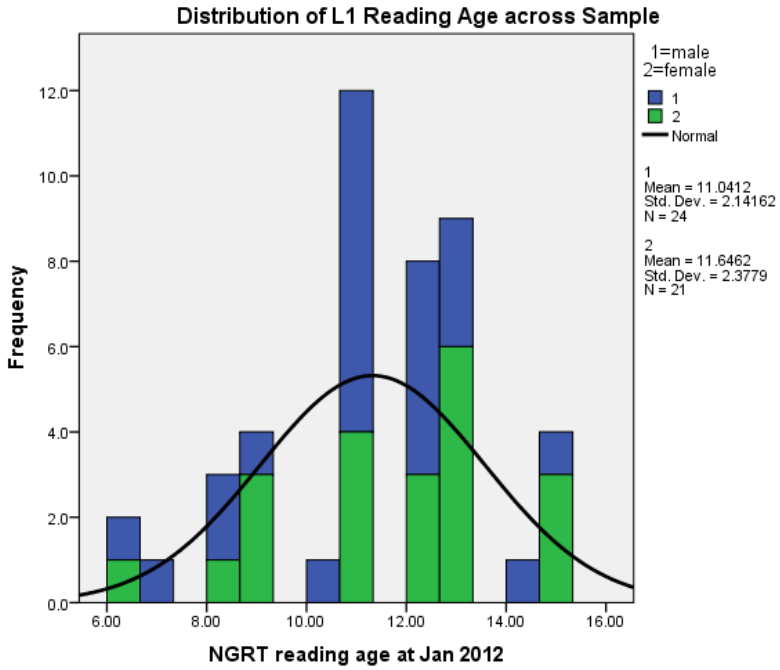

Figure 6.1: Histogram showing distribution of L1 reading ages by gender

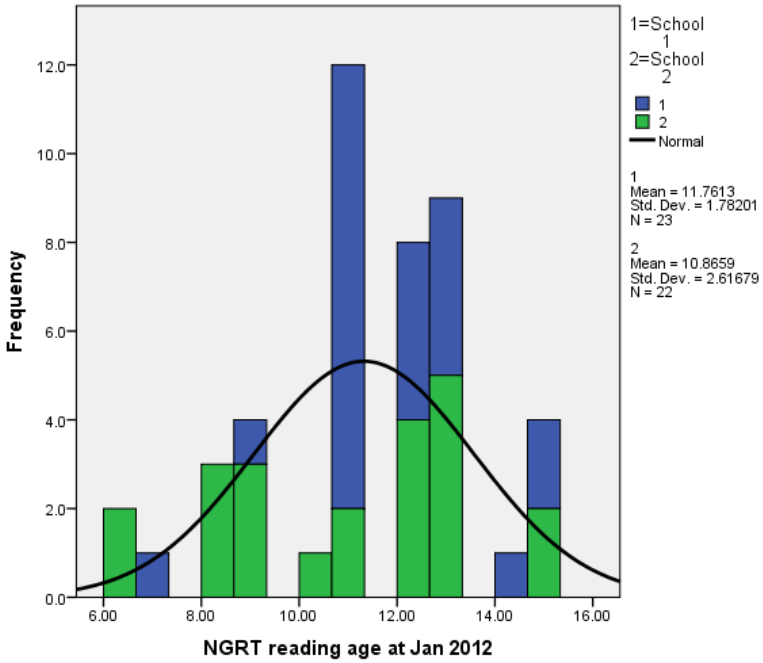

Figure 6.2: Histogram showing distribution of L1 reading ages by school

It should be noted that the mean reading age for the sample (11.32 years) was markedly higher than the mean sample age (9.97 years). This was undoubtedly aided by particularly high top scores (4 participants scored 15.00 years) and a cluster of participants (n=17) whose scores ranged between 12.00 and 13.00 years. Whilst the range between high and low scores was appreciable (8.92 years), the relatively small number of participants with a reading age noticeably lower than chronological age (n=6) had little impact on the mean score. It should also be noted that the reading test used with this sample (NGRT – New Group Reading Test) measured specific reading-related skills. A more detailed outline of this test and its potential limitations is provided in Section 6.2. An independent samples t-test confirmed that the male and female mean scores for L1 reading age and NC reading levels were not significantly different (reading age male mean = 11.04, female mean = 11.65, asymp sig. = .374; reading level male mean = 9.25, female mean = 9.48, asymp sig. = .770). No other L1 measures showed effects for gender in this sample either. Equally, L1 reading age and NC reading levels did not show significant differences between schools (reading age school 1 mean = 11.76, school 2 mean = 10.87, asymp sig. = .185; reading level school 1 mean = 9.65, school 2 mean = 9.05, asymp sig. = .431). It should also be

stated that for all L2 measures at pre-, post- and delayed post-test, results were not significantly different for gender or school and these comparisons will, therefore, not feature as part of this study's findings.

6.3 Ethical Considerations

There are considerable ethical responsibilities attaching to research in any school environment with young children and the more so, as in this case the researcher also had the role of MFL teacher. The potentially conflicting roles of researcher and teacher and resulting ethical issues have been identified by Cohen, Manion & Morrison (2007: 69), and this discussion is drawn on below. Appendix 32 shows a project checklist which sets out some of the ethical issues for teacher researchers identified by Watt (1995) and how this study attempted to address such concerns. Furthermore, Macpherson & Tyson (2008: 55-69) detail five "Cs" (conduct, confidentiality, consent, choice of methodology and contextualization) which were considered when planning this classroom-based research.

6.3.1 Informed Consent

As the participants were all between 9 & 11 years of age, parents, guardians or carers were approached for informed consent (Appendices 33 & 34) using documentation which was carefully drafted with two distinct, but occasionally conflicting, aims. First, it was deemed essential that the information that "mattered" was conveyed in line with guidelines for "reasonably informed consent" (Cohen, Manion & Morrison, 2007: 53). However, the importance of detail had to be counterbalanced with brevity (previous school communication had shown that some parents and carers might be less inclined to read lengthy correspondence). Bearing in mind that this research was educational, the "important ethical questions" (McDonough & McDonough, 1997: 67) would focus on the anticipated concerns and rights of parents/carers and participants, for example: anonymity, confidentiality, storage and preservation of information rather than detailed specification of methods of instruction or assessment. The children's verbal consent was also sought, as part of the intervention comprised classroom observation

and tests in small groups (Appendix 35). Clearly, there were more tensions associated with obtaining children's consent – refusal or discomfort at videoing input sessions from one pupil could have implications for the group and therefore, the intervention as a whole. Also, the intervention was planned to form part of the regular MFL programme and, as such, it was essential that the intervention was "genuinely educational" (Watt, 1995). Therefore, throughout the planning stages (drafting of schemes of work, mid-range plans and lesson plans) clear learning outcomes were directly related to key learning objectives outlined in the Key Stage 2 Framework for Languages (DfES, 2005) thereby conforming to national expectations for MFL learning. Furthermore, lesson activities were carefully balanced and pitched so that learners across the ability range would be able to participate. Indeed, as with usual teaching practice, a commitment was made to revise and review the teaching plans if it became evident that part of a lesson was unsuccessful (through in-situ observation or post-lesson teacher diary reflection). In this way, the study aspired to embrace the notion of "utilitarian ethics" posited by Flinders' Conceptual Framework for Ethics in Qualitative Research (Flinders, 1992).

Whilst there were no overt refusals to participate in teaching sessions or test conditions, it is important to note that this does not represent real freedom of choice in its fullest sense (Cohen, Manion & Morrison, 2007: 55). In other words, throughout the study it was important to consider "ecological ethics" or the power relationships which are a feature of school life and to maintain awareness of the teacher/pupil relationship and its inherent "roles, status….and cultural norms" (Flinders, 1992: 108). In line with the British Educational Research Association Guidelines (hereafter BERA), attempts were made to reduce a "sense of intrusion", "distress" or "discomfort" and to put the participants "at ease" (BERA, 2004: 7).

Finally, test tasks were developed to be as user-friendly as possible and accessible for the learners. The development of the test tasks will be explored in Sections 6.7 and 6.8.

6.3.2 Access and Acceptance

This was less of a problem, as teacher/pupil relationships had already been established with most of the children and, indeed, some of the parents. The teacher/researcher already held an enhanced disclosure from the Criminal Records Bureau and had an ongoing working relationship with both schools (school 1 since 2009; school 2 since 2003). Permission was obtained from both Headteachers (and also the school governing bodies) to conduct small-scale research and the nature and objectives of the project were outlined to them. As provision for MFL instruction differed between the schools, the input sessions were designed to take place across two school terms (from September 2011-April 2012). Pre-tests were conducted at the beginning of the academic year (September 2011), post-tests at the end of the intervention (March 2012) and delayed post-tests at the end of May 2012. School 2 ceased MFL provision for KS2 pupils at Easter every year and the summer terms is devoted to French instruction for the younger children (KS1). School 1, on the other hand, continued with KS2 MFL instruction throughout the academic year. In order, therefore, not to compromise validity, it was negotiated with the school that the participants would spend the first six weeks of the summer term learning a different language - Russian (ab initio). Whilst the six week delay between post and delayed post-test is arguably not ideal, this was necessitated by the national tests (SATS) in May. The sheer volume of pre-tests in September had meant that access was required to individual children over the course of one week and the teacher/researcher felt that this would be too disruptive for both schools in the weeks preceding the national tests.

6.3.3 Confidentiality

Notwithstanding the various dilemmas and conflicts with respect to ethics outlined above, at the heart of this project's ethical considerations was the need to preserve confidentiality and anonymity (Check & Schutt, 2012: 268). A range of steps were taken to ensure that participants' rights to privacy were protected. School names and pupil names were not included in any transcript and video data files, stored on computer, were password-protected. When advice was taken regarding qualitative

data interpretation or inter-rater reliability all data was anonymised; the assistants in these activities were not in any way involved with the schools concerned and, therefore, unable to identify particular children.

6.4 The Research Design

This research environment offered the opportunity to chart and explore the development of second language literacy in young children in a real-life context. Recognizing that "context is a powerful determinant of both causes and effects" (Cohen, Manion & Morrison, 2007: 253), that the boundaries between phenomenon and context are not always clearly evident (Yin, 2009: 18), that this study aimed to be "strong in reality" (Adelman, Kemmis & Jenkins, 1980: 59-60), and, above all, that this was an opportunity for in-depth exploration of one aspect of a problem (Bell, 2005: 13); it was originally suggested that this research should adopt case study methodology. Its overall purpose, to get some degree of insight into a question by studying a particular case, would situate it within the realms of instrumental case study (Stake, 1995: 3) and different levels of data collection and analysis would allow for multiple perspectives thereby attempting to represent as accurately as possible the complexity of a second language classroom. Indeed, the unique strength of case study is seen as the "ability to deal with a full variety of evidence" (Yin, 2009: 6). Hitchcock & Hughes (1995: 317) highlight key hallmarks of case study which include: linking description of events with their analysis, a researcher integrally involved in the case and a rich and vivid description of events relevant to the case. In research of this type, longitudinal and detailed descriptions of specific learners in multiple cases can provide insights into the complexities of particular contexts, combine to draw firmer conclusions about the process and nature of second language literacy development (Mackey & Gass, 2005: 171-173) and potentially contribute to an overall understanding of this phenomenon within a theoretical framework (Mackey & Gass, 2005: 306). In addition, Yin asserts that case study offers the possibility to explore how and why a particular "treatment" worked (2009: 15-16).

However, whilst this study conformed to most of the "hallmarks" of case study research, the integral role of the teacher created a methodological dilemma. Whilst it could be successfully argued that there is an "observer" role in this case study through the use of classroom video data, the researcher in this study was also the teacher and so there were clear theoretical grounds (teacher as researcher and no control group) for this study to be considered action research (Mackey & Gass, 2005: 219). Action research is a "self-reflective, systematic and critical approach to inquiry", led by participants who are also members of the research community (Cornwell, 1999: 5). More specifically, this study was practitioner led and merged the role of researcher and practitioner. By bridging the gap between understanding and action, the study also provided better information for interested community members about classroom occurrences and their origins, including teaching and learning processes. In this way, it conformed to Nunan's (2005: 235) definition of action research. Of particular concern was the teacher researcher's ability, or even obligation, to control and alter classroom events as the investigation progressed. This is supported by arguments that action research, by definition, involves "fine-tuning" (Kember, 2000: 41). In addition, the section relating to this study's ethics has already noted the importance of "utilitarian ethics" – that the greatest good should be obtained for the greatest number of people (Mills, 2007: 112). As it was deemed essential that the teacher-researcher should be able to introduce change to support ongoing learning and sustain a positive experience for the participants, an action research methodology appeared eminently suitable.

The choice of an action research model posed further challenges as it was believed that a clear, cyclical process might not be apparent for the duration of the intervention. However, it can be argued that the cyclical process in action research is not always tidy and that planning action, observation and reflection stages can overlap (Kember, 2000: 27; 127). Most action research cycles appear to feed back into the original area of investigation either through having resolved the problem or by having identified a refined or revised problem. This approach appears to rely on having a relatively narrow and highly contextualized initial area of investigation whereas this

study problematizes the larger issue of developing L2 literacy in younger learners and therefore adopts multiple and simultaneous lines of investigation. For this reason, whilst this study will certainly end with revised areas for resolution, their investigation will not form part of this study (which is, by necessity, time-bound). This will, in turn, limit the opportunity for an ongoing cyclical process of observation, reflection and action.

This study starts with an extensive literature review which examines the issues surrounding the development of L2 literacy both in England and abroad. It was therefore anticipated that this inquiry would, alongside developing the teacher researcher's personal theories about L2 literacy teaching and learning in her classrooms ("theory for practice": Burns, 2013), also add to the theoretical debate surrounding teaching L2 literacy in English classrooms. Nevertheless, Blichfeldt & Anderson (2006) propose that action research is concerned with issues surrounding a practice situation (i.e. with "impact on practice": Burns, 2013) and, as this study's fundamental research problem is undoubtedly located in practice (albeit practice in a wider context than one classroom), it was accepted that action research methodology and its focus on "emergence" and "responsiveness" (Burns, 2013) would provide the best framework for "exploring" the nature of L2 literacy development.

After careful consideration, however, it appeared that no one action research model discussed in the literature adequately reflected the distinct nature of this study. Instead it was found that aspects of two models (presented below) best fit with this investigation's aims, rationale and structure. Firstly, McLaughlin's model (see Figure 6.3) allows for the distillation of a broad problem (e.g. L2 literacy teaching and learning) into more distinct issues (e.g. L2 phonics instruction, L2 text experience, sound and print together).

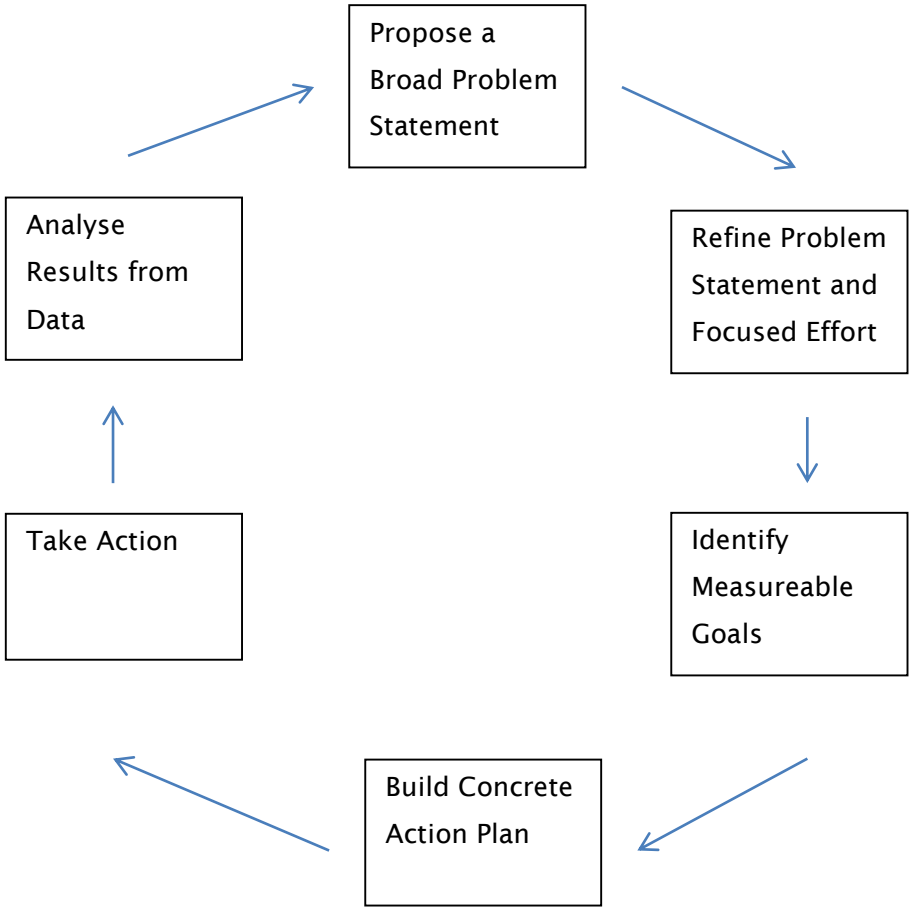

Figure 6.3: The Cycle of Inquiry (after McLaughlin, 2001: 80)

On the other hand, Wells' (1994: 27) model for action research allows for a classroom-centred "problem" and therefore places "practitioner personal theory" at its core (see Figure 6.4). Whilst this study's reflection of a wider issue meant that theory was instead located outside the classroom, referring back to the wider research community (i.e. learning to read an L2, wider teaching practices, cross-linguistic influence, etc.), Wells' model does allow for a key outcome of this study, i.e. change and refinement to personal views (theories) on L2 teaching and learning. and also for the idea that any action taken in action research has the potential to inform and be informed by personal theory.

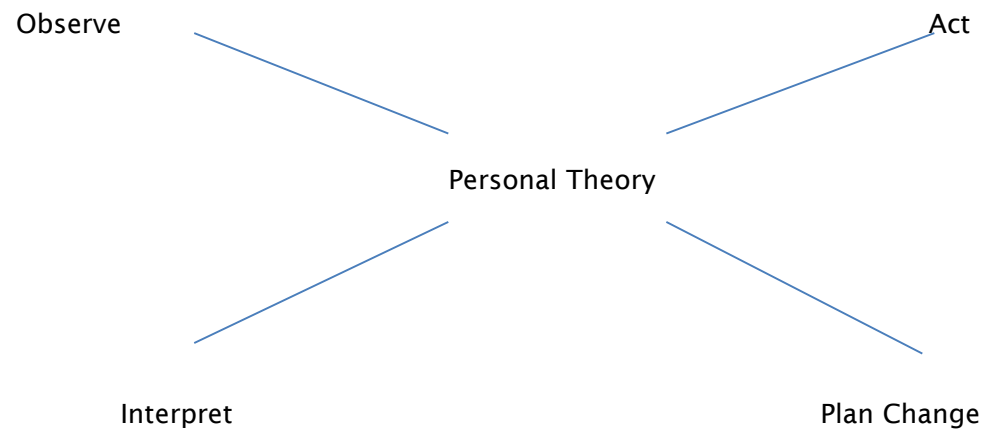

Figure 6.4: An idealised model of the action research cycle, Wells (1994: 27)

It is also important to briefly explore the "distinctions" between classroom-based action research methodologies. The terms action research, teacher research and practitioner inquiry are used almost interchangeably and Check & Schutt (2012: 263) argue convincingly that all action research conducted by practitioners can be teacher research but that not all teacher research can be action research. They propose that the often-cited recursive spiral of investigation is the key feature which sets action research apart from similar approaches. Teacher research, on the other hand, is not necessarily cyclical, does not require a team element and does not necessarily require a specific action or improvement as an outcome. Others acknowledge the importance of the iterative research cycle alongside "systematic data collection procedures" and "cyclical observations" which drive changes and improvements to practice. In this view, the iterative cycles provide richer, deeper data which can be triangulated, and explored across "episodes, sites and subjects" which provides rigour and reduces subjectivity (Burns, 2005: 60, 67). Here, the cyclical nature of action research allows for solving problems within a particular "social situation" using principally qualitative, interpretive methods (Burns, 2005: 61). This study, on the other hand, adopted a mixed-methods approach, collecting both qualitative and quantitative data and analysis which involved both statistical and interpretive techniques. This combination of reflection and data is echoed by Ollerton (2008: 11) who notes that one of the differences between a "reflective practitioner" and "practitioner researcher" is systematic data collection and

analysis). Mills' view of action research in educational settings appears to best embrace the nature of this particular investigation by allowing for collection of both qualitative and quantitative data and a cyclical process which is not necessarily a "series of discrete steps" (Mills, 2007: 127).

The acceptance of a mixed-methods approach for action research in educational settings leads to consideration of another "anomaly" in defining and delimiting roles in this study which involved a research methods trained postgraduate research student who is also actively teaching in an L2 classroom. Check & Shutt differentiate between types of classroom-based research methodologies (action research and practitioner research) through making a distinction between the role of practitioner and researcher; in other words they state that teacher researchers "normally need resource help…..as they are not professional researchers" (2012: 269). Indeed, Mitchell (2011) acknowledges that, traditionally, classroom-based practitioner research has either been managed by university-based academics (who may well have been L2 instructors at some point), undertaken by collaborative researcher/teacher networks or by independent, experienced and confident practitioners. It could, therefore, be argued that this study has a relatively uncommon perspective where (due to the nature of MFL primary school provision), the researcher can be an "active" FL teacher and also an "active" early career researcher and that this dual role has contributed to some of the (already noted) inconsistencies with action research methodology.

A potentially limiting effect of adopting an action research approach links back to the aim to inform the wider research community. More specifically, action research studies are often deemed to be highly situation-specific (i.e. involving a specific teacher/s and therefore specific classroom dynamics) or "objectively subjective" (Burns, 2013). In other words, because action research is deemed not to involve a detached, objective view of what is a highly contextualized situation, research community opinion often views it as motivated by teacher curiosity and a desire to understand particular classrooms (Mackey & Gass, 2005: 216) or as a tool for change at the local level with the objective to promote reflection in practice (Cohen, Manion & Morrison, 2007: 256, 298). Mitchell (2011: 695) notes that action research in education has

engendered debate concerning its scope outside of the classroom and cites Burns' view (2005: 63) that this branch of research concerns "personal professional action and teacher growth" rather than the "production of knowledge and educational change". In this way, she comments that action research often involves the "rediscovery of already established theoretical perspectives". Burns (2013) argues that action research should not even concern itself with "generalizability". Instead of problem-solving and the confirmation/rejection of hypotheses, action research focuses on "illustration, exploration, critical reflexivity and awareness".

Mills (2007: 11) however posited that the legitimacy of data collection in action research (i.e. real teachers, real classrooms, real children) makes it "persuasive", "relevant" and "authoritative" for teachers. Kember (2000: 40, 42) added that generalizability in educational settings is no less problematic even for experimental studies primarily because the very nature of controlling variables to enhance reliability removes the intervention from a "normal classroom setting". Perhaps then, the answer is to embrace both types of study equally. Whilst experimental or quasi-experimental research might offer convincing explanations of the effects of programmes on a wide scale, the detail portrayed in case studies and action research studies in classrooms helps to better understand the processes and steps involved in teaching and learning and is, therefore, arguably of more interest and use to teachers. It is suggested that, certainly in terms of informing the educational community, the longitudinal nature of this study is one of its greatest strengths. In other words, taking account of the fact that learning can follow a long and complex trajectory, this intervention allowed for the opportunity to chart *development* as well as report *effectiveness*.

Finally, from a philosophical perspective, this study embraced aspects of both critical action research and practical action research (Mills, 2007: 6-9). From a critical perspective, one of the strands of this study was the opportunity to challenge ways of professional practice which are "taken for granted" – for example, the premise that learners should reliably form spoken representations of language before print is introduced. More "practical" terms were addressed through the teacher-centred nature

of the intervention: a commitment to improving L2 literacy learning and teaching, reflecting on practice, making decisions and choosing the areas of focus.

In order to attempt to address the potential for impact outside the immediate confines of the particular classrooms involved in this research, it is argued that (similar to case study) the classrooms in this research can be considered representative of primary second language classrooms in the wider community and offer the potential, therefore, for change across rather than purely within a specific learning community. Furthermore, an approach which allowed for reflection and refinement could provide the optimum conditions for improving the teaching and learning of L2 literacy in primary schools because it reflected this process in an authentic way. In other words, it was hoped that the richness of this "slice of life", longitudinal, classroom-based, mixed-methods, protocol-driven study would compensate for any experimental "weakness" (i.e. no control group). Whilst statistical analyses have been reported carefully, with limitations recognised, the opportunity to view classroom events from multiple angles nevertheless provided a robust study. In an effort to support its claims as a robust investigation, final outcomes were assessed against Mills' (2007: 206) Criteria for Judging Action Research (Appendix 36).

6.5 Data Collection

This study involved convenience sampling (Cohen, Manion & Morrison, 2007: 113). In other words, two intact classes were involved in the intervention and, therefore, any findings could be difficult to generalize as, strictly speaking, this sample does not represent the wider population. The research design was mixed-methods and combined quantitative and qualitative techniques into a single study. It was envisaged that this would allow for a fuller portrayal and analysis of the broad aim of this study – to chart the L2 literacy development of these young learners. Furthermore these "multiple perspectives" collected through a range of data would allow for the illustration of "different aspects of the same question or problem" (Check & Schutt, 2012: 267). The variety of data obtained by this study are detailed in following sub-sections and in Appendices 37 and 38 where they are linked to the research questions.

6.5.1 Qualitative Data

The range of data collection techniques is based upon Mills' (2007: 73) Taxonomy of Action Research Qualitative Data Collection Techniques and involves "experiencing, enquiring and examining". Observational data and field notes allowed for the recording of participant observation (in this case as an active participant) and therefore the research experience. Questionnaires and self-reporting/self-assessment formed part of the enquiry mode where the researcher directly asked questions of the participants, and archival documents (schemes of work, plans, teaching protocols), journals (teacher diary), video and audio recordings and artifacts (participant workbooks) provided the opportunity to examine the longitudinal teaching and learning processes of this study.

6.5.1.1 The Protocol. Each L2 lesson took place at the same time of day (afternoons) and generally on the same day of the week in both schools. Both schools followed the same scheme of work, mid-range plans and weekly lesson plans which combined to make the study protocol (see Appendices 2-28). This protocol also included objectives and principles (see Chapter 5) which drove the weekly input. Each weekly language learning lesson lasted for approximately fifty minutes. Where there were whole class absences from school (e.g. residential trips) a catch-up lesson was offered the following week so that each school received an identical amount of input. It is important to note that whilst the intervention was closely documented to support reliability, the study also aimed to accommodate the flexibility that action research requires. In this way, aspects of the teaching intervention evolved over time but each decision which contributed to its evolution was noted in the teacher diary. It is important to state, however, that the core pedagogical principles which underpinned the study and have been described in Chapter 5 remained unchanged throughout as these were derived from the study's theoretical framework.

6.5.1.2 Teacher Diaries. A teacher diary was kept which included important information about how decisions were made and carried out in order to allow for the consideration of biases and the role of the researcher in interpreting the data (Mackey & Gass, 2005: 305). Entries were written up after every teaching session in both

schools on the same day that teaching had occurred (to ensure that events in the classroom were recalled as accurately possible) but, generally, in the evening so that a little reflective "distance" had elapsed between experiencing and recording the classroom experience. As the participants in the study and the teacher-researcher had an existing classroom relationship, it was anticipated that this would also serve to articulate the "particularistic and idiographic" knowledge of the teacher (Bolster, 1983) and would offer crucial insight into "process"; in other words, accessing some of the "psychological, social and affective factors" that often remain unexplored in experimental educational research (McDonough & McDonough, 1997: 135). Reflexivity is a key tenet of action research and it was anticipated that the teacher diaries in this study would contribute to separating out the roles of teacher and researcher (Check & Schutt, 2012: 268), act as a prompt to critical reflection on teaching and allow for systematic and regular reflection on the project's progress (Kember, 2000: 42).

6.5.1.3 Classroom Observation (video and audio). This study adopted a participant-observation method of data collection and central to this was the collection of video data throughout the study. The camera used was small, and placed on top of a cabinet at the back of the room. This contributed to confidentiality and safeguarding issues by recording "backs of heads" and was also deemed to minimize intrusion and therefore the possibility that behaviour could be affected (Mills, 2007). On the one hand, this offers a "distinctive opportunity" to utilise the perception of someone "inside the case" to interpret the video data. Of course, there is a potential threat to validity as interpretation of this data requires critical self-awareness (Check & Schutt, 2012: 266) hence the importance that multiple sources were examined (triangulation) in order to support specific judgments or conclusions.

6.5.1.4 Classroom Artefacts. These comprised materials produced in the course of the instructional programme, and were collected to "corroborate and augment" other evidence (Yin, 2009: 101). It was envisaged that children's workbooks and vocabulary books would offer a rich resource to illustrate the development of second language literacy both across the sample and for individual participants. Furthermore, the whole

pedagogic intervention would culminate in the production of a class book and a video documentary which could be examined to support some of this study's claims.

6.5.1.5 Questionnaires. Small questionnaires (Appendix 55) were distributed at the beginning of the study and some brief questions devised at the end to ask each participant. The first questionnaire attempted to elicit information relating to linguistic background (e.g. multilingual family backgrounds, number of years learning French), attitudes towards learning French and linguistic self-evaluation (e.g. how many French words can you say?). The final questionnaire omitted the linguistic background questions but included the same attitudinal items. In addition, lessons presented an opportunity for impromptu class discussions on various aspects of the learning (e.g. a brief, unstructured exploration of the use of colour in presenting noun gender) which would elicit possibly less guarded responses from the participants. Bearing in mind "ecological" ethical considerations, it was acknowledged it would be important to consider the power relationships featuring in school life when analysing the questionnaire data (Flinders, 1992: 108).

6.5.1.6 Assessment of Intervention. Mid-way through the intervention data was collected in the form of photographs which attempted to give some insight into the participants' attitudes towards most of the teaching and learning activities. Intervention teaching and learning activities were printed on individual laminated cards and colour coded according to the skills they referred to: spoken language (yellow), reading (red), writing (green), listening (blue) and planning, research and teamwork (purple). These were then ranked by the children in order of preference (horizontal ranking was acceptable for those activities which could not be differentiated). The children worked in groups (3-5 children) and photographs were taken after the assessment to record their evaluations. It was anticipated this evidence might support some of the questionnaire information and give further insight into the intervention's successes and failures.

6.5.2 Quantitative Data

Two types of quantitative data were collected. Study-focused data concerned the pre-, post- and delayed post-tests which were designed in order to elicit specific, whole

sample assessment which related to proficiency across three core L2 constructs. Instruction-focused data was collected mid-way through the intervention and related to performance against some of the core instructional objectives determined by the schemes of work and supported by the KS2 Framework for Languages (DfES, 2005).

The study-focused quantitative data (the formal test battery) aimed to track participant performance across two key areas: L2 literacy and L2 general proficiency. These were broken down into discrete constructs: L2 reading aloud, L2 reading comprehension, L2 receptive vocabulary and L2 grammatical development (accessed through elicited imitation). Additional information was obtained which measured working memory through a non-word repetition test (Gathercole & Baddeley, 1996) and L1 reading age through the NGRT (New Group Reading Test). Finally, existing school data which related to individual performance against National Curriculum levels was collected to provide a more extensive portrayal of the literacy background of each participant. Specific information relating to these tests is presented in Section 6.7.

The instruction-focused quantitative data (the informal test battery) aimed to evaluate progress against some of the core instructional objectives (e.g. to elucidate the development of declarative knowledge of sound/spelling links). The constructs tested on this occasion were: L2 reading comprehension, L2 receptive vocabulary, L2 noun gender and adjectival agreements. In addition half the sample were tested for L2 reading aloud of familiar and unfamiliar words. These tests are examined in Section 6.8.

6.6 Validity and Reliability

6.6.1 Validity and Reliability in the Intervention Design

Internal validity – quantitative research: do the treatments and only the treatments make a difference in this experiment? (Cohen, Manion & Morrison, 2007: 155). In order to bolster any claims this study makes and bearing in mind the lack of a control group, findings are compared with those from comparable studies. Furthermore, the data are analysed and learning identified which can be directly attributed to the pedagogical principles adopted. For example, the data portraying the development of

L2 PGCs is linked to aspects of the explicit and systematic phonics instruction. This will be explored fully in Chapter 7.

Internal validity – qualitative research: is the interpretation fair, plausible, credible? Has the research involved prolonged engagement in the field and triangulation? (Cohen, Manion & Morrison, 2007: 135-137). Issues concerning internal validity are presented in the data analysis section (6.6.2) of this chapter.

External validity: can generalizations be made from this research to other populations? (Cohen, Manion & Morrison, 2007: 158). This has, to some extent, been explored in Chapter 6 and will be reprised in Chapter 8.

Construct validity: Yin (2009) suggests using multiple sources of evidence, establishing chains of evidence to ensure that key concepts are studied through a range of operational measures and subjective judgments are avoided. This has principally been achieved through triangulation of evidence by examining multiple data sources. In addition, random data samples (e.g. reading aloud data) which involved a degree of qualitative assessment were second-marked by the teacher/researcher.

Reliability: A clear teaching protocol was devised in the form of schemes of work, mid-range plans and detailed individual lesson plans (see Appendices 2-28). These were grounded in a clear rationale which also supported test design and identified marking/scoring criteria. In other words, all procedures were designed to maximize the opportunity for this intervention to be undertaken in other contexts with different participants and researchers. In addition, the "treatments" were clearly documented and the detailed nature of project documentation allows for some exploration of the relationships between instructional practice and outcome (as evidenced by learner performance).

6.6.2 Validity and Reliability in Data Analysis

Quantitative Data Analysis: As previously identified, the sample was an intact class and therefore a convenience sample which could raise issues relating to selection bias – in other words, the possibility that the results achieved by this study may not be representative of those which could be achieved in the wider population. Furthermore,

it is suggested that this intact sample may contain factors which, statistically speaking, had implications for results. At least six children in the sample had special educational needs (e.g. vision impairment, and special behavioural or educational needs) and therefore, in statistical terms, could be considered "outliers". Whilst it seemed likely that such issues would impact on learning outcomes (especially with relation to the quantitative test data collected) it was deemed important, in terms of reliability, to represent the complex environment that is an intrinsic part of most primary school settings (i.e. mixed-ability, inclusive education). In this way and in order to attempt to optimize "transferability" of this study beyond its immediate environment, learners of varying abilities and needs were represented and each context was described in detail (Mills, 2007: 86).

The marking of the numerically scored tests relied principally on dichotomous scoring and, as such, was deemed to lack subjectivity. However, as the teacher-researcher was also the rater (and the only rater), it was important to avoid issues of "going native" (Cohen, Manion & Morrison, 2007: 158) and becoming too attached to the research to view children's performances dispassionately. With no access to an alternative rater, the teacher-researcher second marked a randomized selection of scripts whilst adhering to the specific marking criteria set out in writing. This was deemed especially important with the read-aloud data and elicited imitation performances which entailed a more subjective marking system. The double marked scores could then be compared for inter-rater reliability using the formula shown below. Rater reliability was 67% for L2 elicited imitation (post-test) and 83% for L2 reading aloud (post-test).

Formula for inter-rater reliability (Cohen, Manion & Morrison, 2007: 147)

$$\frac{\text{Number of actual agreements}}{\text{Number of possible agreements}} \times 100 = \text{Percentage reliability}$$

All the quantitative, test data were then transferred to spreadsheets and analysed in Excel to display information visually and to sort scores by rank order and in SPSS to

provide descriptive and inferential statistics and the visual representation of scores (histograms) and relationships (scatterplots).

Furthermore, the pre- and post-tests were almost identical (except for enhancements identified in Section 6.7.1, and the post and delayed post-tests were identical to ensure validity. In order to optimize reliability , enough time elapsed between different test administrations to ensure participants could not fully remember each test. Finally at no time during the intervention or between post-test and delayed post-test were results and/or answers discussed with the participants. Praise and encouragement was given regardless of whether responses were correct or incorrect. Many participants were keen to discover the answers to the reading comprehension test (i.e. who committed the crime) and the teacher-researcher promised to identify the thieves immediately after the delayed post-test.

Other potential issues with respect to reliability were noted: due to the schools' practical requirements the children were tested at different times of day. School 1 preferred testing in the afternoon (after the day's key input sessions) whilst school 2 felt that morning tests were more convenient. Observationally speaking, this did not appear to visibly affect their performance or concentration and this is borne out by the lack of significant difference between the schools on each L2 construct tested (at pre- and post-test). For L2 reading aloud, L2 elicited imitation, and non-word repetition, the children were tested outside the classroom by the teacher researcher.

Qualitative Data Analysis: The rationale proposed for analyzing the study's qualitative data can be linked to Maxwell's Criteria for Validity of Qualitative Research (1992). Particular consideration was given to descriptive and interpretive validity. In this way the account is concerned with factual accuracy and examines behaviours through the lens of a researcher but also the MFL teacher who (with several years' experience working with many of the participants in the study) attempted to combine the "participant's perspectives" along with a researcher account (Mills, 2007: 87-9).

As it was principally envisaged that the qualitative data would be used to explore and explain the quantitative findings which related to the three key research questions,

the main analysis technique adopted was that of "key questions" (Mills, 2007: 126). For example, in exploring the nature of the acquisition of L2 phoneme/grapheme correspondences, through both quantitative and qualitative data, potential questions included: Which are the most successfully learned PGCs? Is it easier to learn new PGCs or to adapt existing ones? Is everyone successful at learning L2 PGCs? What aspects of a PGC helps its acquisition – consistency, practice? The interpretation of qualitative, classroom data also involved: making clear connections between findings and personal experience (i.e. knowledge of schools, classrooms, learning and teaching), seeking the advice of "critical friends" for additional or supporting insights and contextualizing findings against the theory and expectations presented in this study's literature review (Mills, 2007: 136).

It might be suggested that the analysis of diary evidence, in particular, might raise reliability and validity issues. Whilst triangulation (looking for evidence across multiple sources) was the main tool to address this, it was also important to note an alternative view which suggests that subjectivity can be an essential part of language teaching research (McDonough & McDonough, 1997: 135). In other words, when the object of study is uncovering individuals' reactions to the learning process; (in this study's case) teacher perception of those processes (with its inherent bias) is a "prime research aim" (Jones, 1994: 444). Teacher diaries, then, can contribute to confirmability (Guba, 1981) by potentially revealing underlying assumptions and/or biases which might influence the interpretation of findings in a particular way (Mills, 2007: 86).

Finally, it was important to consider alternative ways to support validity and reliability in action research. Burns (2013) recommends a focus on triangulation (of evidence) and "resonance" (i.e. considering whether findings would be relevant to other practitioners and researchers) in order to address concerns that action research studies lack rigour, clear standards and prestige.

6.7 The Formal Test Battery

Table 6.3 identifies aspects of L2 development that were assessed during the teaching intervention and the reasons behind their inclusion in the test battery. Each component of a particular construct is then linked with ways of tracking its development through qualitative and quantitative data. The formal test battery involved summative tests which, due to logistical issues (e.g. time and manpower) focused on two constructs which measure L2 literacy, and two (L2 elicited imitation and L2 receptive vocabulary) which were designed to give an indication of more general language proficiency. A working memory test (in the form of non-word repetition) was included in the formal test battery as its role in individual learning in second language learning has been extensively documented. Issues concerning the type of tests and their limitations are also discussed. Whilst the DCSF study (Cable et al., 2010) had the onerous task of capturing "all and any language" amongst a large and diverse sample, in this study more information was available regarding the linguistic background of the participants. Therefore, test items were tailored to the language to which the learners had previously been exposed, although this had an impact on the possibility of piloting these tests (e.g. timings of finalised designs and the bespoke nature of the vocabulary items used). There was, however, the opportunity to collect additional data through pupil workbooks, vocabulary books and lesson videos to supplement test-based findings. In other words, although the pre- and post- and delayed post-test intervention test items are important indicators of learning and useful for statistical analyses, they form part of a wider range of data collection techniques intended to present a rounded picture of the impact of the teaching intervention. Assessment followed a "construct-based approach" so that scores obtained should principally reflect the skills they were intended to measure and tasks have been designed to be "participant friendly" but also to attempt to elicit the exact skills required. Examples of each test are included in the appendices.

Skill	L2 construct	Construct	Test Tasks	Timing
L2 General Proficiency	L2 vocabulary	Receptive vocabulary	Word recognition – picture/text circling	Pre-Test (Week 0) Post-Test (Week 21) Delayed Post-Test (Week 27)
	L2 grammar	Interlanguage development (e.g. negation, interrogatives)	Elicited imitation i.e. oral sentence reproduction supported with meaning making illustrations	
L2 Literacy	L2 reading comprehension	Answering questions on an L2 short text Understanding L2 words and sentences	Crime-solving activity – compiling a police report identifying when, what was stolen and the perpetrators	
	L2 Reading aloud	Production of key GPCs	Reading aloud sentences with pictures to support meaning	
Memory	Capacity of working memory	Non-word repetition	Repeating non-words (Gathercole & Baddeley, 1996)	Pre-Test
L1 Reading Age	Chronological reading age	Decoding and word selection	NGRT – New Group Reading Test	Pre-Test (conducted by class teachers)

Table 6.3: The formal test battery

6.7.1 L2 receptive vocabulary – Pre, Post and Delayed Post-Test (Appendix 39)

Research has accorded an important role in the process of second language learning to vocabulary knowledge. Laufer (1998) recognises vocabulary range as an important

component of fluency and a learner-perceived marker of progress with passive vocabulary larger than active vocabulary. Furthermore, many policy documents (see Chapter 3) have stated the importance of a wide range of vocabulary in L1 reading comprehension. This study tested for passive (or receptive) vocabulary knowledge in order to try to ascertain the overall range of the participants' vocabulary. The test was developed around existing designs for eliciting passive vocabulary knowledge: the Peabody Picture Vocabulary Test and the ELIAS British Picture Vocabulary Scale. The former has been adapted for use in several other languages including French (for L1 vocabulary assessment purposes). One principal aim of this aspect of the study was to examine whether the teaching intervention, which combines sound and print, affected learning in terms of general language proficiency measured through breadth of receptive vocabulary. Bearing in mind that, in this intervention, the teacher/researcher had some awareness of the potential range of existing receptive vocabulary, the pre-test and post-test sampled the subject areas taught in the preceding academic year. However, in order to account for potential attrition (bearing in mind that the language tested preceded the novel language taught through the intervention), the post-test was "enhanced" by 20% (n=6 additional language items). Post-test scores were then scaled so that performance between both could be accurately compared. The mechanics of the test loosely resembled the aforementioned tests. One lexical item/structure was spoken and each child ticked the picture that best resembled its meaning on the test worksheet (see Appendix 39 for examples of both tests). Most of the pictures in the test were derived from teaching materials i.e., the same images had been used to present the language to the participants initially, in order to avoid potential conflicts between cues that were not recognisable or did not convey the appropriate communicative intent. This also compensated for the lack of opportunity to properly pilot the pre-tests (which will be explored in more detail in the limitations section of the study, Section 8.5). The test had a dichotomous marking scheme (answers either right or wrong) to promote rater reliability. The test was designed to be conducted with a whole class and lasted approximately 15 minutes including setting up and instruction giving.

6.7.2 L2 grammar (elicited imitation) - Pre, Post and Delayed Post-Test (Appendix 40)

An elicited imitation test was used in the study to shed light on implicit L2 knowledge i.e. "stored knowledge represented subconsciously" (Erlam, 2006: 465). This test was designed to elicit knowledge of particular aspects of L2 grammar at a single point in time and therefore to eliminate the "potentially confounding effect of developmental change" (Ambridge & Pine, 2006: 884). In principle, an elicited imitation test contains utterances of varying lengths which contain aspects of L2 grammar that researchers wish to elicit (e.g. negation or interrogatives). Utterances are designed to be longer than working memory capacity which ensures that they cannot merely be repeated back. Instead, test takers are primed to process these utterances for meaning. Due to a planned overloading of verbal working memory capacity, their reproduction necessitates that, following processing for meaning, these are reformulated rather than memorized and repeated. In this way, developing interlanguage has to be accessed to map and reproduce L2 linguistic form and meaning. Some research has demonstrated that findings from elicited imitation are remarkably consistent with studies using spontaneous L2 production but that EI production can be manipulated to include a range of L2 grammar which might not be as prevalent or diverse in unplanned and non-guided oral L2 production (Ambridge & Pine, 2006: 884; Erlam, 2006: 466, 485). The learners in this study were known to have a limited L2 oral productive vocabulary and this, combined with their age, would have created considerable difficulties for researchers attempting to stimulate and assess spontaneous oral production in a standardized way. Of course, whilst elicited imitation seems a good opportunity to obtain L2 speech data and also to "guide" the production of speech data around specific aspects of developing L2 grammar, the usefulness of elicited imitation tasks and tests depends on elicitations of L2 re-constructions (and therefore access to learner interlanguage) rather than pure imitation of sentences. Erlam (2006: 464-477) recommends several key aspects to be considered when designing such tasks:-

- Meaning: Participants should focus on meaning rather than form as this will deflect attention from form (and therefore access developing interlanguage).

- Time: Delaying participant response by 3 seconds (or more) will guard against direct repetition.
- Ungrammatical sentences: Trying to elicit the spontaneous correction of incorrect sentences is considered a powerful indicator of internal grammar (Erlam, 2006: 464).
- Sentence length: As sentence length increases, success should not decrease. In Erlam's study the statements varied between 8-18 syllables in length, with a mean length of 13.53 syllables.
- Thematic grouping: This has the effect of reducing attention to form.
- Sentence structure and sentence complexity: These need to be considered to bypass the effect of working memory. Research has noted that working memory capacity is determined by pre-existing stored knowledge about the language (Baddeley, Gathercole & Papagno, 1998), that participants cannot encode linguistic content that exceeds their L2 knowledge (Christensen, Hendrickson & Lonsdale, 2010) and that structures in statement initial position are easier to remember (Gallimore & Tharp, 1981).

A recent French L2 elicited imitation test was designed (Myles & Mitchell, 2009-2011) for use with children aged 5, 7 and 11 by researchers at the Universities of Newcastle and Southampton (Myles & Mitchell, unpublished). The grammatical structures that this test attempted to elicit were followed in the present study but the actual language and images used were varied in order to better represent the potential L2 language background of the learners involved in this study. Furthermore, the number of sentences was reduced to reflect time constraints due to the nature of this intervention (i.e. one teacher researcher and individual testing of 45 participants). A dichotomous, syllable-based marking scheme was adopted based on Chaudron's 2005 mark scheme (Lonsdale, Graham, Kennington, Johnson & McGhee, 2008). Each utterance syllable was marked either correctly (1) or incorrectly produced (0). There was a maximum score of 4 per utterance (regardless of length) and errors led to deductions of points. In other words, sentence production with 2 syllable errors would score 2, and with 4 errors would score 0. This test was expected to take between 5-7

minutes per child including setting up and giving instructions (though in reality, this often proved shorter due to inability to repeat, or even try to repeat longer utterances). Two of the L2 utterances for repetition comprised 4 syllables each and, therefore, potentially did not exceed L2 working memory constraints. This meant, of course, that the participants could accurately repeat these particular items without having to "reconstruct" them from their developing inter-language. It was, however, also observed that many participants at pre-test struggled to repeat beyond these sentences and that removal of these items from the test might have had affective implications for the test takers. It was, therefore, decided to keep the shorter utterances in the test, in case there was little improvement at post-test, with the proviso that they could be removed from the data reporting and analysis at a later stage. This test and its accompanying instruction sheet are shown in Appendix 40.

6.7.3 Working Memory - Pre-Test (Non-Word Repetition - Gathercole & Baddelely, 1996) (Appendix 41)

One of the most effective predictors of language learning ability, found to vary greatly inter-individual during childhood, is the ability to repeat multisyllabic non-words (Gathercole, 2006: 513). Evidence-based links are reported between non-word repetition scores and word learning (restricted to phonological forms) for both first and second languages, most notably during the early stages of language acquisition (Gathercole, 2006: 514-515). Non-word repetition has been proposed as a "purer assessment of phonological storage" than previous measures which involved serial recall. This, it is asserted, is because serial recall failure can fall back on activating pre-existing lexical representations in the reconstruction process whereas non-word repetition relies exclusively on short-term phonological representations held in the phonological loop (Gathercole, 2006: 520). Alongside the evaluation of phonological storage quality, non-word repetition accuracy has also been found to measure three other "skill domains" that may contribute to the association between non-word repetition and language learning: auditory processing, phonological processing and speech-motor processing. The test devised by Gathercole & Baddeley (1996) has been

used in other research with young children (Myles and Mitchell, unpublished) and takes approximately 5 minutes to conduct with each participant (including setting up and giving instructions). It follows a dichotomous scoring procedure where 2, 3, 4 and 5 syllable words are marked as either correctly or incorrectly reproduced. Non-word repetition was scored by syllabic count (e.g. "empliforvent" = 4 syllables = 4 points) with a maximum score of 28 for the entire test. An example of this test is presented in Appendix 39.

6.7.4 L2 Reading Aloud (Text) and L2 Reading Comprehension - Pre, Post and Delayed Post-Test (Appendices 42 and 43)

Following partially a template designed by recent research conducted with similar groups of learners (Cable et al., 2010) and bearing in mind the learning to read philosophy that this teaching intervention had adopted (i.e that reading involves both decoding and making meaning – Chapter 2), this study identified two key literacy constructs - target language reading aloud and target language reading comprehension. It is important to note that this is not an exhaustive list of possible literacy constructs that could have been tested. These constructs could be supported by identification of target language use defined by the primary MFL framework (DfES, 2005), for example, the ability to identify and read simple words, pronounce accurately the most commonly used letters and letter strings, read aloud a familiar sentence (DfES, 2005: 19) and to apply phonics knowledge to support reading and writing (DfES, 2005: 33). Although this sounding out process is only one component skill which, in established reading, interacts with other component skills, an analytic approach to reading assessment (Alderson, 2000: 15) is valid in this study in order to assess the impact of instructional techniques devised to improve the sounding aspect of the L2 reading process.

The reading aloud test involved sentences illustrated with pictures. Most of the words in the text were known orally (27% or 15 words out of a total of 56 were not known, 3 of which were cognates). As this intervention adopted an integrated approach to reading instruction which privileged meaning making alongside decoding,

the decision was taken to ensure that, even a reading aloud test, which would essentially examine knowledge of GPCs, should be conducted as a meaning based activity. This was proposed to counter potential arguments that words without context may be less accessible and to resist promoting a "barking at print" approach to teaching L2 decoding. The read-aloud sentences mainly incorporated familiar language for positive reader affect with verbal and non-verbal cues included to be less intimidating and provide complementary information to the text (Alderson, 2000: 55, 77). Furthermore, visuals were included so as to assist meaning-making, which is at the heart of any reading process. Each test was audio-recorded and later analysed for the production of specific taught L2 GPCs and aspects of sight word recognition. The influence of L1 GPCs was monitored and a clear marking scheme was set out to assist with assessing the production of target-like GPCs (Appendix 49). This test had a relatively complex scoring procedure and therefore the steps described previously were followed to ensure rater reliability.

The L2 reading comprehension test was grounded in several learning objectives contained in the Primary MFL Framework (DfES, 2005) – for example, the ability to read and understand a range of familiar written phrases (DfES, 2005: 33), to read and understand the main points and some detail from a short written passage and to read short authentic texts for enjoyment or information (DfES, 2005: 57). The assessment involved solving a crime for the town police. This aimed to promote involvement and enjoyment with varied activities (Hasselgren, 2000: 263-4) which are concrete and meaningful (McKay, 2006: 100). The tasks were "limited production" requiring one word or short sentence responses and were language-use oriented, focusing on meaning and detail (McKay, 2006: 106). Participants alternated between short, written answers which depended on the "police report" and selecting the appropriate pictures (multiple choice style including distractors) from a police file of "evidence". Alderson (2000: 35) proposed that, in order to facilitate adequate comprehension, 95% of a text should already be known with the remaining unknown words guessable from context. Unknown words were selected and positioned in the text carefully – many were cognates or closely related to corresponding L1 vocabulary (approximately 8% or 11

unknown words, 6 of which were cognates). An attempt was also made, in devising the reading comprehension task, to reduce the amount of written responses required. Questions and answers were presented in the L1 but in order to avoid prejudicing the performance of children with weaker L1 literacy, multiple-choice style questions with pictorial identification rather than written responses were often chosen. It was also concluded that a wider style of response-types would be more engaging and comprise a "doing component" (McKay, 2006: 186).

6.7.5 L1 Reading Age - Pre-Test (The New Group Reading Test)

Despite some limitations, this study's quantitative evidence clearly shows that more proficient L2 learners are likely to have a higher chronological reading age. It is important to note, however, that the chronological reading age test used by both schools (NGRT – New Group Reading Test, GL Assessment), whilst arguably allowing for a more holistic measure of L1 reading than previous tests (e.g. Burt Reading Test, 1974), shows reading ability on just two measures: sentence completion and passage comprehension. The former is designed to focus on vocabulary knowledge, grammatical awareness and use of syntactic cues. The latter aims to examine: global inferencing skills, retrieval, knowledge of text organization, writer's use of language and social, cultural and historical traditions. As this test was administered by each school, and not by the teacher/researcher, there is no available example of the exact version of this test taken by these participants

The preceding sections have focused principally on the quantitative data collected across four key constructs which were deemed to form part of the study's formal test battery. In addition, further quantitative and qualitative data were collected to allow for a more holistic examination of L2 literacy development. The additional quantitative data was collected in a test situation, mid-way through the intervention (in week 14 - 14th & 15th December 2011). Whereas the formal test battery assessed language and lexical items taught over the preceding years, the mid-intervention tests (designed principally to inform the teaching) focused on language introduced as part of the intervention. These were available as "supporting evidence" for findings and

observations and are reported in the results chapter (Chapter 7) alongside the quantitative data obtained through the formal test battery.

6.8 The Informal Test Battery

Table 6.4 identifies aspects of L2 development that were assessed during the teaching intervention using a supplementary group of tests. As previously stated, these tests were principally designed to reflect progress against teaching objectives, although it was also considered that they might illustrate aspects of the language learning process (e.g. the development of declarative knowledge and the emergence of application of sound/spelling links) These interim tasks were designed to be "participant friendly" but also to attempt to elicit the exact skills required. Due to the role of teacher/researcher it was essential that these tests could mostly be delivered during class time in group settings. Examples of each test are included in the appendices.

Skill	L2 construct	Construct	Test Tasks	Administered
L2 General Proficiency	L2 vocabulary	Receptive vocabulary	Supplying L1 translations of L2	Once at mid-intervention Week 14 – 14/15.12.11
	L2 grammar	Adjectival agreements and noun gender	Inflecting adjectives to correspond with noun gender and number Explicit rule knowledge	
L2 Literacy	L2 reading comprehension	Reading short sentences for meaning	Responding to L2 sentences by picture drawing	
	L2 decoding	Production in writing of PGCs	Writing letters to match given phonemes	
	L2 decoding	Production of key GPCs in familiar	Reading aloud illustrated word	Half sample mid-intervention Whole sample post-test and

		and unfamiliar words	cards for phonics instruction words (exemplars) and unfamiliar words	delayed post-test

Table 6.4: The informal test battery

6.8.1 L2 Receptive Vocabulary - Mid Intervention (Appendix 44)

As these tests were concerned with assessing learning, they involved the core language taught as part of the intervention. In view of time pressures (i.e. these were designed on a relatively impromptu basis and had to be feasible whilst teaching was ongoing) creativity in activity design was occasionally sacrificed. Here, the teacher read a list of target language lexical items and the children were required to translate the item into the corresponding L1 lexical item and to write this down. A general invitation was given that the children could draw the correct item instead of using the written word. This was designed to reduce cognitive loading for those children who might struggle with or worry about spelling the L1 lexical item. In addition, six test items examined learning of noun gender, sometimes with the indefinite/definite article ostensibly as a "clue" but also with determiners which gave no gender related information (e.g. des, l'évent). This was designed merely to give insight into the possible effectiveness of the teaching which had explored noun gender and had presented colour-coded text for core vocabulary each time it was presented in written form. The test had a dichotomous marking scheme (answers either right or wrong) and lasted approximately 7 minutes including setting up and instruction giving. Noun gender performance was marked separately and proved to be entirely inconsistent.

6.8.2 L2 Grammar - Mid Intervention (Appendix 45)

This test involved eliciting in written form the rules for adjectival agreement according to noun gender and number. The design attempted to establish the nature of declarative knowledge and was followed by a gap-fill activity which attempted to establish how knowledge of these rules would be operationalized. Interestingly, recall

of noun gender rules was relatively successful but application of adjectival agreements in phrases or sentences (e.g. une araignée noir…… - *a black spider*) was far less successful even amongst children who had developed declarative knowledge of the "rules".

6.8.3 L2 Reading Comprehension – Mid Intervention (Appendix 46)

This test examined how L2 reading of familiar text was developing and whether the written forms of new words were being learned alongside the spoken forms. After concerns relating to the design of the formal L2 reading comprehension test, this was seen as an opportunity to experiment with another test design but one which, again, would not rely on lengthy written responses in the L1. Short, richly descriptive sentences were presented which contained mostly familiar words (Total = 60 words 8.33% of these were unfamiliar words). Unfamiliar words did not generally form part of the assessed language. Children had to read these sentences (sometimes involving parts of the body and colours) and produce a picture which exactly matched the description e.g. (une langue violette et fourchée – *a purple, forked tongue*). A point was scored for each description matched i.e. in the previous example: claws = 1, yellow = 1, sharp = 1. Of course, care was taken to ensure that the descriptions contravened usual expectations so that the children would not recognise one word (e.g. léopard – *leopard*) and be tempted to draw a real-life representation of a leopard. In the text, leopards were purple with black spots.

6.8.4 L2 GPC Knowledge - Reading Aloud Word Cards (Familiar and Unfamiliar Words) – Mid Intervention, Post-Test and Delayed Post-Test (Appendix 47)

A small test was designed, following concerns in the classroom that the GPC (print to sound) recoding of known, phonics exemplar words was problematic. The teacher/researcher considered that it might be useful to explore how well these exemplar words were recoded (either sub-lexically or as whole word written forms) compared with the same taught sound/spelling link in an unfamiliar word. Word cards with single, illustrated (for meaning) words were produced for each taught GPC

(/o/ and /e/ were not included as these had not been taught at this stage). Familiar and unfamiliar words were either bi-syllabic or monosyllabic and wherever possible cognates were avoided. Whilst this kind of test had been eschewed when designing the formal test battery, it was decided that this kind of data would be useful in assessing the effectiveness of the systematic and explicit phonics instruction. In view of the philosophical reservations of "barking at print", pictures were included to mitigate (albeit slightly) such effects and provide a potential context for learning new words. In unfamiliar words, the GPC was placed in a different position within the word when compared to the familiar word. The small, laminated cards were shuffled by each child so that their order was randomized. In view of time limitations, half the sample were tested at mid-intervention. The data this test elicited identified that performance for known words was markedly better than that of unknown words. Following this test, the decision was taken to roll out this examination across the sample at post- and delayed post-test in order to better assess the effectiveness of systematic L2 phonics instruction.

6.8.5 L2 PGC Knowledge – Mid Intervention (Appendix 48)

This activity required learners to listen to L2 phonemes (produced by the teacher) and write the appropriate graphemic representations in order to assess the development of declarative sound/spelling link knowledge, for selected L2 PGC/GPCs which formed part of the teaching intervention. Response boxes were provided, so that where phonemes had multiple graphemic representations (e.g. IN/AIN/IEN/EIN = /ɛ̃/), there were three response boxes to indicate multiple answers. This activity again had a dichotomous marking scheme with one mark for each target-like response.

6.9 Ensuring Valid and Fair Assessment Tasks and Procedures for Young Learners

It was anticipated that this clearly set-out framework for test development which included test purpose and construct definition processes to ensure that tasks were

directly related to the constructs, and consistent test administration and scoring procedures would contribute to validity (Luoma, 2004). Four key areas which research concludes may impact on young learners' performance were also taken into account and are discussed in turn (McKay 2006: 78-82).

6.9.1 The Characteristics of the Setting

In most cases, the physical setting replicated that of the language learning environment. In other words tests took place either in existing classrooms or outside the classroom in a designated "quiet area", familiar to the test takers. Furthermore, the test administrator was the children's usual French teacher (with some support from a known teaching assistant). Research has shown that test settings should be playful and non-threatening (Zangl, 2000) and care was taken to ensure that participants were tested in a friendly and supportive environment.

6.9.2 The Characteristics of the Input

With respect to input, texts had illustrations and the overall appearance of the tasks – print size and layout – took into account the available size and space (Alderson, 2000). Instructions were presented in the children's L1 to ensure that every test taker was given the best opportunity to have a positive test experience by fully understanding the requirements of each test task. Test tasks were brief, by necessity, bearing in mind the age of the participants and limitations with respect to access. The tasks were clearly distinguished from one another and presented in a fixed order to support reliability. There was a cohesive theme to most parts of the test. The "test narrative" was a visit to a French town (using realia) with each test task presenting a different aspect of the town with varying aims (i.e. finding out about a new pupil in school, learning about the town's history, meeting townspeople and solving a crime committed in the town centre).

6.9.3 The Characteristics of the Expected Response and the Relationship between Input and Response

Research has indicated that various factors including linguistic processing demands and levels of cognitive demand to complete an activity can impact on expected responses (McKay, 2006: 80). Attempts were made to account for these factors, for example, by approaching the reading comprehension test one question at a time and through providing guidance on which evidence source should be used to access the answer. In individual tests, the participant was reassured and praised regardless of whether responses were correct or incorrect. This stance was aligned with McKay's (2006: 81-86) assertions that the "degree of reciprocity" between the test administrators and takers influences performance. In young learners, this may involve the degree of support available in classroom assessments or how at ease a young learner feels with the interviewer in a test situation. To avoid influencing or over-supporting a learner, McKay recommends that teachers are aware of features of support used but equally, to avoid potentially stressful test situations, she also advocates that "appropriate decisions" are taken to ensure "best performance is observed". She concludes that tests for young learners designed to motivate rather than discriminate are more likely to have positive impact for both teacher and students.

7.0 Summary

The fundamental aim of this chapter was to present a detailed portrayal of this study's setting and the breadth of data to be collected in order to facilitate the study's key aim: to evaluate the effects of teaching oracy and literacy together and to explore the nature of L2 literacy development in younger learners. Sections relating to both data collection and data analysis have addressed issues relating to validity and reliability. In addition, as this study involved a teaching intervention in two English primary schools, a further section has examined ethical concerns and how these were addressed. Test design has then been explored in detail.

The preceding chapters have provided support for this study as empirically and theoretically informed, grounded in a clear methodological framework and centred around a valid, reliable and ethical research design. Chapter 7 will report both qualitative and quantitative results against each of the three research questions.