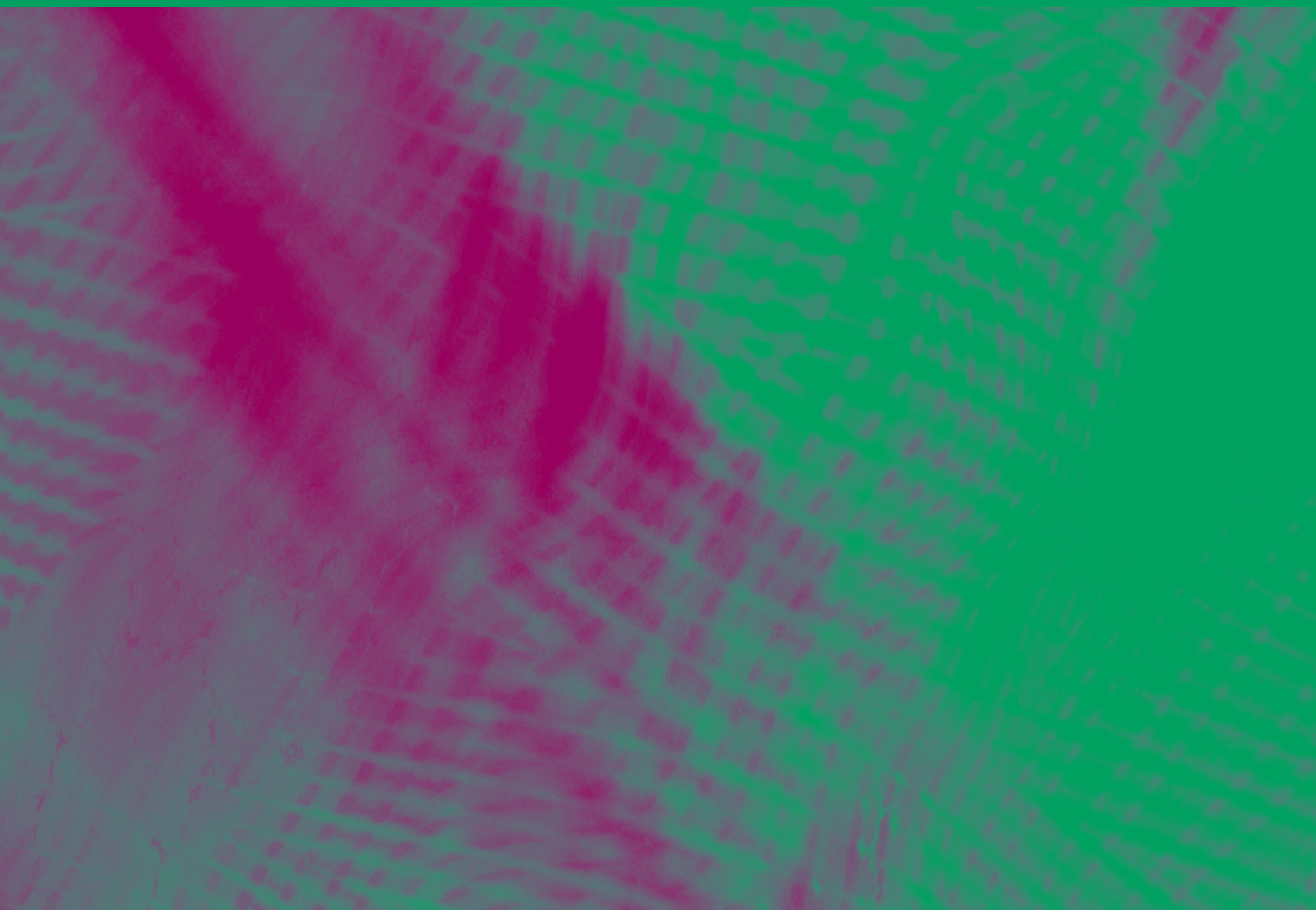# Effective Language Teaching: A Synthesis of Research

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Effective Language Teaching:
A Synthesis of Research

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Acknowledgements

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GLOSSARY OF ACRONYMS

AND INITIALISMS

BES	Best Evidence Synthesis
CLIL	Content and Language Integrated Learning
CLT	Communicative Language Teaching
COGG	An Chomhairle um Oideachas Gaeltachta agus Gaelscolaíochta (translates as The Council for Gaeltacht and Gaelscoil Education)
DES	Department of Education and Skills (previously Department of Education and Science)
EFL	English as a foreign language
ELP	European Language Portfolio
ESL	English as a second language
L1, L2, L3	First language, second language, third language (of learner)
MFL	Modern Foreign Language
NCCA	National Council for Curriculum and Assessment
SLA	Second language acquisition

E X E C U T I V E

S U M M A R Y

BACKGROUND

In June 2010, the National Council for Curriculum and Assessment (NCCA) signalled a move from review of the *Primary School Curriculum* (Department of Education and Science [DES], 1999) to reconstruction of the area of language in the curriculum. A significant consideration in this regard was the publication of *Aistear: the Early Childhood Curriculum Framework* (NCCA, 2009). Although both the *Primary School Curriculum* and *Aistear* were informed by the research of their time, *Aistear* has drawn on research and theory in the past decade to highlight aspects of early childhood education such as the importance of play and the role of the adult in supporting children's learning. During the same time, findings from curriculum reviews and research informed our understanding of children's lives today and how they learn in primary schools, including the areas of reading, writing and oral language, and how these elements of language interact for children.In developing the language curriculum, it is important to draw upon up-to-date research in this regard.

In December 2009, the NCCA commissioned a desktop study to synthesise research in the area of language teaching and learning. The purpose of the research was to identify, evaluate, analyse and synthesise evidence from Irish and international research about language teaching and learning in order to inform discussion about language in the *Primary School Curriculum*, and in particular the teaching of Irish and additional languages. The invitation to tender called for a distinct focus on classroom practice rather than on theoretical approaches, in order to generalise to key principles for successful language teaching.

METHODOLOGY

The research was envisaged as a desk-top study which would have some, but not all, of the features of a Best Evidence Synthesis (BES), drawing together research findings most relevant to second language teaching in primary schools in Ireland, for which there is evidence showing their effectiveness. However, one of the key features of BES is that an advisory group of experts work with the authors at all stages of the research process, locating and assembling data, evaluating and synthesising evidence and interrogating the emerging themes (Ministry of Education, New Zealand, 2004). An advisory group of this kind was not a feature of this synthesis study.

In the search for best evidence strict criteria were applied to evaluate evidence, and only studies in which a clear causal link and objectively determined improvement in learner competence were present were included. This resulted in considerable limiting of the number of studies considered in the first phase of the synthesis. The themes that emerged describe a number of practices that can be said to be effective for second language learners in contexts similar to primary schools in Ireland. Due to the limited number of studies included in the synthesis, however, the emergent themes give only a partial picture of practice in language teaching. The addition of a further chapter which brings together findings from descriptive (process-type) research adds significantly to the completeness of the report in answering the original research questions – what works for language learners, and why?

SYNTHESIS OF KEY STUDIES: EMERGENT THEMES FOR EFFECTIVE LANGUAGE TEACHING

The key findings relating to effective practice in language teaching that emerged from the synthesis study are

- corrective feedback

- Content and Language Integrated Learning (CLIL)

- intensive language programmes.

- orientation of language programmes – communicative or analytical approaches – and the importance of teacher factors

- the importance of second language (L2) literacy development

Corrective feedback

There is evidence to show that corrective feedback, in the form of prompts to students, would be effective in improving second language development for primary school children in fourth to sixth classes. Prompts are more effective than recasts (recasts are when the teacher repeats the utterance with the error corrected) which in turn are more effective than ignoring errors. Care should be taken that any corrective feedback given to young learners should not undermine their self-esteem or confidence.

Content and Language Integrated Learning (CLIL)

Evidence shows that language learning is more effective when it is combined with content learning in another subject other than the language being learned. Content and Language Integrated Learning (CLIL) has been shown to improve students' language proficiency, without negatively impacting on the development of either the students' first language, or their performance in the subject area being taught. CLIL enables learners to encounter language in context and

use it for authentic communication, and challenges them to use the target language for cognitive purposes to acquire knowledge, skills and information.

The report notes that the context of Irish primary schools is particularly favourable to using CLIL in teaching Irish as a second or additional language, as all primary teachers need to demonstrate a satisfactory level of competence in Irish to gain full recognition as a primary school teacher. Three forms of CLIL that could be used effectively in primary schools are described. Individual teachers could consider using CLIL informally, either in their language class or by teaching content from other subject areas through Irish from time to time. Schools could decide to offer an extended core programme where a number of subjects or aspects of subjects would be taught through Irish in a more explicit way. Alternatively schools could choose to offer partial immersion programmes for up to 50% of instructional time. Such whole-school initiatives would require the support of parents and the school community, as well as support for teachers in the form of continuous professional development and provision of resources.

Intensive language programmes

There is strong evidence to suggest that intensive programmes of instruction in a second or additional language over a short time period are more effective than drip feed programmes where learners are exposed to limited amounts of the language over a longer period. The reason intensive programmes are more effective is that they allow opportunities for students to undertake sustained activities, use the language they have learned, and achieve a basic level of communicative ability that supports spontaneous communication and enhances motivation and success. The key difference between intensive language programmes and CLIL approaches is that the focus is on language learning (learning the language through

communicative activities) rather than on content learning (learning another subject through the language).

Orientation of language programmes (communicative or grammatical/analytical approaches) and the importance of teacher factors

The evidence from research shows contradictory results – in some studies communicative oriented courses did not result in any improvement in students' proficiency while in others the language proficiency of learners in classrooms where experiential and communicative activities were emphasised were better than those where there was a traditional grammatical/analytical approach. The conclusion is that the link between course design and pupil proficiency is quite weak and is dependent on context. It is not possible to design an ideal curriculum or course for every situation, and the critical concern should be achieving the right balance between communicative and analytical activities.

There is strong evidence to suggest that teacher characteristics such as experience and skill are critical in achieving that balance, and that teacher competence is more important than the orientation of the language curriculum or course in supporting children's language development. However, as noted later in the report, research has not so far provided clear guidance on what balance should be struck between form-focused and meaning- or communication-focused activities.

Development of L2 literacy skills

Evidence shows that the development of students' L2 literacy skills supports the development of their second language proficiency in general. Reading aloud (teacher reading aloud to children) is a useful strategy to model correct pronunciation, stress and intonation and to help the children develop comprehension skills by focusing on units of meaning, especially in the beginning stages of language learning.

Research findings recommend introducing L2 learners to literacy in a gradual way from the early stages of language learning, taking account of the wider literacy instruction in other languages in the school and L1 literacy in particular. L2 reading strategies need to be explicitly taught.

PROCESS TYPE RESEARCH: ADDITIONAL GENERAL PRINCIPLES FOR EFFECTIVE LANGUAGE TEACHING

As noted earlier, the research design was modified to include an overview of principles for effective language teaching drawn from more descriptive (qualitative) data than from the quasi-experimental (quantitative data) in the original synthesis. The inclusion of this process-type research helps to provide a more complete picture of effective practice in language teaching. The main themes identified in this chapter are:

- early language learning

- task-based interaction

- balancing form-focused and meaning activities

- listening comprehension and story-telling activities

- target language use

- the European Language Portfolio (ELP)

- language learning strategies

An early start in language learning can be beneficial to learners but does not guarantee success. It is a particular feature of the *Primary School Curriculum* that children in primary schools in Ireland benefit from the opportunity to begin learning two languages from the early years. To be successful early language learning must be accompanied

by effective teaching. Motivation and aptitude are important characteristics; enjoyable activities develop motivation but it is also important to focus also on meta-language, accuracy and form, and to strike a balance between spontaneous communication and opportunities to plan and prepare productive language.

Task-based interaction has been shown to facilitate second language learning. In task based interaction the teacher creates activities or tasks which are more than language practice activities or drills, but where learners communicate ideas and feelings and receive feedback as to whether they have been understood. These activities help learners develop production and comprehension skills and improve motivation. The role of teacher feedback and intervention needs to be carefully handled in these situations.

Balancing form-focused and meaning-focused activities is also important. Research has not yet provided clear guidance on the optimum balance, but some studies suggest that alternating between activities that focus on developing fluent expression and confidence and those that focus on accuracy of form and meaning can be useful.

Listening to and comprehending spoken natural language supports the development of comprehension. Through carefully planned listening activities teachers can support learners develop comprehension strategies, including word and sound recognition and use context and previous knowledge to understand content in the target language.

Story telling activities can also help to promote speaking proficiency and literacy skills.

Target language use by the teacher impacts positively on learners' L2 proficiency. It is one of the principles of *Curaclam na Gaeilge* that the target language should be used at all times in Irish lessons, and as much as possible outside formal Irish lessons

Research shows that using the **European Language Portfolio (ELP)** can increase motivation and promote learner autonomy, and supports children in reflecting on their learning; this is particularly important for second language learners who may have little opportunity to use the language they learned outside schools and therefore often lack feedback on their progress and evidence of what they have learned.

D**eveloping learning strategies** can have positive effects on language learning over time, and even young children can become aware of and taught to use language learning strategies.

CONCLUSION

The report highlights a number of important questions and issues for consideration in relation to language in the *Primary School Curriculum*. It also emphasises however, that although research can be a valuable means of informing curriculum review, it can only offer limited guidance and there are no simple answers to the questions raised. For example, although there is a substantial body of research in the area of Second Language Acquisition (SLA), in many cases findings in SLA research are not sufficiently clear or uncontested enough to provide straightforward guidance for teachers. It is notable that in this research project no studies were found to inform the teaching of Irish as a first language. This reminds us of the different contexts in which language is taught: English-medium, Irish-medium immersion and Gaeltacht schools, as well as classrooms where there is a significant minority of children for whom English is an additional language, and approximately 15% of schools where modern European languages are taught to senior classes. All these combine to create a complicated linguistic landscape for primary education in Ireland, which is one of the key challenges in developing the language curriculum for pirmary schools.

S ECTION 1

I NTRODUCTION

The report presented here arose from an invitation to tender for a Best Evidence Synthesis(BES) on effective language teaching. An interim report was submitted in April 2010 and a final report in July 2010. The current report contains some extra material that we added following a further stage to the research process. The report comprises five sections. In the remainder of this section, we ouline the issues that arose in conducting a synthesis of research. In Section 2 we give an account of the search processes used in the research synthesis. We explain the manner in which the database searches were carried out and how they were refined where necessary. Database searches were augmented by hand searches and the results of these are also set out.[1] In Section 3 we identify the key studies that were found to inform our synthesis and we give an account of the data extracted from each one. The findings are discussed in relation to five emergent themes. Section 4, which examines some of the many process–type and correlational studies which have been carried out, was added after the completion of the original BES in order to provide greater coverage of the field. We conclude with an examination of the implications of the present BES for classroom teaching, policy and future research needs in Section 5.

1.1 SYNTHESISING RESEARCH ON EFFECTIVE LANGUAGE TEACHING

We discuss briefly here the literature on research synthesis and examine the complex issues underlying this process. We have included an extended discussion of these issues in Appendix 1 where we examine previous syntheses on language teaching at primary level and describe how they informed our approach to the search process and the formulation of inclusion and exclusion criteria.

A critical component of a BES is to define the criteria of what constitutes evidence for the particular BES. As Norris and Ortega

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1   A more detailed account of the search process is included in Appendix 2

(2000) point out stringent criteria are normally applied for the inclusion of evidence in such a synthesis. In the case of language teaching, to say something was effective, we would want to be able to show that employment of *instructional practice X* or *teaching practice X* produces

a. significant improvements in pupil proficiency or in acquisition of the language (in a pre-test, post-test sense),
    or

b. that it produces better proficiency than would be produced by other (alternative) practices or methods.

We would also accept as evidence for effectiveness, researchers or teachers own judgements that performance had improved (as long as these judgements were focused in some way), or clear indications of improvement in attitude to learning.

For this exercise to be useful to language teachers we need to be able to give precise descriptions of instructional practices employed in the individual studies examined and to describe classroom processes so that teachers can assess their relevance and applicability to other contexts. Unfortunately, as Mitchell & Myles (1998) point out:

> *The findings of SLA research are not sufficiently secure, clear*
> *and uncontested, across broad enough domains, to provide*
> *straightforward prescriptive guidance for the teacher…*
> (p. 195).

There are two main types of research study that are relevant to language teaching namely *process-product studies* and *process-type studies*. Much of the research in the area of second language acquisition (SLA) is dominated by process-product type studies where good measures of effectiveness are linked to well defined and well measured instructional practices. Unfortunately, from the point of

view of teaching and the language classroom, SLA type studies tend to be quite fragmented and not age-related. Many of them deal with adult learners where the learning context and motivation to learn the target language differ greatly from children in primary school.

Process-type studies, on the other hand, tend to be of a qualitative nature, some consisting of professional judgements and emerging as general consensus about what constitutes good practice. The difficulty with these studies for our BES is that they do not establish cause and effect in such a way as to link instructional practices to pupil outcomes. As Driscoll et al. (2004) point out, much of this kind of research focuses on aspects of pupils' learning, programme-planning or curriculum materials, with little, if any, reference to teaching practices or research. It is our view that for a BES to be worthwhile, to add anything new, it must be based on an exhaustive search of research data bases using well defined process-product criteria. There are already many good narrative reviews of mainly process-type studies. This is the approach we adopted in first stage of completing the synthesis.

The major difficulty we faced in carrying out this work was that the synthesis of research on effective language teaching, irrespective of educational level or learner age, is a very new area (Norris & Ortega, 2010). There are no substantial groups of studies conducted on well-defined teaching practices pertaining to classrooms at primary level. The cross cutting themes referred to in the NCCA invitation to tender added to the breadth and complexity of the task of conducting a BES. The different contexts of immersion and first language (L1) in Gaeltacht schools were also integral to our search strategy. Despite exhaustive searching, no suitable studies were found to inform the teaching of Irish in a L1 context. The search for studies relevant to the Irish immersion context yielded a number of potentially useful studies but it was not possible to synthesise the evidence from these studies due to insufficient time.

1.2 LANGUAGE LEARNERS AND PROGRAMMES RELEVANT TO THE SYNTHESIS STUDY

The focus of the BES sought was intended to be language at primary level with particular reference to the teaching of Irish. It was necessary to consider early on whether to include or exclude different kinds of non–mother-tongue language teaching. Primary modern foreign language learning, or early language learning, is a fairly distinct research area. The case of Irish as a minority second language has some unique aspects: a second language which is a minority language, yet in constitutional terms is one of two official languages. Nonetheless, we decided we would include studies of both modern foreign language and minority second language traditions as long as it did not contrast sharply with the Irish context. Thus, for example, we exclude studies where the second language learners were likely to encounter the target language to a significant extent in their lives outside school.

Key features of Irish language teaching in primary schools have been

• the long tradition of teaching the lesson largely through Irish

• that class teachers rather than visiting teachers teach Irish, and

• that primary teachers need to demonstrate a satisfactory level of competence in Irish to gain full recognition as a qualified primary school teacher.[2]

This is a resource that is not enjoyed in many other early language learning contexts. The circumstances in Irish primary schools means that Irish can be used informally outside the Irish lesson throughout

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2   This takes the form of either a qualification in Irish as an academic subject in the B.Ed. degree, a professional qualification in Irish as part of the B.Ed. programme or a qualification to meet the Irish Language Requirement (Scrúdú Cáilíochta sa Ghaeilge). An evaluation of the teaching of Irish in primary schools (Department of Education and Science 2007) found that 95% of teachers in the classes visited had one of these three qualifications.

the school-day. In addition, there is a tradition in a substantial minority of classes of teaching some aspect of the curriculum through Irish, facilitating some integration elsewhere in the curriculum and increasing the pupils' exposure to the target language.

1.3 THE LINK BETWEEN DATA-EXTRACTION AND SYNTHESIS IN THE PRESENT STUDY

The present synthesis presents a number of challenges in trying to arrive at useful conclusions which are well grounded in evidence. Some of these arise from the relatively small number of process-product studies which met out inclusion criteria. Thus, we do not have the kind of substantial groups of experimental quantitative studies which would allow direct cause-effect conclusions about specific instructional practices and the calculation of effect sizes. Against this background, one of the key requirements we set out was that the final set of studies selected for data extraction would at least be of the product-process type, with independent and dependent variables (predictor and criterion variables in the case of correlation-regression studies) being reasonably clearly defined. In addition, we made a systematic attempt to group the small number of key studies selected in relation to a number of specific themes. Particular connections between process (instructional practices) and product (pupil proficiency or learning etc.) established in each study are then linked to a particular theme in order to establish the strength of evidence for each conclusion. Further details on our approach to linking data extraction to the synthesis may be found in the sections below and in the appendices.

S ECTION 2

M ETHODOLOGY

2.1 INVENTORY OF SOURCES AND SEARCH PROCESSES

The first step in commencing our Best Evidence Synthesis (BES) was to scope out the area for investigation. As the purpose of the synthesis outlined in the invitation to tender was broad in nature, it necessitated a broad approach to the search process also. We started with a time period of 1980-2010 initially. We adopted this approach in order to include some key research on the teaching of Irish in the 1980s. Apart from these studies however, few research studies from this period were located.

The search process adopted two forms, data base searches and hand searches. Searches of electronic databases are most likely to identify the key peer-reviewed articles pertinent to the research questions. We deemed it important to include, as far as was practical, so called *fugitive* literature (Norris & Ortega, 2000, 2006) such as dissertations and other unpublished papers. Hand searches were also used to identify books containing key material relevant to the topic. Searches were made of reference lists, research reports and evaluations published in Ireland pertaining to the teaching and learning of Irish. These included reports by the Department of Education and Skills (DES), the NCCA and An Chomhairle um Oideachas Gaeltachta agus Gaelscolaíochta (COGG). We also gathered books and theses describing research studies on key topics such as Content and Language Integrated Learning (CLIL).

2.2 SEARCH SOURCES AND TERMS

We chose nine databases which we deemed to be the most relevant for the purpose of our inquiry as the primary search source. Table 2.1 shows a list of the databases searched. The search terms used can be found in Appendix 2 (Table 1), together with a description of the three phases of the search process.

Table 2.1 Databases searched	
Blackwell Synergy/Wiley InterScience	http://www3.interscience.wiley.com
Cambridge Journals Online	http://journals.cambridge.org
Education Resources Information Center (ERIC)	http://www.eric.ed.gov
JSTOR	http://www.jstor.org
LLBA (Linguistics and language behaviour abstracts)	http://csaweb112v.csa.com
Oxford Journal Online	http://services.oxfordjournals.org
PsychInfo/EBSCO host	http://web.ebscohost.com
Project Muse	http://muse.jhu.edu
Sage Journals	http://online.sagepub.com

2.3 INCLUSION AND EXCLUSION CRITERIA

In order to identify studies for inclusion in the BES it was necessary to draw up inclusion and exclusion criteria. These criteria were applied in a general way initially by looking at the title and/or abstract of each result from the different searches. In order to ensure that no study fulfilling the criteria was excluded unintentionally the initial search process was jointly conducted by the two researchers. Agreement was reached on the identification of potential studies. This process reduced the number of results of the database searches from 8,359 to 532 results.

In order for a study to be included in the synthesis it had to:

• involve learners in the primary school years (4–12 age range) or inform language teaching for these pupils

• focus on effective language teaching and learning in a school setting within the normal school day

• concern research studies published between 1980 and 2010 (in the case of certain databases it was necessary to limit the search to studies published between 1990 and 2010)

- have a process-product type design with well-defined independent (effective instructional practices or approaches) and dependent (e.g. pupil performance, or attitudes) variables

- relate to the language teaching and/or learning in one of the following three contexts:

  - core second language (L2) programmes (and L3 in the case of immigrant children), where the language is taught as a subject only (Phases 1 and 2)

  - L2 immersion settings, where the language is the language of instruction for all or part of the school day (Phase 3)

  - in heritage/minority/regional/endangered language programmes, where the goal is language maintenance in the case of L1 pupils and language revitalisation in the case of L2 pupils (Phase 3).

Studies were excluded if:

- the participants did not fall within the primary school years (4-12 age range) or did not inform language teaching for these pupils

- they concerned effective language teaching and learning outside of the school setting or outside the normal school day

- they did not relate directly to L2 teaching and learning

- they were not empirical or investigative studies

- they concerned immigrant L2 learners of English.

2.4 RESULTS OF DATABASE SEARCHES

The tables in Appendix 2 show in detail how each data base was searched, how the search terms were combined, and the manner in

which searches were refined in order to limit the number of results and increase their relevance. When we were satisfied that we had refined our search sufficiently, the remaining results were exported to the RefWorks bibliographic management programme. This enabled us to retrieve all results from RefWorks when we came to examine the studies in greater detail.

As shown in Table 2.2 (below) a total of 8,359 articles were examined initially against the inclusion and exclusion criteria outlined and of these 532 were selected for further examination.

Table 2.2 Results of search by database and the number of studies stored for further examination in RefWorks				
	Results of Phase 1 search	Results of Phase 2 search	Results of Phase 3 search	Studies stored for further examination
Blackwell Synergy/Wiley Interscience	735	364	284	28
Cambridge Journals Online	1,647	48	455	138
ERIC	414	162	186	34
JSTOR	1,562			127
LLBA	60			20
Oxford Journals Online	1,162			129
Project Muse	786			16
PsychInfo /EBSCO	125			4
Sage Journals	369			41
Total	6,860	574	925	537
Total less duplicates				532

The abstracts of the 532 potentially relevant studies were printed and bound for independent examination by the two researchers. The first researcher identified 74 studies for further examination and the second researcher added four more studies to this list. Seventy-eight titles in total were identified and full-text copies of these reports were sought. Seventy-four documents were accessed in electronic format from the possible 78. Two of the remaining four documents

were available to us in hard-copy format. The remaining documents were dissertations that we were unable to source within the time constraints of the study. These full-text studies were scanned and subdivided into the following categories as presented in Table 2.3: studies containing empirical data, studies on immersion/heritage language education, and review type articles.

Table 2.3 Categorisation of full-text studies	
	Number of studies
Full-text studies identified	76
Studies containing empirical data	24
Studies on immersion/heritage language education	20
Review type articles	32

The 24 studies that contained empirical data were examined against our inclusion and exclusion criteria. Five studies met with our criteria. The remaining studies were found to pertain to contexts that were not relevant to our BES. The reasons for exclusion ranged from inappropriate study design, to L1 or English as a Second Language (ESL) context, to adult or university age group.

The 20 studies pertaining to immersion/heritage language education have been scrutinised and eight of them have potential to be included in a synthesis. The majority of them are concerned with corrective feedback in an immersion context. No studies were located that provide evidence directly related to the Gaeltacht L1 context. Due to time constraints it has not been possible to include these eight studies at this point.

The 32 review type articles did not contain any new empirical data and as such were excluded from our synthesis. They did, however, help to inform the data extraction process and were consulted as part of our additional review of process-oriented research in Section 4.

2.5 HAND SEARCHES

We augmented our database searches with hand searches. The sources for these searches included studies that we were aware of or had conducted ourselves, previous research syntheses (Cable et al., 2010; Driscoll et al., 2004; Norris & Ortega, 2000; Rolstad, Mahoney, & Glass, 2005; Slavin & Cheung, 2005), correspondence with colleagues with expertise in this area, indexes of Irish research studies (An Chomhairle um Oideachais Gaeltachta agus Gaelscolaíochta [COGG], 2002; Ní Dheirg, 2006) and cross-referencing of articles and books. We also searched the Oideas journal (see Appendix 2, Table DB3.4. p. 70). This search yielded studies as categorised in Table 2.4.

Table 2.4 Full-text studies resulting from hand searches	
	Number of studies
Full-text studies identified	17
Studies containing empirical data	15
Studies on immersion/heritage language education	1
Review type articles	1

The 15 studies that contained empirical data were examined against our inclusion and exclusion criteria. Eight of the studies met our inclusion criteria. The remaining studies were rejected for similar reasons to those outlined in section 2.4 above.

Table 2.5 Summary of search results	
	Number of studies
Studies indentified in database search	5
Studies identified through hand searches	8
Total	13

In conclusion, the search of the named databases augmented by hand searches yielded a total of 13 key studies for our BES.

SECTION 3

SYNTHESIS OF KEY STUDIES: EMERGENT THEMES FOR EFFECTIVE LANGUAGE TEACHING

This section lists the studies chosen for inclusion in our Best Evidence Synthesis (BES). A detailed description together with a summary of the methodology and the results of each study is given in Appendix 3. Following the application of our inclusion and exclusion criteria to the full-text studies that we had access to, we identified the 13 key studies as listed in Table 3.1. Each of the studies was coded according to the research design and the language education context in which it took place. Having assembled the studies, each of the researchers assessed the strength of evidence in each one – weak, moderate or strong. Inevitably this is a subjective process to some extent and disagreements had to be resolved through discussion.

Table 3.1 Key studies identified in systematic search			
Study	Design	Context	Strength of evidence
1 Ammar & Spada (2006)	Quasi-experimental	ESL/ EFL[1]	Moderate
2 Ammar (2008)	Quasi-experimental	ESL/EFL	Moderate
3 Gattullo (2000)	Quasi-experimental	EFL	Moderate
4 Harris (1983)	Ex post facto Regression	Irish L2/ CLIL	Strong
5 Jiménez Catalán, R.M. & de Zarobe, Y. R. (2009)	Quasi-experimental	CLIL	Weak
6 Kiziltan, N. & Ersanli, C. (2007)	Quasi-experimental	CLIL	Moderate
7 Seikkula-Leino (2007)	Quasi-experimental	CLIL	Moderate
8 Netten, J & Germain, C. (2009)	Quasi-experimental	Intensive French	Strong
9 Harris & Murtagh (1999)	Ex post facto/ correlation	Irish L2	Strong
10 Edelenbos and Suhre (1994)	Ex post facto/ regression/covariance	EFL	Strong
11 Macaro & Mutton (2009)	Quasi-experimental	MFL[2]	Weak
12 Amer (1997)	Quasi-experimental	EFL	Weak
13 Drew (2009)	Quasi-experimental	EFL	Moderate

1 English as a Second Langue (ESL); English as a Foreign Language (EFL)
2 Modern Foreign Language (MFL)

In order to synthesise the evidence that we extracted from the studies we set out to identify themes, assemble evidence relating to each and assess its strength. Where there is additional but less direct evidence – either of different quality or relating to different kinds of learners and educational levels – we note whether this strengthens or undermines our provisional conclusions. We examine in particular how other meta-syntheses and systematic reviews had dealt with this issue even if they relate to different learners. In conducting this exercise, however, we attempt to maintain a clear separation between the admittedly small number of central studies that formed part of our indepth analysis and more general references to supportive but more marginal evidence.

Driscoll et al. (2004), for example, identified themes that emerged from the best evidence that they had gathered. Telléz & Waxman (2006), having examined a number of alternatives, opted to integrate the results of the studies that they had found by theme across time and researchers.

In our case it was possible to identify five themes that emerged from our synthesis. As the focus of our best evidence is broad in nature, only one or two studies informed most of the themes. The themes are:

- corrective feedback,

- content and language integrated learning (CLIL),

- intensive language programmes,

- teacher factors and orientation of language programmes

- development of L2 literacy skills.

Each theme is discussed with reference to the key studies that informed it and to other relevant research studies or reviews of

research. In the case of four of the themes, vignettes are provided to illustrate them in a more practical way.

3.1 CORRECTIVE FEEDBACK

Studies 1 and 2 by Ammar & Spada (2006), and further analysis of the same study by Ammar (2008), was a small-scale quasi-experimental investigation that examined the acquisition of one morphosyntactic form, the possessive determiners 'his and 'her'. The authors found that the pupils who received prompts in response to their errors outperformed the pupils that received recasts, who in turn, outperformed the pupils who received no feedback. (See the vignette on p. 40 for an explanation of prompts and recasts.) It is worth noting that possessive determiners pose difficulties to Francophone learners of English although they are features that carry meaning in sentences and are not redundant. Incorrect redundant forms on the other hand may be more resistant to corrective feedback. An example of such a form in Irish would be 'Tá sin peann.' (*That's a pen.*) Such an utterance, although grammatically incorrect, does not cause a breakdown in communication and may be more difficult to correct regardless of the type of corrective feedback given (Ó Duibhir, 2009).

Study 3 by Gattullo (2000) on corrective feedback and teaching style with young L2 learners of English in Italian primary schools found similar results to the results of Studies 1 and 2 above. More repair of errors resulted from prompts than from recasts. The findings of Studies 1–3 are in keeping with the research findings of other studies on corrective feedback in classroom contexts, an area that has received a good deal of attention in terms of research studies generally, even if not very often at primary level. There is an extensive body of studies on this topic in the SLA literature although it is a relatively new field of study (Russell & Spada, 2006). Unfortunately, many of the studies deal with contexts that did not allow them to be included in our BES.

A good example of this is the meta-analysis of studies of oral feedback in classroom SLA conducted by Lyster and Saito (2010). While this meta-analysis appeared on initial examination to fall within our inclusion criteria, closer scrutiny showed that many of the findings were based on studies of learners who differed too greatly from the second and minority language in 'subject-only' programmes of interest to us. The pool of studies included, for example, learners in an ESL context, where exposure to the language outside school is substantial and the learners themselves may have a very different sociocultural profile (e.g. Mackey, 2006), or native speakers (e.g. Mackey & Oliver, 2002), students in immersion contexts (Lyster, 2004), or university learners (Muranoi, 2000). Nonetheless, the meta-analysis contains useful findings that may give us some general guidance. Lyster & Saito (2010) conducted a meta-analysis of 15 classroom-based studies (N = 827) to examine the effectiveness of oral corrective feedback on target language development. They found that groups that received prompts made significantly more progress than groups that received recasts. It is interesting to note that younger learners (mean age 10-12 years) appeared to benefit from corrective feedback even more significantly than older learners. They suggest that it may be the case that younger learners are more sensitive to the impact of corrective feedback as it engages implicit learning mechanisms more common in this age group.

Based on the findings of Ammar & Spada (2006), Ammar (2008) and Gattullo (2000) it is likely that corrective feedback in the form of prompts would be effective for primary school pupils learning Irish in fourth to sixth classes (9-12 years). This type of feedback is likely to be more effective than recasts which in turn is more effective than ignoring learners' errors. We do not have enough evidence to make any recommendation regarding children younger than this. A further issue in relation to corrective feedback is that any feedback given to young learners would not undermine their confidence or self-esteem (Edelenbos & Kubanek, 2009).

Corrective feedback: 'Prompts' better than 'recasts', and 'recasts' better than 'ignoring error'

Many studies have been carried out to evaluate the effectiveness of different corrective feedback strategies in the L2 classroom. When a pupil makes an error in the oral L2 production in class the teacher is faced with a number of choices. The teacher can,

1.   recast it

2.   give an elicitation prompt

3.   repeat the error

4.   seek clarification

5.   recast and continue not waiting for the pupil to correct

6.   ignore the error

Gattullo (2000, p. 300) used categories 1-5 above to analyse data in a study of teacher feedback in a foreign language teaching setting in Italian primary schools. She classifies elicitation, repetition of error and clarification request (categories 2,3 and 4 above) as falling under "negotiation of form" type of feedback.

1. Recast after a pupil's error

Pupil 4:   I'm doctor

Teacher: You're the doctor (recast)

Pupil 5:   I'm patient

Teacher: I'm the patient (recast). All right

2. Elicitation after a pupil's error

Teacher: Eh, Giorgio, what do you do in your free time?

Pupil: volleyball

Teacher: you? (elicitation)

3. Repetition of error after a pupil's error

Teacher: What colour is this?

Pupil 1:   This is a green

Teacher: WHAT? this is A green? (repetition of error)

4. Clarification request after a pupil's error

Teacher: What colour is this?

Pupil: This is a brown

Teacher: I can't understand. What colour is this? (clarification request)

5. **Teacher's continuation after feedback**

Teacher: Do you like ice-cream? What kind do you like best? Mint?

Pupil: Doesn't like mint

Teacher: Don't you like mint? (recast) But do you like all the rest? (teacher's continuation)

A sixth category not included by Gattullo (2000) is where the teacher has understood the utterance of the pupil and he/she ignores the error and responds to the meaning of what the pupil has said as in the following example:

6. **Teacher ignores the error**

Teacher: What colour is this?

Pupil 1:   This is a green

Teacher: Okay, can you show me a red one? (teacher's continuation)

In summary then, a teacher can react to a pupil's incorrect utterance by ignoring it and giving no feedback, by explicitly correcting it, or by prompting the student in some way that an error has been made and the teacher would like the utterance to be rephrased. Research studies conducted on corrective feedback with L2 learners indicate that prompts are more effective than recasts in enabling learners to acquire the form that caused the error. Recasts in turn have been shown to be more effective than providing no corrective feedback.

3.2 CONTENT AND LANGUAGE INTEGRATED LEARNING

Content and language integrated learning (CLIL) has been defined as *a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language* (Coyle, Hood, & Marsh, 2010, p. 1). CLIL is also described as 'content–based instruction' in the North American context (Brinton, Snow & Wesche, 2003). Much of the underlying theory for CLIL draws on the research from immersion education (Cable et al., 2010). Irish–medium education is a form of immersion education that has a long

history in the Irish education system since the foundation of the state in 1922, where learners have learned curriculum content through Irish, their L2. Indeed, in English-medium schools, where Irish was taught as a subject only, there was a tradition in a substantial minority of schools of children learning in one or more content areas through Irish (Harris, 1983).

The number of Irish primary school teachers teaching other areas of the curriculum through Irish has decreased considerably in the last 30 years (Harris, Forde, Archer, Nic Fhearaile, & O'Gorman, 2006). Research studies in Ireland and internationally, however, show that studying other areas of the curriculum through the target language is associated with significantly higher proficiency in that language. Notwithstanding this, in the period to which the present BES applies, the number of empirical studies on the effectiveness of CLIL approaches on learners' language achievement is extremely small (Jiménez Catalán & de Zarobe, 2010). The tendency has been for CLIL practice to precede research and much of the evidence available therefore is anecdotal. This may be because the positive effects are readily apparent to teachers.

In our systematic search we found many research articles dealing with the topic of CLIL. Four of these provided empirical evidence relevant to primary schools in Ireland. They were, Harris (1983), Kiziltan & Ersanli (2007), Seikkula-Leino (2007) and Jiménez Catalán & de Zarobe (2010). In the Harris (1983) study, primary inspectors who were carrying out a national assessment of Irish listening and speaking skills using objective tests asked each class teacher in English-medium schools if they taught other areas of the curriculum apart from Irish through Irish. Through a regression analysis Harris found that the mean scores on the Irish test for those classes that taught some aspect of the curriculum, outside the Irish lesson, through Irish were significantly higher (83.7) than those in

classes which taught no aspect of the curriculum through Irish
(66.9). These findings were supported by subsequent national surveys
where a significantly higher level of achievement in Irish in classes
which conducted some Irish-medium instruction outside of the Irish
lesson proper (Harris & Murtagh, 1987; Harris et al., 2006). Jiménez
Catalán & de Zarobe (2010) showed that the receptive vocabulary
scores in English of 65 female Grade 6 CLIL pupils in Spain were
higher than those of 65 female non-CLIL Grade 6 pupils from
similar backgrounds. The authors conclude that the CLIL instruction
appeared to be more effective than English as a subject instruction.
The two groups of learners that were compared were not the same
however, as the CLIL group had received a greater number of hours
of instruction in English prior to the study. The authors could not be
certain that the superior scores of this group were as a result of the
CLIL instruction or due to the effect of a greater number of hours
of instruction. The Seikkula-Leino study compared 217 CLIL and
non-CLIL grade 5 and 6 pupils in a Finnish school. 116 students
were enrolled in the CLIL programme where 40-70% of the classes
were taught through English. In tests of Mathematics and L1 Finnish
there were no significant differences between the CLIL and non-
CLIL groups. The author concluded that the development of one's
mother tongue is not negatively affected by participation in a CLIL
programme. The Kiziltan & Ersanli (2007) study compared the effects
of content-based instruction (CBI) in English with more traditional
approaches. They chose two Grade 6 classes of similar ability with 43
learners in each. After a 15-week period of instruction, the class that
received the CBI instruction significantly outperformed the more
traditional class on an achievement test. The total mean scores of the
CBI class were 61.6 compared to 23.1 for the more traditional class.

These studies indicate that CLIL instruction may be an effective way
to teach Irish in Irish primary schools. None of the studies are
without their limitations however. They all deal with Grade 6 pupils

at the end of primary school. The Harris (1983) study depended on teachers to self-report to visiting inspectors. The other two studies involved relatively small numbers of participants and in the case of the Jiménez Catalán & de Zarobe (2010) study, there were confounding variables relating to previous hours of instruction received by the experimental group. Despite these limitations, one can view CLIL approaches as an attenuated version of immersion and the evidence that we have to date in Ireland on both immersion and CLIL is quite positive (Harris et al., 2006; Ó Duibhir, 2009).

On the basis of the evidence gathered here, a case could be made that pilot projects be established to further investigate the merits of CLIL instruction in an Irish context. One such successful pilot project on a version of CLIL involving teaching one or two whole subjects through Irish was reported in Harris et al. (2006). Based on a qualitative assessment, this intervention was judged to be very successful. Such an approach would also be in keeping with the recommendations in the Government's 20 year strategy for Irish (Rialtas na hÉireann, 2010) and the study of the Inspectorate (Department of Education and Science, 2007).

Content and language integrated learning

Content and language integrated learning (CLIL) is an approach to language learning where the target language is used as the medium to teach both content and language. While the main focus of the typical CLIL lesson is on content, the target language is used as the medium through which pupils engage with the content. This process enables the attainment of both content objectives and language objectives in the same lesson. The approach to teaching in an all-Irish school is a form of CLIL that could also be classified as a total immersion approach as it permeates all aspects of the curriculum except for English.

The CLIL approach described here is where one subject, or topics from a subject, are taught through Irish. CLIL is very much in keeping with a communicative approach to language teaching, also as it provides an authentic context for L2 acquisition and use. The challenge of providing

authentic contexts to learners has been one of the difficulties in achieving success with a communicative approach. This notion of context is also key to learners being able to understand the content that they are engaging with in lessons. As the content is embedded in a context, the pupils utilise this contextual information together with their prior knowledge to derive meaning from the lesson. In a CLIL classroom, learners become active participants in their own learning using complex cognitive processes to acquire knowledge. This ability to think in another language can impact positively on content learning also.

A project to explore the potential of CLIL in teaching Irish when suitable materials and professional support were provided is reported in Harris et al. (2006). The project involved working regularly with 50 third- and fourth-class teachers over a two-year period to develop full courses in Science and Art through the medium of Irish. The teachers came from a wide variety of ordinary schools, including those in disadvantaged areas. The vast majority of them had no previous experience in teaching through Irish. Separate groups of teachers in Dublin and Tullamore met in workshop sessions to explain and discuss the approach and to distribute sample lessons. Having tried out the materials in their own classrooms, the teachers returned and discussed progress and completed questionnaires concerning the lessons. The lessons were then revised on the basis of this information. The teachers found the approach both enjoyable and rewarding and the courses, 'Bain Triail As' and 'Lean den Ealaín' (Harris & Mac Giollabhuí, 1998a, 1998b, 1998c), were subsequently published for general sale.

None of the lesson material consisted of translations or adaptations of existing courses in English. Instead, every aspect of each lesson was planned and developed with the particular needs of pupils and teachers in ordinary schools in mind. Art was chosen because so many of the activities appropriate to the subject at this level involve language use which is located in a practical, concrete context. Science was chosen as the other subject in the knowledge that it would make greater demands on pupils in terms of vocabulary and perhaps use of language. In addition, while it was intended at the time that science would be introduced as a subject for the first time in the *Primary School Curriculum* (1999), that curriculum had not yet been published at the time the project was carried out. Thus, it was expected that pupils would have a high level of interest in this subject since they had not been taught it before. The teachers themselves also would not have taught science before – even through the medium of English. Thus, it was possible for both teachers and pupils to make an entirely fresh start on this subject through the medium of Irish.

The teacher's material for each lesson was in three parts. The first consisted of background material including (i) a statement of the objective of the lesson, (ii) materials required, (iii) a list of the main vocabulary items involved (Irish and English), and (iv) a list of informal phrases or idioms that

might be useful to the teacher during the lesson. The pupils' material in the case of Science also includes a pictorial vocabulary in Irish at the beginning of each lesson. The second part of the teacher's material consisted of an outline of the main steps in the lesson, usually illustrated, including a full script for the teacher. The aim was to anticipate some of the difficulties which would be presented by the limited linguistic ability of pupils, and to suggest possible ways around these difficulties. The availability of the prepared material had the effect of freeing teachers from some of the minute-by-minute decisions about the lesson to be taught, thus allowing them to attend more fully to classroom dynamics. In particular, they could devote more of their creative energy to responding to the individual needs of pupils who were learning through Irish for the first time. Teachers were expected and encouraged to depart from the script which they actually did. Nevertheless, there was general agreement that having the lesson planned in advance in this way was a major factor in the success of the project. The third part of the prepared material consisted of an optional development of the basic theme for more able classes.

A number of principles were agreed with the teachers with regard to teaching the lessons: for example, that in the beginning teachers would accept questions from pupils in English but answer them in simple Irish. In the longer term, teachers might rephrase in Irish the questions which had been posed in English by pupils. Discussions in English between pupils should also be permitted initially, but pupils should gradually be encouraged to use Irish.

While this particular project did not include a pre- and post-test of the pupils' proficiency in Irish, there is evidence from the studies by Harris (1983), Kiziltan & Ersanli (2007), Seikkula-Leino (2007) and Jiménez Catalán & de Zarobe (2010) discussed above that this approach leads to greater proficiency in the target language.

3.3   INTENSIVE LANGUAGE PROGRAMMES

The evidence gathered on intensive language programmes comes to us from the research conducted on intensive French language programmes in Canada. The first intensive language programmes reported on in this body of literature were in Montreal, Quebec in the mid–1970s for intensive French and intensive English (Netten & Germain, 2004a). It was the evaluative research on these initiatives that highlighted the importance of intensity of instruction in the programmes. The authors argue that for the pupils to develop their

L2 language proficiency, they need to reach a basic level of spontaneous communication as quickly as possible. This does not happen in the Core French programme which has been described as a 'dripfeed' (Stern, 1985, p. 18) approach to L2 learning. Netten & Germain (2004b), believe that the Core French approach has a number of weaknesses in enabling pupils to communicate, time being the biggest one. They maintain that there is insufficient time for the teacher to undertake sustained activities and for pupils to use what they have learned. As the pupils do not have sufficient practice in using the language they don't achieve that basic level of spontaneous communication which in turn leads to a lack of motivation. Intensive French programmes overcome this problem by providing an initial intensive period that enables pupils to achieve a basic level of communicative ability that they can build on in the future. The weaknesses of Core French were confirmed in the Netten & Germain (2009) study reported above. They found, in pre-tests administered to 1,600 Core French pupils drawn from Grades 4, 5, 6, 9, and 10, that the pupils did not develop basic communicative competence and that the number of years of previous instruction did not affect this level of ability.

To summarise the description above, intensive French normally takes place in Grades 5 or 6, there is an intensive five-month period in the first year where 65%-70% of the school day is concentrated on French instruction, other curriculum subjects are taught through English. In the second half of the year, pupils typically have two 80-minute periods of French per week. Key features of the programme are increased intensity of instructional time, specific teaching strategies and teacher preparation. The authors suggest that intensive French is more effective at the end of primary school rather than at the beginning (Netten & Germain, 2004a). This approach differs from CLIL and immersion in that the focus is on the language itself rather than on learning content through the medium of the target language.

Although the Netten & Germain (2009) study is the only study of intensive French reported here, its results are significant as it combines the results of pupil assessments across nine jurisdictions in Canada. It should be noted that the testing of achievement in post-intensive French contexts is only commencing and large data sets have not been accumulated yet. Intensive French merits further examination to assess the suitability and feasibility of such an approach to teaching Irish in Irish schools. It may be the case that a period of intensity facilitates learners in making the leap to a level of spontaneous communication that they can build on. There may be other ways to bring about this level of intensity through CLIL for example as discussed above or other forms of partial immersion. A difficulty in implementing intensive language programmes are that they take time from other curricular areas and therefore require greater structural changes. Netten & Germain (2009) note, however, that there have been substantial increases in enrolments in late immersion by students that have completed intensive French programmes.

Serrano and Muñoz (2007) investigated the issue of time distribution with university learners who were adult ESL learners. All learners pursued a 110 hour course in three different time distributions. An 'extensive' group studied for four hours per week for seven months, a 'semi-intensive' group studied for 8-10 hours per week over 3-4 months, and an 'intensive' group studied for 25 hours per week over five weeks. While the students in all three groups improved their proficiency the 'semi-intensive' and 'intensive' groups showed greater improvements in proficiency than the 'extensive' group. The results suggest that concentrating the hours of instruction in shorter periods of time is more beneficial for student learning. It must be borne in mind that this study dealt with adults and the same results may not apply to young language learners. Nonetheless it may offer some support to the findings of the Netten and Germain studies reported above.

Intensive French

Intensive French commenced in 1998 in one rural and one urban school in the province of Newfoundland and Labrador in Canada and has spread to nine other provinces since then. The programme grew from a dissatisfaction with poor results from the existing Core French programme where students spend 30-40 minutes per day (about 90 hours per year) learning French. The focus of the Core French programme tends to be on learning grammar rules and attempting to apply them. In this approach French is treated as an object of study rather than on communication in the language. Between Grades 4 and 12, students of Core French spend about 1,000 hours learning French but by and large they cannot communicate with any degree of fluency at the end of this period. This approach has been described as the 'drip-feed' method of second language learning.

Intensive French was intended to overcome some of the shortcomings of the drip-feed aspect of Core French. Intensive French was conceptualised on the basis of following findings of research that show that:

a. levels of proficiency in a second language (L2) are closely related to the amount of time spent learning the L2;

b. students exposed to intense periods of language learning achieve greater proficiency than those who are exposed to the same amount of time over an extended period;

c. students exposed to a period of authentic language use achieve greater levels of communicative competence than those exposed to the L2 as an object of study (Netten & Germain, 2004, p. 279).

In order to provide this intensive period, the core French programme was enriched by offering three to four times the number of hours of French L2 at the end of primary school in either Grade 5 or 6 (these grades correspond with 5th and 6th classes in Irish primary schools). This intense period lasts for five months and takes place in the first half of the school year from September to January. Figure 3.1 below shows an example of the time allocation based on 72% of the school day devoted to intensive French during the key five month period of the school year in which the intensive French course takes place. The first set of columns shows the percentage time for French, 72% in blue for the period September to February and approximately only 8% (in red) for the remainder of the year. Health Education, Religion, Science and Social Studies (History and Geography) Arts and Language Arts (English) are not taught from September to January and it is from these subjects that the extra time for French comes. Students revert to the regular curriculum for the remainder of the school year as can be seen from the columns in red. In the intense period, 50%-80% of the school day is offered in French. All of this time is

spent learning French rather than other subject matter through French so it differs from an immersion programme in this way. In the example in Figure 3.1, Maths, Music and Physical Education are taught through English from September to January.

Figure 3.1 Example of time allotments for all subjects with 72% of the day in French (Netten & Germain, 2004, p. 285)
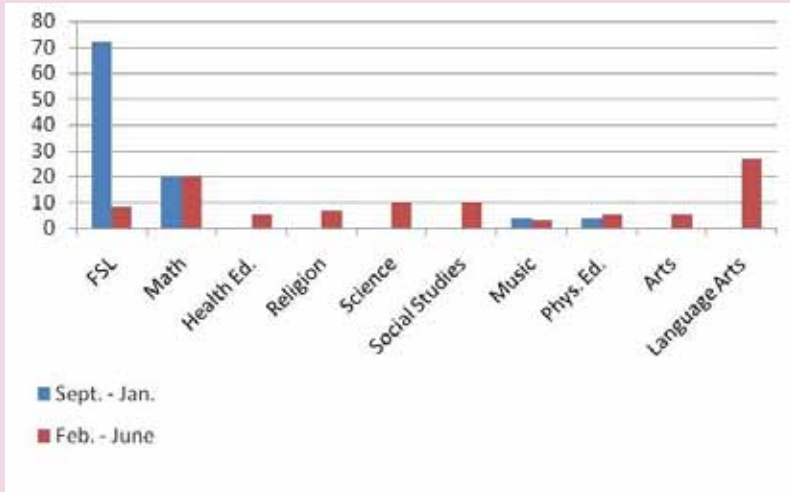
Typically a class would be taught by two teachers during the intensive period, one teaching the intensive French programme and the other teacher taking the class for the 'English' portion of the day. The intensive French teacher would have attended a special five-day in-service course and would receive continuing in-school support form a district French L2 specialist.

The curriculum for intensive French is similar to *Curaclam na Gaeilge* in the *Primary School Curriculum* (1999), in that the communicative outcomes of the programme are stated in terms of the language functions that the student will be able to perform rather than on any specific grammatical structures or vocabulary. It is also a literacy-based approach that emphasises the development of literacy skills in French. Implementing an intensive French programme requires the compacting of the regular curriculum for five months. Drawing on Cummins' common underlying proficiency theory (Cummins, 2001) the proponents of Intensive French maintain that languages are interdependent and that the students in the intensive programme do not lose out on English literacy development as they actually spend 20% more time engaged in literacy development over the course of the school year than their peers in the regular programme.

At the end of the intensive period of French instruction, research has shown that all students make significant gains in achievement and that 70% of students can be expected to develop spontaneous communication in

French and that they continue to maintain this standard and build upon it over time through the regular core French programme.

In summary the three key factors in the success of this programme are increased time, the teaching methods used in the classroom and adequate teacher preparation.

3.4 TEACHER FACTORS AND ORIENTATION OF LANGUAGE PROGRAMMES

Two studies, Harris and Murtagh (1999) and Edelenbos and Suhre (1994) provide evidence in relation to the impact on proficiency of the communicative orientation of language programmes and classes. Only the Harris Murtagh (1999) study, however, provides strong evidence for the benefits of a communicative orientation. It is also notable that evaluations of explicitly experiential or communicative programmes at post primary level are not always positive either (See Allen et al., 1990; Beretta, 1992; Lightbown & Spada, 1990; Spada & Lightbown, 1989). In the latter studies, the performance of the more communicative classes were found to be mixed, equivocal or actually negative. If it is accepted, however, that the critical issue in successful learning is getting the balance between communicative and analytic activities right as Allen et al. (1990) argue, then the fact that some studies show positive effects of an emphasis on communicative activities and others do not, is not so surprising.

In the light of this, we can understand more readily why in the Harris and Murtagh (1999) study the amount of emphasis on communicative activities in classes should be associated with more clearly positive results. The key issue is that the study was conducted against a background of Irish language classes/schools generally which had an audiovisual/structural linguistic approach, with a strong emphasis on traditional language practice (ie an analytic orientation). Among those classes, the minority which emphasised experiential/communicative

activities, considerably more were found to produce better results. But, as the reasoning of Allen et al. (1990) implies, a policy of 'the more communicative the better' has limits. Thus, if the proportion of communicative lesson segments found in the Irish language programme in Harris & Murtagh (1999) study (which was originally 22%) were to actually double, for example, there is no guarantee that the most communicative classes in this new situation would also improve. Increasing the proportion of communicative activities will not always lead to higher levels of proficiency in Irish, more attentive and interested pupils, with more positive attitudes to Irish. The reason is that an optimum balance between experiential and analytic activities might no longer pertain after an increase in the proportion of communicative activities. This constitutes an important reminder also that results of any one study cannot be interpreted as evidence that traditional language practice activities are either ineffective or unnecessary in developing communicative proficiency in Irish (Van Lier, 1988).

The Edelenbos and Suhre (1994) study had examined the issue of communicative oriented courses compared to ones with a greater emphasis on grammar. They report that the communicative courses for EFL were introduced in order to improve pupil achievement in English in primary schools in the Netherlands. They found that no real improvements in pupils' proficiency resulted from the introduction of these communicative oriented courses. They concluded that it is not possible to design the ideal course for foreign language instruction and that the link between pupil proficiency and course design is quite weak. Of far greater importance, they conclude, are teacher characteristics. In the Harris and Murtagh (1999) study perhaps it was also the expertise and skill of the teacher that was critical in striking the correct balance between experiential and analytical activities.

Finally, in this context, it is worth noting the results of an observational study of 159 classes by the Inspectorate of the Department of Education and Science (Department of Education and Science, 2007). The study reports that only half of the teachers observed by the inspectors were deemed to have a good standard of teaching and learning in their Irish classes. This assessment was based on the curriculum framework for Irish rather than upon a measure of pupil achievement in Irish. The report maintains that

> *A systematic, structured approach is required for teaching Irish, and teachers require clear guidelines on methodologies so that pupils' language ability can be developed in a systematic and detailed manner*
>
> (Department of Education and Science, 2007, p. 76).

Such an approach needs to be complemented by the necessary professional development of teachers. Initiatives such as the NCCA's Primary School Network: Language could help to inform such professional development programmes. Cognisance should also be taken of the recommendations contained in the Primary Curriculum Review, Phase 2 (NCCA, 2008).

3.5 DEVELOPMENT OF L2 LITERACY SKILLS

Three studies remain that fell within the theme of L2 literacy skill development. The first of these is the study by Macaro & Mutton (2009) on the development of L2 literacy skills. The results of this study need to be treated with caution as the pupils in the two experimental groups were withdrawn from the classroom in groups of six for the pedagogic intervention. It doesn't appear that the study is broad enough in scale that recommendations could be made for the same pedagogic approach to be used in Irish schools without further research evidence. The thrust of the study is broadly supportive of the strategy of developing pupils' L2 literacy skills to

support the development of their second language proficiency in general.

The second study, by Amer (1997), looked at the effect of the teacher's reading aloud on the reading comprehension of EFL students. The authors point out that reading aloud by the teacher is often discouraged in EFL methodology. They argue that is can be very important at the beginning stages of L2 learning in particular as it can help the pupils to focus on units of meaning rather than on surface details and word–for–word type strategies. The results of the study suggest that there is support for their argument. It is interesting to note in this context, that in the NCCA (2008) curriculum review of the teaching of Irish in primary schools, that reading aloud by the teacher or other pupils was the strategy most frequently cited by teachers to foster a reading culture in their classes. The results of the Amer (1997) study support reading aloud by the teacher but doesn't mention reading aloud by other pupils. The scale of the study, however, is not broad enough to make a general recommendation for the use of a reading aloud strategy for developing pupils' reading comprehension skills in Irish.

Reading aloud and reading strategies

One way, according to a small-scale research study (Amer, 1997), that teachers can help students' L2 reading comprehension is for the teacher to read texts aloud. The students follow the text as the teacher reads it. This helps the students to focus on larger units of meaning in the text rather than depending on word by word decoding. This in turn can help the reader to build on larger meaningful segments rather than depending on graphic cues. The correct pronunciation, stress and intonation by the teacher also aid this process.

Skilled readers draw on a combination of top-down interpretation strategies and bottom-up recognition skills as they read. Students do not always transfer their L1 reading strategies to their reading in the L2. They tend to over-rely on bottom-up strategies such as reading a text word by word and looking up unknown vocabulary items in a dictionary. It may be necessary to specifically teach reading strategies so that students can use a

combination of top-down and bottom-up approaches where they are enabled to combine textual information with the information the reader brings to a text. Reading has been conceptualised as a bi-directional interactive process that concerns both the reader and the text.

The approach to reading in many second language programmes is to use short texts, often only a few sentences long, to expose students to vocabulary and short phrases already presented orally. Many writers suggest that developing L2 literacy skills can help to increase proficiency in the L2 and also lead to increased motivation. One of the keys to improving L2 literacy skills is to provide students opportunities to read extended texts and to teach reading strategies to pupils.

Some research suggests that L2 reading strategies need to be explicitly taught as it cannot be assumed that they will automatically transfer from the pupils' L1. Thus it is not enough merely to expose students to L2 reading material. One such study with 10-11 year-old French L2 learners in England (Macaro, 2009) used a text that was originally written in English and some of the words were replaced with their French equivalents which was the students' L2. The purpose of this was to encourage the pupils to infer the meaning of the new word from the context and the surrounding text in their L1 and to discourage them from using word by word strategies. The percentage of French words was 18% in the first chapter of the book and was increased slightly for each subsequent session, 22% in the second chapter etc. The researchers found that this group significantly outperformed two comparison groups in terms of inferring the meaning of new words in sentences where there was sufficient information for them to make a good guess. They also achieved higher scores in tests for the identification of high-frequency function words. Examples of equivalent function words in English to those in the test would be: *then, in, on, the, enough, a, very, with* etc. The researchers concluded that text-based work has a place in the primary second language curriculum.

The third study is that of Drew (2009) who examined the effectiveness of the Early Years Literacy Programme (EYLP) with third and fourth grade EFL pupils in Norway. The EYLP is a programme developed in Australia to boost L1 reading. In an extensive reading programme pupils are exposed to large amounts of reading texts to introduce high frequency words and to improve reading fluency. They engage in regular reading at home and at school where they are taught by teachers with expert knowledge, who monitor and assess their progress systematically. The classes are

organised around learning centres which are described in the vignette below.

One experimental class using the EYLP was compared with two other classes who followed the regular EFL curriculum. Pupils in all three classes were found to have made progress during the period of the study. The experimental class, however, made the greatest gains relative to the two other classes. Their proficiency in listening, reading, writing and oral skills increased and the gains were statistically significant.

Extensive L2 reading in Nylund School in Norway

Classrooms in Nylund School have print rich environments in both Norwegian and English. Desks are arranged in groups for different learning centres. There are at least four computers in each classroom. There is a class library in every class with at least five levels of the Wings reading series. This is a series of books used in Australian schools for L1 English literacy as part of the Early Years Literacy Programme (EYLP). These books would be read at a younger age by the Australian L1 pupils than the Norwegian L2 pupils. The provision of multiple levels enables teachers to differentiate for pupils of differing abilities. A typical learning centre lasts for 90 minutes with a 5-10 minute plenary at the start. The children spend 10-15 minutes at each learning centre in groups of three to four with one centre led by the teacher. The types of activities at the centres are silent reading, writing (e.g. sentence writing), vocabulary practice on computers, oral activities (e.g. role-play, games, vocabulary practice). At the centre manned by the teacher, pupils read from a Wings book that they have previously read at home. The teacher keeps records of the books that the pupils have read. The pupils read between one and three books each per week at home. They read each book several times to increase fluency. The teacher will usually read an unfamiliar book aloud to the pupils as a final activity at the teacher centre. The session for the whole class will usually finish with a second plenary session.

Classroom observation of the activities showed that the pupils were enthusiastic and focused at most of the learning centres and about reading the books in particular. They were less focused on oral activities such as role-play. The teachers, while generally satisfied with the learning centre approach, found it challenging to prepare all the activities in advance. They also found it frustrating not to be able to leave the group they were teaching in order to help other pupils in difficulty. The teachers alternated between the learning centre and other approaches in order to allow for a greater degree of flexibility. This enabled the pupils to experience whole-class oral activities and helped to balance oral and written training.

The three studies reported upon in this section support a policy of introducing L2 learners to literacy at an early stage of the L2 learning process. This gradual introduction should take cognisance of the wider literacy instruction in other languages in the school and L1 literacy in particular. Some curricula confine young children to the development of listening and speaking only. The research findings reported here support the current practice in Irish primary schools of introducing pupils to L2 literacy in Second Class (Age 7–8). As emerged in the BES pupils can benefit from the early systematic introduction of reading and writing.

SECTION 4

PROCESS - TYPE

RESEARCH:

ADDITIONAL GENERAL

PRINCIPLES FOR

EFFECTIVE LANGUAGE

TEACHING

In this section we briefly review a number of key themes and process-type studies relating to language teaching at primary level which did not happen to emerge in our Best Evidence Synthesis (BES) simply because the individual studies did not meet our inclusion criteria. Yet, a number of the studies and themes discussed in this section have considerable credibility and authority deriving from one or more of the following:

a. good process-type or correlational type evidence though not sufficient to meet our inclusion criteria

b. established professional opinion and experience and

c. judgements of recognised experts in the field of early language learning that the approaches in question are effective in at least some circumstances.

We now turn to the additional individual themes and studies of the kind described above which did not meet our BES inclusion criteria. Some of these were identified in the course of the BES and others emerged from an examination of a number of excellent narrative reviews published in recent years. We have drawn, in particular, on the insights provided by Driscoll et al. (2004), Edelenbos, Johnstone and Kubanek (2006), and Cable et al. (2010).

General principles

4.1 Task-based interaction

Before discussing task based interaction specifically within the evolution of language teaching in recent decades, it is important to bear in mind that communicative language teaching is not a unitary theory or method. It is rather a "fluid and changing body of ideas" (Mitchell, 1994, p. 41), which exists in 'weak' and 'strong' versions

(Mitchell, 1988). Thus, classic communicative language teaching in the 1970s to 1990s, for example, was followed by the current phase of communicative language teaching (CLT) or task based learning in the late 1990s. Jacobs and Farrell (2003) describe the move towards CLT as a paradigm shift which has led to many changes in the way that second languages are taught. They list eight major changes linked to this paradigm shift - learner autonomy, the social nature of learning, curricular integration, focus on meaning, diversity, thinking skills, alternative assessment and teachers as co-learners. But some of these aspects are patchily based on research, even though there are of course specific studies looking at specific issues (eg Rolstad et al., 2005). Indeed, some of the key principles/features in current approaches to subject-only classroom language teaching are not directly based on original research at all, but have acquired credibility and validity by reference to a broad range of research studies in other areas of second language acquisition. An example of this is the fundamental emphasis on the communicative orientation and using language for real purposes. The main original evidence here is actually extrapolated from documented success in a very different educational context – evaluation studies of L2 immersion, particularly in Canada. Yet the principle of an emphasis on communication and meaning has been extended to practice in regular mainstream classroom language teaching.

Turning now specifically to task-based learning, it is generally recognised that one of the challenges of a communicative approach to language teaching is to provide pupils with opportunities to communicate meaningfully with their peers. Teachers need to create activities or tasks that extend beyond language drills, where pupils communicate ideas and feelings to one another about topics of interest to them. Through these activities, pupils need to make their utterances comprehensible and receive feedback as to whether they have been understood. This helps learners to develop their

production and comprehension skills. Tasks can also motivate learners to use the target language by providing them with a reason to communicate. Task-based interactions are seen to be facilitative of second language learning (Oliver, Philp & Mackey, 2008). *Curaclam na Gaeilge* (DES, 1999) contains information-gap tasks and problem solving activities that are ideal for this type of communication as genuine information sharing needs to take place. The role of the teacher during these activities is to monitor the language of the pupils and any intervention needs to be carefully measured. In a study on the impact of teacher input while pupils were completing a task Oliver, Philp & Mackey (2008) found that on-task examples and guidance to younger learners (5-7 years old) were unhelpful whereas on-task examples and guidance to older learners (11-12 years old) facilitated noticing. This may be due to the greater cognitive maturity of the older learners. Task guidance for younger learners might best be provided after the activity.

4.2 LISTENING

Pupils need opportunities to listen to and comprehend natural spoken language. Similar to reading, L2 learners can be helped to develop strategies for deriving meaning from a listening text. Ideally pupils should use an interaction strategy which combines both 'bottom-up' and 'top-down' processing. In 'bottom-up' processing pupils piece together the sounds that they have heard to form words, phrases and sentences that they recognise. They combine this with a 'top-down' approach where they use their prior knowledge of the topic or situation to predict or guess what they have heard. One strategy is said to compensate for gaps in the other so that the oral text can be comprehended. In order to activate their prior knowledge teachers should ask pupils what they know about the topic to which they are to listen.

- Prepare difficult vocabulary.

- Pose pre-listening or focusing questions.

- Ask pupils to recall general points after listening.

- Use listening texts with natural language where possible rather than artificial teacher-made language.

4.3 EARLY START

An early start to L2 language learning can be beneficial for learners as it activates natural language acquisition mechanisms and ultimately provides more time to acquire the L2. Staring early does not however guarantee success. At the minimum it must be accompanied by effective teaching (Edelenbos, Johnstone, & Kubanek, 2006). Two learning characteristics that appear to be important are motivation and aptitude. The research suggests that aptitude can be developed and is not something that is fixed. The implications of this in the classroom is that it is not enough to concentrate exclusively on 'fun' activities based on language use but that teachers need to develop pupils' meta-language. This requires a balance between activities to promote fluency and confidence on the one hand with activities to focus on accuracy or form on the other. Some activities that a teacher will plan will require spontaneous communication and others where pupils have time to plan and prepare what they will say or write such as in class presentations or writing workshops.

4.4 USE OF THE EUROPEAN LANGUAGE PORTFOLIO (ELP)

The European Language Portfolio has been a very successful development in language teaching and learning generally. It can serve a number of functions, but among the ones of immediate interest in the present context are (a) recording learners' achievements and documenting their progress; (b) as an instrument for children to

reflect on their learning. It clearly has a substantial role to play in increasing motivation and promoting learner autonomy. Pupils can record and reflect on what they have learned through 'can do' statements. This enables them to become active participants in their own learning and to experience success in their learning which can enhance motivation and engagement in the learning process. The pupils are enabled to set targets for their learning and this promotes autonomous learning. This responds to one of the challenges presented to the teaching and learning of Irish: that pupils do not get opportunities to use the language they have learned outside school and therefore often lack feedback on their progress and evidence of what they have learned.

The ELP can also provide a stimulus for pupils to reflect on how they learn from each other, how they learn from the teacher and how they might learn independently. Teachers can *help their pupils to document, share, evaluate, supplement and refine how they learn* (Edelenbos & Kubanek, 2009, p. 47). Chinen et al. (2003) found that the introduction of a language portfolio to L2 language pupils learning Japanese in a middle school increased the pupils' motivation. This group had previously been found to lack motivation and expressed disinterest in continuing to learn Japanese.

There is a Portfolio for English as a second language learners in Irish primary schools (Little, 2005). The ELP has also been adapted by the Modern Languages in Primary Schools Initiative as My ELP (Rantz & Horan, 2005). This resource could be further adapted for Irish. Enabling pupils to set their own learning targets also promotes assessment for learning as described in the *Assessment in the Primary School Curriculum: Guidelines for schools* (NCCA, 2007). The Integrate Ireland Language and Teaching (IILT) materials available on www.ncca.ie/iilt could also be adapted for Irish to facilitate the early engagement of pupils in reflection on their learning of Irish.

4.5 TARGET LANGUAGE USE

One of the principles of L2 learning is that learners would receive comprehensible input (Judd, Tan, & Walberg, 2001). This implies that teachers must use the target language in their teaching. Curtain (2000) examined the relationship between teacher target language use and pupils proficiency in the L2. In a study investigating foreign language teaching the US, elementary language teachers were asked to self-report of the amount of Spanish – the pupils' L2 – that they used in the classroom. The findings of the research supported the hypothesis that greater use of the target language by the teacher results in higher L2 proficiency levels in the pupils (Curtain, 2000, p. 101).

4.6 USING STORIES

Research by Donato et al. (2000), Ghosn (2004) and Linse (2007) indicates that story-telling activities can help to promote speaking proficiency and literacy skills. Stories seem to serve a number of functions, including helping children to develop an awareness of narrative discourse structure, as well as stimulating their interest and imagination (Edelenbos, et al., 2006; and Cable et al., 2010). Stories with a cultural dimension and with good illustrations can be particularly effective. Teaching involving the use of stories, however, should not be overly concentrated on grammatical structure but should highlight aspects such as the overall structure of narratives and different points of view within stories. This kind of activity can generalise to other areas of the child's learning and of the curriculum.

4.7 DEVELOPING LEARNER STRATEGIES

Although most research on language learning strategies has been conducted on adults or at post-primary level, there are also some studies at primary level. Learner strategies can be defined as the skills, tactics and approaches which learners adopt in tackling their

language learning (Harris, 2006; Cable et al., 2010). A number of studies reviewed by Edelenbos, Johnstone and Kubanek (2006) and Cable et al. (2010) suggest that quite young children (aged 6-10) can become aware of and can be taught to use various learning strategies: Kubanek-German (2003b), Szulc-Kurpaska (2001) and Mihaljevic Djigunovic (2001), and Macaro (2002).

Mihaljevic Djigunovic (2001), for example, showed that 6-9 year old Croatian children were able to articulate strategies for teaching their dolls some words in English. Szulc-Kurpaska (2001) report a five year longitudinal study of strategy training in the case of 9 to 10 year old learners of English. The training had positive effects on learning although these effects did take some time to become apparent.

4.8   BALANCING FORM-FOCUSED AND MEANING FOCUSED ACTIVITIES

We have reported studies above describing the positive effect of both a form-focused approach and the benefit of an emphasis on communication (or meaning). To some extent, these are emphases in teaching that compete for instructional time. Up to the advent of communicative and task based approaches, there was very much a form-focused or language focused approach, with a substantial emphasis on language practice. Research has not so far provided clear guidance on what balance should be struck between form-focused and meaning/communicative focused activities. Edelenbos et al. (2006) argue that if pupils are to acquire a flexible command of the target language, it is useful to alternate between talk activities focused on confident, fluent expression and those more focused on accuracy of form and meaning; and also between activities requiring spontaneous performance and those where performance can be planned and prepared.

S ECTION 5

C ONCLUSION AND

D ISCUSSION

The scope and comprehensiveness of the work we have done in this synthesis has been determined by a number of factors already discussed above in some detail. The main constraints on what we were able to achieve arose simply from the current state of research on this topic, in particular the small number of process-product studies carried out on well-defined sets of alternative instructional practices or approaches at primary level. On the positive side, the exercise has also had real value. In particular, the systematically planned, exhaustive search of key data bases relating to this topic has provided a clear picture of the range and scope of research available. Despite the small number of studies which met the criteria for inclusion in our final synthesis, we have established five main themes and have reached a number of conclusions about effective practices.

A key question which arises at this point is how teachers and schools should interpret and use the findings from both the BES in Section 3 and the narrative review of process-type studies in Section 4. In discussing this issue, we first need to make a distinction between findings relating to two kinds of instructional practices. First, there are those practices which are primarily a matter for choice and decision by the individual teacher. Examples of these would include the use of corrective feedback, reading aloud by the teacher, or some of the more circumscribed forms of content and language integrated learning – all practices which the individual teacher, on his or her own initiative, can choose to implement in the classroom. Second, there are those findings which relate to instructional options that must really be considered alternative programmes rather than matters of teacher choice and decision alone. These options, such as the more ambitious versions of CLIL (concerned with teaching other subjects or parts of subjects through the target language) and Intensive Language Programmes, probably cannot be selected by the individual teacher acting alone but require in addition some policy decision at school and system level. Their success, however, does also crucially

depend on a positive choice by the individual teacher. As it happens, the instructional options of this second type are also the ones which produce the most striking outcomes in terms of language proficiency and are supported by the strongest evidence. We will now look at the issues which arise in using the evidence relating to these two kinds of instructional options.

5.1 IMPLICATIONS FOR THE CLASSROOM: INSTRUCTIONAL OPTIONS WHICH LIE WITHIN THE TEACHER'S REMIT

Although we have presented evidence on the effectiveness of a variety of teaching approaches or specific instructional practices, and although we believe this kind of information is really important and useful for teachers, we must also note some of its limitations. For example, we have no way of saying how widely generalisable are the findings about instructional practices that we report, nor can we indicate precisely how teachers should make use of them. We cannot claim that these practices will be successful or produce the expected outcomes, in teaching contexts or sociolinguistic contexts which differ from those in the original studies or, for example, when implemented with pupils who are older or younger than the ones studied. The kind of evidence that is available can never specify what is the optimum mix of activities or instructional practices for a particular class on a particular day. As Mitchell and Myles (1998) note:

> *The findings of SLA research are not sufficiently secure, clear and uncontested, across broad enough domains, to provide straightforward prescriptive guidance for the teacher (nor perhaps will they ever be so)….[M]ost importantly, teaching is an art as well as a science, and irreducibly so, because of the constantly varying nature of the classroom as a learning community. There can be 'no one best method', however much*

> *research evidence supports it, which applies at all times and in*
> *all situations, with every type of learner.*
>
> (Mitchell & Myles, 1998, p. 195)

A similar point is made by the authors of one of the most comprehensive reviews of research on language learning at primary level:

> *None of the research which has been surveyed should be*
> *considered as demonstrating universal proofs which lead directly*
> *to particular desirable practices. This is not the fault of the*
> *researchers; it has much more to do with the nature of research*
> *in our highly diverse, complex, fast-changing and contested*
> *field which cannot be as controlled and scientific as is research*
> *in various other domains of human investigation.*
>
> (Edelenbos et al., 2006, p.147).

As Mitchell (2000) points out, the effective teacher has to make rapid, complex decisions all the time in the classroom. These decisions are guided, among other things, by a strategic view of desired learning outcomes, by theories of learning as well as by the teacher's ongoing assessment of individual pupils' knowledge, skill, interest. The value of the present BES is simply that it provides one other source of knowledge which can contribute to the teacher's decision making in class. The BES indicates which of the innumerable possible instructional practices that might be implemented at any time have had demonstrable positive impact on primary school pupils' second and foreign language learning in the past. The BES helps to validate key instructional practices that the teacher may already be using and makes a case perhaps for making others in his or her active repertoire of instructional choices. In addition, it may prompt the teacher to revise or modify his or her underlying language learning theory.

One of the problems, of course, is that the amount of useful information of this kind that is generated and that is made available to teachers is quite limited. The kind of process–product research in the SLA tradition often proceeds according to its own agenda and issues and does necessarily centre on the kinds of questions which are of most concern to teachers. In addition, the results of such research are often not presented and disseminated in ways accessible and meaningful to teachers. Accessibility of information is a problem whether you consider very specific instructional issues, such as the effect on proficiency of different kinds of corrective feedback, or more broadly defined language teaching approaches such as the communicative approach. Mangubhai, Marland and Dashwood (2007), for example, raise issues about the quality of the written texts on the nature and use of communicative language teaching approaches as a learning resource for teachers. While they acknowledged that the 34 texts they examined in their study did *provide teachers with a very rich and diverse set of insights into the nature and use of CLT approaches* (2007, p. 93), they concluded that no single text covered anything like all the constructs identified as being relevant. Even the most comprehensive single text only covered half of the 22 constructs identified in the analysis of the whole set of texts. In addition, there is evidence of fairly substantial variations from teacher to teacher in how such approaches are understood and indeed about how consistently teachers apply methods that they understand and approve of (Sato & Kleinsasser, 1999). This has also been documented in the case of the teaching of Irish at primary level by Ó Néill, (2008).

5.2 IMPLICATIONS FOR POLICY: OPTIONS REQUIRING SCHOOL AND SYSTEM LEVEL DECISIONS

We turn now to the second category of BES findings and the issues which arise for teachers or the educational system in making use of

them. This second category of findings relate to instructional options that must be counted as alternative programmes rather than being simple matters of individual teacher choice, since they require policy decision at school and system level. Two of these programme options are (a) the more ambitious versions of Content and Language Integrated Learning (CLIL), including partial immersion (50% of all instruction through the medium of Irish), and (b) intensive Irish. Since our concern here is just to illustrate some of the issues which arise in making use of our BES findings, we will confine ourselves to the first of these.

Although there are a very large number of different programme options which could be included under CLIL, we are concerned with the more ambitious ones which involve some significant teaching of subjects other than Irish through Irish. There are a range of intermediate immersion programmes of this kind which could be considered ranging up to 50% instruction through Irish – which of course falls well short of the full immersion approach of all-Irish schools. Three broad approaches to the goal of extending the amount of teaching through Irish can be distinguished:

a. A CLIL programme which would involve providing ordinary schools with the possibility (e.g., by providing materials, training or other support) of teaching through Irish on an informal basis, without the school offering a specific 'extended core' programme to pupils (as in option b., below). Many teachers may prefer to start off that way.

b. The alternative is to promote an 'extended core programme' (teaching of one or two subjects, or parts of subjects, through Irish) in a more explicit way, with the school indicating that it is offering such a programme and seeking parental support.

c. The development of intermediate forms of immersion education

ranging up to 50% instructional time in Irish, less ambitious than the full-immersion approach of all-Irish schools but more ambitious than a subject-only or extended programme.

The success of immersion approaches more generally, of course, have been well documented both internationally (Swain & Johnson, 1997) and in Irish primary schools (Harris et al., 2006; Ó Duibhir, 2009; Ó hAiniféin, 2007; Parsons & Lyddy, 2009). Much of the research evidence for this success has derived from programme evaluations that demonstrate that the L1, Mathematics or Science skills of immersion pupils are not suffering as a result of participating in an immersion programme (Swain, 2000; Turnbull, Lapkin, & Hart, 2001) while L2 proficiency outstrips the levels achievable in a subject only programme (Harris, 1983; Jiménez Catalán & de Zarobe, 2009; Kiziltan & Ersanli, 2007).

The intermediate immersion programmes set out above are relatively common elsewhere (see Swain & Johnson, 1997) and they produce improvements in second language achievement which reflect the additional hours of real communicative contact with the language. One of the key advantages of these programmes, of course, is that they achieve these additional contact hours without taking time away from other school subjects. These approaches have also now become part of a larger educational movement operating under the general umbrella of content and language integrated learning (Marsh, 2002) which is actively supported by the Council of Europe's Language Policy Division.

While this evidence is very positive, there are a number of issues which might be taken into account in weighing the pros and cons of adopting one or more of the CLIL/partial immersion options described above. It is notable, for example, that the Irish primary school system has particular advantages in promoting CLIL and

partial immersion which do not prevail in many other early second and foreign language programmes. All primary school teachers teach Irish, and in the system generally there is a 90 year professional history and experience in teaching the language. There is also a considerable reservoir of experience in ordinary schools specifically in conducting some Irish medium instruction outside the Irish lesson. Finally, there is a long tradition of teaching in a total immersion context in a vibrant all-Irish sector, adding up to a very substantial combined experience with Irish-medium instruction for English speaking children in the system as a whole.

Equally important from the point of view of estimating the potential for expansion in this area is the evidence (Harris et al., 2006) that 24% of parents would support the teaching of one or two subjects through Irish in schools where no subject is currently taught through Irish. Thus, where a teacher is motivated to adopt a CLIL approach it should be possible in many cases to also secure the support of parents for such a programme. It scarcely needs to be said that any initiative of this kind could only succeed and be promoted among teachers and parents on an entirely voluntary basis, and in all probability it would be best developed incrementally. In the long term, however, it would be reasonable to aim for the maximum Irish-medium programme that each school, and each set of parents, is willing to implement. The key requirement is that where the teacher's own outlook and motivation make it possible to place a special emphasis on Irish in a particular school, and where local parental attitudes permit it, there should be easy access to the support, structures, training and materials to capitalise on that potential and to deliver that more ambitious programme. Clearly, also, if in the longer term such a programme could be delivered at all grade levels rather than just at one or two grades, the impact would be considerably more positive.

It is very likely, however, that a programme of this kind would not thrive without detailed attention to planning, materials development and training. The Irish CLIL/partial immersion Project described in section 3.2 (Harris, 2006), which was very well received by both teachers and pupils, illustrates some of the key requirements. The in-service workshops were a critical element in the success of the initiative, as they afforded teachers an opportunity to share experiences and to provide mutual support for each other as they responded to the new professional challenges presented by teaching through Irish. More generally, without the broader support and validation provided by a comprehensive scheme, it would be difficult for individual teachers, acting alone, to choose the more ambitious forms of CLIL or partial immersion being discussed here. One of the other key findings of the Irish CLIL/partial immersion study was that the views of many participating teachers on how difficult it would be to teach through Irish did change over time: they became more positive and enthusiastic about the approach as their experience with it increased. It is a reasonable expectation, therefore, that the successful early development of such a programme on a pilot basis nationally, would gradually broaden the support base for partial immersion over time.

Finally, it should be noted that the development of partial immersion/CLIL would considerably help to respond to a major negative factor which has affected Irish at primary level in recent years. This is the gradual decline which has occurred in the amount of core time which can be accorded the language in a crowded curriculum. In a national survey of second grade teachers in ordinary schools in 1982, the mean number of hours per week spent on Irish was reported as 5.1, about half of that on conversational or spoken Irish (Harris, 1984). Again, in 1985, a national sample of sixth-grade teachers in ordinary schools reported spending just over 5.4 hours per week on average on Irish (Harris & Murtagh, 1988). In the

introduction to the *Primary School Curriculum (1999)*, however, the core ('minimum') time for Irish as a second language is specified as 3.5 hours, acknowledging in reality a reduction that had already been happening in the interim. It may be noted in passing that focus groups of teachers consulted about the implementation of the Irish curriculum some years ago mentioned the difficulty of implementing the new communicative approach to Irish in the time available (INTO, 2004). Clearly, a CLIL/partial immersion programme could make a major contribution to developing high levels of pupils proficiency in Irish by increasing the number of hours of communicative contact with the language without creating pressures elsewhere in the curriculum.

5.3 IMPLICATIONS FOR RESEARCH ON EFFECTIVE LANGUAGE TEACHING

A further important achievement of the search process and synthesis has been to demonstrate how incomplete and fragmented is the evidence base itself. What has been revealed is that the initial impression of the existence of a plentiful store of high quality studies is deceptive. In reality, the available research is not of the required process–product type at all, but instead is strongly biased towards fairly general descriptive and process-oriented accounts of language teaching at primary level. Indeed, much of the intellectual task involved in carrying out this study has been a matter of grappling with the implications of that fact. While the results of the synthesis fall short of the kind of input into the deliberations of the NCCA on effective language teaching that we had hoped for, the work itself and our experience in exploiting what evidence was available may make some contribution to research on second language pedagogy more generally.

It is also worth noting briefly one of the immediate research initiatives that have the potential to make a contribution to the kind of evidence

base sought by the NCCA and by many other bodies. This would be to re-examine previously executed high-quality meta analyses of instructional practice, but this time with a new focus on primary level pupils. These earlier meta analyses (e.g. Norris & Ortega, 2000, 2006) as we noted above did not take account of age or type of learner. The aim of reanalysis would be to exploit the potential of the core set of research articles assembled in the course of these earlier syntheses, updating them, and then filtering out for special scrutiny those focused on subject-only language teaching at primary level. The potential advantage of this derives from the fact that searches conducted independently by different authors in relation to specific instructional practices are likely to produce particularly exhaustive inventories of studies and to have unearthed less accessible material on the basis of personal knowledge. While we recognise that high-quality process-product studies focused on primary level are rare, the studies assembled in previous meta-analyses are a promising source of new target studies. As we noted earlier, this approach would have been too time consuming to have adopted in the case of the present synthesis due to the number of studies dealing with non-target age groups which would need to be examined – and the outcome of such a reanalysis was judged in any case to be less predictable that the direct search ultimately chosen. In the light of the relatively small number of useful primary level studies which have now been uncovered in our own direct search, however, the above strategy appears to have some potential.

In terms of future research on effective teaching practices themselves, the greatest need of course is for many more well-controlled process-product studies focused on specific instructional practices. We also need more research however on the immediate decision processes of teachers in classrooms, linking these to factors like teacher skill, training, language proficiency and confidence in various practices and approaches.

Irrespective of proof of the general effectiveness of particular instructional practices, however, the implementation of particular practices at class level is always mediated by the immediate context and by the background and the professional judgement of the teacher in situ as noted in Mitchell (2000, pp. 297-298) above. Research of a very different kind is also needed, therefore, this time focussing on how exactly, in terms of factors such as teacher experience and training, skill in implementation and sensitivity to classroom dynamics, does the teacher's choice of particular instructional practices constitute effective language teaching? This dynamic aspect of effective practice has not yet been well studied and deserves to be a major focus of future research.

S ECTION 6

R EFERENCES

★★ Identifies the key studies synthesised in the current Best Evidence Synthesis.

★ Represents the studies considered for inclusion but that were ultimately rejected.

Allen, P., Swain, M., Harley, B., & Cummins, J. (1990). Aspects of classroom treatment: Toward a more comprehensive view of second language education. In B. Harley, P. Allen, J. Cummins & M. Swain (Eds.), *The Development of second language proficiency* (pp. 57–81). New York: Cambridge University Press.

★★Amer, A. (1997). The effect of the teacher's reading aloud on the reading comprehension of EFL students. *ELT Journal*, 51(1), 43–47.

★★Ammar, A. (2008). Prompts and recasts: Differential effects on second language morphosyntax. *Language Teaching Research*, 12(2), 183–210.

★★Ammar, A., & Spada, N. (2006). One size fits all?: Recasts, prompts, and L2 learning. *Studies in Second Language acquisition*, 28(4), 543–574.

An Chomhairle um Oideachais Gaeltachta agus Gaelscolaíochta (COGG). (2002). *Innéacs taighde*. Baile Átha Cliath: COGG.

Bell, D. M. (2007). Do teachers think that methods are dead? *ELT Journal*, 61(2), 135–143.

Beretta, A. (1992). What can be learned from the Bangalore evaluation. In C. J. Andersen & A. Beretta (Eds.), *Evaluating second language education* (pp. 250–270). Cambridge: Cambridge University Press.

★Blain, S. (2001). Study of verbal peer feedback on the improvement of the quality of writing and the transfer of knowledge in Francophone students in Grade 4 living in a minority situation in Canada. *Language Culture and Curriculum*, 14(1), 156–170.

Block, D. (2001). An exploration of the art and science debate in language education. In M. Bax & J.-W. Zwart (Eds.), *Reflections on language and language learning: In honour of Arthur van Essen*. Amsterdam: John Benjamins.

Brinton, D., Snow, M. A., & Wesche, M. B. (2003). Content-based second language instruction (New ed.). Michigan: University of Michigan Press.

Cable, C., Driscoll, P., Mitchell, R., Sing, S., Cremin, T., Earl, J., et al. (2010). *Languages learning at Key Stage 2: A longitudinal study.* Runcorn: Department for Children, Schools and Families.

★Carless, D. (2002). Implementing task-based learning with young learners. *ELT Journal,* 56(4), 389–396.

Carr, W. (2009). Intensive French in British Columbia: Student and parent perspectives and English as additional language (EAL) student performance. *The Canadian Modern Language Review*, 65(5), 787–815.

Chinen, K., Donato, R., Igarashi, K., & Tucker, G. R. (2003). Looking across time: Documenting middle school Japanese FLES students' attitude, literacy and oral proficiency. *Learning Languages,* 8(2), 4–9.

★Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning.* Cambridge: Cambridge University Press.

Cummins, J. (2001). The entry and exit fallacy in bilingual education. In C. Baker & N. H. Hornberger (Eds.), *An introductory reader to the writings of Jim Cummins* (pp. 110-138). Clevedon, England: Multilingual Matters.

Curtain, H. (2000). Time as a factor in early start programmes. In J. Moon & M. Nikolov (Eds.), *Research into teaching English to young learners* (pp. 87-120). Pécs: University Press Pécs.

Department of Education and Science. (1999). *Curaclam na Gaeilge.* Baile Átha Cliath: Oifig an tSoláthair.

Department of Education and Science (1999) *Primary School Curriculum.* Dublin: Government Publications, Stationery Office

Department of Education and Science. (2007). *An Ghaeilge sa bhunscoil: Staidéir mheastóireachta na cigireachta-Irish in the primary school: Inspectorate evaluation studies.* Dublin: Government Publications, Stationery Office

★Dlugosz, D. W. (2000). Rethinking the role of reading in teaching a foreign language to young learners. *ELT Journal,* 54(3), 284–290.

Donato, R., Tucker, G. R., Wudthayagorn, J. and Igarashi, K. (2000). Converging evidence: Attitudes, achievements, and instruction in the later years of FLES. *Foreign Language Annals* 33(4): 377–393.

★★Drew, I. (2009). Using the Early Years Literacy Programme in primary EFL Norwegian classrooms. In M. Nikolov (Ed.), *Early learning of modern foreign languages: Processes and outcomes* (pp. 108–120). Bristol: Multilingual Matters.

Driscoll, P. (2000). *Modern foreign languages in English primary schools: An investigation of two contrasting approaches.* Unpublished PhD dissertation, Canterbury Christ Church University College., Kent.

Driscoll, P., Jones, J., Martin, C., Graham-Matheson, L., Dismore, H., & Sykes, R. (2004). *A systematic review of the characteristics of effective foreign language teaching to pupils between the ages 7 and 11.* In: Research Evidence in Education Library, London: EPPI-Centre, Social Science Research Unit, Institute of Education.

★★Edelenbos, P., & Suhre, C. (1994). A comparison of courses for English in primary education. *Studies in Educational Evaluation 20*, 513–534.

Edelenbos, P., Johnstone, R., & Kubanek, A. (2006). The main pedagogical principles underlying the teaching of languages to very young learners. Languages for the children of Europe: Published research, good practice and main principles. Final report of the EAC 89/04, Lot 1 study European Commission Education and Culture, Retrieved from http://ec.europa.eu/education/languages/pdf/doc425_en.pdf

Edelenbos, P., & Kubanek, A. (2009). Early foreign language learning: Published research, good practice and main principles. In M. Nikolov (Ed.), *The age factor and early language learning* (pp. 39-58). Berlin: Mouton de Gruyter.

★★Gattullo, F. (2000). Corrective feedback and teaching style: Exploring a relationship. In J. Moon & M. Nikolov (Eds.), *Research into teaching English to young learners* (pp. 295-311). Pécs: University Press Pécs.

Ghosn, I.K. (2004). Story as culturally appropriate content and social context for young English language learners: A look at Lebanese primary school classes. *Language, Culture and Curriculum*,17(2): 109-126.

★Gibson, S. (2008). Reading aloud: A useful learning tool? *ELT Journal*, 62(1), 29-36.

★Goh, C., & Taib, Y. (2006). Metacognitive instruction in listening for young learners. *ELT Journal*, 60(3), 222-232.

★★Harris, J. (1983). Relationships between achievement in spoken Irish and demographic, administrative, and teaching factors. *Irish Journal of Education,* 17(1), 5-34.

Harris, J. (1984) *Spoken Irish in primary schools.* Dublin: Institiúid Teangeolaíochta Éireann.

Harris, J. (2009). Expanding the comparative context for early language learning: From foreign to heritage and minority language programmes. In M. Nikolov (Ed.), *The age factor and early language learning* (pp. 351-376). Berlin: Mouton de Gruyter.

Harris, J., & Mac Giollabhuí, S. (1998a). *Bain triail as! Eolaíocht trí Ghaeilge do na gnáthscoileanna: Lámhleabhar an dalta.* Baile Átha Cliath: Institiúid Teangeolaíochta Éireann.

Harris, J., & Mac Giollabhuí, S. (1998b). *Bain triail as! Eolaíocht trí Ghaeilge do na gnáthscoileanna: Lámhleabhar an mhúinteora.* Baile Átha Cliath: Institiúid Teangeolaíochta Éireann.

Harris, J., & Mac Giollabhuí, S. (1998c). *Lean den ealaín! Ealaín trí Ghaeilge do na gnáthscoileanna: Lámhleabhar an mhúinteora.* Baile Átha Cliath: Institiúid Teangeolaíochta Éireann.

Harris, J., & Murtagh, L. (1988). National assessment of Irish-language speaking and listening skills in primary-school children: Research issues in the evaluation of school-based heritage-language programmes. *Language Culture and Curriculum,* 1(2), 85-130.

★★Harris, J., & Murtagh, L. (1999). Teaching and learning Irish in primary school: *A review of research and development.* Dublin: Institiúid Teangeolaíochta Éireann.

Harris, J., Forde, P., Archer, P., Nic Fhearaile, S., & O'Gorman, M. (2006). *Irish in primary schools: Long-term national trends in achievement.* Dublin: Department of Education and Science.

★Hickey, T. M. (2007). Fluency in reading Irish as L1 or L2: Promoting high-frequency word recognition in emergent readers. *International Journal of Bilingual Education and Bilingualism,* 10(4), 471-493.

Irish National Teachers' Organisation (2004), *Language in the Primary School.* Dublin:INTO.

★★Jiménez Catalán, R. M., & de Zarobe, Y. R. (2009). The receptive vocabulary of EFL learners in two instructional contexts: CLIL versus non-CLIL instruction. In Y. R. de Zarobe & R. M. Jiménez Catalán (Eds.), *Content and language integrated learning: Evidence from research in Europe* (pp. 81-92). Bristol: Multilingual Matters.

Jiménez Catalán, R. M., & de Zarobe, Y. R. (2010). The receptive vocabulary of EFL learners in two instructional contexts: CLILjo versus non-CLIL instruction. In Y. R. de Zarobe & R. M. Jiménez Catalán (Eds.), *Content and language integrated learning: Evidence from research in Europe* (pp. 81-92). Bristol: Multilingual Matters.

Johnstone, R. (2009). Review of research on language teaching, learning and policy published in 2007. *Language Teaching*, 42(03), 287-315.

Judd, E. L., Tan, L., & Walberg, H. J. (2001). *Teaching additional languages*. Brussels: International Academy of Education.

Julkunen, K. (2000). Young learners' opinions on content and language integrated learning. In J. Moon & M. Nikolov (Eds.), *Research into teaching English to young learners* (pp. 374–385). Pécs: University Press Pécs.

Keck, C. M., Iberri-Shea, G., Tracy-Ventura, N., & Wa-Mbaleka, S. (2006). The effectiveness of corrective feedback for the acquisition of L2 grammar: A meta-analysis of the research. In J. M. Norris & L. Ortega (Eds.), *Synthesizing research on language learning and teaching* (pp. 91-131). Amsterdam: John Benjamins.

★Kim, Y., & Kellogg, D. (2007). Rules out of roles: Differences in play language and their developmental significance. *Applied Linguistics,* 28(1), 25-45.

★★Kiziltan, N., & Ersanli, C. (2007). The contributions of theme-based CBI to Turkish young learners' language development in English. *Journal of Language and Linguistic Studies*, 3(1), 133-149.

★Kong, S. (2009). Content-based instruction: What can we learn from content-trained teachers' and language-trained teachers' pedagogies? *The Canadian Modern Language Review*, 66(2), 233-267.

Kubanek-German, A. (2003). Frühes Intensiviertes Fremdsprachenlernen. Bericht zur wissenschaftlichen Begleitung eines Modellprojekts des Kultusministeriums des

Freistaates Sachsen. [An intensified programme for teaching modern languages to children by the Saxon Ministry of Education. Research report.]

Kumaravadivelu, B. (1994). The postmethod condition: (E)merging strategies for second/foreign language teaching. *TESOL Quarterly,* 28(1), 27-48.

★Leeman, J. (2003). Recasts and second language development. *Studies in Second Language Acquisition*, 25(01), 37.

Lightbown, P. M., & Spada, N. (1990). Focus-on-form and corrective feedback in communicative language teaching: Effects on second language learning. *Studies in Second Language Acquisition*, 12, 429-448.

Linse, C. (2007). Predictable books in the children's EFL classroom. *ELT Journal* 61(1): 46- 54.

Little, D. G. (1999). *The European language portfolio and self-assessment*. Strasbourg: Council of Europe.

Little, D. (2005). The Common European Framework and the European Language Portfolio: Involving learners and their judgements in the assessment process. *Language Testing*, 22(3), 321-336.

★Littlejohn, A. (2008). The tip of the iceberg: Factors affecting learner motivation. *RELC Journal*, 39(2), 214–225.

★Littlewood, W., & Yu, B. (2009). First language and target language in the foreign language classroom. *Language Teaching,* First View, 1.

★Low, L., Brown, S., Johnstone, R., & Pirrie, A. (1995). *Foreign languages in primary schools: Evaluation of the Scottish pilot projects 1993-1995. Final report*. Stirling: Scottish CILT.

Low, L., Duffield, J., Brown, S., & Johnstone, R. (1993). *Evaluating foreign languages in primary schools: 1991-1993 Interim report of the evaluation*. Stirling: Scottish CILT.

Luc, C. (1996). *Première année d'initiation à une langue étrangère au cours elémentaire: Constats, analyses, propositions. Rapport intégral du groupe de suivi mis en place à l'INRP*. Paris: INRP.

Lyster, R. (1998). Recasts, repetition, and ambiguity in L2 classroom discourse. Studies in Second Language acquisition, 20(1), 51-81.

Lyster, R. (2004). Differential effects of prompts and recasts in form–focused instruction. *Studies in Second Language Acquisition*, 26(3), 399–432.

Lyster, R. (2007). *Learning and teaching languages through content: A counterbalanced approach* (Vol. 28). Amsterdam: John Benjamins.

★Lyster, R., & Saito, K. (2010). Oral feedback in classroom SLA: A meta-analysis. *Studies in Second Language acquisition*, 32(2), 265-302.

Macaro, E. (2001). *Learning Strategies in Foreign and Second Language Classrooms*. London: Continuum.

★★Macaro, E. (2009). Developing reading achievement in primary learners of French: Inferencing strategies versus exposure to 'graded readers'. *Language Learning Journal*, 37(2), 165-182.

Mackey, A. (2006). Feedback, noticing and instructed second language learning. *Applied Linguistics*, 27(3), 405-430.

★Mackey, A., & Oliver, R. (2002). Interactional feedback and children's L2 development. *System*, 30(4), 459-477.

Mangubhai, F., Marland, P., Dashwood, A., & Son, J.-B. (2007). Framing communicative language teaching for better teacher understanding. *Issues In Educational Research,* 17.

Marsh, D. (2002). *Clil/Emile The european dimension: Actions, trends and foresight potential*. Retrieved from http://ec.europa.eu/education/policies/lang/doc/david_marsh-report.pdf

★Mhic Mhathúna, M. (2010). Arís is arís eile: Scéalta mar áis teanga sa naíonra. *Oideas*, 55, 31-42.

Mihaljevic Djigunovic, J. (2001). Do young learners know how to learn a foreign language? Children and Foreign Languages III, (ed. Vrhovac, Y.), Zagreb:University of Zagreb, Faculty of Philosophy, 57-71.

Ministry of Education, New Zealand (2004) *Guidelines for generating a Best Evidence Synthesis Iteration*. Wellington: Ministry of Education. www.educationcounts.govt.nz

Mitchell, R. (1988) *Communicative language teaching in practice*. London: Centre for Information on Language Teaching and Research.

Mitchell, R. (1994) The communicative approach to language teaching: An introduction. In A. Swarbrick (ed) *Teaching modern languages*. London: Routledge/The Open University.

Mitchell, R. (2000). Anniversary article. Applied linguistics and evidence-based classroom practice: The case of foreign language grammar pedagogy. *Applied Linguistics*, 21(3), 281-303.

Mitchell, R., & Myles, F. (1998). *Second language learning theories*. London: Arnold.

Muranoi, H. (2000). Focus on form through interaction enhancement: Integrating formal instruction into a communicative task in EFL classrooms. *Language Learning*, 50(4), 617-673.

⋆Murphy, B. (2004). Social interaction and language use in Irish infant classrooms in the context of the revised Irish Primary School Curriculum (1999). *Literacy*, 38(3), 149-155.

NCCA. (2007). *Assessment in the Primary School Curriculum: Guidelines for schools*. Dublin: National Council for Curriculum and Assessment.

NCCA. (2008). *Primary curriculum review, Phase 2: Final report and recommendations.* Dublin: National Council for Curriculum and Assessment.

NCCA, (2009) *Aistear: the Early Childhood Curriculum Framework*. Government Publications: Dublin Available online at www.ncca.ie/ earlylearning

Netten, J., & Germain, C. (2004a). Introduction: Intensive French. *The Canadian Modern Language Review,* 60(3), 263-273.

Netten, J., & Germain, C. (2004b). Theoretical and research foundations of intensive French. *The Canadian Modern Language Review,* 60(3), 275-294.

⋆⋆Netten, J., & Germain, C. (2009). The future of intensive French in Canada. *The Canadian Modern Language Review,* 65(5), 757-786.

⋆Newton, J. (2001). Options for vocabulary learning through communication tasks. *ELT Journal*, 55(1), 30-37.

Ní Dheirg, Í. (2006). Vade mecum na Gaeilge: *A guide to sources of information on the Irish language.* Dublin: Trinity College Dublin Press.

Nikolov, M. (2009). Early learning of modern foreign languages: *Processes and outcomes*. Bristol: Multilingual Matters.

Norris, J. M., & Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning*, 50(3), 417-528.

Norris, J. M., & Ortega, L. (2006). The value and practice of research synthesis for language learning and teaching. In J. M. Norris & L. Ortega (Eds.), *Synthesising research on language learning and teaching* (pp. 3-50). Amsterdam: John Benjamins.

Norris, J. M., & Ortega, L. (2010). Research timeline: Research synthesis. *Language Teaching,* 43(4), 1-19.

Ó Domhnalláin, T., & Ó Gliasáin, M. (1976). *Audio-visual methods v. A.B.C. methods in the teaching of Irish*. Dublin: Institiúid Teangeolaíochta Éireann.

Ó Duibhir, P. (2009). *The spoken Irish of sixth-class pupils in Irish immersion schools.* Unpublished PhD, Trinity College, Dublin.

Ó hAiniféin, D. (2007). Iniúchadh ar na múnlaí tumoideachais reatha i nGaelscoileanna, i bPoblacht na hÉireann, agus ar na caighdeáin ghnóthachtála i léitheoireacht an Bhéarla iontu. Unpublished Thesis. NUIG.

Ó Néill, S. (2008). *The communicative approach to the teaching of Irish in the revised Irish curriculum: Teacher attitudes and classroom implementation at primary level.* Unpublished MA, Trinity College Dublin.

★Oliver, R. (2000). Age differences in negotiation and feedback in classroom and pairwork. *Language Learning*, 50(1), 119-151.

★Oliver, R., & Mackey, A. (2003). Interactional context and feedback in child ESL classrooms. *The Modern Language Journal*, 87(4), 519-533.

Oliver, R., Philp, J., & Mackey, A. (2008). The impact of teacher input, guidance and feedback on ESL children's task-based interactions. In J. Philp, R. Oliver & A. Mackey (Eds.), *Second language acquisition and the younger learner: Child's play?* (pp. 131-147). Amsterdam: John Benjamins Publishing Company.

Parsons, C., & Lyddy, F. (2009). The sequencing of formal reading instruction: Reading development in bilingual and English-medium schools in Ireland. *International journal of bilingual education and bilingualism*, 12(5), 493 – 512.

★Pinter, A. (2007). Some benefits of peer-peer interaction: 10-year-old children practising with a communication task. *Language Teaching Research,* 11(2), 189-207.

★Poyen, J. (1993). French instruction in elementary and secondary schools: The Canadian experience. *French Language Annals*, 26(1), 63-73.

★Rantz, F., & Horan, P. (2005). Exploring intercultural awareness in the primary modern language classroom: The potential of the new model of European Language Portfolio developed by the Irish Modern Languages in Primary Schools Initiative (MLPSI). *Language and Intercultural Communication*, 5(3-4), 209-221.

★Renandya, W. A., & Farrell, T. S. C. (2010). 'Teacher, the tape is too fast!' Extensive listening in ELT. *ELT Journal*.

Rialtas na hÉireann. (2010). *Straitéis 20 Bliain don Ghaeilge 2010-2030: 20-year strategy for the Irish language 2010-2030*. Baile Átha Cliath: Oifig an tSoláthair.

Rolstad, K., Mahoney, K., & Glass, G.V. (2005). The big picture: A meta-analysis of program effectiveness research on English language learners. *Educational Policy,* 19(4), 572-594.

Russell, J., & Spada, N. (2006). The effectiveness of corrective feedback for the acquisition of L2 grammar: A meta-analysis of the research. In J. M. Norris & L. Ortega (Eds.), *Synthesizing research on language learning and teaching* (pp. 133-164). Amsterdam: John Benjamins.

Sato, K., & Kleinsasser, R. C. (1999). Communicative Language Teaching (CLT): Practical Understandings. *The Modern Language Journal,* 83(4), 494-517.

Seikkula-Leino, J. (2007). CLIL learning: Achievement levels and affective factors. *Language and Education,* 21(4), 328 - 341.

Serrano, R., & Muñoz, C. (2007). *Same hours, different time distribution: Any difference in EFL?* An International Journal of Educational Technology and Applied Linguistics, 35(3), 305-321.

Slavin, R. E., & Cheung, A. (2005). A synthesis of research on language of reading instruction for English language learners. *Review of educational research*, 75(2), 247-284.

Spada, N., & Lightbown, P. M. (1989). Intensive ESL programs in Quebec primary schools. *TESL Canada Journal*, 7(11-32).

Stern, H. H. (1985). The time factor and compact course development. *TESL Canada Journal*, 3(1), 13-27.

Stern, H. H. (1990). Analysis and experience as variables in second language pedagogy. In B. Harley, P. Allen, J. Cummins & M. Swain (Eds.), *The development of second language proficiency* (pp. 93-109).

Stern, H. H. (1992). *Issues and options in language teaching*. Oxford: Oxford University Press.

Swain, M. (2000). French immersion research in Canada: Recent contributions to SLA and applied linguistics. *Annual Review of Applied Linguistics*, 20(1), 199-212.

Swain, M., & Johnson, R. K. (1997). Immersion education: A category within bilingual education. In R.K. Johnson & M. Swain (Eds.), *Immersion Education: International Perspectives* (pp. 1-18). Cambridge: Cambridge University Press.

Szulc-Kurpaska, M. (2001). Foreign Language Acquisition in the Primary School. Teaching and Strategy Training. Krakow: Publisher Oficyna Wydawnicza ATUT

★Tarone, E., & Bigelow, M. (2005). Impact of literacy on oral language processing: Implications for second language acquisition research. *Annual Review of Applied Linguistics*, 25(-1), 77.

Téllez, K., & Waxman, H. C. (2006). A meta-synthesis of qualitative practices for English language learners. In J. M. Norris & L. Ortega (Eds.), *Synthesizing research on language learning and teaching* (pp. 245-277). Amsterdam: John Benjamins.

★Tonzar, C., Lotto, L., & Job, R. (2009). L2 vocabulary acquisition in children: Effects of learning method and cognate status. Language Learning, 59(3), 623-646.

Turnbull, M., Lapkin, S., & Hart, D. (2001). Grade 3 immersion students' performance in literacy and mathematics: Province-wide results from Ontario (1998-99). *The Canadian Modern Language Review*, 58(1), 9-26.

Van Lier, L. (1988). *The classroom and the language learner. Ethnography and second-language classroom research.* Harlow: Longman.

A PPENDIX 1

S YNTHESISING RESEARCH

ON EFFECTIVE LANGUAGE

TEACHING

In this appendix we discuss the complex issues involved in conducting a Best Evidence Synthesis (BES) in an area of study where this type of exercise is relatively new. We commence with a description of the types of learners and programmes that might be relevant to an Irish language teaching context. This is followed by an examination of the type of evidence required in order to inform effective teaching at primary level. Much of the research carried out to date at this level has been of a process-type. We argue that there is a need for studies to be of the process-product type if they are to inform a BES. We then examine one previous systematic review of effective language teaching in detail. We conclude with a rationale for the selection of studies for data extraction and synthesis in the present study.

WHAT KIND OF LANGUAGE LEARNERS AND PROGRAMMES ARE RELEVANT TO OUR TASK?

The NCCA invitation to tender document made clear that the focus of the BES was language at primary level with particular reference to the teaching of Irish. One of the issues we had to consider early on therefore was whether to include or exclude different kinds of non-mother-tongue language teaching. Some selectivity was important both from the point of view of making our task manageable but also so that we did not include such a diverse set of learning contexts that no useful generalisations would be possible. Research on the teaching and learning of minority, heritage, foreign, and immigrant second-languages have more or less distinct research literatures associated with them as well as some difference in focus on certain questions. In addition, the teaching of English as a second or foreign language often raises different issues to the teaching of other languages at primary level. Primary modern foreign languages or early language learning is a fairly distinct research area. The case of Irish as a minority second language is in some respects unique: a second

language which is a minority language, yet in constitutional terms is one of two official languages.

Nevertheless, in practical classroom-learning terms the challenges of teaching Irish at primary level do not appear all that different to teaching modern foreign languages. In particular, the larger sociolinguistic context shares some features: relatively low chances of pupils engaging in real interactions in the language outside school, parents who have some knowledge of the target language but rarely use it. Not surprisingly, as Harris (2009) has shown, pupil attitudes and motivation in relation to learning Irish and modern foreign languages at primary level are very similar.

But there are also potentially some real differences. There has been a long tradition in the case of Irish of teaching the lesson largely through Irish (facilitated perhaps by the fact that children learn Irish from the beginning of primary school). Crucially also, it is class teachers rather than visiting teachers teach Irish and (nearly) all primary teachers have at least some competence in Irish.[1] In addition, there is a tradition in a substantial minority of classes of teaching some aspect of the curriculum through Irish, facilitating some integration elsewhere in the curriculum. Irish is also used to some extent for some routine communication within the school. Some of these circumstances differ from modern foreign language teaching in some other countries as well as from modern language teaching in Ireland.

Taking all the above into account, we decided to include studies of both modern foreign language and minority second language traditions. We also felt, however, that we would potentially include any otherwise relevant study of primary second/foreign language

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[1]   An evaluation of the teaching of Irish in primary schools (Department of Education and Science 2007) found that 95% of teachers in the classes visited had one of three qualifications: Irish as an academic subject in the B.Ed. degree, a professional qualification in Irish as part of the B.Ed. programme or a qualification to meet the Irish Language Requirement (Scrúdú Cáilíochta sa Ghaeilge).

learning as long as the learning context did not contrast sharply with the Irish context. Thus, for example, we exclude studies where the second language learners were likely to encounter the target language to a significant extent in their lives outside school. Consequently, we excluded English as a second language contexts where the learners were immigrants in English language countries. Harris (2009) makes the point that the study of early language learning has tended to keep research on foreign, second, minority and regional languages unnecessarily separate.

Driscoll et al. (2004) whose Best Evidence Synthesis is discussed below, took the alternative view that Primary Modern Foreign Languages (PMFL) is a very specific, distinct area of research and limit themselves to studies of that kind. We believe, however, that studies of second languages such as Irish must share a huge amount with PMFL and vice versa. We also took into account that if we were to take Driscoll et al. perspective, we would have a very small number of studies to look at.

WHAT COUNTS AS EVIDENCE OF EFFECTIVE LANGUAGE TEACHING?

If a particular teaching approach or practice were to be considered effective, what would count as evidence of that effectiveness? What dependent variable would we examine or use to measure the impact of effective practices? To say something was effective, we would presumably want to be able to show that employment of say, Practice X, produces significant improvements in pupil proficiency or acquisition of the language (in a pre-test post-test sense), or that it produces better proficiency than would be produced by other (alternative) practices or methods. For example, we might want to show that it improved performance on objective tests of proficiency or progress in acquiring particular skills or knowledge. We might also

accept as evidence researchers' or teachers' own judgements that performance had improved (as long as these judgements were focused in some way), or improvements in attitude to learning. More marginal would be even evidence of greater participation and engagement of pupils in response to particular teaching approaches, because these would be one step removed from the ultimate evidence or proof of effectiveness.

In summary, then, some of the initial questions we would ask about research studies to be included or excluded from a BES on effective language teaching would be:

- How narrowly focused on specific teaching practices should research studies on effective language teaching be?

- What kind of data or information should be taken as evidence of effective language teaching – what impact should we define as 'success' in effective language teaching.

- What kinds of research studies or analyses are acceptable in conducting BES (true or quasi experiments, correlation and multiple regression studies using ex post facto designs, qualitative studies)?

What is clear from examining work in the applied linguistics and second language acquisition areas, is that quite demanding and stringent criteria are normally applied in selecting studies for inclusion in research synthesis and meta-analysis. In Norris & Ortega's (2000) landmark study *Effectiveness of L2 Instruction: A research synthesis and quantitative meta-analysis*, for example, only experimental or quasi experimental studies are considered for inclusion. In addition, in relation to independent variables, they required studies which targeted specific forms and functions, either morphological, syntactic, or pragmatic studies, and an appropriate comparison group

(i.e. treatment control or pre-test post-test) had to be included. Studies had to focus on the effectiveness of particular L2 instructional treatments in order to permit the calculation of effect sizes. Crucially, also the dependent variable had to be a measure of language behaviour related to the specific structures targeted by independent variables, on the basis that only studies reporting such outcome measures could provide interpretable findings about the effectiveness of particular instructional treatments (explicit focus on form versus implicit instruction).

These requirements meant that the following kinds of studies, for example, were excluded:

• those which were descriptive or correlational in character

• those involving instructional treatments which were not focused on specific form

• those where the dependent variable was not focused on the learning of the specific structures.

To take another example of the demanding criteria which studies must meet in order to merit inclusion in BES, we can examine Russell & Spada (2006) who conducted a study entitled *The effectiveness of corrective feedback for the acquisition of L2 grammar.* To be included in their analysis, a study of corrective feedback had to –

   • *include empirical data*

   • *consist of an experimental or quasi-experimental design*

   • *include a measure of form focused corrective feedback of grammar as an independent variable*

   • *include a measure of learning as a dependent variable*

- *clearly isolate the corrective feedback from other forms of instruction that may have been included*

- *clearly isolate corrective feedback in response to errors in grammatical form from corrective feedback in response to other types of errors (e.g. sociolinguistic, discourse, phonological)*

<div align="center">(Russell & Spada, 2006, p. 140)</div>

More generally, as Norris and Ortega (2006) point out:

> *The first challenge in sampling primary studies for a meta analysis is to define the relevant conceptual problem space that will be the focus of the study, characterising the theoretical backdrop against which the purposes of a meta analysis are illuminated. At a more mundane level, the problem is to define what makes studies 'similar enough' to be included in a review, or 'different enough' to be excluded, the so called 'apples and oranges' problem.*

<div align="center">(Norris and Ortega, 2006, p. 16)</div>

This serves to highlight a number of related problems which we encountered very early on in planning the present research evidence synthesis related to effective language teaching. First, there is no clearly defined 'conceptual problem space' relating to effective language teaching at primary levels, comprising a substantial set of studies which meets the kind of research criteria specified in the syntheses mentioned above. That is, there are not substantial groups of studies conducted on well-defined teaching practices that have emerged as potentially being central to, or distinctive of, classrooms at primary level. This is not entirely surprising, of course, because even in the case of second language acquisition and language pedagogy more generally (irrespective of educational level or learner age), research synthesis is very new indeed. Norris & Ortega (2010) point

out, for example, that when they set out to assemble their 2006 book on *Synthesizing Research on Language Learning and Teaching*, they had to *search long and hard to find enough synthesists working on language learning and teaching issues to merit a book* (Norris & Ortega, 2010, p. 1).

There are two aspects to this problem in the context of the present Best Evidence Synthesis. One is that the syntheses that have been conducted appear, on the basis of the kind of initial examination possible in this exercise, either not to distinguish between studies conducted at primary compared to secondary/tertiary level, or to specifically exclude in advance studies focused at primary level. For example, having examined the initially promising meta analysis conducted by Keck et al. (2006) *Investigating the empirical link between task-based interaction and acquisition*, we found (p. 97) that it was confined, after all, to adolescents and adults, excluding those under 13. The very reason advanced for this exclusion – *it is unclear whether age affects task-based interaction processes* – crystallises our dilemma. It is all the more pointed because the kind of questions posed in the Keck et al. synthesis appear quite similar to the which are implicit in the present exercise. Consider three of the Keck et al. questions:

> *Compared to tasks with little or no interaction, how effective is task based interaction in promoting the acquisition of grammatical and lexical features?*

> *Are certain task types (e.g. information gap) more effective than others in promoting acquisition?*

> *To what extent do the following task design features impact the extent to which interaction tasks promote acquisition; (a) the degree of task essentialness of target features and (b) opportunities for pushed output.*

> <div align="right">(Keck et al., 2006, p. 95)</div>

Second, and more problematically perhaps, our initial examination of research on language learning at primary level - particularly foreign language learning at primary level which appears to have been the subject of a number of narrative reviews - suggests that studies meeting the kind of criteria required for research synthesis and meta-analysis discussed above are very rare and have often been carried out only on a pilot scale. Thus, the prospects for the data base search in the case of the present synthesis exercise producing many well designed studies meeting the Norris & Ortega criteria do not seem promising. Nor is such a synthesis likely to identify even small groups of high quality studies specifically focused on the kind of well-defined teaching practices at primary level deemed necessary in the research synthesis and meta-analysis field.

PREDOMINANCE OF PROCESS RESEARCH ON INSTRUCTIONAL PRACTICES AT PRIMARY LEVEL

This brings us the question of what kind of research has been conducted on language teaching at primary level. Even if such research is unlikely to be adequate for the kind of research synthesis, just discussed, we must consider what individual studies at primary might be used as the basis of a synthesis if integrated into an assessment in some other (perhaps qualitative) manner?

Certainly, there is a substantial range of research on 'early language learning' or second or foreign language teaching at primary level. There have been a number of excellent narrative reviews and edited collections of papers, for example, dealing with research in these areas in recent years, each substantial enough, but varying somewhat in scope and detail e.g. Cable, Driscoll, Mitchell et al. (2010); Edelenbos, Johnstone and Kubanek, (2006); Nikolov, (2009). Crucially, however, most of this research on second and foreign language learning at primary level – where the language is just one subject – appears to

focus on describing processes rather than on *process-product* relationships. As Driscoll et al. (2004) point out, much of it is focused on aspects of pupils' learning, programme-planning or curriculum materials, with little if any references to teaching or research. While this process orientation is a particular feature of research at primary level, it is also common in research on language pedagogy more generally:

> *At present, like UK educational researchers more generally, UK applied linguists with interests in pedagogy are generally more comfortable with process oriented, qualitative classroom research (Hammersley, 1999)'. The need to pay more attention to learning outcomes and their connection with instructional processes means we need to become more numerate and more at home with process product research designs, both macro and micro.*
>
> (Mitchell, 2000, p. 298)

Driscoll et al. (2004) who carried out what appears to be the only BES of effective language teaching at primary level – discussed in more detail below – also note this:

> *Studies which did consider teaching tended to focus on topics such as the qualifications of the teacher or the teaching programme used; this may be useful as background but does not enable conclusions to be drawn about effective teaching.*
>
> *A significant finding of the review is the lack of research on effective teaching in PMFL [primary modern foreign languages], which is to some extent an indication of a subject in its infancy.*
>
> (Driscoll et al., 2004, p. 4)

They also point out that part of the problem may be that the term

'effectiveness' is so contested that it leads to a reluctance to focus on and attempt to define the concept in research (p. 4).

Finally, one other issue must be mentioned briefly in this regard, even though it may initially appear incidental to our present task, if only because it comes up so often in the early language learning literature. This is the question of age and success in learning, and specifically the value of an early start. This matter has never been fully resolved by research, and indeed, as Mitchell (2000) points out, research can only make a partial contribution to answering such major questions which involve value judgements:

> *A whole series of educational decisions depend fundamentally on non-empirical value judgements about educational priorities and goals, and the nature of knowledge itself; examples from within the FL field would include whether to teach FLs in primary schools… Applied linguists may contribute expert judgement and theoretically informed suggestions to debates around such decisions, but should not be lured into arguing that they can be made on purely technical grounds.*
>
> (Mitchell, 2000, p. 298)

MAINTAINING THE PROCESS-PRODUCT REQUIREMENT BUT RELAXING DESIGN CRITERIA IN THIS SYNTHESIS

Given the apparent scarcity of high quality studies, and the lack of a clearly defined problem space relating to instructional practices at primary, we considered alternative ways to proceed with the synthesis of research. There seemed to be three broad alternatives, not necessarily entirely mutually exclusive.

One would be to use the already published high-quality BES and meta analyses of the effectiveness of different instructional practices which we described above. In some of these meta analyses, small

numbers of studies at primary level would have been included in the initial set of articles selected for examination. One advantage of working from these lists of studies is that each synthesis would have already identified precise conceptual domains and instructional practices worthy of detailed examination (e.g. corrective feedback, task based learning). The basic sets of studies could then be re-examined to see if sufficient numbers of them dealt with primary level to permit a check on whether conclusions of the meta analyses generally also held specifically for the primary level studies. Comparing primary and post primary studies, assuming the former did actually exist, would also allow us to approach the synthesis process at primary level with working hypotheses about the kind of teaching practices likely to be of interest.

A problem with this approach, however, is that since the titles of papers in such synthesis reports rarely mention the age or educational level of learners, an immediate difficulty would be the prohibitive amount of time needed to obtain copies of all papers, as well as the considerable time needed to examine all of them – and most would probably deal with older learners and therefore not be of interest.

An alternative would be to conduct a broad search of relevant data bases, using key terms related specifically to primary level in order to target the most promising papers directly. Given the indications in the various narrative reviews of language teaching at primary level already referred to, however, it was unlikely there would be significant numbers of process-product type studies focussing on particular instructional practices and with the kind of tight control of independent and dependent variables characteristic of high quality meta analyses.

A third option would be to search relevant data bases, but also to relax the criteria for including studies at primary level to include

process-product studies satisfying at least minimal requirements. There are a number of criteria which could be relaxed. For example, instead of requiring the design to be experimental or quasi experimental, we could accept ex post facto designs using correlation and regression analysis which sought to explore links between predictor and criterion variables (broadly equivalent to independent and dependent variables). These designs do not allow cause-effect type conclusions to be drawn, however, and require care in the identification and measurement of potentially confounding variables (such as teacher experience or competence) when extracting and weighing the evidence for the effectiveness of particular teaching practices. In addition, process-product studies of this kind do not permit the calculation of effect sizes for particular practices in the way that is possible with quantitative experimental studies, and so the final synthesis process would have to take a qualitative approach.

Another way of increasing the inclusivity of the approach in the light of the small number of process–product studies at primary level, is to relax the criteria relating to the definition and measurement of independent and dependent variables. For example, in the case of independent variables, instead of requiring the identification of precise instructional practices, the alternatives being studied or compared might be broad approaches to teaching. These approaches could be seen as representing aggregates of more narrowly focused instructional practices, such as 'grammar' focused approaches or 'communicative' approaches. The difficulty as noted in Section 4 above is that there can be considerable ambiguity about the precise definition of such broadly defined teaching approaches, with for example the specification of a communicative approach existing in weak and strong forms in curriculum documents in different educational systems. As a result, there are a number of sources of variation from study to study in the implementation of broad teaching approaches, raising doubts about how consistent the

'treatment' (independent) being evaluated from study to study is. In other words, even if we find evidence in a particular study in favour of one of two broad approaches studied (allowing us to claim that Approach X is superior to Approach Y) doubts about the specification and implementation of the approaches set limits on what instructional practices exactly are being recommended to teachers.

Despite these challenges, and the fact that the very idea of 'language teaching method' and the search for the 'best' method has been queried (e.g. Kumaravadivelu, 1994), there is also evidence that the notion of method actually plays a vital role in the thinking of teachers (Bell, 2007; Block, 2001). We believe a case can be made, therefore, for including in a BES of effective language teaching those process–product studies which define independent variables in terms of teaching methods. While the results of such studies must be interpreted carefully, their inclusion is clearly merited in an area of research where process–product studies are rare. Such studies centring around independent variables defined in terms of teaching methods or approaches must be seen as having at least the potential to generate initial working hypotheses about what works and what does not at classroom level. Because of the variation from study to study in the implementation of broad teaching approaches, mentioned above, doubts about the specification and implementation of different broad approaches set limits on what instructional practices exactly can be recommended to teachers.

A PREVIOUS SYNTHESIS OF RESEARCH ON EFFECTIVE LANGUAGE TEACHING: THE DRISCOLL ET AL. STUDY

Because the Driscoll et al. (2004) was the closest published research exercise to the BES brief we had from the NCCA, and because it raises issues that are central to how we later proceeded in our own case, it will be useful to look at that study in some detail. We will

consider two main issues. Firstly, we query whether the four key studies selected for in depth review in the Driscoll et al. study actually merit inclusion in a BES of effective language teaching. This analysis will also serve as a background to our decision to include just one of the key studies identified by Driscoll et al. (2004) in our own synthesis. Secondly, we will examine briefly the process by which Driscoll et al. (2004) sought to link the data extraction phase to the set of conclusions about effective language teaching they eventually reached. Again, this has a bearing on how we proceeded from data extraction to synthesis in our own case.

In critically examining the responses of Driscoll et al. (2004) to the challenges of conducting a research synthesis in this area, it cannot be emphasised too strongly that we fully recognise the value of innovative exercise they have conducted and the wealth of information and new questions which it has generated. Our own BES very much builds on the Driscoll et al. exercise.

We begin with Driscoll et al.'s definition of effective teaching

> *Effective teaching is educational activity intended to bring about pupil learning. We have used the term 'effective' to explore successful pedagogic practice which brings about pupil progress and learning in a number of aspects: in this instance, language proficiency, cultural and language awareness, positive attitudes towards the subject and intercultural understanding.*
>
> (Driscoll et al., 2004, p. 10)

Driscoll et al. (2004, p. 31) point out that for a study to be selected for in-depth review in their exercise, it had be rigorous, with the sampling methods, teaching characteristics and the methods used to measure effectiveness all being explicitly described. An examination of the studies selected by Driscoll et al., however, raises doubts whether all four of them actually meet the criteria set out. The issue

is important both in terms of assessing the significance of the Driscoll et al. synthesis, but also in determining the details of procedure in our own synthesis. Given the paucity of process–product research already referred to we are keen to include the maximum number of such studies. Ultimately, however, we could only justify the inclusion of one of the four Driscoll et al. studies in the present BES.

While we had direct access to only two of the four key Driscoll et al. synthesis studies, Edelenbos and Suhre (1994) and Low et al. (1995; 1993), fairly detailed descriptions of the other two – Driscoll (2000) and Luc (1996) – were included in Driscoll et al. (2004). It was immediately clear that the Edelenbos and Suhre (1994) study merited inclusion in our synthesis. It focused on the difference in pupils' level of command in the language and their attitudes towards learning English as a result of being taught using (a) grammatical courses, (b) communicative courses. It used multivariate covariance analysis with 'course for English', (a) or (b),as the independent or predictor variable. The Low et al. (1995) study, we judged, did not qualify for inclusion in our synthesis on a number of grounds. Firstly, it is a pilot project in which 'the teaching in primary school was undertaken by a visiting tutor working in conjunction with the primary school class teacher'. The study is concerned with the effect on later pupil achievement in the foreign language of being exposed, versus not being exposed, to such a programme at primary level. This is not a question that is really relevant to of the effectiveness of different teaching approaches or instructional practices in the case of Irish at primary level, since the question of teaching Irish at this level is an uncontroversial and long standing element of language education policy. The Low et al. study is not focused on the question of central interest in our synthesis: the relative effectiveness of different teaching practices on language learning performance of primary school pupils. No clear attempt is made in Low et al. (1995) to link defined

teaching practices to pupil performance. Certainly, taking all these issues together, the Low et al. (1993, 1995) studies do not appear to meet the criteria for inclusion in our synthesis. Finally, the Luc et al. (1996) study was not available to us and so our assessment must be based on Driscoll et al.'s (2004) description. The study examines process aspects of the use of the video cassettes CE1 sans frontière and appears to be a process product study.

In the case of Driscoll's own qualitative study (Driscoll et al., 2004, p. 32), one of the four key studies included in her synthesis, it is not clear what the evidence for effective teaching is. The study, a PhD thesis which we were unable to obtain a copy of in time, did not appear on the basis of the summary description in Driscoll et al. (2004) either to measure pupil proficiency directly or to provide qualitative type evidence of learning. The study appears to equate the occurrence of an educational activity intended to bring about pupil learning with the actual occurrence of learning, when in reality no real direct evidence of effectiveness in terms of specific pupil learning or behaviour is presented. Effectiveness is defined, for example, in terms such as 'teacher subject knowledge' having 'a major influence on the way the subject is presented, the complexity of the subject content included, and the planning and assessment of learning'. To count as evidence of effectiveness, we would need some indication of how 'the way the subject is presented' actually leads to pupils learning, increased proficiency or positive attitude motivation. Another example in Driscoll et al. (2004) of what is seen as evidence for effectiveness is the researchers' perception (in qualitative study terms) that 'teacher identification with a professional community' has an 'Impact on practice and on the learning opportunities offered to pupils'. But again, this seems to equate the provision of certain kinds of learning opportunities with success and effectiveness. It does not meet the aspiration in Driscoll et al.'s own definition of effective language teaching above of identifying an educational activity which

brings about pupil learning – or with the characterisation of effective language teaching elsewhere as practice that works. The approach, therefore, appears to be proposing a kind of evidential base for effective teaching which is too far removed from the detailed exercise linking independent and dependent variables in the SLA type meta analyses exemplified by, for example, Keck et al. (2006) or Russell and Spada (2006).

We turn now to the second main question concerning Driscoll et al.'s synthesis. This relates to the link between the data extracted and the conclusions. They refer to the lack of evidence on effective language and the fact that because the four studies selected for in depth review are concerned with different aspects of teaching, it was not possible to arrive at definitive findings supported by a body of substantive research. Two of their 10 conclusions can be taken as examples:

> *5. Purposeful use of activities, such as games and songs, provides enjoyment and reinforces children's learning. The ludic approach is an appropriate method that stimulates, motivates and provides challenge for learning. The repetitive rhythms of games and songs provide opportunities for extensive practice and consolidation as well as the exposure necessary for language intake to take place.*

> *6. Audio-visual and other resources are useful aids to teaching and learning. They can also be a support for teachers' language and cultural knowledge but they are not a substitute for it. The evidence indicates a measure of dependence on such aids and the need to train teachers to use such aids selectively and as part of a planned sequence of learning.*
>
> (Driscoll et al., 2004, p. 5)

They point out in this context that in this area, there is very little hard evidence and that in synthesising the evidence inferences and conclusions are derived from what evidence has been brought together. Critically, however, what limited evidence there is from the data extraction is not presented in any systematic way to support particular conclusions directly. We have attempted to learn from this aspect of the Driscoll et al. exercise in the present synthesis, therefore, and have established an approach to linking the data extracted to the conclusions reached which we believe is as rigorous as the evidence will allow.

THE LINK BETWEEN DATA-EXTRACTION AND SYNTHESIS IN THE PRESENT STUDY

The present synthesis presents a number of challenges in trying to arrive at useful conclusions that are well-grounded in evidence. Some of these arise from the relatively small number of process-product studies which met our inclusion criteria and the consequent patchy nature of the evidence available to us on any one instructional practice. Other challenges arise from the earlier discussed necessity to relax the selection criteria for key studies. Thus, we do not have the kind of substantial groups of experimental quantitative studies which would allow direct cause-effect conclusions about specific instructional practices and the calculation of effect sizes. In addition, research on second language acquisition and pedagogy has not yet yielded a conceptual map of effective language teaching at primary level in which a range of significant alternative specific instructional practices are identified and indeed are serving to guide the focus of new studies. As a result, there is little evidence of the accumulation of a well-structured evidence base.

Against this background, one of the key requirements we set out was that the final set of studies selected for data extraction would at least

be of the product-process type, with independent and dependent variables (or predictor and criterion variables in the case of correlation–regression studies) being reasonably clearly defined. In addition, we made a systematic attempt to group the small number of key studies selected in relation to a number of specific themes. Particular connections between process (instructional practices) and product (pupil proficiency or learning etc) established in each study are then linked to each theme in order to establish the strength of evidence for each conclusion. Although we refer to studies in the broader literature – which were not included in the synthesis itself because for example they dealt with older learners – to support some conclusions, we emphasise the conceptual and practical distinction throughout between the data extracted and the more indirect evidence. In some cases, of course, there may only be one study related to a particular theme or teaching practice (although the review of the larger literature accompanying the study may refer to other supporting studies which do not meet our inclusion criteria). Further details on our approach to linking data extraction to the synthesis may be found in Section 2 (Methodology) of the report above.

A PPENDIX 2

E LECTRONIC

DATABASE SEARCHES

SEARCH TERMS

These search terms in Table 1 were developed as part of the search process which was divided into three phases. Terms 1-20 formed the major part of the search and these terms were used in the first phase of the search. Terms 21-24 were added in Phase 2 to search specifically for research studies in the area of CLIL that were not captured in the initial search. In order to ensure adequate coverage of all the research questions and cross-cutting themes, terms 25-32 were added in Phase 3 of the search. The number of sources resulting from the searches in Phases 2 and 3 proved to be quite large. The process of scrutinising these to identify relevant studies proved to be very time consuming. After many hours searching three databases only two relevant studies were added to the existing studies identified in Phase 1. Due to the time constraints of the project it was decided to suspend further database searches at that point and to augment the studies already sourced with hand searches.

A systematic approach was adopted in the search process. The individual nature of the different databases, however, required a flexible approach. The fact that different countries use different terminology to describe similar structures such as 'primary' or 'elementary' when referring to the type of school for the students in the age-range that is the focus of this BES, it was necessary to include both terms in the search. Similarly language programmes for minority students might be described as 'heritage', 'indigenous' or 'endangered' depending on the context.

Table 1: Search terms and combinations	
Phase 1	
1	Child
2	Pupil
3	Student
4	Elementary
5	Primary

	Table 1: Search terms and combinations
6	Young
7	Second
8	Foreign
9	Modern
10	Minority
11	Regional
12	Language
13	Teach*
14	Learn*
15	Pedagogy
16	Acquisition
17	Effective
18	Best practice
19	Best evidence
20	Success*
Phase 2	
21	Content
22	Integrated
23	Learning
24	CLIL
Phase 3	
25	Immersion
26	Heritage
27	Indigenous
28	Endangered
29	Biling*
30	Early
31	Mid
32	Late

★ An asterisk is used after a search term to instruct the database to search for all forms of that word

e.g. teach★ will search for teach, teacher, teaching

Table 2: Search combinations and phases	
Phase 1.	(1 or 2 or 3) and (4 or 5 or 6) and (7 or 8 or 9 or 10 or 11) and 12 and (13 or 14 or 15 or 16) and (17 or18 or 19 or 20)
Phase 2.	(12 and 21 and 22 and 23) or 24
Phase 3.	(25 or 26 or 27 or 28) and 29 or (30 or 31 or 32)

PHASE 1: SEARCH PROCESS

Tables DB1.1-1.9 describe the search process for the different databases in Phase 1.

Table DB1.1 records the search process adopted for the Blackwell/ Wiley InterScience database. The search combination in Row 21 yielded 735 results. The titles and/or abstracts of these articles were examined and 11 articles were exported to RefWorks bibliographic software for further examination.

Table DB1.1: Blackwell Synergy/Wiley InterScience		
1	Child	full text
2	Pupil	full text
3	Student	full text
4	Elementary	full text
5	Primary	full text
6	Young	full text
7	Second	full text
8	Foreign	full text
9	Modern	full text
10	Minority	full text
11	Regional	full text
12	Language	full text
13	Teach*	full text
14	Learn*	full text
15	Pedagogy	full text
16	Acquisition	full text
17	Effective	full text

Table DB1.1: Blackwell Synergy/Wiley InterScience		
18	Best practice	full text
19	Best evidence	full text
20	Success*	full text
21	(1 or 2 or 3) and (4 or 5 or 6) and (7 or 8 or 9 or 10 or 11) and 12 and (13 or 14 or 15 or 16) and (17 or 18 or 19 or 20)	735 results
		11 results were exported to RefWorks for further examination

★ An asterisk is used after a search term to instruct the database to search for all forms of that word

e.g. teach★ will search for teach, teacher, teaching

Table DB1.2 describes the search conducted on the Cambridge Online Journals. The combination in Row 21 yielded 44,748 results. When the search was refined to limit the results to the years 1980-2010 in Row 22, 1,777 studies were found. The search was further refined in Row 23 to the category 'Language and Linguistics' and to the particular journals listed there. This resulted in 1,647 studies which were examined according to the inclusion and exclusion criteria. The titles and/or abstracts of these articles were examined and a final group of 100 articles was exported to RefWorks bibliographic software for further examination.

Table DB1.2: Cambridge Journals Online		
1	Child	full text
2	Pupil	full text
3	Student	full text
4	Elementary	full text
5	Primary	full text
6	Young	full text
7	Second	full text
8	Foreign	full text

Table DB1.2: Cambridge Journals Online		
9	Modern	full text
10	Minority	full text
11	Regional	full text
12	Language	full text
13	Teach*	full text
14	Learn*	full text
15	Pedagogy	full text
16	Acquisition	full text
17	Effective	full text
18	Best practice	full text
19	Best evidence	full text
20	Success*	full text
21	(1 or 2 or 3) and (4 or 5 or 6) and (7 or 8 or 9 or 10 or 11) and 12 and (13 or14 or 15 or 16) and (17 or18 or 19 or 20)	44,748 results
22	Limit 21 to yr=1980-2010	1.777 results
23	Limit 22 to the category Language and Linguistics and the following journal titles within Cambridge Journals Online: Studies in Second Language Acquisition, Language Teaching, Language Variation and Change, Annual Review of Applied Linguistics, Nordic Journal of Linguistics, Journal of French Language Studies, Journal of Linguistics, Language in Society, English Language and Linguistics	1,647 results
		100 results were exported to RefWorks for further examination

Table DB1.3 describes the search conducted in the Education Resources Information Center (ERIC) database. The combination in Row 21 yielded 128,850 results. When the search was refined to limit the results to 'full text' available from ERIC in Row 22 there were 42,026 results. The search was then limited to the years 1980-2010 in Row 23, yielding 34,035 studies. The search was further refined in Row 24 to the years 1990-2010 reducing the number of results to 26,020. Rows 25–28 refined the search terms on a gradual basis to 'Item title' in ERIC. This reduced the number of results to

5,154. Row 29 removed the category 'Elementary Secondary Education' reducing the number of results further to 1,999. Finally Row 30 changed the search combination to 'teach★' and 'learn' instead of 'teach★ **or** 'learn'. This resulted in 414 studies which were examined according to the inclusion and exclusion criteria. The titles and/or abstracts of these articles were examined and 19 articles were exported to RefWorks bibliographic software for further examination.

Table DB1.3: ERIC		
1	Child	keywords (all fields)
2	Pupil	keywords (all fields)
3	Student	keywords (all fields)
4	Elementary	keywords (all fields)
5	Primary	keywords (all fields)
6	Young	keywords (all fields)
7	Second	keywords (all fields)
8	Foreign	keywords (all fields)
9	Modern	keywords (all fields)
10	Minority	keywords (all fields)
11	Regional	keywords (all fields)
12	Language	keywords (all fields)
13	Teach*	keywords (all fields)
14	Learn*	keywords (all fields)
15	Pedagogy	keywords (all fields)
16	Acquisition	keywords (all fields)
17	Effective	keywords (all fields)
18	Best practice	keywords (all fields)
19	Best evidence	keywords (all fields)
20	Success*	keywords (all fields)
21	(1 or 2 or 3) and (4 or 5 or 6) and (7 or 8 or 9 or 10 or 11) and 12 and (13 or 14 or 15 or 16) and (17 or 18 or 19 or 20). Limited to Education Level: Early Childhood Education, Elementary Education, Elementary Secondary Education, Grade 1, Grade 2, Grade 3. Grade 4, Grade 5, Grade 6, Kindergarten, Primary Education	128,850 results

Table DB1.3: ERIC		
22	Limit 21 to full text available from ERIC	42,026 results
23	Limit 22 to yr=1980-2010	34,035 results
24	Limit 23 to yr=1990-2010	26,020 results
25	Limit 24 to 'Language' (see 12) in Item title	25,657 results
26	Limit 25 to 'Teach*' or 'Learn' or 'Pedagogy' or 'Acquisition' in Item title	11,368 results
27	Limit 26 to 'Effective' or 'Best evidence' or 'Best practice' or 'Success*' in Item title	5,223 results
28	Limit 27 to all terms in Item title	5,154 results
29	Limit 28 to Education Level: Early Childhood Education, Elementary Education, , Grade 1, Grade 2, Grade 3. Grade 4, Grade 5, Grade 6, Kindergarten, Primary Education (i.e. remove 'Elementary Secondary Education')	1,999 results
30	Limit 29 to 'teach*' and 'learn' (13 and 14 or 15 or 16)	414 results
		19 results exported to RefWorks for further examination

Table DB1.4 describes the search conducted in the JSTOR database. The combination in Row 21 yielded 130,017 results. When the search was refined to limit the results to the following disciplines within JSTOR, *'Education, Irish studies, Language and Literature, Linguistics'*, there were 65,218 results. The search was further refined by limiting the search to the categories *'Education, Language and Literature'* leading to 63,641 results. Row 24 searched for journal articles only and resulted in 48,038 articles. We limited the search to the years 1980–2010 in Row 25 and got 28,789 results. We then limited the search term 'language' to the 'item title' and this led to 1,562 results. These articles were examined according to the inclusion and exclusion criteria. The titles and/or abstracts of these articles were examined and 127 articles were exported to RefWorks for further examination.

Table DB1.4: JSTOR		
1	Child	full text
2	Pupil	full text
3	Student	full text
4	Elementary	full text
5	Primary	full text
6	Young	full text
7	Second	full text
8	Foreign	full text
9	Modern	full text
10	Minority	full text
11	Regional	full text
12	Language	full text
13	Teach*	full text
14	Learn*	full text
15	Pedagogy	full text
16	Acquisition	full text
17	Effective	full text
18	Best practice	full text
19	Best evidence	full text
20	Success*	full text
21	(1 or 2 or 3) and (4 or 5 or 6) and (7 or 8 or 9 or 10 or 11) and 12 and (13 or 14 or 15 or 16) and (17 or 18 or 19 or 20)	130,017 results
22	Limit 21 to the following disciplines within JSTOR: Education, Irish studies, Language and Literature, Linguistics	65,218 results
23	Limit 22 to the following disciplines within JSTOR: Education, Language and Literature	63,641 results
24	Limit 23 to Article	48,038 results
25	Limit 24 to yr=1980–2010	28,789 results
26	Limit 25 to Language (see 12) in Item title	1,562 results
		127 results exported to RefWorks for further examination

Table DB1.5 describes the search conducted in the Linguistics and Language Behaviour Abstracts (LLBA) database. The combination in

Row 21 yielded 183 results. When the search was refined to limit the results to the years 1980–2010 in Row 22, 153 studies were found. Row 23 limited the search to journal articles yielding 60 results. Almost all of the results excluded were dissertations The titles and/or abstracts of these 60 studies were examined and 20 articles were exported to RefWorks for further examination.

Table DB1.5: LLBA		
1	Child	full text
2	Pupil	full text
3	Student	full text
4	Elementary	full text
5	Primary	full text
6	Young	full text
7	Second	full text
8	Foreign	full text
9	Modern	full text
10	Minority	full text
11	Regional	full text
12	Language	full text
13	Teach*	full text
14	Learn*	full text
15	Pedagogy	full text
16	Acquisition	full text
17	Effective	full text
18	Best practice	full text
19	Best evidence	full text
20	Success*	full text
21	(1 or 2 or 3) and (4 or 5 or 6) and (7 or 8 or 9 or 10 or 11) and 12 and (13 or 14 or 15 or 16) and (17 or 18 or 19 or 20)	183 results
22	Limit 21 to yr=1980-2010	153 results
23	Limit 22 to Articles (almost all exclusions were dissertations)	60 results

Searching the Oxford Journal Online database required a different search strategy due to the manner in which the database is configured. The search terms in Table DB1.6 below were used to search the title of the articles contained in the database.

The combination in Row 8 yielded 17,837 results. When the search was refined to limit the results to the following journal titles *'Applied Linguistics, ELT Journal and Forum for Modern Language Studies'*, 1,626 studies were found. The search was further refined in Row 10 to limit the search to the years 1980–2010. This resulted in 1,162 studies which were examined according to the inclusion and exclusion criteria. The titles and/or abstracts of these articles were examined and 129 articles were exported to RefWorks for further examination.

Table DB1.6: Oxford Journal Online		
1	Language	title
2	Teach*	title
3	Learn*	title
4	Effective	title
5	Best	title
6	Evidence	title
7	Success*	title
8	(1 or 2 or 3 or 4 or 5 or 6 or 7)	17,837 results
9	Limit 8 to the following journal titles: Applied Linguistics, ELT Journal and Forum for Modern Language Studies	1,626 results
10	Limit 9 to yr=1980-2010	1,162 results
		129 references exported to RefWorks for further examination

Table DB1.7 describes the search conducted in the PsychInfo/ EBSCO Host database. The combination in Row 21 yielded 1,144 results. When the search was refined to limit the results to the years 1980-2010 in Row 22, 1,055 studies were found. The search was further refined in Row 23 to the category 'Childhood 0-12 yrs'. This resulted in 580 articles. Row 24 limited the search to 23 to 'Intended Audience: Psychology: Professional & Research' and this yielded 125 results which were examined according to the inclusion and exclusion criteria. The titles and/or abstracts of these articles were examined and 4 articles were exported to RefWorks for further examination.

Table DB1.7: PsychInfo/EBSCO Host		
1	Child	full text
2	Pupil	full text
3	Student	full text
4	Elementary	full text
5	Primary	full text
6	Young	full text
7	Second	full text
8	Foreign	full text
9	Modern	full text
10	Minority	full text
11	Regional	full text
12	Language	full text
13	Teach*	full text
14	Learn*	full text
15	Pedagogy	full text
16	Acquisition	full text
17	Effective	full text
18	Best practice	full text
19	Best evidence	full text
20	Success*	full text
21	(1 or 2 or 3) and (4 or 5 or 6) and (7 or 8 or 9 or 10 or 11) and 12 and (13 or 14 or 15 or 16) and (17 or 18 or 19 or 20)	1,144 results
22	Limit 21 to yr=1980-2010	1,055 results
23	Limit 22 to Childhood 0-12 yrs	580 results
24	Limit 23 to Intended Audience: Psychology: Professional & Research	125 results
		4 references exported to RefWorks for further examination

Table DB1.8 describes the search conducted in the Project Muse database. The combination in Row 21 yielded 17,105 results. Row 22 limited the search to the following journal titles within Project Muse: The Canadian Journal of Linguistics, The Canadian Modern Language Review, Education and Culture, Education and Treatment of Children, Éire-Ireland, The Journal of General Education, Journal of Slavic Linguistics, Language, Linguistic Inquiry, MLN, MLQ: Modern Language Quarterly, Pedagogy, Radical Teacher. 786 studies were found in this search. These 786 studies were examined according to the inclusion and exclusion criteria. The titles and/or abstracts of these articles were examined and 16 articles were exported to RefWorks for further examination.

Table DB1.8: Project Muse		
1	Child	full text
2	Pupil	full text
3	Student	full text
4	Elementary	full text
5	Primary	full text
6	Young	full text
7	Second	full text
8	Foreign	full text
9	Modern	full text
10	Minority	full text
11	Regional	full text
12	Language	full text
13	Teach*	full text
14	Learn*	full text
15	Pedagogy	full text
16	Acquisition	full text
17	Effective	full text
18	Best practice	full text
19	Best evidence	full text
20	Success*	full text

Table DB1.8: Project Muse		
21	(1 or 2 or 3) and (4 or 5 or 6) and (7 or 8 or 9 or 10 or 11) and 12 and (13 or14 or 15 or 16) and (17 or18 or 19 or 20)	17,105 results
22	Limit 21 to the following journal titles within Project Muse: The Canadian Journal of Linguistics, The Canadian Modern Language Review, Education and Culture, Education and Treatment of Children, Éire-Ireland, The Journal of General Education, Journal of Slavic Linguistics, Language, Linguistic Inquiry, MLN, MLQ: Modern Language Quarterly, Pedagogy, Radical Teacher	786 results
		16 results were exported to RefWorks for further examination

Table DB1.9 describes the search conducted on the Sage Journals. The combination in Rows 21 and 22 yielded no results. The search was broadened so that any combination of the search terms was acceptable. This was done by inserting or between all the search terms. This yielded 163,612 results in Row 23. Then the search was limited to the following journal titles: Canadian Journal of School Psychology, Child Language Teaching and Therapy, Education and Urban Society, Educational Policy, Educational Researcher, First Language, International Journal of Bilingualism, Journal of Early Childhood Literacy, Journal of Early Childhood Research, Journal of Educational and Behavioral Statistics, Journal of English Linguistics, Journal of Language and Social Psychology, Journal of Learning Disabilities, Journal of Research in International Education, Journal of Teacher Education, Language and Literature, Language and Speech, Language Teaching Research, Language Testing, Qualitative Research, Sociology of Education, Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children, and Theory and Research in Education. This yielded 14,460 results in Row 24. When the search was refined to limit the results to the years 1980–2010 in Row 25, 12,005 studies were found. The search was further refined in Row 26 to limit the

results to the years 1990–2010 which yielded 8,985 results. Row 27 refined the search to look for the search terms in 'Full text' instead of 'All fields'. This resulted in 8,897 articles being found. Row 28 searched for the same terms in 'Keywords' which reduced the results to 369 articles. These articles were examined according to the inclusion and exclusion criteria. The titles and/or abstracts of these articles were examined and 41 articles were exported to RefWorks for further examination.

Table DB1.9: Sage Journals		
1	Child	All fields
2	Pupil	All fields
3	Student	All fields
4	Elementary	All fields
5	Primary	All fields
6	Young	All fields
7	Second	All fields
8	Foreign	All fields
9	Modern	All fields
10	Minority	All fields
11	Regional	All fields
12	Language	All fields
13	Teach*	All fields
14	Learn*	All fields
15	Pedagogy	All fields
16	Acquisition	All fields
17	Effective	All fields
18	Best practice	All fields
19	Best evidence	All fields
20	Success*	All fields
21	(1 or 2 or 3) and (4 or 5 or 6) and (7 or 8 or 9 or 10 or 11) and 12 and (13 or 14 or 15 or 16) and (17 or18 or 19 or 20)	0 results
22	(1 or 2 or 3) or (4 or 5 or 6) or (7 or 8 or 9 or 10 or 11) or 12 and (13 or 14 or 15 or 16) or (17 or18 or 19 or 20)	0 results

Table DB1.9: Sage Journals		
23	(1 or 2 or 3) or (4 or 5 or 6) or (7 or 8 or 9 or 10 or 11) or 12 or (13 or 14 or 15 or 16) or (17 or18 or 19 or 20)	163,612 results
24	Limit 23 to the following journal titles: Canadian Journal of School Psychology, Child Language Teaching and Therapy, Education and Urban Society, Educational Policy, Educational Researcher, First Language, International Journal of Bilingualism, Journal of Early Childhood Literacy, Journal of Early Childhood Research, Journal of Educational and Behavioral Statistics, Journal of English Linguistics, Journal of Language and Social Psychology, Journal of Learning Disabilities, Journal of Research in International Education, Journal of Teacher Education, Language and Literature, Language and Speech, Language Teaching Research, Language Testing, Qualitative Research, Sociology of Education, Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children, and Theory and Research in Education.	125 results
	14,460 results	4 references exported to RefWorks for further examination
25	Limit 24 to yr=1980-2010	
	12,005 results	
26	Limit 25 to yr=1990-2010	
	8,985 results	
27	Limit 26 to Full text	8,897 results
28	Limit 27 to Keywords	369 results
		41 results exported to RefWorks

PHASE 2: SEARCH PROCESS

Tables DB2.1–2.3 describe the search process for the different databases in Phase 2 .

Table DB2.1 records the search process adopted for the Blackwell/ Wiley InterScience database. The search combination in Row 6 yielded 346 results. The titles and/or abstracts of these articles were examined and 2 articles were exported to EndNote bibliographic software for further examination.

Table DB2.1: Blackwell Synergy/Wiley InterScience		
1	Language	full text
2	Content	full text
3	Integrated	full text
4	Learning	full text
5	CLIL	full text
6	(1 and 2 and 3 and 4) or 5	364 results
		2 results exported to RefWorks for further examination

Table DB2.2 describes the search conducted on the Cambridge Online Journals limited to the years 1980–2010. The combination in Row 6 yielded 48 results. The titles and/or abstracts of these articles were examined and 5 articles were exported to RefWorks bibliographic software for further examination.

Table DB2.2: Cambridge Journals Online		
1	Language	full text
2	Content	full text
3	Integrated	full text
4	Learning	full text
5	CLIL	full text
6	(1 and 2 and 3 and 4) or 5	48 results
		5 results exported to RefWorks for further examination

Table DB2.3 describes the search conducted in the Education Resources Information Center (ERIC) database. The combination in Row 6 yielded 162 results. The titles and/or abstracts of these articles were examined and 13 articles were exported to RefWorks bibliographic software for further examination.

Table DB2.3: ERIC		
1	Language	keywords (all fields)
2	Content	keywords (all fields)
3	Integrated	keywords (all fields)
4	Learning	keywords (all fields)
5	CLIL	keywords (all fields)
6	(1 and 2 and 3 and 4) or 5	162 results
		13 results exported to RefWorks for further examination

PHASE 3: SEARCH PROCESS

Tables DB3.1–3.3 describe the search process for the different databases in Phase 3.

Table DB3.1 records the search process adopted for the Blackwell/Wiley InterScience database. The search combination in Row 9 yielded 284 results. The titles and/or abstracts of these articles were examined and 15 articles were exported to EndNote bibliographic software for further examination.

Table DB3.1: Blackwell Synergy/Wiley InterScience		
1	Immersion	full text
2	Heritage	full text
3	Indigenous	full text
4	Endangered	full text
5	Biling*	full text
6	Early	full text
7	Mid	full text
8	Late	full text
9	(1 or 2 or 3 or 4) and 5 or (6 or 7 or 8)	284 results
		15 results exported to RefWorks for further examination

Table DB3.2 describes the search conducted on the Cambridge Online Journals limited to the years 1980–2010 and the category 'Language and Linguistics'. The combination in Row 9 yielded 1447 results. The search was further refined to limit the search to the following journals: Studies in Second Language Acquisition, Journal of Child Language, Annual Review of Applied Linguistics, Bilingualism: Language and Cognition, Applied Psycholinguistics, English Language and Linguistics. This search yielded 455 articles. The titles and/or abstracts of these articles were examined and 33 articles were exported to RefWorks bibliographic software for further examination.

Table DB3.2: Cambridge Journals Online		
1	Immersion	full text
2	Heritage	full text
3	Indigenous	full text
4	Endangered	full text
5	Biling*	full text
6	Early	full text
7	Mid	full text
8	Late	full text
9	(1 or 2 or 3 or 4) and 5 or (6 or 7 or 8)	455 results
		33 results exported to RefWorks for further examination

Table DB3.3 records the search process adopted for the Education Resources Information Center (ERIC) database. The search combination in Row 9 yielded 186 results. The titles and/or abstracts of these articles were examined and 2 articles were exported to EndNote bibliographic software for further examination.

Table DB3.3: ERIC		
1	Immersion	full text
2	Heritage	full text
3	Indigenous	full text
4	Endangered	full text
5	Biling*	full text
6	Early	full text
7	Mid	full text
8	Late	full text
9	(1 or 2 or 3 or 4) and 5 or (6 or 7 or 8) Limited to Education Level: Early Childhood Education, Elementary Education, Elementary Secondary Education, Grade 1, Grade 2, Grade 3. Grade 4, Grade 5, Grade 6, Kindergarten, Primary Education. Limited to yr=1990-2010	186 results
		2 results exported to RefWorks for further examination

Table DB3.4 describes the search conducted on the Oideas Journal. Due to the nature of the journal, this search combined both Phase 2 and Phase 3 searches, limited to the years 1980–2010 and the

category 'Language and Linguistics'. The combination in Row 9 yielded 20 results. The titles of these articles were examined and 1 article was printed for further examination.

	Table DB3.4: Oideas	
1	Immersion	full text
2	Content	full text
3	Language	full text
4	Irish	full text
5	Gaeilge	full text
6	Teanga	full text
7	Second	full text
8	CLIL	full text
9	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8	20 results
		1 result was printed for further examination

APPENDIX 3

DESCRIPTION OF 13 KEY STUDIES SELECTED FOR IN-DEPTH ANALYSIS

STUDY 1. AMMAR SPADA (2006) ONE SIZE FITS ALL? RECASTS, PROMPTS, AND L2 LEARNING

STUDY 2. AMMAR (2008) PROMPTS AND RECASTS: DIFFERENTIAL EFFECTS ON SECOND LANGUAGE MORPHOSYNTAX

Ammar & Spada (2006) carried out a quasi-experimental tightly controlled study to examine the impact of prompts in comparison to recasts, or no corrective feedback. A recast typically occurs where a teacher reformulates a pupil's erroneous utterance while keeping the intended meaning e.g. "He went with her mother," might be reformulated as "He went with his mother." A prompt on the other hand is a signal to the pupil that there is something wrong with the previous utterance. Prompts can take different forms, in the example above the teacher could reformulate the utterance with rising intonation but not complete it e.g. "He went with …?" This indicates to the pupil that there was an error. The critical element with a prompt is that the correct form is withheld (Lyster & Saito, 2010).

The participants in this study were 64 Grade 6 Francophone learners of English in three intact intensive ESL classes in the Montreal area. Although the context of the study was an ESL course, the participants spoke French at home and all reported that they had limited exposure to English outside of school. Three teachers were selected on the basis of the type of feedback they habitually gave to their pupils in response to errors this categorisation being based on observation of their practice. One teacher gave only recasts, another provided prompts and a third gave no feedback. The target structure examined in the study was the acquisition of third person determiners 'his' and 'her'. All pupils received three phases of instruction. In the first session they were provided with a rule of thumb regarding possessive determiner use. They practiced the structure in the following two sessions with further instruction where necessary. Following the instructional phase each group engaged in 11 communicative activities and received

feedback from the teacher in accordance with that teacher's style – recasts, prompts, or no corrective feedback.

A pre-test (Day 1), immediate post-test (Day 30) and a delayed post-test (Day 60) design was used to examine the effects of prompts, recasts, or no feedback. Data were gathered in a computerised fill-in-the-blank task, an oral picture-description task, and a multiple-choice task.

Results from the quantitative analyses of the passage correction task and the oral picture description task indicated that the prompt group significantly outperformed the recast group on the immediate and delayed written post-tests. Results from the oral test indicated that the prompt group benefited more than the recast group. However, the difference between the two groups was found to be statistically significant only at the time of the delayed post-test. When the pupils were divided into high- and low- achieving groups the researchers found that prompts were more effective than recasts for the low-proficiency learners, but that prompts and recasts were equally effective for high-proficiency learners.

Ammar (2008) carried out further analysis of the data gathered by Ammar & Spada (2006). Analysis of data from the computerized task and from the oral task was reported in this study.

The data analysis revealed that pupils who received corrective feedback benefitted more than those that received no feedback. The pupils who were prompted to self-correct made greater progress in their L2 morphosyntactic development than the recast group. This was particularly true for low-achievers. The author notes that these results need to be interpreted with caution *because factors other than the ones the ones investigated could have contributed to the reported outcomes* (Ammar, 2008, p. 201).

STUDY 3. GATTULLO (2000) CORRECTIVE FEEDBACK AND TEACHING STYLE: EXPLORING A RELATIONSHIP

Gattullo (2000) examined the type of corrective feedback used by primary English language teachers in Italy. She divided the 10 teachers in her study into two groups according to two teaching styles, five teachers with a teacher-centred style and five teachers with a more pupil-orientated style. They were all teacher of fourth grade pupils (9-10 years). The teachers with a teacher-centred style tended to organise whole-class activities in such a way that the teacher was always the centre of interaction. The teachers with the pupil-orientated style on the other hand organised more pairwork and group work giving more autonomy to the pupils.

Ten hours of classes were recorded for analysis according to the following corrective feedback type responses: i) recast, ii) elicitation, iii) repetition of error, iv) clarification request, v) teacher's continuation after feedback and vi) pupil's continuation after feedback. Gattullo (2000) further categorised elicitation, repetition of error and clarification request (ii, iii, and iv above) as falling under the broader category of "negotiation of form". The analysis revealed that both types of teacher used recast most often followed by negotiation of form although the teachers with a teacher-centred organisational style used a wider range of responses. It was the latter, negotiation of form, that was most successful in leading to pupils repair of their utterances. As Gattullo states *feedback that did not provide pupils with the correct form was more likely to initiate a sequence of negotiation of form whereby learners attempted to self-repair, either successfully or not* (2000, p. 305).

Grattullo (2000) concluded from her analysis that it was easier for the teacher-centred teachers to draw pupils attention to form in a way that didn't immediately supply the correct form. When pupils are organised in groups or pairs, corrective feedback can cause a greater

interruption to the communicative activity and negotiation of form type of feedback is more difficult to give thus teachers are inclined to provide the correct expression directly (2000, p. 307). In such situations pupils tend to continue with the activity without repairing the error. Part of the difficulty with recasts is that there is an inherent ambiguity (Lyster, 1998) whereby pupils don't always realise that they have been corrected.

STUDY 4. HARRIS (1983) RELATIONSHIPS BETWEEN ACHIEVEMENT IN SPOKEN IRISH AND DEMOGRAPHIC, ADMINISTRATIVE, AND TEACHING FACTORS

In this study based on a national sample of sixth-grade classes, correlation and multiple regression analysis were used to link a number of criterion measures of demographic, school administration, and teaching variables to a criterion measure of pupil achievement in spoken Irish. The criterion measures included demographic variables (region, urban-rural location), administrative variables (size of sixth-grade group in class, gender composition of class, school size, number of grades in the class unit) and teaching variables ('extent of Irish medium instruction', 'type of course-method used' and 'number of years teaching experience'). School inspectors who administered the Irish tests collected the data on all the criterion variables using a form which specified the information required.

The categories of Irish medium instruction used were (a) 'some aspects of the curriculum taught through Irish' and (b) 'no aspect of the curriculum taught through Irish' (outside the Irish lesson proper). It was found that 22.03% of teachers were reported to be teaching 'some aspects' of the curriculum through Irish. This proportion was lower than might be expected given that in official statistics based on routine school returns 35.44% of classes report that … *the ordinary medium of communication with the class for at least one subject or activity is*

Irish. While the latter percentage would include Gaeltacht areas (while the Harris, 1983 study would not) the author considered this to be an unlikely to be the main explanation for the disparity. More likely, the circumstances of data collection in the Harris study, where the inspector's report on Irish medium instruction was compiled in consultation with the class teacher (whose class of course was tested by the same inspector), may have tended to produce relatively conservative reports on the extent of Irish medium instruction. To that extent, relatively low levels of Irish medium instruction may have gone unreported suggesting perhaps that a relatively robust Irish medium instruction treatment was being examined.

There were three categories of 'course method used' (a) Nuachúrsaí (audio-visual), (b) 'ABC-related' and (c) 'Other'. The 'ABC-related' category resulted from combing 'ABC' and 'ABC plus Nuachúrsaí' because the 'ABC' (only) category was too small. The ABC method, described as 'a well planned and effective aural-oral approach' (Ó Domhnalláin & Ó Gliasáin, 1976) was widely and consistently applied in all primary schools from the 1930-1960s. A Department of Education booklet on the approach describes both teaching methods and course content. The letters A, B, C refer to the three aspects of language around which the approach was organised – A (language structure), B (vocabulary) and (C) (free conversation/fluency). A substantial number of teachers continued to use the old ABC method to some extent after the audio-visual courses and methods were introduced. In the study reported here, 38.65% of teachers categories themselves as using ABC-related methods while nearly all the remainder (58.8%) used the audio-visual Nuachúrsaí.

Four variables were found to explain significant proportions of the variance in spoken Irish: 7.6% (region), 8.9% (size of sixth grade group in class), 13.5% (extent of Irish-medium instruction) and 11.6% (type of course-method). 'Extent of Irish medium instruction' and 'Course method' were entered in the regression equation after

the demographic and administrative variables. The teaching experience variable was entered last. Teaching experience did not make a significant contribution to variance explained. Mean scores on the Irish test were 83.7 (SD 17.7) for those classes taught some aspect of the curriculum outside the Irish lesson through Irish while it was 66.9 (SD 18.6) in those class which taught no aspect of the curriculum through Irish. Mean scores for course method were 67.4 (SD 20.2) for the audio-visual Nuachúrsaí and 76.9 (SD 16.6) for ABC-related.

One issue that arises here is whether the 'no Irish' group have the same overall time exposure to Irish as the 'some aspects' group. This is relevant because the positive impact of teaching through Irish may simply be the extra time, the 'real interaction' element, or perhaps a bit of both. (See Jimenez Catalán & de Zarobe (2009)). In the Irish primary school system, it must be borne in mind that the Irish-medium instruction is possibly running many years as certain schools might tend to have an implicit school policy.

STUDY 5. JIMÉNEZ CATALÁN, R.M. & DE ZAROBE, Y. R. (2009) THE RECEPTIVE VOCABULARY OF EFL LEARNERS IN TWO INSTRUCTIONAL CONTEXTS: CLIL VERSUS NON-CLIL INSTRUCTION

Jiménez Catalán, R.M. & Ruiz de Zarobe, Y. (2009) conducted research on 130 female English language learners of Spanish in primary school. They sought to ascertain whether Grade 6 primary school EFL learners (11-12 year-old) in a CLIL instructional context would outperform EFL learners in English as a subject only (ES) instructional context.

The sample consisted of two sub-groups of learners. The first group were an intact class of 65 female pupils from a Basque single-sex private primary school receiving state funding. They lived in a

bilingual Basque and Spanish community, and English was their L3. The second group was drawn from a random sample of 65 female pupils living in a monolingual region of Northern Spain, and English was their L2. Both groups started learning English when they were three. The first group, however, had received 960 hours of instruction in English (5 hours per week) whereas the second group had received 629 hours (3 hours per week) prior to the commencement of the research. The first group had also studied Science (grades 1-6) and Arts and Crafts (grades3-6) through English providing a further two hours per week contact with English.

The researchers measured the pupils' proficiency using two vocabulary tests and a cloze test. The vocabulary tests were the 1000-word receptive test (WT) and the 2000-frequency band of the receptive version of the Vocabulary Levels Test (VLT). These are described as receptive vocabulary tests that represent words from the 1000 and 2000 most frequent words in English. The pupils who received content instruction through CLIL achieved higher scores on all three tests than the pupils who studied English as a subject only. The differences between the CLIL and the ES groups were significant on the 1000 WT test and highly significant on the 2000 VLT test.

These results need to be treated with caution as the CLIL group had received more hours of instruction and greater exposure to English. The researchers could not state categorically that the greater proficiency of the CLIL group on the tests was due to CLIL proper due to the confounding effect of more hours of instruction.

STUDY 6. KIZILTAN, N. & ERSANLI, C. (2007) THE CONTRIBUTIONS OF THEME-BASED CBI TO TURKISH YOUNG LEARNERS' LANGUAGE DEVELOPMENT IN ENGLISH

Kiziltan & Ersanli (2007) conducted a small-scale quasi-experimental study on content-based instruction (CBI) with young English language learners in Turkish schools. They investigated if theme-based CBI was an effective way of teaching English to young learners in elementary schools. Two grade 6 EFL classes were randomly chosen for inclusion in the research study. There were 43 pupils in the experimental group and 43 in the control group also. The language proficiency of both groups was tested at the beginning of the study and no statistically significant differences were found.

The experiment lasted 15 weeks. Content-based language instruction was used in the experimental group while traditional methods were used in the control group. The pupils in the experimental group were given an opportunity to choose the theme that they would like to study by means of a questionnaire. The most popular choice was the theme of 'love'. Topic-related tasks and activities were developed that actively involved the exchange of content or theme-related information. The same topics and grammar points were studied in the control group in a more traditional way.

Achievement tests were administered at the end of each of four topics and a fifth test at the end of fifteen weeks (the authors don't state what form the achievement test took). The experimental group scored better on each of the five tests and the differences in the mean scores were statistically significant. The total mean scores of the experimental group were 61.6 compared to 23.1 for the control group at the end of the experiment. The results of this study are quite impressive, in that because of its short term nature, it is easier to show cause and effect. On the other hand, it may be more difficult to sustain the energy and enthusiasm for such an intervention over a longer time period.

STUDY 7. SEIKKULA-LEINO (2007) CLIL LEARNING:
ACHIEVEMENT LEVELS AND AFFECTIVE FACTORS

Seikkula-Leino (2007) compared 217 CLIL and non-CLIL grade 5 and 6 pupils in a Finnish school. She wished to investigate how successfully the pupils learned content in a CLIL programme and also to look at affective factors such as motivation and self-esteem. Of the 217 pupils in the study, 116 students were enrolled in the CLIL programme where 40-70% of the classes were taught through English and 111 pupils were in the regular non-CLIL programme. In tests of Mathematics and L1 Finnish there were no significant differences in achievement between the CLIL and non-CLIL groups. When she examined the number of overachievers in each group, however, she found that there were more overachievers in the non-CLIL group. Overachievement was calculated on the comparison of pupils' scores on a non-verbal intelligence test and a vocabulary test with their scores in Mathematics and L1 Finnish. Seikkula-Leino explains that

> *Teaching in a pupil's mother tongue provides the pupil with more opportunities to reach maximum results. However, one must bear in mind that CLIL pupils learn a foreign language to a very high standard, which is unlikely to happen to such an extent in teaching conducted only in Finnish.*
>
> (Seikkula-Leino, 2007, p. 336)

Despite this statement the author maintains that participation in CLIL does not adversely affect development of pupils' mother tongue.

STUDY 8. NETTEN, J & GERMAIN, C. (2009) THE FUTURE OF INTENSIVE FRENCH IN CANADA

Netten, J & Germain, C. (2009) examined the French oral proficiency of pupils in core French and intensive French programmes in Canada. Core French has been taught in Canadian schools for many years while intensive French was introduced in Newfoundland and Labrador in 1998. Over 22,000 pupils have participated in intensive French since its inception. Intensive French normally begins towards the end of elementary school in Grade 5 or 6. It is based on the premise that a level of intensity is required at the beginning of the L2 learning process in order to gain a basic level of spontaneous communication. The program starts with an intensive five-month period where 65%-70% of the school day is given over to French. Other subjects such as Mathematics or Science are taught through English. After the initial intensive period pupils follow the normal curriculum and it is recommended that the time for French be combined into two 80 minute sessions so that a level of intensity is maintained. In this way pupils receive approximately 345 hours (minimum 250 hours) in French during the intensive year. The IF programme is based on the theory that the development of L2 communication requires comprehensible input and comprehensible output. Specific teaching strategies have been developed for the programme and teachers attend five-day training sessions. Thus the three core characteristics are; increased time, specific teaching strategies and teacher preparation.

In order to evaluate the success of the programme to date the researchers pre-tested pupils' oral French proficiency in four jurisdictions on the New Brunswick Middle School Scale (MSS) of the Oral Proficiency Interview (OPI). The ability categories within the MSS are novice, basic, intermediate and advanced. The novice and basic levels can be seen in the following table. Each descriptor also has a numerical equivalent.

Descriptors and Numerical Equivalents for the New Brunswick Middle School Scale of the Oral Proficiency Interview (Abbreviated Version) (Carr, 2009, p.798)		
Level	Descriptor	Numerical Equivalent
Novice low	Able to express oneself only in a very limited fashion by using isolated words or expressions	11
Novice mid	Able to speak in a limited fashion about familiar topics; use of words and memorized phrases rather than complete sentences; can identify objects; frequent, long pauses	12
Novice high	Able to satisfy immediate needs using longer, memorized phrases; some hesitations; understanding is limited; shows beginning signs of initiative in choice of words and sentences	13
Basic low	Able to show a certain spontaneity when speaking about familiar topics; uses simple but complete sentences; asks and answers simple questions	14
Basic mid	Able to show some spontaneity when speaking about a variety of topics; can initiate and sustain simple dialogue	15
Basic high	Able to show considerable spontaneity when speaking about a wide variety of topics; can initiate and sustain a simple conversation	16
Basic mid	Able to show some spontaneity when speaking about a variety of topics; can initiate and sustain simple dialogue	15
Basic high	Able to show considerable spontaneity when speaking about a wide variety of topics; can initiate and sustain a simple conversation	16

The evaluators were experienced EFL teachers who had received a two-day training session. The learner participants were core French pupils drawn from different jurisdictions within Canada and of different backgrounds and abilities. A pre-test in the form of an oral interview was conducted with each pupil using the MSS. Interviews were recorded for re-evaluation to ensure reliability. The results of pre-tests from 2003-2008 (n = 1,600) suggest that core French pupils do not achieve spontaneous communication regardless of the number of years of instruction. The average level of performance on the MSS was novice low.

Post-tests have been administered to IF Grade 6 pupils (n = 625) from 2003-2008 in nine jurisdictions at the end of the five-month intensive period. The average number of intensive hours was 299. The average level of performance was 'basic low'. When comparisons were made for 476 of these pupils that had been pre-tested, the

average gain per pupil was 2.5 levels on the MSS. This gain was statistically significant in all cases. This level was achieved regardless of how many years previous instruction in core French that a pupil had. After five months of IF, 70% of pupils attained a level of basic low or above.

Post-tests have also been administered to intensive French Grade 5 pupils (n = 1,400) from 2003-2007 at the end of the five-month intensive period. The average number of intensive hours was 298. Once again the average level of performance was basic low. After five months of IF, 80% of pupils attained a level of basic low or above. Pre-tests had been administered to 841 of these pupils and the average gain was 2.7 levels on the MSS. These gains were statistically significant. There was no significant difference between the attainments of pupils who had chosen to participate in this programme and those for whom the programme was compulsory.

Post-tests were administered in one jurisdiction to intensive French Grade 4 pupils (n = 285) from 2004-2007 at the end of the five-month intensive period. The average number of intensive hours was 271. The average level of performance in this case was basic low. After five months of IF, 69% of pupils attained a level of basic low or above. The average gain for these pupils was 2.2 levels on the MSS. These gains were statistically significant.

Post-Intensive French testing was in its initial stages when the report was written. Preliminary data from these tests (four classes, n = 53) indicate that pupils continued to develop their oral competence attaining a level of basic mid on the MSS with 94% reaching basic low or above. The authors note that continued development of the pupils' proficiency in French will be dependent on suitably qualified teachers being available to teach these pupils. They argue nonetheless that IF has the potential to bring about linguistic duality in Canada if those in charge have the courage to make the necessary changes in

the system.

STUDY 9. HARRIS & MURTAGH (1999) TEACHING AND LEARNING IRISH IN PRIMARY SCHOOL: A REVIEW OF RESEARCH AND DEVELOPMENT

This was an in-depth exploration of the relationship between a large range of variables concerning Irish in primary school. Twenty sixth grade primary school classes (N=534 pupils) representing the full range of social, educational and linguistic conditions nationally under which Irish was being taught participated in the study. It was carried out at a time when an audio-visual, structural linguistic syllabus was still predominant in Irish classrooms. The process of implementing a more explicitly communicative syllabus and teaching approach only began in 1999.

In the part of the study relevant to effective language teaching, variations in particular aspects of the approach to teaching Irish across the twenty classes were linked to

- class achievement in spoken Irish,

- class attitude motivation towards Irish

- class attention and

- class interest.

Each teacher was asked to teach two typical lessons while school inspectors observed and recorded for each segment of the lesson information on

- topic,

- language activity,

- pupil behaviour,

- teacher mode of involvement,

- classroom organisation and

- materials.

In the case of language activity, for example, the categories used include 'translation', 'imitation', 'contextualisation exercises', 'real communication in Irish' and 'simulated communication in Irish'. In observing and recording the beginning and end of lesson segments, and in rating the various aspects of teaching and classroom activities, the inspectors used observation schedules and coding specification previously developed by the researchers.

The goal was to link between class variations in these 'independent' variables to the four 'dependent' variables. Class achievement in spoken Irish was measured by an objective test and class attitude motivation towards Irish was derived from a pupil multiple choice questionnaire. Measure of the other two variables, Class attention and Class interest, were based on on-line codings of these variables for each segment by the inspectors.

The distinction between 'experiential' activities and 'analytic' activities (Allen, Swain, Harley, & Cummins, 1990; Stern, 1990, 1992) or 'communicative' versus 'language-practice' activities was crucial to account for the results. In relation to the Language activity, for example, about one-fifth of the Irish lesson segments were found to involve communicative activities – either 'real communication' or 'simulated communication - although there are very substantial class-to-class variations.

Correlational analyses showed that classes in which a greater emphasis was placed on communication did significantly better in a variety of ways than classes which were less communicative in orientation. For example, when the two communicative activities

('Real' plus 'Simulated' communication in Irish) were combined, it was found that 37% of lesson time on average is spent on communicative activities in high-Irish-achievement classes, while only 10% of time is spent on them on average in low-Irish-achievement classes. Significant positive correlations were observed between, on the one hand, class achievement in Irish, levels of attention and interest, and general pupil attitude motivation and, on the other, the number of lesson segments and time devoted to communicative activities. In contrast, generally less favourable outcomes were associated with teachers who emphasised and devoted more time to traditional language-practice (non-communicative) activities such as 'Drills' or repetition-based activities. The evidence that class attention and interest was higher when communicative activities were in progress compared to other kinds of activities is particularly notable.

It was also found, using a second classroom observation system focused on individual pupils, that as classes spend more time on 'Simulated communication in Irish' there is a significant tendency at class level for pupils to speak individually more often and to make sustained spoken contributions in class more often (indicated by Pearson's r).

STUDY 10. EDELENBOS AND SUHRE (1994) A COMPARISON OF COURSES FOR ENGLISH IN PRIMARY EDUCATION

The study focused on the difference in

- pupils' level of command of English

- their attitudes towards learning English

as a result of being taught with

- grammatical courses

- communicative courses

- communicative courses with an emphasis on grammatical structure.

In the period leading up to the study, English in the Netherlands had been taught almost exclusively using commercially available courses. Traditionally, these had been grammar oriented courses. More recently, however, communicative courses had been developed because the traditional courses were thought to be producing poor results in terms of pupil proficiency. In grammar oriented courses the correct use of the foreign language is emphasised and the sequencing of material is based on the language system itself with little reference to context of use. In the communicative courses, the emphasis is on the skills pupils need to understand the language and to express themselves in certain contexts and the material is thematically sequenced. The courses differ also with respect to the directions to the teacher and the organisation of seatwork. These differences are predicted to produce differential effects on the proficiency and attitudes of pupils.

The authors point out that research on the effectiveness of courses ideally should take the form of an experiment. What is feasible, however, is an ex post facto design. This requires the collection of additional data about such issues as prior knowledge of the pupils, teachers' characteristics and opportunities to learn (time investment, subject matter coverage and teaching styles). The detailed data on these variables were derived from logbooks, a questionnaire and measures of teacher fluency.

In the case of pupils, data were derived from tests of vocabulary, grammar, listening, reading, writing and speaking skills, and measures of attitude and parental SES. The data were first analysed using content analysis of the courses, examining variations in teaching time,

partial correlations between teacher characteristics and learning characteristics, using the parents' SES as a control factor. The second step used mulitvariate covariance analysis with 'course for English' being the independent variable.

Results showed that pupils studying the grammar–based courses did achieve higher grammar scores. But when learning opportunities and teacher characteristics (certification in foreign language teaching, experience and fluency in English) are taken into account, there are no significant differences between the courses in pupils' oral proficiency, writing, reading, listening comprehension and vocabulary. The research also found that the particular course used had no impact upon pupil motivation or attitude towards learning English. The communicative courses produced no real improvements in the pupils' command of language, suggesting that the course as such is of minor importance in relation to the pupils' achievements. The authors conclude that the teacher is vitally important in learning a foreign language.

The authors conclude that

> *in foreign language teaching … The pluriform, ever changing learning environment of foreign language teaching leads to the conclusion that the ideal course for foreign language teaching does not exist … Trying to improve learning results in general, and foreign language teaching in particular, through designing and altering courses is a dead-end street*
>
> (Edelenbos and Suhre, 1994, p.531).

STUDY 11. MACARO & MUTTON (2009) DEVELOPING READING ACHIEVEMENT IN PRIMARY LEARNERS OF FRENCH: INFERENCING STRATEGIES VERSUS EXPOSURE TO 'GRADED READERS'

Macaro & Mutton (2009) carried out a small-scale pilot study with 79 ten-eleven year-old Year 6 pupils learning French as a second language in England. The aim of their study was to provide some evidence that there should be a literacy component in primary second language learning curriculum. Three groups of pupils from three different schools participated in the study. One group of pupils (n = 25), engaged in an intervention where they used materials designed to help develop their inferencing strategies when presented with unfamiliar French words in short texts. A second group (n = 25), were exposed to graded French readers only without any strategy instruction. A third group (n = 29) continued to receive their normal teaching provision. We are not told what 'normal teaching' consisted of.

Pupils in the first two groups were extracted from the lesson in groups of six. Each pupil received two hours of exposure to the text. The researchers developed a pedagogical tool whereby they adapted a novel that was written in English by inserting French words into the text producing a codeswitched text. Each group was given three tests at Time 1 and Time 2. The first test, 'words in sentences', involved difficult new words that pupils were asked to translate by guessing from the context. The second test, 'comprehension test', was concerned with reading comprehension and pupils had to read a text in French and write down anything that they understood in English. The third test, 'function-word test', asked the pupils to translate from French to English any function words that they knew from a list of 30 words. The results showed that there were significant differences for the 'inferencing' group over the other two groups in the words in sentences and function-word tests.

The researchers conclude that text-based work is highly beneficial and appropriate for primary school pupils and they observed that the pupils appeared to enjoy the work. The pedagogical tool developed as part of this study enabled the pupils to read texts with a content and topical interest appropriate to their maturity level as learners. The research offers some evidence of the need for strategy instruction rather than just exposing L2 learners to text. They also suggest that text-based work is appropriate for primary L2 learners.

STUDY 12. AMER (1997) THE EFFECT OF TEACHER'S READING ALOUD ON READING COMPREHENSION OF EFL PUPILS

Amer (1997) conducted a small-scale study with 75 sixth grade male EFL learners in Cairo on the effect of teacher's reading aloud on reading comprehension of EFL pupils. There were elements of experimental control in the study. The pupils were assigned to two classes but it does not state whether they were 'randomly' assigned. There were 39 pupils in the experimental class and 36 in the control class. Pre-test differences were not significant but were in the direction of experimental prediction.

The story chosen to be read aloud in the study was The Perfect Pearl (Osborne, 1989). The story was divided into four meaningful segments and read aloud to the experimental group. Vocabulary for the part of the story that was due to be read was prepared as a pre-reading activity. Pupils were encouraged to follow the teacher and read the text silently as the teacher read aloud. The teacher paused at random points in the text and asked pupils to read the following word in order to check attention. This aspect of the design may have confounded the reading aloud effect with a test for attention. The control group received similar preparation for the story but were asked to read it themselves silently without oral reading by the teacher.

The tests used to measure the experimental effects were a multiple-choice test (MCT) and a story-frame test (SFT). Post-test results, conducted three days after instruction ended, showed that the experimental group outperformed the control group on both tests. The mean scores for the experimental group were 11.7 and 11.0 for the MCT and SFT respectively. The mean scores for the control group were 9.3 and 9.0 for the MCT and SFT respectively.

These results indicate that the pupils in the reading aloud group had a better understanding of the content of what they had read compared to the pupils who read the text silently. The authors suggest that reading aloud by the teacher may help to shift readers from an over dependence on bottom-up reading strategies that are evident in ineffective readers. They further propose that regular planned reading aloud by the teacher can have a positive effect on the comprehension of EFL learners. They caution that this may not be the case for unplanned occasional reading aloud. It is also important the learners understand the objective of reading aloud.

STUDY 13. DREW (2009) USING THE EARLY YEARS LITERACY PROGRAMME IN PRIMARY EFL (ENGLISH FOREIGN LANGUAGE) NORWEGIAN CLASSROOMS

Drew (2009) conducted a small-scale study on the effectiveness of the Early Years Literacy Programme (EYLP) with third and fourth grade EFL pupils in Norway. The EYLP was originally developed in Australia for English as a first language (L1). It is an extensive reading programme where pupils are expected to do large amounts of regular reading taught by teachers with expert knowledge, where pupils are monitored and assessed and with parental participation. The books in the programme introduce high frequency words in a systematic way to promote pupils' fluency and automaticity. Pupils are encouraged to read all books at a given level, up to 25, and to read other material in

English. The teachers keep reading records of each pupil's strengths and weaknesses. The class is organised around learning centres with pupils rotating in groups from centre to centre every 10-15 minutes. One centre is manned by the teacher while pupils work independently on pre-prepared tasks at the other centres.

57 third grade pupils in one school were studied using the EYLP with 58 pupils in two other control schools that followed the regular EFL programme. The experimental school had been using the EYLP approach for mother tongue Norwegian for three years prior to the study and had been impressed with the improvement in L1 literacy levels. The pupils were tested on their listening, reading/writing and oral skills at the end of the Spring term in 2006 (third grade) at the commencement of the study and again at the end of the Autumn term in 2006 when they were in fourth grade. The pupils had one lesson per week in third grade and two lessons per week in fourth grade. Typical lessons lasted 90 minutes.

While all pupils made progress during the period of the study, it can be seen in Figure 1 that the experimental school made the greatest gains relative to the two control schools. These gains were statistically significant. The rate of increase for the experimental school in listening was 26% which was 9% higher than C1 and 7% higher than C2. The rate of increase for the experimental school in reading and writing was 15% which was 4% higher than C1 and 3% higher than C2. Finally the rate of increase for the experimental school in the oral test was 17% which was 5% higher than C1 and 11% higher than C2.

Figure 1. Pupils' rate of progress in three tests from Test 1 to Test 2 (Drew, 2009, p. 117)
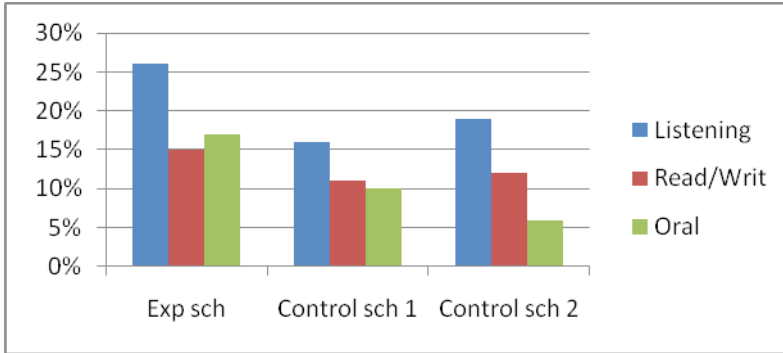
The results of this small–scale study are promising and encouraging. It will require further monitoring and study to assess the merits of implementing such a programme more widely. It provides some evidence to support the view that extensive L2 reading can lead to increased proficiency in the other language skills of listening, speaking and writing.