Developing children's language learner strategies at primary school

This article discusses the strategy repertoires and strategy development of six English children who learned foreign languages at primary school. My study differs from mainstream research in that it focuses on young children and on the development of their strategies, draws on sociocultural theory and uses ethnographic methods.

My findings show that the six children developed a range of strategies over the course of a calendar year in spite of receiving no direct strategy instruction. The primary classroom encouraged learner autonomy and stimulated children to reflect on their learning which, in turn, enabled them to refine their strategies.

Introduction

The teaching of foreign languages is now mandatory in primary schools in most EU countries (European Commission 2008, 2009). In England primary languages were to become compulsory with the new primary national curriculum (QCDA 2010) but the new government did not pass the law and there is currently a question mark over the future of foreign languages. Research findings on primary language learning have demonstrated that it increases children's self-esteem, enhances their motivation and enthusiasm for language learning and contributes to the development of positive attitudes towards other cultures (Blondin *et al.* 1998; Kubanek-German 1998; Naysmith 1999; Pufahl *et al.* 2000). Researchers working in the field of bilingualism (Baker 2006; Cummins 1976; Hamers & Blanc 1989) have mentioned heightened metalinguistic and metacognitive awareness as additional gains. Metacognitive awareness fosters the development of language learner strategies which, in turn, has the potential to enhance proficiency, self-regulation and independent learning. Although learner strategies play a key role in learning, strategy instruction is currently not a general feature of classroom teaching (Beckman 2002). At best, curricula propose strategies as one of their strands. This is the case of the Key Stage 2 framework for Modern Foreign Languages in England (DfES 2005) where one strand focuses on language learner strategies. There is abundant guidance on strategy instruction for

adolescents and adults but support and research on strategy development of children in primary schools is sparse.

In this article I examine children's language learner strategies (LLS) and the ways in which teachers contributed to their development. The six monolingual English children aged 9 to 10 learned and used French, German and Japanese at school, at home and sometimes on holidays. My study differs from the vast majority of studies on strategies through its focus on *young children* learning *foreign* languages, its research question (*strategy development)*, the *framework* (sociocultural theory) and the *methods* (ethnographic methods). The ethnographic approach enabled me to examine strategies from the *perspective of the children*. Here, I present *their* definitions. As will become apparent, some of their strategies are very specific, others general and others again resemble activities and skills. These findings are in line with Brown *et al.* (1983) who explain that strategies in younger children begin as task-specific activities which develop into a broad repertoire of more flexible and generalisable skills. However, this broad understanding of strategies does not correspond neatly with the tighter and more rigorous definitions of mainstream scholars (see Cohen and Macaro 2007). One needs to bear in mind that mainstream research has been carried out predominantly with adolescents and adults. The same is true for research on strategy instruction which focused predominantly on interventions in language classes with the aim of improving the strategy use of secondary or university learners. Research on strategy use of primary children learning foreign languages is different because children are younger and less experienced learners and because they spend less time on foreign language learning at school. Therefore, I investigated children's strategy use both in language lessons and in other primary school subjects.

Before I present my findings it is necessary to define strategies and outline some findings on strategy instruction and the role of the classroom environment.

The development of language learner strategies

In this section I define language learner strategies from a psycholinguistic and sociocultural perspective and examine strategy development in the light of strategy instruction and strategic classrooms. I restrict my review to these two factors as they are of particular relevance to the primary classroom. This is not to say that other factors - some of which are identified in the following section - do not also affect the development of LLS.

Two perspectives on language learner strategies

Language learner strategies have been well researched for the last 30 years (Cohen and Macaro 2007). Mainstream research has been underpinned by a cognitive, psycholinguistic view on how complex cognitive skills such as strategies are developed. LLS have been defined as specific actions, behaviour patterns or techniques undertaken by learners to enhance their own learning (Scarcella and Oxford 1992). Scholars agree that they are problem-oriented tools for active and self-directed involvement and that their effective use can enhance performance in language learning (Cohen 2007). There is also some agreement that the use of strategies is to some degree conscious but the extent of awareness has been debated.

Cohen (1998), O'Malley & Chamot (1995) and Oxford (1990) have shown that strategy use is influenced by a range of factors (and their interaction) such as personality-related variables (e.g. learning styles), person-related elements (e.g. prior learning experience, motivation),

social and demographic variables (e.g. age, ethnicity), the task at hand, and culture (e.g. prevailing learning practices). Until recently mainstream researchers viewed LLS as relatively stable processes in the minds of the learners and paid little attention to the situated learning experiences (see comments from Cohen and Macaro (2007, p. 107) and White *et al.* (2007).) This issue has been addressed by the recent 'sociocultural turn in LLS research', a significant albeit small move (Gao 2007, p. 619). Researchers following the line of Vygotsky assert that strategies are both related to individual cognitive processes and socially-mediated activities. From the perspective of sociocultural theory LLS are higher mental functions that help learners regulate the processes involved in learning (Oxford 1999). Oxford and Schramm (2007, p. 48) define them as 'a learner's socially mediated plan or action to meet a goal, which is related directly or indirectly to L2 learning'. As higher mental functions, strategies are by definition social and cultural in origin; voluntarily controlled and self-regulated; realised in a conscious way and mediated through the use of cultural tools (Wertsch 1985). Donato and McCormick (1994) call them a 'by-product of mediation and socialisation into a community of language learning practice' (p.453). Researchers have shown that learners can acquire a new language and internalize beliefs, practices and procedures such as ways of learning languages through interaction with more knowledgeable others in socially-mediated activities (De Guerrero and Villamil 2000; Donato & McCormick 1994; Ma 2008; Ohta 2000).

Sociocultural theory provides some insights into the origin and development of strategies but there has been little empirical research on strategy development of children. The existing few studies tended to be carried out with *bilingual* children or in *immersion settings* (Chamot 1999; Chesterfield and Chesterfield 1985; Gu *et al.* 2005; Kirsch 2001; Purdie and Oliver 1999). Taken together, these findings indicate, first, that children as young as six are aware of

their strategy use and can articulate their views. Secondly, strategies get more complex as children progress through higher levels of learning and improve their proficiency. Older and more proficient learners present a wider range of strategies and use them in a qualitatively different way from younger and less proficient ones. As for children learning a *foreign language* at school, research is even sparser. In Scotland, Low *et al.* (1993, 1995) investigated children's affective strategies. More recently Macaro and Erler (2008) and Macaro and Mutton (2009) carried out an intervention in reading strategies and examined the impact of strategy instruction on achievement. While Macaro and Erler (2008) were not able to isolate and measure the impact, Macaro and Mutton (2009) found that the intervention was successful in helping children develop inferencing strategies and acquiring high-frequency words.

In order to gain further insights into strategy instruction and the important role of the learning environment we have to turn to studies carried out with adolescents and adults. These studies were predominantly written from a psycholinguistic perspective.

Strategy instruction

Many researchers have based their understanding of strategy development on the cognitive model of Anderson (1985). Like other forms of procedural knowledge LLS need to be taught as declarative knowledge and practised extensively in order to become 'proceduralised' (Gagné 1985). Eminent scholars in the field hold that explicit and overt instruction is necessary for the development of strategies and their efficient use (Cohen 1998; O'Malley and Chamot 1995; Oxford 1990; Wenden 1987, 1998).

Since the 1990s strategy instruction has become common in language lessons. Training is generally based on a sequence of steps as exemplified in the frameworks developed by

Chamot (2005), Grenfell and Harris (1999), Macaro (2006), O'Malley and Chamot (1990) and Oxford (1990):

- Raising awareness of strategies and strategy use;

- Presenting and modelling strategies;

- Offering opportunities for focused and scaffolded practice;

- Promoting evaluation of the effectiveness of strategies;

- Monitoring strategy use.

Oxford and Leaver (1996) and Rubin *et al.* (2007) remind us that this final step is crucial if strategy instruction is to be successful. Learners should be in a position where they can apply their new skills in new situations and transfer strategies. They should be encouraged to take control of their learning, monitor their strategies and evaluate their efficiency.

There is a danger that this type of instruction can become overly teacher-centred (see comments by Oxford (1990) and O'Malley and Chamot (1990)). Teachers are in charge of selecting strategies and materials, modelling them and helping students practise, evaluate and transfer them. Practitioners need to bear in mind that the goal of strategy instruction is learner autonomy. Learner autonomy requires good metacognitive knowledge[1] and the effective use of metacognitive strategies[2]. Learners need to have opportunities to plan, select, monitor and evaluate strategies in contextualised tasks in order to learn how to use them effectively (Rubin *et al.* 2007). The teachers' role therefore consists of developing learners' metacognitive strategies alongside their cognitive strategies and thereby giving them some control over their learning. This principle is realised in Strategy-Based Instruction (SBI), a learner-centred approach where learner strategies are integrated in the learning tasks (Grenfell

---

[1] Metacognitive knowledge refers to the knowledge learners have about their own cognitive processes and those of others (Wenden 1998, p. 516). Flavell (1976) mentions three types of metacognitve knowledge: person knowledge, task knowledge and strategy knowledge.

[2] Metacognitive strategies involve thinking about the language learning process and help learners to regulate their own cognition, plan, monitor and evaluate.

and Harris 1999; Oxford 1990; Wenden 1998). One of the most popular models is the Cognitive Academic Language Learning Approach (CALLA) developed by Chamot and O'Malley (1994). CALLA develops the learners' cognitive and language skills by integrating content (e.g. mathematics), the teaching of English, and direct strategy instruction. It is used in elementary and primary schools with second and foreign language learners in Canada and the States. Chamot & O'Malley (1994) found that children improved their understanding of the target language, increased their motivation and became more responsible and active learners.

Having reviewed 38 intervention studies Hassan *et al.* (2005) conclude that instruction was effective in the short-term rather than the long-term. Further, it was successful when it focused on strategies for reading and writing rather than listening, speaking and vocabulary learning (Rubin *et al.* 2007, p. 155). Findings on the efficiency of strategy training are equivocal to the extent that researchers admit that one does not fully know what triggers efficient strategy use (Chamot *et al.,* 1996, p. 180). Although research has failed to demonstrate a causal link between training and efficient and long-lasting strategy use, it has led to the identification of key principles for efficient instruction such as the need to embed strategy instruction in language lessons, to develop metacognitive strategies and to promote autonomy (Chamot and O'Malley 1994; Little 1996; Wenden 1998).

In primary schools learner autonomy is developed in the primary classroom rather than in individual language lessons. It is therefore important to briefly look into research on the role of the classroom.

The classroom environment

Donato & McCormick (1994) and Coyle (2000, 2007) have shown that the classroom environment can mediate the development of strategies in effective ways. These studies are of particular relevance to me because the researchers worked within a sociocultural framework. Although they studied older learners their findings - the key role of reflection and scaffolding - are pertinent to primary schools.

Donato & McCormick (1994) examined the strategy use of American university students who recorded and evaluated their learning of French in a reflective portfolio. The researchers found that strategies became more focused, specific, personal and realistic over the semester. Donato & McCormick concluded that the success of the learners in identifying, refining and developing their own strategies was related to the language learning practices that required systematic and analytic reviews of the learning process. The 'strategic' classroom was also of interest to Coyle (2007) who explored how the classroom influenced the strategy development of 11-year-old learners of German in an English secondary school. She found that the students' strategic behaviour developed through the classroom culture, scaffolded learning and the creation of learning opportunities. The extensive use of the target language required systematic mediated learning and effective scaffolding techniques of the teacher and the students. The students needed to develop and use a range of strategies in order to become able to communicate in German and to self-regulate their learning.

Antón (1999), Cotterall and Murray (2009) and Gao (2006) confirm that the whole learning environment, underpinned by the pedagogy of the teacher, influences children's strategy use and is conducive (or not) to the development of strategies. Research into learner autonomy has similarly shown that learning environments that give students control over their learning

encourage self-assessment and reflection and foster the development of metacognitive knowledge (Dam 1995; Holec 1981). This knowledge can, in turn, enhance strategy development (Horwitz 1987, 1988; Wenden 1987, 1998, 2002).

While research studies on strategy instruction or the role of strategic classrooms were carried out with adolescents and adult learners, the current study was undertaken with young monolingual children who learned foreign languages at home and at primary school.

The current study
Many researchers who study language learning in context work within a sociocultural framework and choose an ethnographic approach combined with ethnomethodology (Heath 1983; De la Piedra and Romo 2003). As my study of children's language learning strategies and participation in language learning practices was also underpinned by a sociocultural approach, I combined an ethnographic approach to collecting data with Seedhouse's 'sociocultural approach' to conversation analysis (2005). My aim was to examine how participation in language learning activities in a range of settings contributes to strategy development. The study was carried out over the calendar year 2002 with six children aged 9-10 who learned French, German and Japanese at school and at home (Kirsch 2006, 2008). In this article I focus on children's development of LLS at school.

Sample and setting
My choice of ethnographic methods and the need for in-depth data demanded that I focus on few participants. I chose to work with six children, their parents and the seven teachers who taught them over the calendar year (three primary teachers, two secondary teachers and two A-level students). Anne, Jane, Sandy, Paul, Mike and Larry were chosen because they were considered by their teacher to be monolingual English children of 'average' ability. (All

names have been changed). They attended a popular, average-sized school in a town in the South of England. The percentages of ethnic minority children or children with special educational needs were below the national average. The 2004 OfSTED report rated the quality of education as 'sound' and the teaching and learning as 'satisfactory'. The provision of foreign languages received special praise.

From January to July 2002, while in Year 4, the six children learned French with their class teacher and Japanese in weekly half-hour lessons with a secondary specialist and two A-level students from the nearby Specialist Language College. From September to December 2002 they learned German with a secondary specialist in 45 minute lessons. They revisited the content of these lessons with their primary teachers. In July the Year 4 class was split. From September two of the six children attended Year 5a and four Year 5b. Year 5a had German in the first seven weeks of the Autumn term and Year 5b in the remaining seven weeks.

Each of the six children lived with their parents in a small terraced house with a garden, owned by the parents. With the exception of two mothers, all parents were employed in local shops, small companies or bigger industries. All parents had studied at least one foreign language at secondary school and some had O-level qualifications in one language. No parent made regular use of a foreign language.

Data collection and analysis

I collected data using an ethnographic approach and relied mainly on semi-structured interviews and non-participant observations. A total of eighty-nine interviews with children and adults were recorded and transcribed. The majority focused on learning opportunities, learning experiences and learner and teaching strategies. The main focal points of the observations were strategy use, the nature of classroom interactions and children's task engagement. I observed and transcribed 20 lessons in Japanese, French and German and 26

other lessons including lessons in English, Mathematics, music and Physical Education. I also observed children in informal learning situations outside the classroom when, for example, they discussed documents from their pen pals abroad. In addition to interviews and observation I used questionnaires and elicitation procedures (i.e. role-plays), collected documentary evidence (e.g. policies) and kept a research diary. The children documented their experiences of using and learning languages in diaries, with a digital camera and a tape recorder.

This range of methods provided me with detailed contextualized accounts of the specific actions and events happening at home and at school and shed light on the meanings participants gave to their strategies and practices (Hammersley 1998; Hammersley and Atkinson 1995). The triangulation of data helped to ensure the trustworthiness of the findings.

The data analysis was underpinned by sociocultural theory and based on grounded theory.. Following Rogoff (2003), I analysed the data from three perspectives. First, I focused on individual children or adults and examined, for example, their learning or teaching strategies, and any changes over time. Secondly, I concentrated on dyads and investigated the interactions between adults and children. I used conversation analysis underpinned by sociocultural theory (Seedhouse 2005) to analyse interactions at a micro-level. Finally, I studied the cultural-institutional setting and explored the context in which foreign languages were used in England. My data analysis followed the principles of grounded theory (Strauss and Corbin 1990). I identified categories that emerged from the data rather than draw on a priori categories (Freeman and McElhinny 1996).

Findings

My analysis of children's learner strategies and their learning experiences showed that they developed a range of strategies in spite of their receiving no direct strategy instruction in their language lessons. The productive learning environment in the Year 5 class played a key role. I take up these points in turn.

Children's language learner strategies

My observations and interviews gave me rich insights into children's strategy use. The two excerpts below give a flavour of the conversations. The codes I used in the data analysis are in italics.

Excerpt 1: Observation of two children playing a French domino game and follow-up interview:

> Anne [takes the card 'enfants']: That looks like infants.
> [She matches the word with the correct picture. Next she takes the word 'chiens'. There are two cards left; pictures of two dogs and a house.]
> Anne: I think it is dogs because it has an –s at the end. Doesn't it have to have an –s or something?

Excerpt of the interview

> R (researcher): How did you know the meaning of the French words?
> A: Some words were spelt like in English. Like infants. It looked the same. *(inferring meaning)*
> R: What else?
> A: I asked you sometimes *(asking for help)*. And that's it, really.

Anne asked for help and drew on her knowledge about language in order to understand the French words. When asked to verbalize her strategies, she mentioned using cognates (enfants/ infants) but she did not point out that she correctly guessed the meaning of 'chiens' because she had inferred the rule about agreements.

Excerpt 2: I observed Jane using the word 'Pferd' (horse) in a German lesson and asked her for an explanation.

> R: Where did you learn that word?
> J: I was asking my step-dad to learn some German. We took Jack's dictionary and we read the words. He said them and I taped them. So, errr, speaking and I was listening to him. (*speaking, listening, using reference books*)
> C: So he was saying them and you were saying them back to him?
> J: Yes. And then I couldn't remember the words. So I wrote down words like 'mein'. I wrote them down and read them. And then I knew them. (*reading, writing, memorizing*).

Jane frequently asked her father or her brother Jack who studied German at secondary school to translate words or phrases. Jane's wish to memorize these words, especially the pronunciation, led her to tape them, write them down and practise.

Here: Figure 1: Children's language learner strategies

Figure 1 presents the 17 language learner strategies in French, German and Japanese that the six children mentioned deploying at home and at school. I like to repeat that this classification represents the *perspective of the children* which, in turn, explains the co-existence of different types and levels of strategies. Some strategies resemble broad and task-specific activities (e.g. finding native speakers, reading), others are specific (inferring) and others are similar to skills (e.g. using reference books). The type of strategies mentioned by the young children in my study are very similar to those reported by Chesterfield and Chesterfield[3] (1985) although the contexts are very different. The nursery and first-grade Mexican American children in the US study were bilingual or emergent bilinguals and needed to develop a range of learning strategies, particularly communication strategies, to communicate in English. The children in my study are older and more experienced learners and, therefore, able to use strategies such as reading, writing or revising. Most of the strategies listed in both studies resemble general

---

[3] Chesterfield and Chesterfield (1985) found that the children they studied used the following strategies: repetition, memorisation, formulaic expression, verbal attention getter, talk of self, elaboration, anticipatory answer, monitoring, appeal for assistance, request for clarification and role-play.

activities rather than specialized techniques. This is in line with Brown *et al*. (1983) who hold that strategies of young children begin as task-specific activities which develop into more flexible and generalisable skills. As pupils engage in activities requiring more complex cognitive processes, they develop more sophisticated strategies which they use with increasing flexibility.

From my observations and discussions with teachers and parents I knew that children deployed the vast majority of strategies they mentioned. For example, they reported listening and speaking to a range of people (parents, siblings, teachers, acquaintances on holidays); singing; watching TV; reading labels, signposts and books; and writing words and phrases. A few children reported practising at home as an effective strategy and several complained about the lack of worksheets at school which impeded further practice. Two of the strategies listed will only be of use in the future; studying languages in secondary school or taking private lessons (coded as formal practice). Children counted these as strategies – and they therefore figure in the list – although one could argue that they are mere ideas or plans for the future. Strategies were similar across languages although children reported that some languages were more difficult to learn than others.

Apart from the range of cognitive and social strategies, I found one metacognitive technique being used: evaluation. Paul explained that he told his cousins 'how much he knew' which helped them 'try to improve' his knowledge. He drew on metacognitive skills when he assessed his needs and planned appropriate resources to get 'language input'.

All children developed their strategies over the course of the year. By December they had increased their repertoire, transferred strategies across languages and used more precise and appropriate strategies. For example, in February Paul defined memorizing as 'putting things

in one's head' but he was unable to explain what this implied. I noticed that he rarely retained

more than a couple of new words in his Japanese lessons. By the end of the year he had

understood that memorizing entailed listening, repeating, revising and reading. In his words:

> You say words over and over again. […] You look at a word and then you cover it up and look at it and you do that every time and then you keep doing it with a lot of different words.

Paul had internalised the procedures for learning vocabulary that the A-level students used in

the Japanese lessons. He transferred this strategy across languages and used it successfully to

memorize German. I observed that he was able to recall more words than in the first Japanese

lessons.

In the next section I turn to children's language learning experiences at school. This is only

half the picture as children had many opportunities to encounter, learn and use languages at

home and on holidays.

Children's language learning experiences

In order to understand children's strategy use I present the learning experiences from the

perspective of the teachers and the children and compare experiences and strategies.

Teaching practices in foreign language classes

The school had officially implemented a *sensitization* approach, the model used in every fifth

school in Kent at the time (Driscoll *et al.* 2004). The school aimed at familiarising children

with several languages and cultures. Teachers used songs, games and rhymes in brief

language lessons and embedded languages in routine activities throughout the day. In

addition, some classes had formal German and Japanese lessons taught by secondary teachers

and A-level students from the nearby specialist language college. The aim of these lessons was the development of proficiency.

Here: Figure 2: Language learning practices

As explained earlier, the children in this study learned French with their class teacher and Japanese with a secondary teacher and two secondary students in Year 4. In Year 5 they were taught German by a secondary teacher and their respective primary teacher. Figure 2 lists all practices according to the type of teacher. My findings show that, overall, children engaged in more practices that fostered linguistic proficiency than language and cultural awareness (i.e. the first four practices in Figure 2). All teachers (and to some extent the A-level students) used the target language in routine activities (e.g. taking the register) and provided entertaining activities through songs and games. In addition, the two Year 5 teachers and the secondary teachers (particularly the German one) developed children's oral and literacy skills through focused listening exercises, vocabulary teaching and short reading and writing tasks. After seven weeks of German teaching, children were able to compose six sentences about themselves.

The differences in the choice of practices reflect the teachers' competence and confidence in the target language, their teaching philosophies and their beliefs of the overall aim of language teaching rather than their teaching qualification. The Year 4 teacher (who had GCSE French) intended to familiarise children with languages in a playful manner. He wanted children to have a 'fun time' and believed that it was inappropriate to focus on 'serious' language work. Like the A-level students, his teaching was heavily teacher-centred. Similarly, behaviourist theories largely underpinned the teaching of the Japanese teacher. By contrast, the Year 5 teachers had degrees in languages and considered competence the goal of language learning. Their role consisted of revising the lessons of the secondary teacher which

they did whenever it suited them. This explains why I observed mere 6 brief revision lessons compared to 20 lessons in other curriculum subjects. These observations gave me a good insight into their philosophy of teaching. Their pedagogy was underpinned by social constructivist theories (Bruner 1986, 1990; Vygotsky 1978) and they viewed their role as creators of productive learning contexts and facilitators (Dewey 1916; Bruner 1996). As one Year 5 teacher explained:

> I try to get children to be curious and inquisitive and to think for themselves and to want to learn. […] We are there as facilitators rather than as teachers, to a large extent.

Three concrete examples of their social constructivist practice are provided in the section 'a reflective learning environment.'

Like the primary teachers, the secondary German teacher said that she intended to develop children's learner strategies. Nevertheless, there was no evidence of overt strategy instruction. I observed a mere ten explicit references to language learner strategies in all language lessons over the course of the calendar year. The comments tended to be general as exemplified below.

> You will need your ears and eyes (Year 5 teacher).

> Now when we learn a foreign language, we have to learn verbs like this. … [we] have to sit down and say the verb to run, I run, he runs etc (German secondary teacher).

> You need to be ready to do the actions which go with the numbers. So it's easier to remember (Japanese secondary teacher).

Overall, teachers explained that language learning required listening, speaking, having a go, thinking, learning rules, memorizing and practising. These explicit but unspecific and imprecise comments had little potential to move children on from the fairly general techniques they had already developed. Strategies were introduced implicitly through tasks. For example, teachers helped children memorize new words by making them aware of

cognates, stimulating oral and visual associations and organising structured revisions. However, they neither explained the purpose of these individual tasks nor evaluated their efficiency. The reason for this lack of explicit strategy intervention became clear in the interviews. The Year 4 teacher and the secondary teachers seemed unaware of their teaching strategies. Nevertheless, the teaching had some impact on children's strategy use. My data revealed that the Year 5 pupils began to deploy some memorizing strategies more appropriately. Some examples illustrate the point. I observed all children repeat German words sotto voce after their teacher which I took as an indication that they wanted to memorize the word. When trying to make sense of the letters of their pen pals, all 6 children asked for translations of particular words and they all wrote these in their notebooks. Mike read each word silently before asking for a new translation. Anne explained that the notes are useful in order to revise the words with her older brother at home. Jane commented that writing helped her memorize the letter 'ü' as a smiling face, an indication that she 'applied images' (Oxford 1990). While I observed all children deploy some memorisation strategies, Paul was the only child able to clearly articulate what memorizing entailed (see Page 14).

A reflective learning environment

The key for the development of children's language learning strategies seems to lie in the productive learning environment established by the Year 5 teachers. Although they taught very little German they played a key role in developing children's metacognitive skills. Following social constructivist theories, the two Year 5 teachers provided children with ample opportunities to construct knowledge, to make associations with prior learning, hypothesise, analyse, compare and evaluate. They carefully scaffolded the children's learning by structuring tasks, by finding appropriate ways to help them solve problems, and by stepping back as soon as children appeared to manage a task by themselves (Bruner 1986;

Wood *et al.* 1976). Three examples, representative of others, show how they encouraged autonomy and reflection and developed children's metacognitive skills across the curriculum. They encouraged children to *plan* their learning, to *select* and *orchestrate* strategies, and to *monitor* and *evaluate* learning processes (Anderson 2002).

The first example, a Physical Education lesson, illustrates the scaffolding strategies and the ways in which the teacher developed children's monitoring and evaluating skills. The teacher aimed to develop a range of movements. She modelled and explained several movements and asked children to have a go. She carefully observed pupils' performance, assembled the class and invited children to explain how they got on. She then asked some pupils to perform the movement again and the others to watch carefully. In the subsequent discussion, children analysed what their classmates had done in order to be successful and what they themselves could do in order to improve. The teacher observed them perform once more and gave individual feedback.

The second example comes from a maths lesson and exemplifies a focus on planning skills. The teacher gave the children ten minutes to practise the times tables they knew least in a manner that suited them best. This meant that children had to plan for learning (to decide what to focus on) and to select appropriate strategies. Sandy covered her ears and began to recite multiplication tables. Jane wrote the times tables down. Paul and Mike, who sat at the same table, questioned each other. This 'reciprocal teaching' (Palincsar & Brown 1984; Rosenshine and Meister 1994) ensured that pupils monitored and evaluated each others' strategy use.

Third, both teachers asked children to assess the level of difficulty of completed work in mathematics and English and to plan further work. Some pupils asked for help, others wished to continue practising, others requested more complicated work. The teachers reviewed the children's work, assessed their level of understanding and gave them the level of work they

requested if they agreed with the self-assessment. In doing so, they implicitly encouraged pupils to set themselves targets, to choose appropriate methods and to evaluate the effectiveness of their strategies. Over the three months I observed the Year 5 children I could see them improve their ability to work independently. The six children's emerging metacognitive knowledge and skills, developed in a range of subjects, enabled them to develop *general* learner strategies, to monitor strategy use and to evaluate their learning process. I assume that children transferred this knowledge and skills to their language lessons, which, in turn, helped them increase and refine their strategy repertoire.

The relationship between strategies and language learning activities

In order to develop further insights into the reasons underlying children's strategy development I asked them about 'the things the teachers did with them in their language classes'. Children listed sixteen different activities which are presented in Figure 3.

Here: Figure 3: Children's perspectives of their learning experiences

As expected, children realised that the practices depended on the language being taught. The two children in Year 5a who had completed seven German lessons at the time of the interview indicated that they spoke about languages and reflected on language learning unlike in other lessons. (The children in Year 5b had only had two German lessons until then.) All children agreed that the French lessons had a different purpose and format. They sang more songs and played more games and did not engage in literacy work unlike in the German lessons where they frequently read and wrote sentences. The children's ability to critically analyse the impact of their learning experiences is exemplified in the following excerpts:

Larry: I would learn most of [French] when I went on holidays this year and the year before and the year before that. So that is when I learned the most because it didn't, no, because we have not been through any French at school at all.
R: Well, you did the songs last year.
Larry: Oh yeah, but that did not really teach us anything.

Sandy: Because in the French ones we did songs and games but we didn't really do anything.

The six children explained on many occasions that they had enjoyed the French lessons. At the same time, they all agreed that singing, playing games and discussing cultural artefacts had not helped them become better language learners or users. It is therefore understandable that very few considered them as language learner strategies (see Figure 1).

The triangulation of the teaching practices (Figure 2) and children's representation of these (Figure 3) leads to two conclusions. First, children were aware of their learning environment and as a group recalled all the activities carried out in their lessons. The good correspondence is a sign of the trustworthiness of my data (Carspecken 1996; LeCompte and Schensul 1999; Taylor 2002). Secondly, the differences between the practices and children's representations are a reminder that children do not necessarily learn what teachers intend them to learn. For example, the majority of children reported that they did some reading and memorized vocabulary in their French lessons although the class teacher did not focus on these aspects. Children thus seemed to have engaged in the French activities on a deeper level than one might have expected. Similarly, Larry and Anne wrote German words in their notebooks although teachers did not ask them to do so. This implies that children recognised the potential that particular situations hold for language learning and, therefore, paid particular attention.

My comparison between children's language learner strategies (Figure 1) and their representations of the language learning activities at school (Figure 3) is by its nature incomplete. I repeat that their strategies were holistic in the sense that children referred to a

variety of techniques to be used with a range of people and materials in informal and formal settings at home and at school. Nevertheless, I can draw some conclusions. The strategies are similar, though not identical to the actual experiences. For example, children frequently sang songs and played games in all languages. However, they did not mention these as learner strategies because they believed that singing and playing were not effective ways of improving their competence. On the other hand, children did not use reference books in their language classes and had few opportunities to revise at home language work done at school. Nevertheless, most children mentioned using reference books and practising as effective methods. This indicates that children had internalised the strategies they used in other curriculum subjects, in particular in their mathematics and English lessons, and transferred these to foreign languages.

Discussion

Like the children studied by Chamot *et al.* (1999), Gu, Hu and Zhang (2005) and Kirsch (2001) the six children who participated in this study were aware of their learner strategies and able to discuss them. Strategies started off as general activities. These developed into vague techniques and eventually turned into more distinctive, concrete and specific strategies. I found like Brown *et al*. (1983), Chamot (1999), Chesterfield and Chesterfield (1985), Gu, Hu and Zhang (2005) and Magowe and Oliver (2007) that children developed more complex and a greater range of strategies as they gained more experience of learning languages.

My findings indicate that children developed LLS in the absence of explicit strategy instruction. Learning techniques were introduced implicitly through language learning tasks. The 'strategic' primary classroom appears to have played a greater role in the development of LLS than the foreign language instruction. The Year 5 teachers encouraged autonomy and

reflection and contributed to the development of children's metacognitive knowledge and skills in the following ways. They structured tasks into manageable chunks, allowed children to select strategies, encouraged focused observation, and promoted reflection on learning processes and strategy use. These steps are similar to the final two steps of strategy instruction as indicated by Grenfell & Harris (1999), O'Malley and Chamot (1990) and Oxford (1990). There are also similarities to strategy-based instruction as the Year 5 teachers embedded implicit strategy instruction in the primary curriculum and developed subject knowledge at the same time as metacognitive knowledge. Research into strategic learning environments (Cotterall and Murray 2009; Coyle 2007; Donato and McCormick 1994) and learner autonomy (Dam 1995; Holec 1981) confirm that learning environments that encourage independence foster the development of metacognitive knowledge which, in turn, enhances strategy development (Horwitz 1987, 1988; Wenden 1986, 1987, 1998, 2002). I argue that children's growing understanding of learning influenced their 'general' as well as their 'language' learner strategies and enabled them to develop more precise and concrete techniques.

The comparison of the language learning activities (Figure 3) and strategies (Figure 1) shows that the strategies were similar though not identical to the activities. The opportunities to *observe and listen* to other people learning languages and other subjects enabled children to familiarise themselves with practices and to infer strategies. The experience of *learning and using* languages enabled them, firstly, to trial a range of techniques with or without assistance and, secondly, to internalise strategies, adapt and refine them according to their needs, and, finally, to begin to use them independently. This highlights the social origins of strategies (Cole 1996; Vygotsky 1978; Wertsch 1990) and confirms that children can develop strategies through participation in socially-mediated activities with more competent others (Donato and

McCormick 1994). The children's wish to become more proficient language users and the awareness of their own needs acted as a catalyst for strategy development. For example, Anne, Jane and Larry, representative of the others, realized that listening to a parent or a teacher was insufficient to remember words. They needed to develop and deploy additional strategies, in this case writing, memorizing and practising. My findings are consistent with Pollard and Filer (1996) who state that children are constantly active in developing and adapting their strategic responses. Similarly, Bruner (1990, 1996) and Dewey (1933) argue that children analyse their environment and their needs and develop theories to increase their autonomy. The six children who participated in my study analysed the learning practices at school and commented on the inconsistent approaches. The diversity of models did not confuse the children. As seen in Figure 1, the strategies were not language specific. The variety of approaches might even have encouraged children to compare practices and reflect on their effectiveness.

My final points deal with the limitations of my study. While I have shown that children increased their strategy repertoire and refined strategies over the course of the year I was not able to attribute strategy developments to specific settings. For example, it was not possible to measure the influence of the primary classroom on strategy development between September and December. Finally, I must acknowledge that my asking children to reflect on their language learning might have had a bearing on their strategy development.

Conclusions and implications

Although my data were collected in 2002 with a small number of children my findings complement and extend studies carried out by mainstream applied linguists in that I added a

qualitative dimension and investigated the learners' understanding of strategy use. My findings challenge the views of scholars who hold that strategy instruction is necessary for learners to develop language learner strategies and to learn how to deploy these effectively. I have shown that children developed language learner strategies without explicit strategy training in their language lessons. I claimed that strategies developed because children were encouraged to and needed to find ways to successfully participate in language learning activities and tasks in other curriculum subjects.

The language provision in the school was very good as was that of other schools surveyed by Driscoll *et al.* (2004), Hunt *et al.* (2005) and Muijs *et al.* (2005) at the same time of my study. It is still comparable in 2010 where children aged 7-11 have an entitlement to foreign languages. Reports show that 92% of primary schools offered language teaching during class time in 2008 (Wade *et al.* 2009). The combination of primary and secondary teachers delivering languages is a model still used today (Cable *et al.* 2010; Wade *et al.* 2009). Although all primary and secondary teachers in my study collaborated closely, their aims and teaching approaches varied greatly (Woodgate-Jones 2009). Most shared an intention to develop children's thinking skills although few did so explicitly. It is interesting to compare the children's strategies to the 6 categories advocated by the KS2 framework (DfES 2005); metacognitive strategies, communicative, practice, memorization, applying prior knowledge and dictionary skills. I have shown that the six children were already familiar with most of the strategies mentioned in the above document and, apart from the metacognitive ones, made good use of strategies though not always consciously. They would have benefited from explicit, concrete and individualized advice on how to use strategies, in particular the metacognitive ones. If, as the Government says, it wants strategic thinking developed, is it not

time to offer teachers improved guidance and training in effective means of creating strategic classrooms and delivering strategy-based instruction?

I close this article with implications for classroom teachers and researchers. I believe that teachers are only successful in developing learner strategies if they start where children are, create an environment where children want to learn, give them some autonomy and, finally, develop their metacognitive skills. I gave many examples in this article that showed that children come to school with a baggage of experiences that they use as a background to analyse unfamiliar events. For example, Jane's motivation to learn German was driven by her desire to understand her older brother. The dialogues in class enabled the children to share their experiences of language use at home and on holidays.

Teachers retain children's motivation and develop language skills by providing children with purposeful ways to use their newly acquired skills (Dam 1995; Graham 1997; Holec 1981). The wish to learn and to communicate brings children into situations where they need to develop strategies to cope with the demands of the setting. In this study, the children's desire to communicate in German with their pen pals led them to practise vocabulary and some basic grammar. Some children became aware of the limitations of their strategy repertoire and developed new LLS (e.g. taping and writing in order to memorize words).

Children need to have some control over their learning in order to learn to use strategies effectively (Dam 1995; Holec 1981). The children in this study had limited control in their language lessons but were fortunate that their Year 5 teachers promoted learner autonomy. Primary teachers help children become independent learners by developing learner strategies in an overt and explicit way across the curriculum. They can give children opportunities to plan for learning, choose appropriate strategies, reflect on learning processes and evaluate strategy use. I have shown that strategy development takes place across the curriculum and at

home. This has repercussions for researchers as they need to acknowledge that strategies are related to children's experiences of using and learning languages in a range of setting. A framework underpinned by sociocultural theory best lends itself to the study of language learning strategies in context.

References

Anderson, J.R. 1985. *Cognitive psychology and its implications*. second ed. New York: Freeman.

Anderson, N.J. 2002. The role of metacognition in second language teaching and learning. In *Eric Digest*. www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED463659

http://www.cal.org/resources/digest/digest_pdfs/0110_Anderson.pdf.

Antón, M. 1999. The discourse of a learner-centred classroom: Sociocultural perspectives on teacher-learner interaction in the second language classroom. The Modern Language Journal 83: 303-18.

Baker, C. 2006. *Foundations of bilingual education and bilingualism*. 4th ed. Clevedon: Multilingual Matters.

Beckman, P. 2002. Strategy instruction. In *Eric* E638.

Blondin, C., M. Candelier, P. Edelenbos, R. Johnstone, A. Kubanek-German and T. Taeschner. 1998. *Foreign languages in primary and pre-school education: Review of recent research within the European union*. London: CiLT.

Brown, A.L., J.D. Bransford, R.A. Ferrara and J.C. Campione. 1983. Learning, remembering, and understanding. In *Carmichael's manual of child psychology*, ed. J.H. Flavell and M. Markman ed, 77-166. New York: Wiley.

Bruner, J.S. 1986. *Actual Minds, Possible Worlds*. Cambridge: Harvard University Press.

---. 1990. *Acts of meaning*. Cambridge: Harvard University Press.

---. 1996. *The culture of education*. Cambridge: Harvard University Press.

Cable, C., P. Driscoll, R. Mitchell, S. Sing, T. Cremin, J. Earl, I. EYeares, B. Holmes, C. Martin and B. Heins. 2010. Primary modern languages: Language learning at key stage 2, a longitudinal study. Final report. The Open University, Christ Church University Canterbury and University of Southampton: DCSF, September 2006 - November 2009.

Carspecken, P.F. 1996. *Critical ethnography in educational research, a theoretical and practical guide*. London, New York: Routledge.

Chamot, A.U. 1999. Reading and writing processes: Learning strategies in immersion classrooms. In *Language learners of tomorrow: Process and promise*. Lincolnwood, IL: National Textbook.

---. 2005. Language learning strategy instruction: Current issues and research. Annual Review of Applied Linguistics 25: 112-30.

Chamot, A.U., Keatley, C., Barnhardt, S., El-Dinary, P.B., Nagano, K., & Newman, C. 1996. Learning strategies in elementary language immersion programs. *Final report* submitted to Center for International Education, U.S. Department of Education. Available from ERIC Clearinghouse on Languages and Linguistics.

Chamot, A.U., S. Barnhardt, P.B. El-Dinary and J. Robbins. 1999. *The learning strategies handbook*. New York State: Longman.

Chamot, A.U. and J.M. O'Malley. 1994. *The CALLA handbook: Implementing the cognitive academic language learning approach*. New York: Addision-Wesley.

Chesterfield, R. and K.B. Chesterfield. 1985. Natural order in children's use of second language learning strategies. Applied Linguistics 6: 45-59.

Cohen, A.D. 1998. *Strategies in learning and using a foreign language*. London: Longman.

---. 2007. Coming to terms with language learner strategies: Surveying the experts. In *Language learner strategies*, 29-46. Oxford: Oxford Applied Linguistics.

Cohen, A.D. and E. Macaro eds. 2007. *Language learner strategies.* Oxford: Oxford Applied Linguistics.

Cole, M. 1996. *Cultural psychology: A once and future discipline*. Cambridge, Massachusetts, London: Harvard University Press.

Cotterall, S. and G. Murray. 2009. Enhancing metacognitive knowledge: Structure, affordances and self. . System 37: 34-45.

Coyle, D. 2000. Meeting the challenge: Developing the 3cs curriculum. In.*New perspectives on teaching and learning modern languages*, ed. S. Green, 158-82. Clevedon: Multilingual Matters.

---. 2007. Strategic classrooms: Learning communities which nurture the development of learner strategies. Language Learning Journal 35: 65-79.

Cummins, J. 1976 The Influence of Bilingualism on Cognitive Growth: A Synthesis of Research Findings and Explanatory Hypotheses. Working Papers on Bilingualism, 9:1-43.

Dam, L. 1995. *Learner autonomy from theory to classroom practice*. Dublin: Authentik.

De Guerrero , M.C.M. and O.S. Villamil. 2000. Activating the ZPD: Mutual scaffolding in l2 peer revision. The Modern Language Journal 84: 51-68.

De la Piedra, M. and Romo, H. D. 2003 Collaborative literacy in a Mexican immigrant household: The role of sibling mediators in the socialisation of pre-school learners. In *Language Socialisation in Bilingual and Multilingual Societies*, ed. R. Bayley, and S. R. Schecter, 44-61. Clevedon: Multilingual Matters.

Department for Education & Skills. 2005. *The key stage 2 framework for languages.* Nottingham: DfES Publications. www.standards.dfes.gov.uk/primary/publications/languages/framework

Dewey, J. 1916 *Democracy and Education.* New York: Macmillan.

---. 1933. *How we think: A restatement of the relation of reflective thinking to the educative press*. Chicago: Henry Regenery.

Donato, R. and D. McCormick. 1994. A sociocultural perspective on language learning strategies: The role of mediation. The Modern Language Journal 78: 453-63.

Driscoll, P., J. Jones and G. Macrory. 2004. The provision of foreign language learning for pupils at key stage 2, 111. London: Department for Education and Skills.

European Commission. 2008. *Key data on teaching languages at school in Europe*. Brussels: Education, Audiovisual and Cultural Executive Agency.
http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/105EN.pdf

---. 2009. *Key data on education in Europe in 2009*. Brussels: Education, Audiovisual and Cultural Executive Agency.
http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/105EN.pdf

Freemann, R. and B. McElhinny. 1996. Language and gender. In *Sociolinguistics and Language Teaching*, ed. S.L. McKay and N.H. Hornberger, 218-80. Cambridge: Cambridge University Press.

Gagné, E.D. 1985. *The cognitive psychology of school learning*. Boston: Little Brown.

Gao, X. 2006. Understanding changes in Chinese students' uses of learner strategies in china and Britain: A socio-cultural re-interpretation. System 34: 55-67.

---. 2007. Has language learner strategy research come to an end? A response to Tseng *et al.* (2006). Applied Linguistics 28: 615-20.

Graham, S. 1997. *Effective language learning. Positive strategies for advanced level language learning*. Clevedon: Multilingual Matters Ltd.

Grenfell, M. and V. Harris eds. 1999. *Modern languages and learning strategies in theory and practice.* London, New York: Routledge.

Gu, P.Y., G. Hu and L.J. Zhang. 2005. Investigating language learner strategies among lower primary school pupils in Singapore. Language and Education 19: 281-303.

Hamers, J. F. and Blanc, M. H. 1989. *Bilinguality, Bilingualism,* Cambridge: University Press.

Hammersley, M. 1998. *Reading ethnographic research (2nd edition)*. London and New York: Longman.

Hammersley, M. and P. Atkinson. 1995. *Ethnography: Principles and practice*. London, New York: Longman.

Hassan, X., E. Macaro, D. Mason, G. Nye, P. Schmith and R. Vanderplank. 2005. Strategy training in language learning - a systematic review of available research. Research Evidence in Education Libary, http://eppi.ioe.ac.uk/EPPIWeb/home.aspx?page=/reel/review_groups/mfl/review_one.htm (accessed 4 January 2010).

Heath, S. B. 1983. *Ways with Words: Language, Life, and Work in Communities and Classrooms,* Cambridge: Cambridge University Press.

Holec, H. 1981. *Autonomy and foreign language learning*. Oxford: Pergamon.

Horwitz, E.K. 1987. Surveying students' beliefs about language. Learning. In *Learner strategies in language learning*, ed. A.L. Wenden and J. Rubin, 119-29. Englewood Cliffs, NJ: Prentice-Hall.

---. 1988. The beliefs about language learning of beginning university foreign language students. Modern Language Journal 72: 283-94.

Hunt, M., A. Barnes, B. Powell, G. Lindsay and D. Muijs. 2005. Primary modern foreign languages: An overview of recent research, key issues and challenges for educational policy and practice. Research Papers in Education 20: 371-94.

Kirsch, C. 2001. Children's strategies when learning additional languages - a comparative study of bilingual and monolingual children. Goldsmiths Journal of Education 3: 2-19.

---. 2006. English primary children learning foreign languages at home and at school: A sociocultural approach to the development of language learning strategies. London: Goldsmiths.

---. 2008. *Teaching foreign languages in the primary school: Principles and practice.* London: Continuum.

Kubanek-German, A. 1998. Primary foreign language teaching in Europe - trends and issues. Language Teaching 31: 193-205.

Lecompte, M.D. and J.J. Schensul. 1999. *Designing and conducting ethnographic research*. Walnut Creek, CA: Altamira Press.

Little, D. 1996. Strategic competence considered in relation to strategic control of the language learning process. In *Strategies in Language Learning and Use* , ed. H. Holec, D. Little and R. Richterich, Straßbourg: Council of Europe.

Low, L., S. Brown, R. Johnstone and A. Pirrie. 1995. Foreign languages in Scottish primary schools - evaluation of the Scottish pilot projects: Final report to Scottish office. Stirling: Scottish CiLT.

Low, L., J. Duffield, S. Brown and R. Johnstone. 1993. Evaluating foreign languages in Scottish primary schools. Report to Scottish office. Stirling: Scottish CiLT.

Ma, J. 2008. Reading the word and the world' - how mind and culture are mediated through the use of dual-language storybooks. Education 3-13 36: 237 - 51.

Macaro, E. and L. Erler. 2008. Raising the achievements of young-beginner readers of French through strategy instruction. Applied Linguistics 29.

Macaro, E. and T. Mutton. 2009. Developing reading achievement in primary learners of French: Inferencing strategies versus exposure to 'graded readers'. Language Learning Journal 37: 165-82.

Magowe, J.M. and R. Oliver. 2007. The relationship between language learning strategies, proficiency, age and self-efficacy beliefs: A study of language learners in Botswana. System 35: 338-52.

Muijs, D., A. Barnes and M. Hunt. 2005. Evaluation of the key stage 2 language learning pathfinders. In *Research Report No 692*: DfES Publications. http://www.dfes.gov.uk/research/programmeofresearch/projectinformation.cfm?projectId=14080&type=5&resultspage=1

Naysmith, J. 1999. Primary modern foreign language teaching: A picture of one country. Language Learning Journal December: 15-19.

O'Malley, J.M. and A.J. Chamot. 1990. *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.

O'Malley, J.M. and A.U. Chamot. 1995. *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.

Ohta, A.S. 2000. Rethinking interaction in SLA: Developmentally appropriate assistance in the zone of proximal development and the acquisition of L2 grammar. In *Sociocultural theory and second language learning*, ed. J.P. Lantolf, 51-78. Oxford: Oxford Applied Linguistics.

Oxford, R. 1990. *Language learning strategies, what every teacher should know*. Boston, Massachusetts: Heinle & Heinle Publishers.

---. 1999. Relationships between second language learning strategies and language proficiency in the context of learner autonomy and self-regulation. Revista Canaria de Estudios Ingleses 38: 108-26.

Oxford, R. L. and Leaver, B. L. 1996. A synthesis of strategy instruction for language. In *Language learning strategies around the world: Cross-cultural perspectives,* ed. R.L. Oxford, 227-46. Honolulu: University of Hawai'i, Second Language Teaching and Curriculum Center.

Oxford, R. and K. Schramm. 2007. Bridging the gap between psychological and sociocultural perspectives on l2 learner strategies. In *Language learner strategies*, ed. A.D. Cohen and E. Macaro, 47-68. Oxford: Oxford Applied Linguistics.

Palincsar, A. S. and Brown, A. L..1984 Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. Cognition and Instruction 1: 117-75.

Pollard, A. and A. Filer. 1996. *The social world of children's learning - case studies of pupils from four to seven*. London: Cassell.

Pufahl, I., N. Rhodes and D. Christian. 2000. Foreign language teaching, what the united states can learn form other countries: Center for Applied Linguistics, prepared for the U.S. Department of Education's Comparative Information on Improving Education Practice. www.cal.org/ericcll/countries.html.

Purdie, N. and R. Oliver. 1999. Language learning strategies used by bilingual school-aged children. System 27: 375-88.

QCDA. 2010. The new primary curriculum. http://curriculum.qcda.gov.uk/new-primary-curriculum/index.aspx

Rogoff, B. 2003. *The cultural nature of human development*. Oxford: Oxford University Press.

Rosenshine, B. and Meister, C. 1994 Reciprocal teaching: A review of the research. Review of Educational Research 64: 479-531.

Rubin, J., A.U. Chamot, V. Harris and N.J. Anderson. 2007. Intervening in the use of strategies. In *Language learner strategies*, ed. A.D. Cohen and E. Macaro, 141-60. Oxford: Oxford Applied Linguistics.

Scarcella, R.C. and R. Oxford. 1992. *The tapestry of language learning: The individual in the communicative classroom*. Boston: Heinle.

Seedhouse, P. 2005. Task as a research construct. Language Learning 55: 533-70.

Strauss, A. and J. Corbin. 1990. *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park: Sage.

Taylor, S. ed. 2002. *Ethnographic research - a reader*. London: Sage Publications in association with Open University.

Vygotsky, L.S. 1978. *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.

Wade, P., H. Marshall and S. O'Donnell. 2009. Primary modern foreign languages: Survey of national implementation of full entitlement to language learning at key stage 2: NFER, commissioned by the DCSF, July 2006 - April 2009.

Wenden, A. 1986. Helping language learners think about learning. ELT Journal 40: 3-12.

---. 1987. How to be a successful language learner: Insights and prescriptions from l2 learners. In *Learner strategies in language learning.*, ed. J. Rubin and A.L. Wenden, 103-18. Englewood Cliffs, NJ: Prentice Hall.

---. 1998. Metacognitive knowledge and language learning. Applied Linguistics 19: 515-37.

---. 2002. Learner development in language learning. Applied Linguistics 23: 32-55.

Wertsch, J.V. 1985. *Vygotsky and the social formation of mind.* Cambridge, MA.: Harvard University Press.

---. 1990. The voice of rationality in a sociocultural approach to mind. In *Vygotsky and education: Instructional implications and applications for sociohistorical psychology*, ed. L.C. Moll, 111-26. Cambridge: Cambridge University Press.

White, C., K. Schramm and A.U. Chamot. 2007. Research methods in strategy research: Re-examining the toolbox. In *Language learner strategies*, ed. A.D. Cohen and E. Macaro, 93-116. Oxford: Oxford Applied Linguistics.

Wood, D., Bruner, J. and Ross, G. 1976 The role of tutoring in problem-solving. Journal of Child psychology and psychiatry 17: 89-100.

Woodgate-Jones, A. 2009. The educational aims of primary MFL teaching: An investigation into the perceived importance of linguistic competence and intercultural understanding. Language Learning Journal 37: 255 -65.