



INTERNATIONAL BACCALAUREATE ORGANIZATION

Primary Years Programme

Learning additional languages in the primary years: A review of the research

January 2002

This paper reviews research literature on the learning of additional languages in primary schools. It is hoped that teachers in PYP schools will find the information pertinent and informative.

The teaching of additional languages is a complex issue. It would be helpful for the IBO to be aware of the reality of teaching additional languages in PYP schools. A questionnaire is being developed at IBCA, to be mailed to schools in August 2002, that will provide us with feedback to help us better understand your circumstances and solutions.

Primary Years Programme
Learning Additional Languages in the Primary Years:
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Introduction

Primary Years Programme (PYP) policy directive on learning additional languages

The PYP requires that children gain experience of learning an additional language during their years in primary school. This requirement is stipulated within the *PYP Monograph* (IBO, 2001).

all students receive instruction in a language other than the language of instruction of the school starting by the age of seven at the latest. One of the goals of exposing children to languages other than their mother tongue is to provide an insight into and an appreciation of other cultures, and an awareness of other perspectives.

Why learn an additional language?

Over the past decade there has been a tremendous upsurge of interest in children learning additional languages in primary school. The frequency and ease of international travel, the cultural diversity that is commonplace in small and large communities, and the increasingly globalized marketplace have necessitated a closer examination of how best to prepare children for these realities. The PYP seeks to enable children to function as international citizens which, in part, entails the ability to function capably and comfortably within and between cultures. Developing the capacity to speak more than one language is an integral part of this preparation and, as a result, the provision of additional language instruction has been made a mandatory requirement of PYP schools.

The educational consensus is clear. The learning of a second language must be regarded as a necessary part of total personality formation in the modern world, since it should enable a person to live and move freely in more than one culture and free them from the limitations imposed by belonging to, and being educated within a single cultural group and a single linguistic community.

(Stern, 1963)

The need to function in more than one language is becoming increasingly necessary.

In most countries, ethnic pluralism and linguistic contact are the rule and not the exception. Sixty to seventy per cent of the world's population are bilingual in the sense that they have acquired a functional use of two or more languages and bilingualism (or multilingualism) is the norm and monolingualism the exception.

(Stern and Weinrib, 1977)

In making additional language learning a mandatory component of the programme, the PYP recognizes the need to reflect this reality and to prepare children for the world in which they will live and work. The PYP acknowledges the immediate and far-reaching benefits associated with learning additional languages. Not only does an individual enjoy cognitive, personal and social gains by acquiring another language, but professional prospects of participating in a highly globalized economy increase markedly.

The nature of language needs in international schools

International schools are generally comprised of students from linguistically and culturally diverse backgrounds, many of whom relocate regularly and often live in several different countries throughout their school years. Generally, it is within the context of the international school that the most complex array of language needs is represented. However, it is important to acknowledge that national system schools, too, face language challenges that are equal if not, in some instances, more complex than those faced by international schools. It is anticipated that presenting details of language approaches that exist in a context that is generally more rather than less challenging (in terms of the diversity of language needs that must be supported) would be useful to PYP schools whether they are part of the international or national systems.

The nature of language needs in a PYP classroom

Language is a key factor in the development of international understanding and, as such, has a major role in a PYP classroom. Many students will be familiar with two or more languages and will have learned these interdependently. The PYP classroom values and supports the mother tongue and the language of instruction and may provide access to other languages.

Therefore the PYP classroom is flexible enough to cater for a wider than usual range of language and literacy development needs. There are so many variables in students' backgrounds and experience that it is likely that, even in a single age group, there will be enormous diversity in the levels of language and literacy development. Some students may be working in their second or third language, but the fundamental objectives of responsible, competent and confident communication are common to all.

The purpose of this paper

This paper is designed to provide PYP schools with a review of the research that has been done in key areas of learning additional languages with the intention of providing possible guidance in relation to the implementation of additional language instruction. Can research tell us such things as:

- the most appropriate age at which to begin learning additional languages in school? (is it 5 years? 8 years? 11 years?)
- the time required to allow for successful development in an additional language?
- the kinds of proficiency that might reasonably be expected in an additional language by the end of primary schooling?
- the specific features of successful additional language instruction, and the characteristics of schools which appear to foster the success of the additional language learning experience?

The answer to some of these questions, frankly, is no. There are many important aspects of additional language teaching and learning in primary schools that are relatively untouched by research. Yet practical decisions must be made in relation to some of these issues and it is not feasible to wait for research to provide definitive answers. Therefore certain assumptions and recommendations will need to be made based on more pragmatic, common sense grounds. At the same time there needs to be an openness to modifying these recommendations in the light of new evidence from PYP additional language teaching practice or from continued research in this area. We are reminded that we must not lose sight of the ultimate value of learning an additional language in examining the various elements of how and when such instruction is best implemented. The Irish National Teachers Organisation (1992) points out that,

an understanding of the role of a second language in a community and an appreciation of its educational and cultural value, are perhaps more important than the search for such things as a psychologically or biologically optimal age.

The bulk of the research into key areas of learning an additional language is relatively inconclusive and the material and staffing resources vary from school to school. All that can be done is to indicate what, on the basis of present-day thinking and available research, appears to be significant for the successful organization and delivery of instruction that aims at presenting children with knowledge of other languages as part of their primary education. PYP schools that have used innovation and their experience to uncover effective ways to meet the language needs within their student body may offer guidance and practical ideas which other schools currently grappling with how to address the language needs within their student population may find useful. The degree to which such suggestions can be implemented will, of necessity, depend on local conditions and resources.

Clarification of terms used regularly in this discussion of learning additional languages

In discussing the learning of additional languages, several terms are used repeatedly throughout this paper and it is important that their meaning is clear at the onset.

Additional language/target language

In this paper, these two terms are used to refer to the language that is offered in addition to the language of instruction of the school. The student population within today's schools is generally characterized by highly diverse cultural and linguistic backgrounds with students bringing to the learning situation one or several languages with varying levels of proficiency in each of these. The additional language ideally represents one that is an addition to the repertoire of languages that the child brings to the learning situation. However, it is recognized that, due to the complexity of language needs within schools, the additional language may not, in fact, represent a language that is completely new to the child. In this instance, the additional language may be the English provided through English as an additional language (EAL) instruction or the language used in mother tongue support.

Mother tongue

For the purposes of this discussion, mother tongue refers to the language that is most strongly linked to the culture that an individual identifies with as their culture of origin, and often is the language used in the home.

First language

Within this paper, this term refers to the language that the individual is most proficient in and may or may not be the first language learned.

Language of instruction

This refers to the language that is used to deliver the curriculum within the school.

English as an additional language (EAL)

In a school where English is the language of instruction this refers to English instruction that is given to assist the student in gaining sufficient English language proficiency to cope within the English-speaking school environment. In PYP schools, the language of instruction is not always English and therefore this instruction would be in any language that is the language of instruction of the school.

Age as a factor in learning an additional language

Do the primary years represent an appropriate time during which to provide children with formal instruction in an additional language? Would it be better to wait until secondary school before offering instruction in an additional language in a classroom setting? Is there a particular age at which the learning of an additional language should be introduced to optimize the potential for attaining proficiency in the target language? For instance, will the child who begins studying an additional language at age 5 ultimately achieve higher proficiency in the target language compared to a child who begins such language learning at age 12? The answers to these questions may help to guide PYP schools in the implementation of additional language learning.

What is the state of the research on the relationship between learning an additional language and age?

Research into the relationship between age and language learning has attracted a lot of attention over the years. Yet despite the studies and discussion that this issue has stimulated, it remains a controversial area that, even now, cannot be claimed to be fully resolved. This being the case, the recommendations that may be culled from the literature are subject to revision based on the continued research that is certain to take place in this area of language learning.

Is there a critical period within which to learn an additional language?

Much of the research has centred around the issue of whether a critical or optimal period exists during which an individual is more receptive to acquiring an additional language. According to McLaughlin (1984) “the original advocates of the ‘critical’ period relied on neurological studies to assert their claim that prior to puberty the child’s brain is more flexible or ‘plastic’ and as such is more receptive to language mechanisms than is the adult’s brain”. After puberty the brain’s receptivity to language was thought to diminish (brain functions become more rigid and specialized) causing the years prior to adolescence to be seen as critical for language learning.

The neurological arguments supporting the critical period have been more or less discredited, and it appears that rather than one particular stage being ideal for learning an additional language, several stages of development from the early years to adulthood present certain advantages and disadvantages linked to learning an additional language.

Most recent reviews of the biological evidence point to the conclusion that the aging of the brain during childhood does not diminish the ability to learn language and that no period of the life span is critical to such acquisition .

(McLaughlin, 1984)

According to Johnstone (1994) “the learning of an additional language is an active process that involves several dynamic mental processes”. These processes can be classified into three broad categories which include metacognitive, cognitive, and social/affective processes. Research into each of these categories of language learning processes presents perspectives on the advantages and disadvantages of particular stages of development in relation to additional language learning.

Perspectives on the metacognitive processes involved in additional language learning

When learning an additional language is regarded from the standpoint of a child’s awareness of how he/she learns, older children appear to have an advantage over younger children. Older children are better equipped to learn an additional language as they tend to have greater metacognitive awareness. They are more familiar with how they learn and have more experience using strategies to facilitate their learning. Metacognitive strategies according to Edelenbos and Johnstone (1996) “involve thinking about the learning process, planning for learning, monitoring the learning task and evaluating how well one has learned”. The ability to apply good study habits and monitor or evaluate their own progress, for instance, may provide

older children with a distinct advantage over younger children offering the potential to increase the efficiency with which they learn an additional language.

Perspectives on the cognitive processes involved in additional language learning

Cognitive skills are developed in learning the first language, including the ability to deal with abstract concepts and to problem solve, which are invaluable in learning an additional language. Older children have had more time to establish a solid foundation in their first language, including the ability to read and write in that language. According to Little and Ushioda (1998) “underlying powers of cognition developed through the first language can successfully be applied to the learning of another language”. Many writers disagree with the notion that the younger a child is when they start learning an additional language the better. Instead they claim that children should spend the first few years of formal schooling establishing a firm foundation in their first language, including the ability to read and write in that language. In this way, children who are required to learn an additional language will have more highly developed cognitive and metacognitive skills at their disposal. According to Noubadji (1996), “the age of 8 or 9 appears to be a good time for a child to start receiving instruction in an additional language as this provides the time for a foundation to be established in the first language”.

Perspectives on the linguistic processes involved in learning an additional language

Researchers who have examined linguistic factors in relation to learning an additional language argue that older learners of an additional language are more successful than younger learners.

Adolescent and adult learners demonstrate superiority over younger learners in all areas of linguistic skill including syntax and morphology, at least in the early stages of the learning process.

(McLaughlin, 1984)

The one exception to this is in the area of pronunciation. Younger children appear to be more skilled in differentiating between sounds and more open to mimicking sounds. According to Noubadji (1996), “this capacity for the discrimination of sounds diminishes as the child develops and the sounds of the mother tongue become predominant”.

Some authors argue that there is actually a biologically critical period in the case of the attainment of accent-free abilities in an additional language. Proponents of this critical period notion, including Lenneberg (1967) and Penfield and Roberts (1959), claim that it is best to introduce instruction in an additional language at a time when the child’s natural receptiveness to sounds may be exploited (before puberty). Yet, according to Trim (1996), “it should not be introduced before a child has established a foundation in the mother tongue”.

There is not enough substantiated research to fully support the critical period notion with regard to achieving accent-free performance in an additional language. Curtain (1999) quotes Singleton (1989) and points out that “even in studies that indicate that younger learners acquire native accent, the evidence is for a trend rather than for a rule”. In addition, tests have revealed that there is little age-related difference in relation to phonetic skills. Stern (1983) explains that “final proficiency test measures on the areas of syntax and morphology indicated that the older children (11–16 years of age) outperformed the younger children (6–10 years)”.

Perspectives on the social and psychological processes involved in learning an additional language

Social and psychological factors are also important to consider in attempting to identify the appropriate stage at which to introduce an additional language. These factors tend to favour younger learners and outline adolescence as a particularly inappropriate time to begin additional language learning. The Irish National Teachers Organisation (1992) recognizes that in learning an additional language “heavy demands are put on empathy and a child is required to identify, to a certain degree, with the people and culture associated with the additional language”.

Pienemann and Johnstone (1987) argue that “the ability to see the world from another’s perspective is at its height at the age of 8 or 9 and declines rapidly with the onset of puberty”.

The self-consciousness that tends to characterize adolescence may reduce the willingness to experiment with an additional language, reducing particularly oral participation for fear of making mistakes that may be heard by their peers. Stern (1983) argues that in learning an additional language the learner must,

develop some interest in the foreigner and his way of life, as in a geography and history lesson, but must also learn to “behave like a foreigner” making the foreigner’s seemingly ridiculous sounds for his mates to hear.

Younger children tend to be much less inhibited and this coupled with their natural curiosity and desire to “play” through mimicking new sounds increases their motivation to interact more readily with an additional language. Johnstone (1994) suggests that “less inhibition and more empathy for other cultures prior to puberty lends support to the idea that there may be a critical period for language learning from a psychological and social standpoint”.

Overview of the advantages and disadvantages of younger versus older additional language learning

Krashen, Long and Scarcella (1979) argue that “older learners acquire the syntax of an additional language faster than young children but that child learners will ultimately attain higher proficiency”. As McLaughlin (1995) claims,

several researchers including Low, Duffield, Johnstone, Brown and Bankowska (1994) dispute this by arguing that although it is true that young children made larger gains over time, this was caused by older learners having reached “ceiling” levels of proficiency.

In the area of general competence it was found that adult and adolescent beginners had a distinct advantage over younger learners, but this initial advantage was short-lived as younger learners soon overtook older ones.

Age appears to affect aspects of linguistic competency and rate of acquisition but not the eventual proficiency levels that may be reached in the additional language. As with the metacognitive and cognitive research, studies on linguistic factors affecting the learning of an additional language support the notion that an established foundation in the first language facilitates learning in an additional language.

Schools should aim to introduce children to a foreign language when a firm grounding has been laid in the first language in their second year of compulsory schooling, after having spent their first year systematically learning to read and write in the first language.

(Noubadji, 1996)

Recommendations to PYP schools regarding age and additional language learning

The PYP requires that instruction in an additional language should begin by the time the learner reaches age 7. It is at approximately this age that the child will have had the opportunity to establish a foundation in the first language (having learned to read and write). In so doing, the child will have an understanding of language structure and the cognitive and metacognitive skills that may be used to facilitate the learning of the additional language. In addition, learners at this age exhibit the propensity to experiment and take risks in learning situations allowing them to make greater gains than their adolescent counterparts who may be hindered by the shyness and self-consciousness that the onset of puberty often brings.

Proficiency in an additional language

What constitutes proficiency in an additional language? What level of proficiency is it reasonable to expect a child to achieve in an additional language by the end of the primary years programme? To a large degree, the answers to these questions depend on how proficiency is defined.

What is the state of the research on additional language proficiency in the primary years?

Unfortunately the literature offers very little in terms of adequately defining proficiency in an additional language at the primary level. According to Trim (1996), “there is information available regarding proficiency and the inherent levels that can be attained in high school and adult second language classes but no such information exists for language programmes at the elementary school level”.

It may be useful in the meantime, however, to review the information on adolescent and adult learning of additional languages to access information that may help to define proficiency in an additional language at the primary level. There appears to be little consensus on the definition and assessment of proficiency in the available research. Proficiency in an additional language has been interpreted in so many different ways and it has yet to find a completely satisfactory expression. Johnstone (1994) acknowledges the need for further research in this area by saying,

much work remains to be done by teachers, working groups and researchers, before a clear idea will emerge, based on carefully monitored classroom experience, of the number and nature of stages that learners go through in learning an additional language.

What is meant by proficiency in an additional language?

The competency or knowledge possessed by a native speaker of a language is a good reference point in beginning attempts to define proficiency in an additional language. According to Stern (1983), “the native speaker has not only linguistic competence (including such skills as ‘the intuitive mastery of the forms of the language’) but also sociolinguistic competence (which refers to such skills as the ‘intuitive mastery of the linguistic, cognitive, affective and sociocultural meanings’)”. It is apparent that defining proficiency merely as the four skills of reading, writing, listening and speaking is seen almost unanimously by contemporary researchers as being inadequate.

Noubadji (1996) cites an attempt by primary school teachers of additional languages to use random descriptors to define what exactly success in the target language means in the case of a 7- or 8-year-old child and what kind of 7-year-old child succeeds in learning additional languages. This outline indicates consideration of both the linguistic and sociolinguistic competencies.

Autonomy, spoken language, good accent, desire to understand and speak, enjoyment, the child who wants to find things out, the child who enjoys what he does, no fear of failure, a child who thinks about their own language etc.

(Noubadji, 1996)

Since the 1970s the aim of most additional language learning approaches has shifted away from concentrating almost entirely on linguistic competency to giving equal emphasis to the development of sociolinguistic proficiency. Equal focus on a combination of linguistic and sociolinguistic proficiency in language learning better mirrors the demands of real communication.

The foreign language is to be used creatively for real communication, not just for drilling or translation...to use a language creatively, we must be able to operate a system of underlying rules, otherwise we would be parrots.

(Johnstone, 1994)

This notion of learning a language for the sake of enabling real communication resonates closely with the PYP principles of offering curriculum that is both relevant and significant to learners and supports the ultimate goal of enabling graduates of the PYP to function as international citizens, part of which will most likely entail communicating with citizens of other cultures who may speak different languages. For PYP purposes, it makes sense that language learning instruction should focus on real communication and as such this focus may serve well in defining proficiency in an additional language from the PYP perspective.

It is important that we know what the ability to undertake real communication in a language means, in order to decide if this is a reasonable aim for our additional language instruction. Johnstone (1994) cites Canale's (1983) outline of the different components of competence that learners must possess if they are to be capable of using language for real communication. These include:

- *grammatical competence (referring to knowledge of vocabulary, sound and grammar)*
- *sociolinguistic competence (knowledge of how to use language appropriately in different contexts)*
- *discourse competence (linking elements of language together to take part in certain kinds of discourse, for example, conversation or debate)*
- *strategic competence (knowledge of appropriate strategies to use if communication breaks down and knowledge of how to learn language)*
- *cultural competence (includes sensitivity toward attitudes, norms, behaviours and cultures in which the other language is spoken).*

What proficiency expectations are reasonable for additional language learning in primary school?

If it is true that these five areas of competency must be addressed before a child is able to communicate in the real sense in an additional language is there sufficient time to do this within the primary school years? Studies have been carried out to determine the time required to produce language proficiency and have acknowledged the notion that time is a key factor in relation to proficiency. The *ALL Policy statement on an earlier start to foreign language learning* (1997) indicates the following,

More than 320 hours at secondary school would be required before any learner at school crossed the threshold into a stable, all-round practical command of the language. Additional hours gained in primary school will help considerably, but a total of over 1000 hours has been estimated as being required. It is reasonable to assume that the more time that is spent learning and using the language the better the chance of the learner becoming proficient.

(Association for Language Learning, 1997)

The time required to attain proficiency (or the ability to use language for real communication) in an additional language cannot be entirely accommodated within the primary school years. Yet focus should still be given in the primary years to establishing the five categories, as outlined by Canale (1983), that make up the ability to use language for practical communication purposes. Johnstone (1994) claims that "learners of an additional language should learn the same skills as in the mother tongue but at a different level of language". This may help practitioners to work towards defining more clearly what levels of achievement are possible at the primary school level in each of the five language competency categories.

However various strategies are still suggested to maximize the time that is available in the primary school for learning an additional language. Several researchers argue that the task of enabling children to demonstrate proficiency in an additional language should be undertaken using a whole-school approach. This entails integrating the learning of an additional language with other subjects and sharing the responsibilities for facilitation of this learning with other

teachers beyond the teacher of the additional language.

There is widespread agreement that it is desirable to increase the number of contact hours with the new language by teaching other subjects and/or conducting some extra curricular activities through the second language.

(Noubadji, 1996)

This arrangement offers children an opportunity to use the language as a means of communication without paying too much attention to the linguistic processes and, in this way, to practise the additional language in functional situations. In addition, transdisciplinary teaching fosters greater awareness not only of the additional language but of the first language as well.

Children realized that the same ideas and concepts can be expressed by different idioms. It also helped them to see their own language as a linguistic system in its own right, sharing differences and similarities.

(Curtain, 1999)

This strategy supports the development of a foundation in the first language prior to learning an additional language which has been deemed by many researchers to be most valuable in facilitating additional language learning. In fact, Johnstone (1994) states that “first language development should take priority in primary school and that this responsibility should be shared by all teachers in the school”. It is suggested that the class teacher should attempt to develop the five aspects of communicative competence with pupils in their first language after which they may be related to the additional language.

The transdisciplinary approach can facilitate the learning of an additional language not only through helping to build a foundation in the first language but through increasing motivation to learn the additional language. The child will be given opportunities to recognize how the target language can apply in different disciplinary contexts.

As far as possible there should be an integrated approach to the teaching and learning of these individual skills. The learning of a second language can become more meaningful to children if it is integrated into other parts of the curriculum, as opportunities arise.

(Association for Language Learning, 1997)

The transdisciplinary approach necessitates collaborative planning among teachers which is in accordance with the suggested mode of planning required for other parts of the PYP curriculum. Additional language instruction planned in a collaborative manner is consistent with the PYP focus on the development of the whole child.

The selected situations must connect with other school disciplines: elementary teachers are concerned with the child's whole development and must connect with the child's total development and must connect the various elements in a given situation.

(Noubadji, 1996)

As with planning for learning in all areas of the curriculum it is important to ensure that activities are stimulating while not being overwhelming. According to Wray (1997) this is particularly true in the case of learning an additional language. Many children lose their way simply because the pace is too fast.

The initial approach to learning a foreign language should be flexible enough to give every child the time needed to ensure that the processes involved are successfully completed. Repeating, imitating, looking and doing were simply not enough for the six years of primary school. Learning must rapidly become a challenge for children and build on their creativity.

(Noubadji, 1996)

Even if, by the end of primary school, learners have not fully realized the goal of using language for real communication, these years are valuable for setting the stage for the eventual achievement of this goal. By encouraging empathy towards other cultures and the confidence to take a risk when learning an additional language the learner's capacity to be successful in acquiring another language is increased. According to Johnstone (1994), "if empathy and understanding are created by a good teacher, then the process of acquiring an additional language will be more likely to flourish".

If a child has had a positive experience in primary school language classes, they are more likely to want to continue their language learning at the secondary level. This is desirable, as additional time spent learning the language is said to increase the prospect of attaining language proficiency. Continuity between the approaches used in primary and secondary language learning thus becomes an important consideration so that the learner will be provided with an effective, coherent and successful experience in acquiring an additional language.

Recommendations to PYP schools with regard to proficiency in an additional language

Research does not provide us with enough direction in terms of outlining exactly what a child should be able to demonstrate in an additional language by the end of the primary years. As a result it is necessary to focus on overall goals that should drive additional language instruction at this level and to what extent these goals may be achieved. It is unlikely that a child will be able to demonstrate the use of the additional language for real communication as research indicates that considerable time is required in both primary and secondary school to achieve this. Yet this goal should still represent the direction towards which the primary years additional language learning should be aimed. The primary years then should focus on developing the elements that will encourage the child to continue their involvement in learning an additional language. According to research these elements include the learner:

- having an established foundation in the first language
- participating in language instruction that seeks to develop skills in the five categories of language competency as defined by Canale (1983)
- having a positive experience in the learning of an additional language
- having attributes such as empathy and openness to risk taking.

Supporting the development of these elements should be the focus for primary schools with the ultimate goal being to have students use an additional language for the purposes of real communication. In order for these elements to be successfully achieved a whole-school approach is necessitated. This involves all teachers sharing the responsibility of enabling the learner to gain a firm grounding in the first language. In addition, the additional language should be utilized, where feasible, in other subject areas. Teachers creating a positive atmosphere in the classroom and using the PYP student profile as a fundamental guide in support of the development of attributes combine to enable the learner to be successful in an additional language.

Time as a factor in learning an additional language

Within the context of theories explaining educational effectiveness the time factor is seen as crucial within the school and the classroom. There is considerable evidence that proficiency in an additional language is related to the number of hours of exposure to the language though the distribution of that time—whether it is more or less concentrated or dispersed—appears to be a mediating factor.

One of the most important arguments supporting an early start to learning an additional language in primary school is that it quite simply increases the number of hours of exposure to the language and is likely, in the long run, to produce a higher level of proficiency. The Irish National Teachers Organisation (1992) indicates that “one of several studies supporting this premise found that ‘early starters’, those that started in grade one or two, scored significantly higher on proficiency tests than ‘late starters’, those who started the programme in grades 4 or 5”.

If time is a crucial factor then the question that follows is what amount of time should be allocated to instruction in an additional language in order to produce satisfactory results in the target language by the end of the primary years? How often should children receive instruction? How intense or concentrated should this instruction be?

What is the state of the research on time and learning an additional language?

The results so far reported do not, as yet, lead to any definite recommendations. As a general principle, according to Stern (1963) “it has been recommended that ‘an adequate time allocation every day’ should be provided without determining what may be considered adequate”. Most reports on time allocation suggest a variety of possibilities. For instance, a study that looked at the amount of time allocated to instruction in additional language in schools located around the world, found that there was a wide variation in the duration of lessons from 10 minutes per week to 120 minutes per week. While the “Modern Foreign Languages in Primary Schools” CILT report (1995) reveals that “in some schools the language was taught for a short time each day, in others there was one longer lesson per week”.

Arguments for shorter, frequent additional language learning sessions

The majority of studies done on time allocation for instruction in an additional language tend to suggest that the periods allocated for language instruction in the classroom should fall within the range of between 15 and 30 minutes and should take place on a regular basis, for example, daily. Pienemann and Johnstone (1987) are more specific in their recommendations by claiming that a minimum time allotment for additional language learning in primary school should be 30 minutes three times per week, beginning as early as possible.

Curtain (1999) indicates that “a national group of experts that convened to try to achieve consensus on the time issue recommended that classes should meet all year within the school day (at least every other day), for a minimum average of 75 minutes per week”. They also recommended that “teachers should have both language proficiency and the professional knowledge and skills necessary for effective additional language instruction at the elementary school level”.

Arguments for longer, frequent language learning sessions

Another study cited by Curtain (1999) which surveyed teachers’ opinions on aspects of additional language instruction revealed that “the teachers indicated the need for more time in additional language learning sessions as they felt that with more time students would have time for reflection and would be able to synthesize and produce language”. There is, however, widespread agreement that it is desirable to increase the number of contact hours with the additional language by teaching other subjects and/or conducting some extra curricular activities through the medium of the additional language. The value of this is demonstrated wherever the language is used

partially or exclusively as a medium of instruction. This arrangement allows pupils to use the language in a variety of contexts without being so conscious of the linguistic processes and more focused on using the language for functional purposes.

Intensity of additional language instruction

Studies on intensity of additional language instruction reinforce the notion put forth by Johnstone (1994) that “how the time is used in the additional language classroom is as important as the time allocated”. Time intensive instruction has been reported to yield better results than less intensive instruction of the same number of hours. Stern and Weinrib (1977) citing Stern (1976) and Stern *et al* (1976) argue that “small amounts of daily time for language learning is not as effective as longer, more concerted efforts”. They argue that “very small amounts of time, eg, 15–20 minutes a day over several years appear to be less productive and it is more difficult to organize a more concerted effort”.

Noubadji (1996) suggests that “the personal satisfaction involved in listening to something and working out its meaning conditions the memorisation process, which is reinforced when that satisfaction is recalled and renewed”. He claims that this is why intensive, short and frequent sessions are the best way of introducing children to a language, and why the number of language elements that the teacher sets out to identify must be limited.

Overview of the opposing research arguments

The results call for more research aimed at the identification of a minimum ratio of time and intensity that will produce measurable proficiency results. The overwhelming experience is in favour of regular practice on the whole, and sessions lasting thirty minutes or slightly less. This advice is based on common sense psychology of work on memory. According to Vilke and Mihaljevic Digunovic (1996) “studies indicate children at age 7 or 8 cannot concentrate on one activity for more than 5 to 10 minutes”. If the time of the lesson period is too long the attention of the children cannot be maintained at a useful level. In addition, if the interval between the lessons is too great and too irregular the children would tend to forget the work previously learnt.

Recommendations to PYP schools regarding time and additional language learning

The recommendation of regular, brief (30 minutes or slightly less), intensive daily lessons preferably integrated with other subjects can serve as a practical guide for PYP schools to fit the additional language into the timetable. There must be a certain degree of flexibility in this recommendation as feasibility considerations within each school must be taken into account (for example, qualified language staff). More research is required in this area, but pending additional investigation, it appears reasonable that the time devoted to additional language sessions must be defined by each school to determine what works best within their particular circumstances. Stern and Weinrib (1977) support this notion saying that “the time to be given to additional language learning sessions is a matter of trial and error accompanied by systematic evaluation in relation to stated objectives”.

Some features of successful additional language approaches

According to much research on successful language instruction, it is imperative that learners are not put in what Baker (1996) calls a “sink or swim” situation where they are forced to cope on their own with learning an additional language and, in many cases, simultaneously adjusting to a new culture. This is particularly true if the child’s first language is not the language of instruction within the school. In this instance, very often the child may, of necessity, have to use the additional language before they feel comfortable doing so, which may cause the child much anxiety. It is a mistake to assume that a fast conversion to the target language and culture will somehow shorten the adjustment period that the learner must experience and in so doing reduce the stress that generally accompanies such a period of adaptation. According to Baker (1996) the opposite is often true and he explains that this approach stands the chance of causing the child more harm than good indicating that,

It denies the child’s skills in the home language, even denies the identity and self-respect of the child itself. Instead of using existing language skills the “sink or swim” approach attempts to replace these skills...The home language gives a sense of assurance and security amid stormy seas. Even if the child is slow in sailing in that language, with progress delayed, it is the boat known to the child. Being forced to switch to the majority language will not make the journey faster or less problematic.

The pace at which an additional language is introduced, the nature of the environment within which this learning takes place (be it supportive or not supportive) will have an impact on the outcome of the language learning experience. There is a range of theories related to learning an additional language and the promotion of bilingualism that refers to the concepts of additive bilingualism and subtractive bilingualism. These concepts relate to the two possible outcomes of having learned an additional language. Additive bilingualism generally occurs when an additional language has been acquired in a supportive environment and subtractive bilingualism is the result of learning an additional language in an environment that provides very limited support. Baker (2001) outlines the personal and societal implications of these two outcomes.

When a second language and culture have been acquired with little or no pressure to replace or reduce the first language, an additive form of bilingualism may occur. Positive self-concept is likely to relate to additive bilingualism. When the second language and culture are acquired with pressure to replace or demote the first language, a subtractive form of bilingualism may occur. This may relate to a less positive self-concept, loss of cultural identity, with alienation and assimilation.

Some schools offer the PYP in a manner that promotes bilingualism. These schools have opted to use two different languages of instruction to deliver the programme. How bilingualism has been structured within the school’s daily and weekly schedule varies from school to school. Some schools use the two languages simultaneously giving equal weight to each language in a given school day. Other schools use one language as the language of instruction for two out of five days, and then use the other language as the language of instruction on the remaining three days of the school week.

It is important that a school intent on providing its students with a successful additional language learning experience considers not only the structure of the language approach but the nature of the school climate in which the language learning will take place. It is within a school’s language policy that its attitudes and philosophy related to language learning, linguistic and cultural diversity may be outlined and, as such, provide an opportunity to consider factors that will play a part in determining the kind of ethos within which language learning will take place (staffing requirements, parent involvement etc). A study cited by Baker (1996) which was done to research the effectiveness of bilingual education revealed eight features seemingly important in promoting the success of language minority students.

- *Value and status were given to the language minority students’ language and culture.*
- *High expectations of language minority students were prevalent.*

- *School leaders gave the education of language minority students a relatively high priority.*
- *Staff development was designed to help all the staff effectively serve language minority students.*
- *A variety of courses for language minority students was offered.*
- *A counselling program was available.*
- *Parents of language minority students were encouraged to become involved in their children's education.*
- *School staff were committed to the empowerment of language minority students through education.*

(Baker, 1996)

The above features which support the learning of an additional language may provide some useful guidance to schools attempting to develop an effective language policy. The necessary components required to support additional language learning are listed below. These components function in an integrated manner to contribute to a positive school climate that is conducive to the learning of additional languages.

- Mother tongue support
- EAL support
- Special needs support
- Articulation between language learning in primary and secondary schools
- Consideration of the host country context

As the introduction to the PYP language scope and sequence document outlines, the PYP considers language from the point of view of classroom teachers, teachers of the language of instruction (often EAL), teachers of other languages (often the host country language) and teachers of mother tongue languages. The specific expectations apply to each student in every language taught, although the means and pace of teaching vary in different contexts. The PYP introduction to the language scope and sequence document also states that language must be integrated into all areas of the curriculum and that every teacher in the PYP school should be viewed as a language teacher, necessitating collaborative planning among teachers. The PYP approach to learning additional languages is underpinned by the belief that it is particularly important to reinforce, support and extend the language work of the homeroom.

Mother tongue support

Recognition of the home culture and mother tongue is an important feature of any successful additional language learning approach. Provision for the maintenance and further development of the mother tongue helps to address many of the emotional, social and academic needs of the language learner. By continuing to have opportunities to engage in their mother tongue, the learner is able to build on the language skills that they have already established in their home language making it possible to draw on these skills when learning the additional language. Communication in the mother tongue also allows the child to preserve their cultural identity through maintaining close familial bonds and previously established social relationships which in turn help to foster the child's emotional well-being and self-image.

According to Baker (1996) "the mother tongue is generally the first language that is used to care for and nurture the child and if the language used to communicate love and caring disappears then the child may assume that the feelings of caring have disappeared as well". It is therefore very important that parents/guardians are made aware of the importance of maintaining the mother tongue and that they see themselves as partners with the school in supporting the process of their child's language learning. As outlined in the introduction to the PYP language scope and sequence document, language is seen as a major connection between home and school. The school may enhance this connection by doing such things as translating letters to parents prior to sending them home.

Special educational needs support

The identification of learning disabilities among students who are developing proficiency in a second language is a challenging task for many teachers as the academic and language problems experienced by many students who are learning an additional language are very similar to the difficulties that learning disabled students have in an academic setting. The causes of these difficulties are different. According to Hamayan (2000) “learning disabilities are generally due to factors intrinsic to the learner, such as a nervous system disorder while additional language learning difficulties are typically due to factors extrinsic to the learner, such as the language learning process”. The needs of the two populations are different with learning disabled students often requiring support in ordering and processing information and additional language learners needing to develop further proficiency in language.

Although children learn additional languages at different rates and in different ways, there are some fundamental stages of language learning that a child passes through. When teachers and parents have an understanding of these fundamental stages, they are better equipped to offer encouragement or to provide additional support if necessary. One stage that children learning an additional language often go through is known as the “silent period” during which the child is internalizing the sound system of the target language which is done without speaking it to any great extent. This stage is a natural part of the learning process, yet if the period of non-speaking lasts too long there may be a need to look at academic or emotional reasons for this. An extended period of non-speaking should be monitored as it may indicate that a child is overwhelmed either emotionally or academically.

It is important that staff trained in special needs are available to support the language learning approach when necessary. The child’s proficiency in the first language must be examined when there are concerns about the existence of special educational needs. It is important that the child’s functioning in the additional language is not seen to represent the child’s overall language development and that additional information (social, cultural, family, educational and personal) be collected to make a valid and reliable assessment and accurate placement of the child in mainstream or special education. Baker (1996) reminds us that neither the language and culture of the home, nor socio-economic conditions and ethnic differences should be considered as handicapping conditions in themselves and suggests a means by which to gain a more accurate assessment of special educational needs in bilingual learners.

When bilingual children are assessed, it is important to keep three different aspects of their development distinct: 1) first language proficiency 2) second language proficiency 3) the existence or not of a physical, learning or behavioural difficulty. This threefold distinction enables a more accurate and fair assessment to be made with regard to special education.

(Baker, 1996)

It is essential to distinguish between genuine individual learning difficulties and problems that are caused by factors outside the individual such as lack of support. According to Hamayan (2000) “difficulties encountered by learners of additional languages are more likely to be due to temporary language learning problems rather than any long-term disorder”. It is suggested that the five questions listed below may help to eliminate the possibility that extrinsic factors are leading to a bilingual student’s difficulty in school and may assist in making an accurate diagnosis.

1. *Are there any superficial variables that immediately explain why the student is being perceived as potentially disabled?*
 - a) *Were any procedural mistakes made in the assessment or scoring of the student’s performance?*
 - b) *Are the individual behaviours exhibited by the student within the normal range for bilingual students, but seem cumulatively to be abnormal?*
 - c) *Have there been indications of extreme anxiety during assessment in one context but not another?*

2. *Is there evidence that the problems noted in the less proficient language can be explained according to normal second language acquisition or dialectal processes?*
 - a) *What stage of language development is the student going through?*
 - b) *Does the student have the proficiency necessary to learn new abstract concepts?*
 - c) *Has the student had enough exposure or experience in the second language environment?*
3. *Is there any evidence that the problems noted in school can be explained according to cross-cultural differences or related cultural phenomena?*
 - a) *Are the student's cultural norms in areas affecting school behaviours different from those of the classroom?*
 - b) *Is the student comfortable in the culture of the school?*
 - c) *Is the student comfortable in the culture of the country in which the school is located?*
4. *Are the learning difficulties due to a documented lack of proficiency in the student's primary language?*
 - a) *Is there documented evidence of normal first language proficiency?*
 - b) *Does the student exhibit the same problematic behaviours in the first as well as the second language?*
5. *Is there any evidence that the problems noted in school can be explained according to any bias effect?*
 - a) *Is the student in a subtractive language learning environment, especially where he or she is seen as being in need of remediation?*
 - b) *Is the student affected by any negative or low expectations?*

(Hamayan, 2000)

These questions are to be answered by different school personnel who know the student in attempts to reach a decision as to what type of placement is called for. If the answers to the above questions indicate that all extrinsic variables are such that they are not likely to be causing higher than expected levels of difficulty for the student, then a special education referral may be called for.

Special educational staff may have to call on additional specialized professionals (speech therapists, clinical psychologists, doctors etc) in order to uncover the nature of the child's problem and the possible treatment. It is important that these professionals have an understanding of the nature of bilingualism or multilingualism, as the case may be, with the clients that they advise and treat.

English as an additional language (EAL) support

The EAL teacher's role is to address the day-to-day language needs of those students who speak languages other than English. In fact, in some schools the EAL department has been renamed the ESOL or "English to Speakers of Other Languages" department.

The initial priority within EAL instruction is to equip students with enough language to enable them to forge social relationships and to cope with the practical expectations of life in an English-speaking school. When the basic vocabulary and language structures have been acquired it becomes necessary for the EAL teacher to help students to gain the spoken and written language required to function fully in the mainstream academic classroom.

Schools may adopt one or more of the following strategies in providing EAL support.

- Pull-out approach of classes for learners at different levels of competence, for example, beginner, intermediate and advanced

- Support within the classroom for individual or small groups of students
- A combination of pull-out and classroom support

There are arguments over which system is most beneficial for the child. Some claim that pulling the student out of the classroom for segregated EAL support harms the child's self-esteem and makes them feel isolated from the other children. Others argue, however, that the EAL classroom represents a kind of haven for EAL learners where they may rest assured that they will understand and be understood. An EAL learner may more fully exhibit elements of their personality not outwardly evident in the mainstream classroom as Sears (1998) indicates below.

They dare to speak out and to risk making mistakes. In discussions between mainstream and ESL teachers, it often becomes clear that a new child exhibits different, more outgoing and confident behaviour in the secure environment of a small ESL group.

It is most effective if EAL support is given, where feasible, in a way that mirrors the methodology and content of the mainstream classroom. For example, in a PYP school, primary level EAL learners would ideally be given EAL support that links with the unit of inquiry that students in the mainstream classroom are engaged in.

Articulation between language learning in the primary and secondary levels of schooling

According to Burstall, Jamieson, Cohen and Hargreaves (1974) "one of the most important factors with regard to long-term success in the language is the way in which transition from the primary to the secondary school is handled". The British Council report entitled "Optimum age or optimum conditions?" (2000) indicates that "although the importance of this transition was highlighted in 1974 by Burstall *et al*, in many schools around the world this articulation still does not seem to be receiving a lot of focus".

There must be regular collaboration between homeroom teachers and specialist language teachers at both the primary and secondary levels in order to develop an approach that offers students a coherent additional language learning experience. It is important that the language learning experience within the secondary school builds upon that of the primary school for many reasons such as those indicated below by the British Council report (2000).

Without careful liaison between the two levels, and planned use of the children's achievements at primary school, there is every danger that the language will be restarted "from zero" in the new school, with consequent loss of pace and progress and usually of motivation on the part of the pupils.

Collaborative planning and training of teachers within and between the primary and secondary levels of the school would enable issues related to articulation of the school's language learning approach to be addressed in order to ease a child's transition from one level of schooling to the next.

Consideration of the host country context

It is important that the context outside the school is taken into consideration when a school is deciding which language to offer as part of the PYP additional language requirement and to realize the impact that it may potentially have on a child's attitudes towards learning the language selected. Johnstone (1994) points out that "the child's motivation to learn the second language is greatly dependent on the social context and the availability of authentic target language input and opportunities to communicate".

Stern (1983) cites studies completed by Gardner *et al* (1979) and Burstall *et al* (1974) which focused, in part, on how and to what extent the social context may account for the attitudes and

motivations of individual learners of additional languages. The social status of the language in relation to the first language, and economic or political factors were taken into account in these studies. Evidence from the studies indicated that if the sociolinguistic status of a group is lower than that of the target language group (for example, when the target language group is dominant) instrumental motives may be at work in the child's mind (or in the parents' minds, in the case of primary school children) whereby learning the language is seen as important because it is likely to be a prerequisite for economic advancement. In the same instance, a child may be integratively motivated to learn the additional language as it may be viewed as a way to assimilate with the dominant group. Stern (1983) reminds us that "motives (both integrative or instrumental) are very complex and may not always be at the level of conscious awareness".

The degree to which the social context impacts on children's (and/or parents') attitudes towards learning an additional language can depend on a range of factors related to the context but also to the individual learner. Stern (1963) recognizes this complexity below.

The degree of motivation felt by a language learner depends partly on the specific social context and partly on the way that the individual responds to that context. We conclude that the introduction of second language learning is not simply a matter of curriculum and method, but rather one of correct psychological timing. It must be viewed against the background of aspirations and social attitudes among the population served by the school system.

The degree of exposure that a child may have to the additional language beyond the school setting will depend on the languages that are used in the community within which they live and interact. There are a range of possibilities as presented by Stern (1983),

Case 1—The additional language is either used as a first language or as an acquired language in the immediate family or household of the child.

Case 2—The additional language is used by a population in close geographical contact with the family (eg in the same neighbourhood or in the same town), such that the child frequently hears the additional language being spoken by other children and/or by adults.

Case 3—The additional language is used only by a special group of individuals (eg a religious society, a servant class).

It is important that PYP schools carefully consider the factors outside the school when planning their additional language instruction and make choices that will naturally bolster student motivation to learn the language and, as much as possible, ensure that opportunities to use the language for real communication purposes are available. As Burstall *et al* (1974) indicate, attitudes toward learning additional languages are formed to a great extent by the experiences gained in the primary years. On the basis of longitudinal studies successful early learning experiences promote not only successful later learning but also more positive attitudes.

What conclusions may be made about additional language learning in primary school?

The ability to communicate in more than one language facilitates individuals' movement beyond their first language and home culture, increasing their awareness of the world and ultimately enabling them to participate more fully as international citizens.

The introduction of an additional language to younger learners encourages the development of a well-informed, positive attitude to the languages and ways of life of our neighbours, far and near, and the development of an international, as well as a national and local sense of identity.

(Johnstone, 1994)

Research that has been done on key areas of additional language learning presents a view that is often contradictory and far from conclusive. As a result, it appears inadvisable to make recommendations to schools without stipulating the condition that these recommendations are based on assumptions made on pragmatic grounds rather than on the basis of highly consistent research findings. The recommendations made in this paper represent general guidelines that may be useful in making decisions related to the implementation of additional language learning approaches in PYP schools. These guidelines should be adopted with an awareness that modifications may be necessitated based on additional findings from continued research and evidence from PYP additional language learning/teaching practice.

Age, time and proficiency levels all represent important considerations in relation to the provision of additional language instruction but so too are the cognitive, psychological, social and economic benefits that may be gained by children involved in additional language learning. In making decisions that relate to additional language learning approaches, primary schools should remain mindful of the ultimate benefits of learning additional languages and reflect on ways to maximize these benefits within the school's particular circumstances.

In relation to the specific stage at which to introduce additional language instruction, research indicates that the learning of an additional language can take place from any age onwards. There is no particular age that is optimal for learning an additional language but rather each developmental stage presents certain advantages and disadvantages. However after having synthesized the research, an assumption has been made about the period that appears to provide the most advantages for learning an additional language in the primary school. This period falls somewhere between age 7 or 8 (the approximate age at which reading and writing skills may become relatively established in the first language) and 10 or 11 (the approximate age at which puberty generally begins).

Since research also shows that there are no detrimental effects on the child who has received additional language instruction in primary school, it is recommended that additional language instruction begin at this level so as to increase the time available for learning the additional language. According to several researchers such as Stern (1983), time is said to be one of the key predictors of the attainment of proficiency in a language (the more time the more proficient). Various strategies including the adoption of a whole-school approach to additional language learning are suggested in the research so as to maximize the language learning time in the primary school. Based on research by Johnson and Newport (1989), "approximately thirty minutes of additional language exposure and instruction on a regular, for example, daily basis appears to be a desirable target for this level".

In terms of the level of proficiency a child may demonstrate in an additional language by the end of the Primary Years Programme, little research has been done to stipulate the details of what this might look like in the primary school. Research into secondary and adult level second language learning provides some guidance but the definition of proficiency at the primary level is still unclear. Ultimately, proficiency at the primary level should involve preparing the groundwork for the use of the additional language for practical or real communication purposes. When the learning is recognized as being applicable to practical situations, motivation to learn tends to be optimized and

learning takes on a relevance and significance that it might not otherwise. This is in keeping with the PYP philosophy of encouraging learning that is both relevant and significant.

Various prerequisites are necessary to pave the way for the attainment of language use for real communication. Some of the prerequisites include the establishment of a foundation in the first language (including the ability to read and write), along with the development of positive attitudes and behaviours in relation to additional language learning. The structure of the language approach itself is an important factor in determining the nature of the child's language learning experience. A positive experience of learning an additional language is more likely when the additional language learning approach is comprised of a network of approaches, for example ESL, mother tongue instruction, special needs support, that function in conjunction with one another in order to support the linguistic, cultural, academic, social and emotional needs of the language learner. These factors combine to increase the possibility of the learner choosing to continue additional language studies in secondary school. Again, this increases the time that the learner is exposed to the additional language which in turn increases the prospect of proficiency being achieved in that language. This goal may appear somewhat lofty for primary school but even if it is not wholly attainable by the end of this level of schooling, any advancements made towards its ultimate achievement appear well worthwhile.

Research by Johnstone (1994) indicates that "the achievement of the use of a foreign language for real communication takes at least one thousand hours". This is not a reasonable time expectation to be accommodated at the primary level. Therefore it may be more feasible for primary school to aim to set the prerequisite foundations for achieving this goal. Proficiency (as defined as being able to use the language for real communication purposes) would only be attainable if both primary and secondary schools were involved in additional language learning instruction designed with this aim in mind. The development of this kind of approach to the learning of additional languages would necessitate collaboration between the primary and secondary schools to ensure that there was articulation between the two levels. In this way, learners would be more likely to have a coherent and successful additional language learning experience.

A school's language policy should explicitly state to those both inside and outside the school, the decisions that have been collaboratively arrived at in relation to many of the aspects of additional language learning discussed in this paper (child's starting age, time, staffing requirements, articulation between primary and secondary school). These decisions will frame the school's stance on learning additional languages and will create the ethos within which that learning will take place. As such, the development of an effective school language policy will require considerable reflection incorporating direction from recent language learning research and practices currently in use in PYP schools.

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