THE TIMING OF FOREIGN LANGUAGE INSTRUCTION AND RELATED ISSUES

At A Glance

In an effort to support the development of higher levels of foreign language proficiency among our nation’s students, researchers have examined the effectiveness of foreign language programs based on the amount of time students receive instruction, the age at which instruction begins, and the course schedule utilized. This Information Capsule reviews research that has been conducted in these three areas. A brief summary of Miami-Dade County Public Schools’ foreign language programs and schedules is also provided.

Researchers have examined several issues regarding the timing of foreign language instruction to determine the policies and practices that will lead to effective foreign language programs and higher levels of foreign language proficiency among our nation’s students. This Information Capsule reviews research that has been conducted in the following three areas:

- the amount of instructional time students need to acquire proficiency in a foreign language;
- the age at which it is most beneficial to begin foreign language instruction; and
- the most effective foreign language scheduling strategy.

All students are capable of learning a foreign language. It is important to remember that time is only one of the factors that contribute to students’ successful acquisition of a foreign language. Student aptitude for language learning, motivation, and engagement, as well as the quality of the instructional program, all play key roles in students’ mastery of a foreign language (Castro et al., 2007; American Educational Research Association, 2006; Jensen, 2006; Met, 2004).
Several researchers have examined if the length of time students study a foreign language has an impact on their level of language proficiency. Most studies confirm that students who study a foreign language for a longer period of time attain higher levels of proficiency but the findings of some studies suggest the relationship between length of study and mastery of a foreign language may not be as strong as was originally believed. More research is needed to determine if length of instruction plays a larger role in the development of certain language skills than others.

Two studies produced the expected findings, i.e., the longer students studied a foreign language, the higher their levels of proficiency. Cho (1998) studied the relationship between length of study and use of connectives (words that connect phrases, clauses, or sentences, such as “and,” “so,” and “but”) in writing samples completed by Korean learners of English. A group of students with three years of foreign language instruction produced more words, more connectives, and a wider range of connectives than a group of students with two years of foreign language instruction, suggesting that students who studied longer were more likely to produce longer and more complex text. Incorrect use of connectives was also found to increase with length of foreign language study. Cho (1998) suggested that the increased error rate may have occurred because students who produced more connectives had more opportunities to make mistakes than students who produced fewer connectives.

Survey data collected in conjunction with the 2002 Advanced Placement French, German, and Spanish language examinations revealed a strong relationship between the reported length of foreign language study and students’ scores on the corresponding advanced placement examination. Students who reported they had studied a foreign language for five years scored significantly higher on the examinations than students who reported studying a foreign language for four years (Baum et al., 2004).

Roberts (1998) conducted a survey of randomly selected elementary foreign language immersion teachers from around the United States. Teachers reported that students who were enrolled in an immersion program for three or more years were
The Age at Which it is Most Beneficial to Begin Foreign Language Instruction

Some researchers recommend that foreign language instruction begin as early as possible, claiming an early start enables students to develop higher levels of language proficiency. However, improved language capability is not guaranteed by beginning foreign language instruction at an early age. Research suggests that the age at which instruction begins is less important than the quality and intensity of the instruction and the continuation of exposure over a sufficient period of time (American Educational Research Association, 2006; Lightbown, 2003; Branaman & Rennie, 1998; Marcos, 1998; Rosenbusch, 1995; Byrnes, 1990; Curtain & Pesola, 1988). Marinova-Todd, Bradford, Snow, & Snow (n.d.) maintained that age itself is not the primary reason for success or failure in language acquisition, but is related to other factors, such as students’ motivation, commitment, and energy. The impact of age on language proficiency is not always clear: some young learners end up with accents and incomplete grammar, while some older learners become as skilled as native speakers (American Educational Research Association, 2006).

A recent study, conducted by the Center for Applied Linguistics, collected information from educators in 19 countries about foreign language instruction in their elementary and secondary schools. The researchers examined the successes of other countries in an effort to strengthen American foreign language programs. Among the exemplary characteristics of foreign language education identified in the countries surveyed was an early start to foreign language instruction. Thirty-seven percent of the countries surveyed had widespread or compulsory education in foreign languages by age eight and an additional 42 percent introduced foreign languages in the upper elementary grade levels. In contrast, the majority of students in the United States who study a foreign language do not start before age 14 (District Administration, 2006; Pufahl et al., 2003).

Data from children who were raised bilingually indicate that, given a supportive environment, children can start learning two languages from birth (Hamayan, 1986). Manzo (2006) reported...
on one elementary school’s Chinese immersion program that began in kindergarten. School staff reported that students, even at such a young age, were able to learn the vocabulary, pronunciation, and grammar of the language and demonstrated increasingly advanced skills as they progressed through the elementary grades. Collier’s (1988) review of the research, however, found that children who began foreign language instruction at age 5 or 6 took longer to become proficient because they had not completed acquisition of their first language, which continues through at least age 12.

Some parents and teachers are concerned that total immersion in a foreign language will interfere with a young child’s ability to learn English. However, studies have shown that learning one language does not impede the development of language proficiency in another language. While there may be an initial, brief decrease in English achievement, research indicates that full-immersion students catch up and score as high as other students on tests of verbal and mathematical skills (American Educational Research Association, 2006; Sze, 1994).

Many researchers claim that older learners have more difficulty acquiring foreign language speech sounds than younger learners. According to the Critical Period Hypothesis (CPH), developed by Lenneberg in 1967, language learning ability is a biologically determined period in which the brain retains plasticity for acquisition of any language. This ability is reduced at puberty, resulting from the loss of plasticity of the brain. However, many studies have refuted the validity of the CPH. These studies found that adult learners can learn novel foreign language sounds when they are provided with sufficient exposure and opportunities for practice, suggesting that adults do not have as much difficulty acquiring foreign language speech sounds as previously believed (Lightbown, 2003; Lipton, 2003; Wang & Kuhl, 2003; Nagai, 1997; Collier, 1988).

Jordan’s (2003) review of the research concluded that older learners initially outperformed younger learners; however, long-term outcomes suggested that, over time, younger learners caught up and eventually attained higher levels of language proficiency. Similarly, studies of oral language skill acquisition found that older learners acquired proficiency faster than younger learners; however, by the third year of instruction, younger learners outperformed older learners (Collier, 1988). Collier (1988) found contrasting findings when she examined studies comparing performance on language tasks associated specifically with academic skills, such as reading and writing. Older students (ages 8 to 12) initially outperformed younger students (ages 4 to 7) and continued to outperform them in long-term studies.

Wang and Kuhl (2003) examined the learning of Mandarin Chinese lexical tones by four age groups of Americans (6, 10, 14, and 19 years of age). All participants were native speakers of American English, with no previous experience with the Mandarin language. Participants were randomly assigned to experimental and control groups. The experimental group participated in a two-week training program. Both the experimental and control groups were administered a pretest and posttest that required them to identify monosyllabic Mandarin words. No significant differences were found between the experimental and control groups’ pretest scores. All four age groups in the experimental group showed improvement in their identification scores from pretest to posttest, while none of the age groups in the control group showed a significant increase. Within the experimental group, the average posttest score for 6 year olds was significantly lower than the other three age groups and 19 year old’s average score was significantly higher than the other three age groups. The average scores for 10 and 14 year olds were comparable, although they were significantly higher than 6 year olds’ average score and significantly lower than 19 year olds’ average score. Wang and Kuhl (2003) concluded that the results of their study did not support the CPH claim of rigid cut-off periods for language learning. Instead, they suggested that, given the same amount of experience and exposure, the degree of learning attained would be the same regardless of age.

Harley and Jean (1999) examined students studying French as a second language in Ontario, Canada. The researchers compared students
When comparing younger children and adolescents, it is also important to consider differences in the way the two age groups interact. For example, younger children are more likely to practice their oral language skills because they are not worried about making mistakes, while adolescents tend to be more concerned about embarrassing themselves. Adolescents' speech may also involve abstract topics that are more difficult to discuss in the new language and younger students’ conversations tend to be more simplistic (Missouri State University, 2005; Jordan, 2003).

As can be seen from the above review of the research, there is no real consensus on the optimum age at which to begin foreign language instruction. While some researchers recommend starting foreign language instruction at the earliest possible age, others suggest there are benefits to beginning instruction at age nine or ten.

The Most Effective Foreign Language Scheduling Strategy

While length of time spent studying a language and the age at which instruction begins are related to language proficiency, the distribution of study over time is also an important factor (Reilly, 1998). A daily class period of 40 to 55 minutes is still the most common option for foreign language instruction. Although students in these traditional schedules receive less exposure to the foreign language than those enrolled in immersion programs, they still benefit from continuous daily exposure to the language, which researchers have determined is especially important during the first two years of study (Schulz, 1998; Shortt & Thayer, 1995; Schoenstein, 1994).

Two models of block scheduling are frequently used in school districts throughout the country: the 4x4 model (in which students take four 90-minute courses every day of the week for one semester) and the A/B, or alternating, model (in which students take three or four 90- to 120-minute courses on alternating days for the entire school year). Educators and researchers have noted that the block schedule offers advantages, as well as disadvantages. Advantages include:

Based on the available evidence, Castro, Catallini, Everist, Kirk-Anderson, Lane, and Shackman (2007) recommended the optimal time for a child to begin to learn a second or third language is before age 10. Larsen-Freeman and Long (1991) stated: “The data on older versus younger children suggest . . . that the optimal timing is not the earliest possible, but may be around age nine, although being this specific is probably a little premature.” Schulz (1998) concluded that, unless native or near-native pronunciation is a high priority, an early start in language learning is not essential since research has shown that adolescents and young adults can also learn a foreign language quickly and efficiently.

Older learners (12 years of age and older), whose cognitive ability is more developed, appear to have several advantages, including knowledge of a first language, awareness of the structural features of languages, a larger vocabulary, and the ability to make grammatical generalizations. In addition, some classroom teaching of foreign languages involves more demanding abstract tasks, which favor older students (Missouri State University, 2005; Lightbown, 2003; Nagai, 1997; Sze, 1994). Nagai (1997) suggested that, in the artificial classroom setting, older students may perform at higher levels because younger children take longer to adjust to the new classroom environment and unfamiliar teaching methods.
• Teachers have more time to teach the curriculum in greater depth; develop a greater variety of teaching techniques and texts (oral, visual, and written); and engage in more diverse activities, such as field trips and films. Implementation of block schedules has been linked to less reliance on the standard “lecture, discussion, and seatwork” method of instruction.

• Students have more time to internalize the language.

• Teachers are better able to address the various learning styles of their students.

• Teachers have more time to work individually with students and students have more opportunities to work with one another.

• Students are not subjected to the typical frantic high school schedule (nine locations and activities in a six and one-half hour school day). Carroll (1994) stated that this schedule produces a “hectic, impersonal, inefficient instructional environment.”

• Students have more opportunities to take advanced language courses because they enroll in a greater number of courses throughout the school year (Wallinger, 1999; ERIC Clearinghouse on Languages and Linguistics, 1998; Irmsher, 1996; Canady & Rettig, 1995; Huff, 1995).

Many researchers have expressed reservations about the effectiveness of block schedules for language instruction. These concerns must be taken into consideration when planning a quality foreign language program. Disadvantages of block scheduling for foreign language courses include:

• Block schedule classes actually meet for fewer instructional minutes over the course of the school year. For example, a traditional two-semester course that meets for 50 minutes per day for 180 days provides a total of 9,000 minutes of instruction. A class that meets 90 minutes per day for 90 days offers 8,100 minutes of instruction. However, it should be noted that, with a traditional schedule, a great deal of time is lost every day when students transition from class to class.

• The fast pace imposed by the block schedule may create difficulties for students who learn foreign languages more slowly.

• Students in block schedule classes often have more difficulty making up work due to absences.

• Students in block schedules are often assigned less homework (for example, in the 4x4 model, twice as much daily homework must be assigned in order to complete a full year’s work in one semester). A study conducted by Wallinger (1999) found that more out-of-class homework was assigned to students in traditional class period schedules than in block schedules. The average total hours of expected homework was 51.00 for students in traditional class periods, 42.68 for students in alternating block schedules, and 37.28 for students in the 4x4 block schedules. These differences were not, however, statistically significant.

Some teachers on block schedules also subtract from instructional time by giving their students more time in class to begin their homework. Teachers in one study (Wallinger, 1999) reported that students in 4x4 block schedules were allowed to work on homework in class more often (an average of 11.35 hours annually) than students in alternating block schedules (an average of 5.87 hours annually) and traditional class schedules (an average of 5.63 hours annually). These differences were not, however, statistically significant.

• Some teachers have reported that students had difficulty paying attention during the longer class periods. A survey administered to students in 80-minute and half-day foreign language classes found that many students reported getting too tired in the longer periods.

• There are long lapses of time between 4x4
Researchers have compared the effectiveness of traditional classroom periods versus blocked classes to determine if one of the two scheduling models produces higher levels of foreign language proficiency. Studies have not yet provided conclusive evidence to support the effectiveness of the block schedule, although early indications are that longer class periods may promote higher levels of proficiency (ERIC Clearinghouse on Languages and Linguistics, 1998).

Collins, Halter, Lightbown, and Spada (1999) examined foreign language courses offered in three formats: massed approach (a full-day, five-month intensive program; this approach provided students with 400 hours of contact with the foreign language); massed-plus approach (the same model as the massed approach, with students also encouraged to use the foreign language in other locations throughout the school; this approach provided students with 400 hours of contact with the foreign language plus additional exposure outside of the classroom); and distributed approach (shorter periods of foreign language instruction, distributed over 10 months; this approach provided students with 300 hours of contact with the foreign language). Results of the study indicated that students in the massed and massed-plus groups knew more vocabulary and understood and produced more words than students in the distributed group. The most success was reported for the massed-plus group. On tests of vocabulary recognition and listening comprehension, the massed-plus group outperformed both the massed and the distributed students. The researchers concluded that, even though students began foreign language instruction at the same age, the compact instructional schedule was more effective than the distributed schedule. The reader should be advised, however, that students in the distributed approach received 25 percent fewer contact hours than students in the massed and massed-plus approaches. Therefore, it cannot be stated with certainty that the latter groups’ higher levels of performance were due to the compact schedule, rather than the greater number of contact hours.
The Carleton Board of Education in Ontario, Canada studied the effects of three alternative models of core French delivery: a half-day of instruction over a 10-week period (half-day model); 80 minutes of instruction for five months (80-minute model); and 40 minutes of instruction for 10 months (traditional model). The three models provided an equal amount of total instructional time. Grade 7 students were assigned to classes on a random basis and no significant differences were found between the scores of students in the three models on the pretest, a four-skills French test package. Posttests administered at the conclusion of the instructional programs found no significant differences in performance between the three groups in listening comprehension or speaking. There were, however, significant differences in reading comprehension and writing. In reading comprehension, students in the half-day and 80-minute models scored significantly higher than students in the traditional model. In writing, students in the half-day model scored significantly higher than students in the traditional model. Follow-up testing was conducted in eighth grade, when students in the half-day model had not attended classes for approximately 9 months, but students in the other two models had attended classes three months prior to follow-up testing. Students in the half-day model again obtained significantly higher scores in writing than the traditional model. No differences were noted between any of the groups in listening comprehension or reading comprehension (no follow-up test in speaking was administered). Although study results were mixed, the authors suggested that, overall, their findings supported the conclusion that longer class periods over fewer months may have promoted higher levels of reading and writing proficiency (Lapkin et al., 1997).

Wallinger (1999) compared the end-of-course performance of students who had studied French in one of three models: an alternating day model (in which classes met on alternating days for the entire school year); a 4x4 model (in which classes met every day for one semester); and a traditional, one period per day, model. The total time for instruction over the course of the year was significantly less on both block schedules than on the traditional schedule. Results of the study indicated there were no significant differences in the performance of students in the three different models in any of the skill areas tested (listening, reading, writing, and speaking). Wallinger (1999) concluded that time is only one factor in the learning process and that future research in the area of block scheduling might wish to study other variables that contribute to successful learning, such as quality of instruction, as well as student aptitude, perseverance, and engagement.

On A Local Note

All elementary students in Miami-Dade County Public Schools (M-DCPS) receive 150 minutes per week of Spanish, starting in kindergarten for Spanish speakers and in grade 2 for students for whom Spanish is a second language. In addition, a number of other foreign languages are offered at the elementary level, including Creole, French, German, Italian, and Portuguese.

Foreign languages offered at the middle and senior high school level include Chinese, French, German, Hebrew, Italian, Japanese, Latin, Portuguese, and Spanish. Two consecutive years of enrollment in courses teaching the same language are required for college entrance; however, M-DCPS does not require students in middle or senior high schools to enroll in a foreign language course.

Ninety-eight M-DCPS schools currently offer a dual language program, in which students receive foreign language instruction and content area instruction in the second language from one to three hours daily. Three types of programs are included under the dual language program heading: the Elementary Bilingual School Organization (BISO) program, the Extended Foreign Language (EFL) program, and the International Studies (IS) program.

The BISO program operates on a schoolwide basis in eight elementary schools. All elementary schools offer an English/Spanish program and one of the elementary schools also offers an English/Portuguese program.

The EFL program is offered in selected classes within each of the participating schools. The
program was implemented by the district in order to expand the dual language program to at least one school in each feeder pattern and provide all students with access to the program at a school in their neighborhood. The EFL program operates in a total of 87 schools (65 elementary schools, 4 K-8 centers, 14 middle schools, and 4 senior high schools). All schools offer an English/Spanish program; in addition, two of the elementary schools offer an English/Italian program, two of the elementary schools offer an English/French program, and one of the elementary schools offers an English/Haitian Creole program.

An evaluation of M-DCPS’ Extended Foreign Language Program (Shneyderman, 2007) found that students who experienced more instructional time in Spanish outperformed those with less exposure to foreign language instruction. Students in two models of instruction were compared: those who received an average of one hour daily on Spanish language arts instruction and those who received the daily hour of Spanish language arts instruction plus 30 additional minutes daily of science or social studies instruction in Spanish. Non-native Spanish speaking students who received longer periods of instruction scored higher on the reading comprehension portion of the Aprenda 2 in 2004, 2005, and 2006. In 2006, students who received longer periods of instruction scored at the 66th percentile, while students who received fewer hours of instruction scored at the 52nd percentile. Native Spanish speaking students who received longer periods of instruction scored higher on the Aprenda 2 in 2004 and 2005, but not in 2006. In 2006, native Spanish speaking students in both program models scored at the 75th percentile.

The International Studies (IS) Program provides students with an international perspective that promotes a comprehensive understanding of other nations, cultures, and languages. Students study a second language in the context of the culture, history, and art of the country where the language is spoken. The program is operated in conjunction with governments such as Spain, France, Italy, and Germany. These governments’ foreign ministries of education supply M-DCPS with teachers, professional development, and instructional materials. The IS program provides students with three hours of content area instruction in the target language daily as part of an extended school day. The program operates in a total of 9 schools (6 elementary schools, 2 middle schools, and 1 senior high school). Programs in French, German, Italian, and Spanish are offered.

The majority of M-DCPS’ schools operate on a traditional schedule (six one-hour classes each day). Approximately 29 middle schools and 10 senior high schools utilize block scheduling. These schools use an A/B blocking model, based on a six-period day. Students attend three 120-minute classes on alternating days for the full school year.

M-DCPS senior high schools that are participating in the Secondary School Reform Plan also use an A/B blocking model, but it is based on an eight-period day. Students attend four 90-minute classes on alternating days for the full school year. In 2006-07, 11 senior high schools participated in the Secondary School Reform Plan. Fourteen additional senior high schools will participate in the program during the 2007-08 school year.

The 39 schools included in the School Improvement Zone also use block scheduling and extra class periods to provide additional instructional time directed at literacy and mathematics, although foreign language blocks are not offered.

**Summary**

This Information Capsule reviewed research regarding the timing of foreign language instruction. It is important to remember that time is only one of the factors that contribute to students’ successful acquisition of a foreign language. Student aptitude for language learning, motivation, and engagement, as well as the quality of the instructional program, all play key roles in students’ mastery of a foreign language. Researchers generally agree that the more instruction students receive, the more proficient they will become. Some researchers recommend foreign language instruction begin as early as possible, while others have concluded there are
benefits to beginning instruction at 9 or 10 years of age. Studies conducted to determine the best age at which to begin foreign language instruction have produced mixed results. There is, however, general agreement that the age at which instruction begins is less important than the quality of instruction and the continual exposure to the language over extended periods of time. Research has not provided conclusive evidence to support the effectiveness of block scheduling, compared to traditional one-period-per-day foreign language classes. Early indications are that longer class periods over fewer months may promote higher levels of language proficiency. A brief summary of Miami-Dade County Public Schools’ foreign language programs and schedules was also provided in this report.

All reports distributed by Research Services can be accessed at http://drs.dadeschools.net by selecting “Research Briefs” or “Information Capsules” under the “Current Publications” menu.

References


