



Concord Public Schools &
Concord Carlisle High School

**Elementary World Language Consideration Committee
Report to the Superintendent**

Benefits, Obstacles and Recommendations for a
New Language Program at the Elementary Level

February 2015
Concord, Massachusetts

To: Superintendent Diana Rigby
From: Kristen Herbert on behalf of the EWL Committee
Re: Recommendations for K-5 Elementary World Language Program
Date: February 2015

In the summer of 2014, a committee was formed to investigate the possibility of adding the study of a World Language to our program in the elementary grades (kindergarten – grade 5). The committee members were: Bob Lemaire (5th grade Thoreau School), Michelle Wison (5th grade Alcott School), Kim Rivers (5th grade Willard), Kate Keating (CMS Language Dept. Chair), Yolanda Volpe (CCHS Language Dept. Chair), Heather Bout (parent, Willard School), and Kristen Herbert (Director of Teaching and Learning, CPS & CCHS).

We met four times during the 2014 – 2015 school year. We researched the benefits of having a world language program both from published research and like communities that have a program. We collected information on the obstacles to adding a program. Weighing the benefits and the obstacles, **we do recommend that an elementary world language program be implemented** under certain conditions. The following report gives particulars in each of these areas.

Section I: Benefits of An Elementary World Language Program

In order to research the benefits of the study of a world language at the elementary level, our committee began by brainstorming what we think they are. We followed this up by doing research. Some of our committee members spoke with like-districts that have highly effective programs. Others of us reviewed the research studies that have been done on the subject.

Our committee found that there were six main benefits to implementing an effective world language program: 1) wider opportunities in the future; 2) increased potential for fluency ; 3) various cognitive benefits; 4) improvements in academic performance in other areas; 5) improved results on standardized testing; and, 6) increased potential for human connections. Each benefit is discussed below.

1) Study of a second language opens doors to opportunities.

- We live in a global society, where cultural and linguistic competence will become increasingly critical as our children inherit it.
- Language and cultural skills will become fundamental to success.
- Language study improves college acceptance rates and career opportunities.
- Speaking a second language increases access to people and resources.
- America’s economic security depends on linguistic and cultural fluency.
 - “A pervasive lack of knowledge about foreign cultures and foreign languages threatens the security of the United States as well as its ability to compete in the global marketplace and produce an informed citizenry... Language skills and cultural expertise are also urgently needed to address economic challenges and the strength of American businesses in an increasingly global marketplace. Professions such as law, health care, social work, and education call out for an international dimension that reflects the changed world environment and increasingly diverse U.S. population.” (NEA 2007)

- Most countries in Europe and many throughout the world begin language study in elementary school. We are currently leaving ourselves at a competitive disadvantage.

2) Early study of a second language increases potential for fluency.

- Many experts agree that children should learn a foreign language as early as possible. (Nash, 1997)
- From birth to adolescence, the brain is literally “wired” to acquire language naturally. Early exposure allows children to optimize this window of opportunity, when they can absorb sounds, structures and intonation patterns naturally, as they did with their mother tongue.
- A child learns multiple languages in parallel paths, enabling natural absorption, as compared to the translation-based learning often required later.
 - “The power to learn a language is so great in the young child that it doesn’t seem to matter how many languages you seem to throw their way....They can learn as many spoken languages as you can allow them to hear systematically and regularly at the same time. Children just have this capacity. Their brain is ripe to do this...there doesn’t seem to be any detriment to....develop[ing] several languages at the same time” according to Dr. Susan Curtiss, UCLA Linguistics professor. (Curtain & Dahlberg 2004)
 - “The learning experiences of a child determine which [neural] connections are developed and which no longer function. That means what is easy and natural for a child – learning a language – can become hard work for an older learner.” (Curtain & Dahlberg 2004)
- The ability to absorb language fluently and accurately reproduce linguistic tones significantly decreases at adolescence (Curtiss, 1995; Johnson and Newport, 1989).
- Studies suggest that children who learn a language before adolescence are more likely to attain native-like pronunciation. (Harley, 1986; Patkowski, 1990)

3) Study of a second language results in cognitive benefits.

- Foreign language study increases Grey Matter
 - “Bilingual children in one study reported in Nature showed a significantly larger density of grey matter in their brains. And those who had been exposed to a second language from an early age proved to have the most grey matter of all. Grey matter is responsible for processing information, including memory, speech and sensory perception. And if it can be increased by exposure to a second language, then language learning would be just like taking your brain to the gym.” (*Dinçay 2007*)
- Studying a foreign language increases creativity and ability to solve complex problems. (Bamford and Mizokawa, 1991)
- Bilinguals outperform others in both verbal and non-verbal tests of intelligence. (Bruck, Lambert, and Tucker, 1974; Hakuta, 1986; Weatherford, 1986)
- Foreign language learners have better listening skills and sharper memories than their monolingual peers. (Lapkin, et al 1990, Ratte 1968)
- Early language study results in greater skills in divergent thinking and figural creativity. (Landry 1973)
- Language learners show greater cognitive flexibility, better problem solving and higher order thinking skills. (Hakuta 1986)
- Research suggests that foreign language study “enhances children’s understanding of how language itself works and their ability to manipulate language in the service of thinking and problem solving.” (Cummins 1981)

4) Study of a second language improves academic results in other subjects.

- Foreign language study improves vocabulary and reading skills in primary language as well. (York University Study)
- “The more children learn about a foreign language, the more they understand about their own language.” (Nancy Rhodes, director of foreign language education at the Center for Applied Linguistics)
- Numerous studies have shown a positive relationship between foreign language study and ELA achievement (Barik and Swain, 1975; Genesee, 1987; Swain, 1981). All of these results suggest that second language study helps enhance English and other academic skills.
- Evidence shows foreign language study improves performance in ELA, social studies, and math. Foreign language learners consistently outperform control groups in core subject areas on standardized tests, often significantly. (Armstrong & Rogers 1997; Saunders 1998; Masciantonio 1977; Rafferty 1986; Andrade 1989; Kretschmer & Kretschmer 1989)
- Students in Kansas City foreign language magnet schools in 1988 had surpassed national averages in all subjects by the time they reached fifth grade. These foreign language students performed especially well in mathematics. (Eaton 1994)
- Foreign language students within an urban magnet program scored well above anticipated national norms in both reading and mathematics and higher than the average of all magnet school participants, despite the fact that they represent a broad cross-section of the local community. (Andrade 1989)
- Mastering the vocabulary of a second language enhances student comprehension and abilities in reading, writing, mathematics and other subjects. (Saville-Troike 1984)
- Bilingualism fosters the development of verbal and spatial abilities. (Diaz 1983)
- Students learning a second language in elementary school surpassed those who were not in English reading and language arts tests. (Mavrogenes 1979).
- Early second language study promotes achievement in English vocabulary and reading skills. (Masciantonio 1977)
- Foreign language learners consistently score higher than their non-language-learning peers in measures of English vocabulary, particularly when the language studied has Latin roots. (Masciantonio 1977)
- Bilingual children have been shown to understand better than monolingual children the representational concept of print as related to the spoken language.
- A 2001 study showed that children who studied languages as of kindergarten were better than their peers at grammatical judgment, correction tasks, and word recognition in their native language. (Demont 2001)
- In Science, bilingual children show an improved ability to formulate scientific hypotheses and use more complex scientific language in communicating them. (Kessler & Quinn 1980)

5) Study of a second language correlates to improved standardized test scores.

- Foreign language students consistently perform better on SAT and ACT tests. (College Board 2007, 2004, 2003, 1992, 1987, 1984, 1982, 1981...)
- Students who study a foreign language outperform others in mathematics, even when language study takes away time from math instruction. (Caccavale, 2007)
- A study conducted in Louisiana in the 1980s showed that students who received daily instruction in a foreign language outperformed those who did not receive such instruction on the third-, fourth-, and fifth-grade language arts sections of Louisiana's Basic Skills Tests (Rafferty, 1986).
- A study of third graders showed those who studied Spanish to perform higher in both Math and Language on the Metropolitan Achievement Test (MAT). (Armstrong & Rogers 1997)
- Students in an immersion program in Kansas City, MO scored higher than their peers in standardized tests and divergent thinking tests. (Cade 1997)
- Multiple studies have shown a correlation to higher scores on standardized tests in reading, language arts, and math for students who have studied foreign languages. (Armstrong & Rogers 1997, Saunders, 1998, Masciantonio 1977, Rafferty 1986, Andrade, Kretschmer & Kretschmer 1989)
- A 2007 study in Harwich, Massachusetts showed that students who studied a foreign language outperformed their non-language-learning peers on the MCAS test after two to three years, and significantly outperformed them after seven to eight years.(Caccavale)

6) Study of a second language builds cross-cultural understanding and empathy.

- Studying a foreign language and culture promotes of understanding of people who come from different backgrounds.
 - "The age of ten is a crucial time in the development of attitudes toward nations and groups perceived as 'other' according to the research of Piaget, Lambert and others. At age 10, children are in the process of moving from egocentricity to reciprocity and information received before age 10 is eagerly received." (Curtain & Dahlberg 2004)
- Foreign language learners tend to be more tolerant of differences among people. (Carpenter & Torney 1974)
 - This encourage increased empathy, understanding, and kindness among children.
- Communicating in a second language provides a greater depth to children's understanding of the human experience.

Note: Benefits of second language study increase when started early.

- "Learning another language actually enhances a child's overall verbal development." (Roberta Michnick Golinkoff Ph.D, author of *How Babies Talk*)
- "Children who learn a foreign language beginning in early childhood demonstrate certain cognitive advantages over children who do not." (Caccavale 2007)
- "Studies have shown repeatedly that foreign language learning increases critical thinking skills, creativity, and flexibility of mind in young children." (Caccavale 2007)
- "Children who learn a foreign language at an early age also exhibit better problem-solving skills, enhanced spatial relations, and heightened creativity." (Languagestars.com)
- Proficiency or regular study are necessary to see corollary benefits. The longer the study, the greater the benefits. (King & Mackey, 2007)
 - Research indicates that children who are exposed to a foreign language at a young age achieve higher levels of cognitive development at an earlier age. (Bialystok & Hakuta 1994; Fuchsén 1989)

Section II: Obstacles to Implementing An Elementary World Language Program

Our committee found that there were three main obstacles to implementing an effective world language program in Concord: budget, time in the elementary schedule, and adding to the crowded elementary curriculum.

Budget

- In order to create and sustain a EWL program, there are a number of cost centers: hiring and funding teachers; supporting the development of instructional materials; purchasing supporting materials (manipulatives, puppets, music, picture books, etc.); professional development for the teachers; and, supporting program evaluation and assessments.
- The level of the necessary budget would be determined by the scope of the program (how many grade levels in the program).
- The uncertain nature of the size of the educational budget from year to year is a major challenge to implementing an EWL program. About ten years ago, an EWL program was implemented in Concord only to have it cut through the budget process the following school year.
- Our committee had hoped to have the possibility of an EWL program to be implemented during the 2015-2016 school year. Unfortunately, this is not possible in the current fiscal climate.

Adding to the Crowded Elementary Curriculum

- There are already many great areas of curriculum in the elementary schools: English language arts; mathematics, social studies, science, art, music, physical education, health, technology, etc.
- Research has shown that many of the most effective pedagogical strategies, meaning students retain the information the longest, take more time for teachers to design the curriculum.

Time in the Elementary Schedule

- Elementary educators in Concord are challenged every year to fit in all the pieces to the weekly schedule.
- For example, an EWL program in grade 5 would provide a good transition to the language program at Concord Middle School; however, the schedule here has to include the regular curriculum program, time for intervention and enrichment, added health curriculum, DARE, standardized assessments, and an elementary instrumental program. Individual schools also build in: buddy classrooms; chorus; school assemblies; and other additional programs.
- With the intervention times that are scheduled, there is already a danger of having the students' daily lives too chopped up with 15-20 minutes here or there, not allowing for a long investigation of a curriculum area. Adding another subject into this mix could potentially segment time even more.

Section III: Qualities of Our Recommended Elementary World Language Program

Our recommendation is that we implement an Elementary World Language Program that has oral fluency as the central goal. From our research, we have recommendations in the following areas: language choice; curriculum design & instructional strategies; instructional materials; and assessment and evaluation procedures.

Language Choice

- At this point, Spanish is the most likely candidate for implementation in Concord due to prevalence of curriculum programs, materials, and qualified teachers.
- Many schools have also implemented successful programs supporting French, Mandarin, and even Japanese.

Curriculum Design & Instructional Strategies

- The ideal model of Elementary World Language is the FLES model of instruction (using concepts listed in next bullet points). This is used in Brookline, MA in grades K – 6 and in Lincoln, MA in grades 3 – 5.
- *A content-enriched program* would be most effective within the realistic range of our capabilities in Concord. A content-enriched program is one in which language lessons include concepts and themes from other subjects such as math, science and geography, used as both learning tools for the foreign language and as reinforcement of concurrently taught content. (This is distinct from a *content-based program*, where one or more academic subjects are taught in the foreign language.)
- Curricula should be based on the “5 C’s” of language learning: Communities, Communication, Cultures, Connections, and Comparisons.
- Teaching methods should be interactive and fun, incorporating games, songs, and small-group activities to keep students engaged and motivated to learn.
- Technology can also be leveraged to build skills and to connect students with other students learning the same language in other places. For example, safe “sister school” relationships could be created. Another example is partnering students from our elementary schools with students from our high school, especially seniors, as buddy classrooms.

Instructional Materials

- Materials will obviously be chosen based on the curriculum chosen, but it’s worth noting that of the schools often highlighted as having ‘model’ programs nationwide, none has adopted textbooks as the core of its instructional program.
- Ideally, teaching staff will identify or develop materials that will support learning in an existing context or tie into the regular curriculum. Neighboring districts with an EWL program have hired teachers to develop materials for 6 months or so full time before they begin teaching.
- Materials should be varied, supporting both visual and auditory learners.

Assessment & Evaluation Procedures

- With younger students and experiential learning techniques, evaluation procedures are not necessarily based on written tests. They will likely be task-oriented (i.e. describing the contents of a backpack) or conversation-based.
- Evaluations will be developed in conjunction with the curriculum.
- In addition to student assessment, the language program itself should be evaluated periodically for maintenance and improvement, ideally through a process that incorporates feedback of staff, parents and past and current students.

Section IV: Possible Implementation Plan(s)

The members of our committee whole-heartedly support the implementation of an Elementary World Language Program. Given the obstacles, we have outlined our best recommendation along with some other good options. We also give recommendations on scheduling, staffing, alignment and articulation, and potential pitfalls.

Scope of the Program

- The most effective EWL programs begin in kindergarten and continue through grade 5.
- In the short term, a dual launch of programs in kindergarten and third grade could ‘capture’ a larger segment of the current elementary population, while still only creating two points of curriculum adjustment at the middle school level.
- Going forward, students entering elementary school in first grade or above would need some extra accommodations to help them integrate into the language studies.
- If a program that spans all elementary grades is not possible given possible obstacles, we recommend the program in grades 3 – 5. (We do not think placing a program in just one grade level is worthwhile.) If we go with a grades 3 – 5 program, we recommend that this is seen as phase 1 in a program that looks towards a full K – 5 program.

Scheduling

- Given our budgetary and time constraints, we recommend students have language instruction at each grade level for a minimum of 60 minutes a week.
- We recommend students have language instruction at least twice a week. Our ideal is that students have language instruction three times a week, or about every other day.
- We recommend scheduling EWL as a special, such as art, music, and PE.

Staffing and Professional Development

- Recruiting engaging and inspiring language teachers is critical to a successful program.
- Ongoing professional development should be available for language teachers to keep the program fresh and current.
- It would also be beneficial to offer opportunities for current elementary teachers to learn the chosen language if interested.
- Common planning time is recommended for all elementary world language teachers so that they can create lessons and units.
- Common planning time across all grades levels (K – 12) is necessary for alignment of the curriculum.

Alignment and Articulation

- Both the middle school and high school language departments (of the chosen language) will need to adjust their curricula in preparation for an incoming class of students with enhanced language skills. This will provide for opportunities to experience the language in deeper and more advanced ways at both levels.
 - This may need to happen in two stages if languages are implemented in two grades at once (i.e. kindergarten and third grade).

- Teachers at all levels will need to coordinate in order to ensure proper alignment of teaching trajectory.

Potential Pitfalls (which have historically thwarted attempted language programs)

1. Scheduling language classes too infrequently
 2. Treating foreign languages differently from other academic subjects
 3. Planning and scheduling a language curriculum in isolation from the general curriculum
 4. Launching a weak program with the hopes of 'strengthening' it later
-

Section V: Summary

Our committee recommends that we do implement an elementary world language program. We found the benefits of having a world language program to include: 1) wider opportunities in the future; 2) increased potential for fluency ; 3) various cognitive benefits; 4) improvements in academic performance in other areas; 5) improved results on standardized testing; and, 6) increased potential for human connections.

There would be, however, significant obstacles to adding a elementary world language program, such as: budget, time in the elementary schedule, and adding to the crowded elementary curriculum. Each of these would have to have complex and long-lasting solutions created in order to implement an effective program without negatively impacting the rest of our engaging curriculum.

Weighing the benefits and the obstacles, we do recommend that an elementary world language program be implemented under certain conditions. The conditions that would have to be further discussed and agreed upon include: scope of the program, scheduling, staffing, alignment and articulation, and solutions to potential pitfalls.

Overall, our committee does recommend implementing an elementary world language program by creating the optimal conditions. Overall our goal is to implement a program that can be sustained long term.