The Benefits of Second Language Study
Research Findings with Citations

Contents

- Status of U.S. second language study 1

Research Findings: Second language study:
- …benefits academic progress in other subjects 2
- …narrows achievement gaps 3
- …benefits basic skills development 3
- …benefits higher order, abstract and creative thinking 4
- …(early) enriches and enhances cognitive development 4
- …enhances a student's sense of achievement 4
- …helps students score higher on standardized tests 5
- …promotes cultural awareness and competency 5
- …improves chances of college acceptance, achievement and attainment 6
- …enhances career opportunities 6
- …benefits understanding and security in community and society 6
- …barriers 6
- Bibliography 7
- Web References 12

Status of second language study in the USA

- "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. The U.S. education system has, in recent years, placed little value on speaking languages other than English or on understanding cultures other than one’s own. Although there have been times in the country’s history when foreign languages were considered as important as mathematics and science, they have reemerged as a significant concern primarily after major events that presented immediate and direct threats to the country’s future. Most recently, the events of September 11, 2001, compelled the federal government to reflect on the expertise of its personnel and to focus attention on the need for more and better language skills, particularly in certain languages considered critical. It would be shortsighted, however, to limit national attention to the needs of government alone. 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. The U.S. education system—from elementary and secondary school to higher education—needs the capacity to provide the requisite training. Higher education needs the
capacity to serve as a resource on the politics, economics, religions, and cultures of countries across the globe, countries whose positions on the world stage change over time, often in unpredictable ways." (National Research Council 2007)

- "All but two countries (Ireland and Scotland) in the European Union mandate the study of a foreign language, which usually begins in primary school. With the exception of Italy and Wales, all European students must learn a foreign language throughout their compulsory education." (Eurydice 2005)

- "Interest in and support for language study has been strengthened in the United States in recent years by the growing recognition that proficiency in more than one language benefits both individual learners and society. For the individual language learner, research has found a positive link between second language proficiency and cognitive and academic ability. (And) a multilingual workforce enhances America’s economic competitiveness abroad, helps maintain our political and security interests, and promotes tolerance and intercultural awareness." (Marcos & Peyton 2000)

- In addition to developing a lifelong ability to communicate with people from other countries and backgrounds, other benefits include improved overall school performance and superior problem-solving skills. (Bamford & Mizokawa 1991; Hakuta 1986)

**Second language study benefits academic progress in other subjects**

- Applying current standard practices of foreign language instruction ("Five Cs of Communication, Culture, Connections with other disciplines, Comparisons with students' native languages and cultures, and use of the foreign language in Communities outside the classroom") reinforces English language course content of other coursework. (Curtain & Dahlberg 2004)

- Learning another language can enhance knowledge of English structure and vocabulary (Curtain & Dahlberg, 2004).

- A study of 13,200 third and fifth graders in Louisiana public schools revealed that, regardless of race, gender, or academic level, children taking foreign language classes did better on the English section of the Louisiana Basic Skills Test than those who did not. (Dumas 1999)

- Strong evidence shows that time spent on foreign language study strongly reinforces the core subject areas of reading, English language literacy, 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)

- One study found students scored significantly higher in math and language arts after one semester of foreign language study 90 minutes per week. (Armstrong 1997)


- Students who started kindergarten in the first 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)

**Second language study narrows achievement gaps**

- Children of color, children from economically disadvantaged backgrounds, and English Language Learners make the greatest proportionate achievement gains from foreign language study. Early foreign language study is less dependent on previous verbal learning than most other elements of the elementary school curriculum and this allows some students to succeed who have otherwise experienced repeated failure in school. (Curtain & Dahlberg 2004)
- A study of 13,200 third and fifth graders in Louisiana public schools revealed that, regardless of race, gender or academic level, children taking foreign language classes did better on the English section of the Louisiana Basic Skills Test than those who did not. (Dumas 1999)
- Foreign language study can help to alter the trajectory for children of average intelligence and narrow the achievement gap. (Garfinkel & Tabor 1991)
- Cincinnati’s Foreign Language Magnet Program has a student population that is 57% African American and 43% Caucasian, with 52% of the total receiving free and reduced lunch. Achievement for these children far exceeds national norms in both reading and math and participants in the foreign language magnet program on average score higher than the average of all Cincinnati’s many magnet programs. (Andrade, Kretschmer & Kretschmer 1989)
- In a four year study by McGill University, working class students did just as well in foreign language as middle-class students even though their English skills were not as good. (Holobow 1988)

**Second language study benefits basic skills development**

- A study of 13,200 third and fifth graders in Louisiana public schools revealed that, regardless of race, gender or academic level, children taking foreign language classes did better on the English section of the Louisiana Basic Skills Test than those who did not. (Dumas 1999)
- There’s a high positive correlation between foreign language study and improved reading scores for children of average and below average intelligence. (Garfinkel & Tabor 1991)
- Foreign language learners have better listening skills and sharper memories than their monolingual peers. (Lapkin, et al 1990, Ratte 1968)
Second language study benefits higher order, abstract and creative thinking

- Several studies indicate that individuals who learn a second language are more creative and better at solving complex problems than those who do not. (Bamford & Mizokawa, 1991)
- 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)
- Early language study results in greater skills in divergent thinking and figural creativity. (Landry 1973)

Early second language learning enriches and enhances cognitive development

- "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)
- 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; Fuchsen 1989)
- Language learners show greater cognitive flexibility, better problem solving and higher order thinking skills. (Hakuta 1986)
- People who are competent in more than one language consistently outscore monolinguals on tests of verbal and nonverbal intelligence. (Bruck, Lambert, 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)

Second language study enhances a student's sense of achievement

- Foreign language study is an area where children not accustomed to achievement in school are able to excel. The resulting benefit to self-image, self-esteem and satisfaction with school experience are enormous. Evidence from several studies study show language students to have a significantly higher self-concept than do non-language students. (Mascianonio 1977, Saunders 1998, Andrade, et al. 1989)
- Language study is an area in which ELL students can be successful in front of their peers, since bilingual children learn additional languages more quickly and efficiently than monolingual children. (Cummins 1990)
- Offering foreign language study demonstrates to ELL students and their families that languages other than English - and by extension cultures other than the mainstream - are valued. Research suggests that foreign language study “enhances children’s understanding of how language itself works. It also increases their ability to manipulate language in the service of thinking and problem solving.” (Cummins 1981)
Second language students score higher on standardized tests

- Students of foreign languages tend to score higher on standardized tests. Results from the Scholastic Aptitude Test (SAT) show that students who had studied a foreign language for 4 or more years outscored other students on the verbal and math portions of the test. (College Board 2003)
- Students who completed at least four years of foreign-language study scored more than 100 points higher on each section of the SAT than students who took a half year or less. (College Board 2004)
- Students who studied four or five years of a foreign language scored higher on the verbal section of the 2004 SAT than students who had studied any other subject for the same number of years. (Cooper 1987; Eddy 1981)
- Other studies correlate bilingual proficiency with higher scores on standardized tests and tests of both verbal and nonverbal intelligence (Caldas & Boudreaux, 1999; Hakuta, 1986; Thomas, Collier, & Abbott, 1993).
- People who are competent in more than one language consistently outscore monolinguals on tests of verbal and nonverbal intelligence. (Bruck, Lambert, Tucker 1974, Hakuta 1986, Weatherford 1986)
- Third-graders who had received 15 minutes of conversational French lessons daily for a year had statistically higher Stanford Achievement Test scores than their peers who had not received French instruction. (Lopata 1963)

Second language study promotes cultural awareness and competency

- In an age of global interdependence and an increasingly multicultural and multiethnic society, early foreign language study gives children unique insight into other cultures and builds their cultural competency skills in a way that no other discipline is able to do. “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)
- “...(E)xposure to a foreign language serves as a means of helping children to intercultural competence. The awareness of a global community can be enhanced when children have the opportunity to experience involvement with another culture through a foreign language.” (Curtain & Dahlberg 2004)
- “The positive impact of cultural information is significantly enhanced when that information is experienced through foreign language and accompanied by experiences in culturally authentic situations.” (Curtain & Dahlberg 2004)
- Experiences in learning a second language and learning another culture will facilitate teachers’ interactions with their students’ learning experience. Competent teachers understand that positive self-concept and positive identification with one’s culture is the basis for academic success. (Lemberger 1990)
- Foreign language learners are more tolerant of the differences among people. (Carpenter & Torney 1974)
Second language study found to improve chances of college acceptance, achievement and attainment

- Students who were in “rigorous” programs in high school—that included three years of foreign language study—were likely to earn better grades in college and less likely to drop out. (Horn & Kojaku 2001)
- Graduating high school seniors with two or more years of foreign language study showed significant superiority in performance on achievement tests in English when compared with nonforeign language students. (Bastian 1980)

Second language study enhances career opportunities

- Studying a foreign language helps students understand English grammar better and improves their overall communication and problem-solving skills. Beyond the intellectual benefits, knowledge of a foreign language facilitates travel, enhances career opportunities, and enables one to learn more about different peoples and cultures. (National Research Council 2007)
- In a survey of 581 alumni of The American Graduate School of International Management in Glendale, Arizona, most respondents said they had gained a competitive advantage from their knowledge of foreign languages and other cultures. They said that not only was language study often a critical factor in hiring decisions and in enhancing their career paths, it also provided personal fulfillment, mental discipline, and cultural enlightenment. (Grosse 2004)
- In recent years, the U.S. government has expressed a need for fluent speakers of languages other than English, particularly in less commonly taught languages such as Arabic and Chinese (U.S. General Accounting Office 2002).
- Students of foreign languages may have better career opportunities. (Carreira & Armengol 2001)

Second language study benefits understanding and security in community and society

- Research suggests that attitudes about other groups and peoples are formed by the age of ten and are often shaped between the ages of four and eight. Learning a language at a young age helps connect a child with another culture while they are still open-minded and have not yet begun to restrict their views of others whom they perceive to be different. (Curtain & Pesola 1988)
- The benefits of foreign language study last throughout one’s lifetime. Recent research indicates that knowing two languages may help stave off age-related mental decline. Researchers compared monolingual to bilingual adults in a test of cognitive function, and bilingualism seemed to offer a protective benefit. (Bialystok 2004)
- The benefits to society are many. Americans fluent in other languages improve global communication, enhance our economic competitiveness abroad, and maintain our political and security interests. (Center for Applied Linguistics 2004)

Barriers to second language study

- "...Not only are American secondary school students studying foreign languages too seldom, and with too little intensity, they are failing to study in sufficient numbers many of the languages essential to meeting the challenges of a new era. (Committee for Economic Development 2006)
- "...Although approximately one million students in the United States study French, a language spoken by 70 million people worldwide, fewer than 40,000 American students
• Opportunities to learn about other languages and cultures are severely lacking in many low-income, minority, and urban school districts. Foreign language instruction is offered in only one-quarter of urban public schools compared with about two-thirds of suburban private schools.

• At the middle-school level, 78 percent of private (non-parochial) schools report that more than half of their students study foreign languages, compared with 51 percent of students in public middle schools.

• In 2003, 29 percent of public school principals in heavily minority school districts anticipated future decreases in instructional time for foreign languages. African-American, Hispanic, and American Indian students earn fewer credits in foreign languages than their white peers. Increasing access to and enrollments in foreign language courses in elementary and secondary schools may not, by themselves, be sufficient to improve foreign language proficiency. The average high school student receives about 150 hours of language instruction per year.

• (Greater language proficiency can be achieved with a longer amount of time on task. (Curtain & Pesola 1988)) Experience has shown that 300 hours of instruction spread over two years is woefully inadequate for high-school students to develop any usable level of proficiency. Elementary-school students, who receive only 30-60 minutes of instruction per week, are even more disadvantaged. Schools may also need to change the way languages are taught. Time on task is important, which may mean greater use of immersion programs and content-based language learning, where subject matter drawn from the school curriculum is delivered in a foreign language. In 2002, only 29 states offered language-immersion programs...

—The Importance of International Studies and Foreign Language Education for U.S. Economic and National Security (Committee for Economic Development 2006)

Bibliography

Andrade, C., et al. (1989). Two languages for all children: Expanding to low achievers and the handicapped. In K. E. Muller (Ed.), "Languages in elementary schools" (pp. 177-203). New York: The American Forum. (**"Describes student performance in the Cincinnati Foreign Language Magnet Program. These children score 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 Cincinnati community.")

Armstrong, P.W. and J.D. Rogers. (1997). Basic Skills Revisited: The Effects of Foreign Language Instruction on Reading, Math and Language Arts.” Learning Languages, Spring. 20-31. (**"Presents a study that provides quantitative and qualitative evidence of the effect of foreign language education upon the basic skills of elementary students, with the hope that such evidence will provide information and assistance to parents and educators who are investigating the benefits of elementary school foreign language programs.")


Idaho. ("Graduating high school seniors with two or more years of foreign language study showed significant superiority in performance on achievement tests in English when compared with nonforeign language students.")


Brega, E., & Newell, J.M. (1967). "High-school performance of FLES and non-FLES students." *Modern Language Journal*, 51, 408-411. ("Compares performance of two groups of 11th grade students on MLA French examination (advanced form) in listening, speaking, reading, and writing. One group of students had begun French in Grade 7, the other group had also had 80 minutes per week of FLES beginning in Grade 3. FLES students outperformed non-FLES students in every area.")


Campbell, W.J. (1962). "Some effects of teaching foreign language in the elementary schools." NY Hicksville Public Schools.: Dec. (ED013022) ("Contrasts performance in all school subjects of FLES (20 minutes per day) and non-FLES students, all selected to have IQ of 120 or above. Data collected over 3 years suggests that FLES has a positive effect.")


[http://faculty.ucmerced.edu/khakuta/research/publications/](http://faculty.ucmerced.edu/khakuta/research/publications/)


Horstmann, C.C. (1980). *The effect of instruction in any of three second languages on the development of reading in English-speaking children* (p. 3840). DA, 40, 07-A. (*"Compared reading scores in Cincinnati program among French, German, and Spanish learners in Grade 2 and a control group. There were no deficiencies; German group showed a significant positive difference over control group.")

Johnson, C.E., Flores, J.S., & Ellison, F.P. (1963). "The effect of foreign language instruction on basic learning in elementary schools." *Modern Language Journal*, 47: 8-11. (*"Performance on Iowa Test of Basic Skills was compared for fourth-graders receiving 20 minutes per day of audio-lingual Spanish instruction and similar students receiving no Spanish instruction. No significant loss in achievement in other subjects was found; the experimental group showed greater achievement in reading, vocabulary, and comprehension.")


Lipton, G., Rhodes, N. & Curtain, H. (Eds.). (1985). "The many faces of foreign languages in the elementary school: FLES, FLEX, and immersion." Champaign, IL: American Association of Teachers of French. (ERIC Document Reproduction Service No. ED 264 727). (*"Describes FLEX program: 30 minutes per week, taught by volunteers in many languages, all grades. ITBS scores for participants were higher than those for nonparticipants.")

Lopata, E.W. (1963). "FLES and academic achievement." *French Review*, 36: 499-507. (*"Classes of third-grade children in New York City and suburban New York schools were taught conversational French for 15 minutes daily. After 1 year they were evaluated for French skills, and their scores on the Stanford Achievement Test were compared with scores of children who had not received French instruction. All statistically significant differences were in favor of the experimental group, and seven of eight mean differences
were in favor of the experimental group. Children were judged to have pronunciation and fluency in French superior to that of high school students with the same amount of instruction.


Mavrogenes, N.A. (1979). "Latin in the elementary school: A help for reading and language arts." *Phi Delta Kappan*, 60: 675-77. (**Cites studies in several cities in which FLES students surpassed non-FLES students in test performances in reading and language arts. Washington study includes students in Spanish and French as well as Latin.")


Nespor, H.M. (1971). *The effect of foreign language learning on expressive productivity in native oral language*. (p. 682). DA, 31 (02-A) University of California, Berkeley. (**Foreign language learning in Grade 3 is shown to increase expressive oral productivity in pupils' native languages.")


Rafferty, Eileen A. (1986). *Second Language Study and Basic Skills in Louisiana*, 80-85. Baton Rouge: Louisiana Department of Education. (ED283 360). (**Third, fourth, and fifth graders studying languages showed significantly higher scores on the 1985 Basic Skills Language Arts Test than a similar group of nonparticipants. In addition, by fifth grade the math scores of language students were also higher than those of nonlanguage students.")


Samuels, D.D., & Griffore, R.J. (1979). "The Plattsburgh French language immersion program: Its influence on intelligence and self-esteem." *Language Learning*, 29: 45-52. (**Tested 6-year-olds after 1 year in French immersion with WISC and Purdue Self Concept Scale. No significant difference on Verbal IQ or PSCS; significant differences in favor of immersion students on Performance IQ, Picture Arrangement Object Assembly.")


Vocolo, J.M. (1967). "The effects of foreign language study in the elementary school upon achievement in the same foreign language in the high school." *Modern Language Journal, 51:* 463-469. (*"FLES students were found to have significantly better performance in listening, speaking, and writing when compared to non-FLES students at the end of an intermediate-level high school French class.")


**Web References**

American Council on the Teaching of Foreign Languages (<*Comments about references are from) <http://www.actfl.org>*


National Council of State Supervisors for Languages
NCSSFL is an organization of education agency personnel from all states of the United States who have the responsibility of foreign/world language education at the state level. <http://ncssfl.org>

Committee to Review the Title VI and Fulbright-Hays International Education Programs, Mary Ellen O'Connell and Janet L. Norwood, editors, National Research Council <http://books.nap.edu/catalog/11841.html>.