

## The Benefits of Latin?

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*Classicists have long claimed that the study of Latin has benefits that exceed knowledge of the language itself, and in the current economic times, these claims are made with urgency. Indeed, many contend that Latin improves English grammar and writing skills, cognitive abilities, and develops transferable skills necessary for success in the sciences. In and of itself, the study of Latin seems to be a topic of concern primarily within Classics departments. However, given the broad claims that have been made about the benefits of Latin for educational development, it is useful to investigate the role of Latin within elementary and high school curriculums as it relates to learning: does the study of Latin improve cognitive abilities and English skills, including grammar and vocabulary?*

In order to address this question, this article will begin by surveying the historical background of the debate, beginning with the 1921-1924 study by the American Classical League (ACL). It will then consider the claims tested in the ACL study, using modern research to assess their validity. Lastly, it will consider the possible benefits of Latin in light of the surveyed research.

Arguments about the applicability and benefits of Latin can be found throughout history. Within the American educational system, Latin was a central part of primary, secondary and postsecondary education in the nineteenth and early twentieth centuries. In the early 1920s, classicists noted with some alarm a decline in the number of Latin and Greek courses being taught within America's school systems. A study by the newly formed American Classical League was commissioned from 1921 to 1924 in an attempt to ascertain if claims about the study of Latin were verifiable. The study designers undertook it with the assumption that the benefits

of Latin would be validated, and thus there would be a resurgence of Latin courses taught. Classicists at this time contended that the study of Latin not only helped students to learn English grammar and composition, but that it imparted moral and cultural values to students (Mavrogenes 1979). Also, the academic discipline required to master the language arguably transferred into excellence in other studies.

The ACL's study was nation-wide and included figures such as Thomas Briggs, W.W. Charters and E. Thorndike among its advisors, though Thorndike was the only psychologist to contribute (Warga 2009). The study began by attempting to determine what was actually being taught in schools and then to examine any possible connections between Latin and English, and cognitive skills. Surprisingly to members of the ACL, Thorndike's test of the correlation between Latin and increased English vocabulary demonstrated that it was not as high as many had hoped (Warga 2009). When it came to the issue of grammar, students who had not studied Latin performed comparably to those who had. Many of the differences between the students were statistically quite small, one to two points on a one hundred point scale (Warga 2009). Following the startling findings of the ACL's study, classicists shifted their argument to focus on the connection between Latin and English. By effectively misrepresenting the study's findings, classicists claimed that the study of functional Latin, which did not emphasize aspects of Latin grammar, would help to improve knowledge of English grammar.

In the 1970s, the debate about the decline of Latin courses offered in schools was revived following an analysis of SAT scores. A study found that the average verbal scores dropped 33 points between 1957 and 1973 (Mavrogenes 1979). This revived interest in Latin, as proponents were quick to point to the findings of the ACL report and to offer Latin as a solution to dropping SAT scores (Mavrogenes

1979). Numerous studies were undertaken that reexamined the potential of Latin to improve not only test scores, but also Latin's relationship to cognitive abilities, its ability to enrich knowledge of English vocabulary and grammar, and its potential to transfer to other academic subjects. It is in these four areas that recent research has focused.

Some scholars theorized that the discipline required to attain mastery of Latin is indicative of higher than average cognitive abilities. Though there was a plethora of studies in the 1970s, one of the most important that addressed the relationship between Latin and cognitive abilities was written concurrently with the ACL study. Thorndike (1924) challenged a key claim that Latin improved mental discipline and intelligence. Thorndike tested over eight thousand students in the ninth through eleventh grades with multiple kinds of intelligence tests. He was attempting to ascertain if the study of certain academic disciplines could improve intelligence. He found no connection between the two (Warga 2009; Haag and Stern 2003). Rather, he concluded that students who were precocious were drawn to more difficult subjects. Haag and Stern (2003) ran a similar test to that of Thorndike's in Nuremberg, focusing on students in grade five. They found no differences in verbal and non-verbal IQ between those who had and had not taken Latin. This was a longitudinal study, and Haag and Stern returned to examine deductive and inductive reasoning capabilities among those who had studied Latin. They found no significant differences there, either. However, not all subsequent research has supported Thorndike's conclusions. Citing Piaget and Vygotsky, Nancy Mavrogenes held that learning Latin not only would help to expand students' vocabulary, but also improve their cognitive skills, pronunciation, and reading comprehension (1979). In a 2004 article, VanTassel-Baska enumerated nine areas that benefited from the study of Latin. Included among these were

intellectual habits of the mind, higher-level thinking and deep analysis.

Turning to academic performance, the claim that the requisite skills needed to learn Latin promote academic excellence in other subjects has been the subject of scholarly inquiry since the ACL study. In order for skills to transfer from one discipline to another, it is necessary that the disciplines have common elements; Thorndike (1924) held that there must be overlap. A 1933 examination of the grades of Yale College students found that men who had taken thirty hours of Latin (required for the A.B. degree) had a higher GPA than students who did not (Whelden 1933). Whelden suggested that the skills acquired via the study of Latin transferred into other subjects. A more recent study concluded that learning Latin was responsible for improvements in math skills. In Indianapolis, sixth grade students who had taken Latin were compared to students who had not. Using the Metropolitan Achievement Tests, the study found statistically significant improvement not only in the English skills of the Latin group but also in math problem solving, computation and concepts (Mavrogenes 1977).

However, the research regarding the acquisition of second and third languages raises questions about the transfer argument. A study by Ringborn (1997, in Cunningham & Graham 2000) and Odlin (1990, in Cunningham & Graham 2000) found that “transfer between languages with close genetic relationships results in more rapid acquisition” of a second language (Cunningham & Graham 2000, p. 37). Haag and Stern (2003) contended that because of its structure, Latin would be of little help to students struggling to learn modern grammar. In a follow-up to the Nuremeberg study, they found that students who studied Latin and then Spanish were less well prepared to learn Spanish than students who had started with French (Haas and Stern 2003). Spanish and French share structural commonalities, which make transfer

possible. Indeed, Haas and Stern postulated that Latin may have a negative transfer effect, making it *more difficult* to learn romance languages.

Other research has contradicted these findings. Mavrogenes (1977) reviewed several studies that explored the relationship between Latin and third language acquisition. In Washington D.C., sixth grade students took a one-year Latin course before taking courses in either French or Spanish. Latin students were better prepared to begin foreign language study than their counterparts who had no Latin preparation. The Latin students began third language study on average two years earlier. Mavrogenes argued that Latin promoted linguistic awareness. However, the results of this study on third language acquisition cannot be applied in the same fashion as Haas and Stern's study. Students were deemed eligible to pursue study of French or Spanish based upon their performance in English, and thus, it would seem that Latin promoted the development of English skills.

Similarly, many contend that Latin helps to promote the development of a rich English vocabulary due to the genetic relationship between the two languages (Masciantoni 1977). Given that sixty percent of English words come from Latin, this is no surprise (VanTassel-Baska 2004; Homes & Keffer 1995). Much research has validated this; a 1920 study by Gilliland used 115 randomly selected college freshmen and tested their ability to define forty words. These words originated from Anglo-Saxon, Latin and Greek languages. Students who had studied Latin performed the best, not only regarding words which originated from Latin, but also on words with Greek roots. Masciantonio (1977) reviewed numerous studies conducted during the early 1970s, and all the studies saw a marked improvement in English vocabulary among students who had taken Latin. Research by Berelson and Steiner (1964) found that studying Latin increased knowledge of English vocabulary. Likewise, Lafleuer's 1985

study resulted in the same conclusions. Using 115 students from a college preparatory program, he divided them into four groups. The students who were exposed to Latin did much better on English vocabulary post-tests than those who did not (Holmes & Keefer 1995).

However, broader analyses have found that the study of any foreign language improves English vocabulary. Eddy (1981) and Cooper (1987) examined the effects of foreign language study (German, French, Spanish, or Latin) on the SAT scores of high school students. Eddy concluded that the length of time students spent studying a language (three or more years) was positively correlated with SAT scores. Additionally, the language studied did not make a difference. Cooper, utilizing 1,778 students found that the length of time students spent studying a foreign language had a great effect on their SAT scores: the longer time spent, the higher the scores (1987). In contrast to Eddy's study, Cooper found that students who had studied German scored higher than students had studied other languages. Cooper, Yanosky and Wisenbaker (2008) attempted to replicate Cooper's 1987 study. Using students from sixteen high schools in Gwinnett County, Georgia, they confirmed the results of earlier studies. The length of time students spent studying a foreign language (three years or more) correlated with higher SAT scores. The reason for this gain is because of the acquisition of critical-thinking skills that students develop by taking a foreign language; they are able to apply these skills to the various sections of the SAT (sentence completion, reading comprehension and vocabulary).

In contrast, some studies concluded that it is not the length of time a foreign language is studied, but the language itself. The English skills of students at three public schools in Washington, D.C. were tested using the California Achievement Test. Students were divided into three groups. Latin students had studied Latin for one year; other students

had taken French or Spanish for four years, and the last group had no language training (Mavrogenes 1977). Students who had taken Latin performed at a level five months' higher than students with no foreign language training and .13 years higher than the French/Spanish students.

Studies do not agree about the effects of Latin on English grammar. Early research claimed that Latin promoted English writing skills (Wier 1921), and more recent studies have postulated that because English is derived from Latin, knowing Latin should help students to understand English better (Haas and Stern 2003). An experiment to test this was undertaken at Philadelphia public school. The researchers had students participate in daily Latin lessons for twenty minutes (Mavrogenes 1977). After several weeks, students were tested on their English reading performance using the vocabulary portion of the Iowa Tests of Basic Skills. The study found that students who had taken Latin performed one grade higher than students who had not (Mavrogenes 1979).

However, there is a question as to *why* students' grammatical and reading skills improved. Structurally, Latin and English share little in common. Therefore, knowledge of Latin *per se* would not promote better English grammar due to transfer. It seems that benefits are due to the way in which Latin is taught, rather than the subject matter itself. In order to teach Latin, instructors also teach students about English grammar and rules. Mavrogenes (1977) notes that the Philadelphia study's findings occurred because of teaching methodology: teachers used comparable materials, drilling, aural-oral work and multisensory aids. VanTassel-Baska further held that because learning Latin requires extensive knowledge of grammatical concepts and structures, students are consistently asked to compare Latin and English; this in turn promotes increased knowledge of English grammar (2004). In this fashion, Latin can enhance vocabulary

acquisition and knowledge of syntactic structures (Baca, Mandel & Neshat 1979).

The latter was tested in Los Angeles, using the model of the Philadelphia study. Scores on the California Achievement Test (CAT) were used to determine improvement. Children that received no training in Latin did not show appreciable gains, whereas students who did showed twice the expected gain in scores (1979). A three-year follow-up found that students who took Latin consistently outperformed students who did not on tests of English reading and vocabulary (Baca, Mandel & Neshat 1979). The study found that studying Latin improved English vocabulary and reading comprehension.

Overall, there is evidence to support that the study of Latin has several benefits, including increased English vocabulary and grammatical knowledge. However, research does not indicate that Latin is unique in this regard. Indeed, scholarship suggests that the study of Latin, like that of Spanish or French, has beneficiary *tertiary* effects. Some studies have indicated that students who study Latin have expanded vocabularies, and this is likely due to the genetic relationship between Latin and English. Regarding cognitive abilities and performance in other disciplines such as mathematics, the majority of research does not indicate that Latin gives students any advantage in these areas.

That being said, Latin, like other foreign languages, still has much to offer students. In an effort to promote the study of Latin, classicists are proponents and avid users of emerging technology that helps to enliven the study of antiquity. Sites such as the Perseus project or the *TLG* make ancient texts accessible to scholars and students alike. Also, it is through the study of classics that students are introduced to the foundations of the modern intellectual world. However, as classicists noted in the 1920s, the study of Latin and more

broadly classics, is in decline, a situation that likely will not change in the foreseeable future.

### References

- Baca, A., E. Mandel, and K. Neshat. (1979). Language transfer project of the Los Angeles Unified School district. *The Classical Outlook* 56(1): 74-80.
- Cooper, T. D. (1987). Foreign language study and SAT-verbal scores. *Modern Language Journal* 71, 381-387.
- Cooper, T., D. Yanosky, and J. Wisenbaker. (2008). Foreign language learning and SAT verbal scores revisited. *Foreign Language Annals* 41(2), 200-217.
- Cunningham, T. and C. Graham. (2002). Increasing native English vocabulary recognition through Spanish immersion: cognate transfer from foreign to first language. *Journal of Educational Psychology* 92(1), 37-49.
- Eddy, P. A. (1981). *The effect of foreign language study in high school on verbal ability as measured by the scholastic aptitude test-verbal*. Washington D.C.: Center for Applied Linguistics.
- Gilliland, A. (1923). The effect of the study of Latin on ability to define words. *The Journal of Educational Psychology* 14(3), 501-505.
- Haag, L. and E. Stern. (2003). In search of the benefits of learning Latin. *Journal of Educational Psychology* 95(1), 174-178.
- Holmes, C. and R. Keffer. (1995). A computerized method to teach Latin and Greek words: Effect on verbal SAT scores. *The Journal of Educational Research* 89(1), 47-50.
- Masciantonio, R. (1977). Tangible benefits of the study of Latin: a review of research. *Foreign Language Annals* 10(4), 375-382.
- Masciantonio, R (1983). Language arts through Latin: A staff development project. *Foreign Language Annals* 16(5), 369-372.

- Mavrogenes, N. (1979). Latin in the elementary school: a help for reading and language arts. *The Phi Delta Kappan* 60(9), 675-677.
- Mavrogenes, N (1977). The effect of elementary Latin instruction on language arts performance. *The Elementary School Journal* 77(4), 268-273.
- Thorndike, E. and R. Woodworth. (1901). The influence of improvement in one mental function upon the efficiency of other functions. *Psychological Review* 8, 247-261.
- Thorndike, E. (1933). Heredity and environment. *The Journal of Educational Psychology* 19(3), 161-167.
- Thorndike, E. (1924). Mental discipline in high school studies. *Journal of Educational Psychology* 15, 1-22, 83-98.
- VanTassel-Baska, J. (2004). Quo vadis? Laboring in the classical vineyards: An optimal challenge for gifted secondary students. *The Journal of Secondary Gifted Education* 15(2): 56-60.
- Whelden, C. (1933). Training in Latin and the quality of other academic work. *The Journal of Educational Psychology* 24(7), 481-497.
- Wier, M.C. (1921). Latin and Greek as aids to English composition. *The Classical Journal* 16(6), 326-338.