## COMPARISON OF STUDENT PERFORMANCES IN EFI \& PARTIAL IMMERSION PROGRAMS

 SELECTED REFERENCES
## REFERENCE

Bournot-Trites, M., Reeder, K. (2001)
Interdependence Revisited: Mathematics Achievement in an Intensified French Immersion Program; Canadian Modern Language Review 58 (1) p 27-43

Burmeister, P., Daniel, A. (2002) How effective is late partial immersion? Some findings from a Secondary School Program in Germany, An Integrated View of Language Development, edited Burmeister, P., Piske, Rohde, A. (2002), WVT Wissenschaftlicher Verlag Trier

## SUMMARY/ABSTRACT

This study examines the effect of teaching mathematics in French on mathematics achievement evaluated in English. In this context it analyzes the effect of increased intensity of bilingual education on mathematics achievement. It also analyzes the effects of language of testing in the context of French immersion at the intermediate level. The participants in the study are two cohorts of French immersion pupils followed from Grades 4-7. The treatment group received $80 \%$ of the core academic curriculum, including mathematics, in English. The comparison groups received $50 \%$ of the core academic curriculum in French and 50\%, including mathematics, in English. Achievement in mathematics was measured for both groups at the end of Grade 6. Analyses of covariance showed an advantage in mathematics for the $80 \%$ French groups compared to the $50 \%$ French group. These results provide further evidence for Cummins' threshold hypothesis and interdependence
hypothesis. [941]
The data of this study derive from the Kiel Immersion Project at Kiel University. In the partial immersion program, two subjects (geography, history or biology) are taught in English from grade 7 onwards so that the contact time to the L2 amounts to almost $30 \%$ of the curriculum - an increase of about $15 \%$ compared to the regular curriculum. The testing method uses a communicative test called A Difficult Decision which is designed to elicit both oral and written data. The test is administered at two cross-sections from 1992 to 1995 to 12 to 13 year-old student at the end of grade 7 and from 1995 to 1998 to 10th graders. There are three test groups: IM classes and non-IM classes from a school which offers both, and a third group from a school without IM program (to address the concern that IM students are selected based on their motivation). The groups are compared with regard to the length of their contributions in terms of the number of clauses, the absolute frequency of cohesive elements per category and subcategory, and the density of cohesive elements. It is found that the IM students score higher with respect to the number of clauses and the frequency of cohesive devices of interaction in the discussions. They also cohesively link their contributions and rely less on the interviewer's prompts and guidance. The non-IM group from a school which does not offer IM program scores better than their counterpart from a school which

|  | does. In terms of vocabulary, the aspects that appear to benefit enormously from IM are words from sources other than the test-text or the vocabulary list and contextual variants. Lexical errors are not affected by participation in the IM program |  |
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| Dicks, J., Kristmanson, P. (2008) French Immersion: When and Why, The State of French Second Language Education in Canada, Canadian Parents for French, Ottawa, ON | Compares pros and cons of entry points for full and partial FI programs | http://cpf.ca/en/files/03 FI When and Why E. pdf |
| Harley, B., Hart, D. (1997) Language Aptitude and Second Language Proficiency in Classroom Learners of Different Starting Ages, Studies in Second Language Acquisition, Cambridge University Press | This empirical study investigates the relationship between language aptitude components and second language (L2) outcomes among learners whose intensive L2 exposure began at different ages. The learners in this study are 65 11th grade students in continuing early partial and late French immersion programs. The former group has been receiving $50 \%$ of their instruction in French since grade 1, and for the latter group, since grade 7. Three group-administered tests were given in a single class period, focusing on associative memory, memory-for-text, and analytical ability. In addition, there is further testing on L2 proficiency measures. Evidence is found to support the main hypothesis that in late immersion starting in adolescence there will be a positive relationship between L2 outcomes and an analytical dimension of language aptitude, whereas in early immersion beginning in grade 1 a positive relationship will hold between L2 outcomes and memory ability. A further hypothesis that early immersion students will have higher language aptitude as a result of their early L2 exposure is not supported by the findings, as the early immersion students' language aptitude scores are on average not significantly higher than those of the late immersion students. The late immersion students score significantly higher on language analysis. |  |
| Swain, M. (1974) Immersion Programs across Canada; Canadian Modern Language Review 31(2), p. 117-129 | Study indicates that students in French immersion programs in Canadian schools achieve superior progress in French and equal skill in English relative to students in partial immersion classes or traditional second-language study | URL not available |
| Swain, M (1978) French Immersion: Early, Late or Partial? Canadian Modern <br> Language Review 34(3); p. 577-585 | A discussion of three possible formats of a bilingual education program: early total immersion, early partial immersion and late partial immersion. A French cloze test was used to evaluate the lead group of students in each program. A tentative conclusion is drawn in favor of the early total immersion program. [923] | No free PDF available |

## Wesche, M.B. (2002) Early French

 Immersion: How has the original Canadian model stood the test of time? An Integrated View of Language Development, Petra Burmeister, Thorsten Piske, and Andreas Rohde (Eds), WVT Wissenschaftlicher Verlag TrierThe author revisits the original St. Lambert experiment and similar early French immersion programs in order to recount their key features as well as their social contexts and outcomes. The question is addressed as to which program features and contextual elements have proven essential for effective school second language learning across settings, and which, while less crucial, have been shown to significantly influence the success of school language learning. The most prominent original program features include earliest possible school starting age, intensive L2 exposure over an extended period, and the use of the L2 to teach the school curriculum. Contextual features such as that learners were majority language speakers and were in the same situation were also discussed. She then moves onto outcomes with comparisons of the different models of immersion and students' proficiency in their English and French and results in other academic subjects as well. Although the outcomes are very positive, the students' French is still below the level of native speakers in terms of a more restricted vocabulary, largely limited to domains experienced in school, overuse of high frequency verbs, and L1 influences in their production grammar. Other forms of immersion with variables in length, starting age, and intensity are explored. Those include partial immersion and the bain linguistique (language bath) experiment, which increased exposure to French from the 120 hour Core French program to 450 hours for one year. The author then talks about immersion models around the world.

