Research on the Foreign Language Immersion Programs (FLIP) at the University of Minnesota

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Update January 26 2004

While university-level language immersion programs have been in existence for some years, research on the bilingual processing strategies of students participating in such programs is scant. A study was conducted at the University of Minnesota with LRC funding to investigate: (1) the participants' use of both their native and the immersion language to process meaning on academic tasks, and (2) the influence of the social ecology of the immersion context on their language use.

Twenty-four Spanish, French, and German university-level students in the Spring 1996 four-course immersion program and 17 non-immersion students participated in the study. The measures used for obtaining data included a questionnaire addressing program perceptions and background, pre/post multi-modality tests and self-assessments, and a retrospective self-observation instrument to provide data on bilingual mental processing. The retrospective verbal-report data were collected directly after the students had performed a classroom task (e.g., engaging in process writing, listening to a lecture, watching a video, or discussing an article). A third of those also performed listening, reading, writing, and speaking activities around a central topic outside of class, providing verbal report data. For listening, reading, and writing tasks, verbal report took place during the activity itself. Similarities and differences in bilingual processing strategies were analyzed: 1) according to individual student across modality, task, and program, and 2) comparatively among students within the same reporting context (e.g. class activity or out-of-class tasks).

The following results were obtained (see Cohen & Allison, 1998, 2001):

1. *The extent of note taking in the immersion language among immersion and non-immersion students:* Note taking in the immersion language was somewhat more prevalent among FLIP students, yet the difference was not statistically significant.

2. *The extent of internal mental dialog in the immersion language:* As expected, more FLIP students engaged in mental dialog (91% to 79%), although two high Spanish non-FLIP scores offset the possibility of statistical significance.

3. *The extent of mental translation by immersion and non-immersion students during classroom activities and its perceived helpfulness:* FLIP students were found to use significantly **less** mental translation compared to non-FLIP students, but reported **higher** resulting

satisfaction when they did use it. For FLIP students, mental translation functioned as a targeted strategy rather than as a general "stay afloat" strategy. Consistent with expectation, German FLIP students engaged in significantly more mental dialog vs. mental translation compared to non-FLIP students, while results for Spanish and French were inconclusive.

4. *The impact of language modality/activity on the extent of mental translation and mental dialog:* For immersion students, modality/activity proved to be a significant predictor as to the extent of mental translation, corresponding to a great extent with the control the students had over the information stream: listening (the least control), viewing, speaking, and writing (the most control). Increases in mental dialog also followed this pattern. This hierarchy was also found predictive across languages in cases where language-specific tasks favored one modality or another. The modality of the task was found to impact non-immersion students in similar ways.

5. *The role of affect in language processing in the immersion context:* Verbal report interviews indicated that authentically-engaged affect appeared to be more prevalent in the immersion context than in traditional language curriculum, and it was reported to have a positive impact on production and fluency. Likewise in contrast to the traditional language classroom, the immersion context was characterized as allowing for a greater range of exposure to authentic perspectives.

6. *The role of the social ecology of the immersion program in language processing and use:* It was found that the social ecology of immersion programs extended beyond the classroom. Immersion language use outside the classroom was reported to a degree not usually experienced in conventional curriculum. The development of "target language friendships" was the single most frequently cited positive element in the program. Correlatively, the most frequently cited stimulant for increased outside-class target language interaction was "target language use with friends." Such relationships were also cited as a significant compensatory factor for deficits within the program against the backdrop of what was seen as the general impersonality of the university. Immersion students emphasized the unique social context of immersion as supporting and extending target language use, both within and beyond the classroom. They acknowledged that the greater extent of direct target language cognitive processing was attributable to both the linguistic and social dimensions of the immersion context.

While focusing on immersion programs at the university level, the study's quantitative and qualitative findings provided pedagogical implications for all college-level foreign language education, whether involving standard, intensive,

or immersion curricula. The findings would suggest that participation in the immersion program was promoting more extensive cognitive processing directly through the immersion language.

References

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