Is early second language learning really better? Evidence from research on students in CLIL programs

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Le présent article passe en revue la recherche ayant examiné les bénéfices relatifs de l'apprentissage précoce et de l'apprentissage tardif d'une langue seconde dans des programmes axés sur le contenu ou programmes CLIL. La revue de la recherche se concentre sur les étudiants de langue majoritaire.

L'importance de la quantité d'exposition à la langue seconde et de la qualité de l'enseignement sont également considérés par rapport au moment de l'acquisition langagière – c'est-à-dire l'acquisition langagière précoce versus tardive.

Les conclusions de cette revue stipulent que, bien que les jeunes apprenants connaissent souvent plus de succès que les apprenants plus âgés, la quantité et la qualité de l'enseignement de la langue seconde sont aussi, sinon plus, importants que l'âge auquel les apprenants débutent leur apprentissage de la langue seconde en milieu scolaire. Pour être avantageuse comparativement à l'apprentissage tardif, l'introduction précoce à une langue seconde en milieu scolaire doit être accompagnée d'un curriculum et de méthodes d'enseignement efficaces et cohérents.



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> It is widely believed that children are effective and efficient second language (L2)1 learners. Thus, it is generally expected that L2 acquisition by school-age children will proceed quickly and effortlessly and will result in native-like or at least very high levels of proficiency through mere exposure to the target language. Schools in Europe and around the world are experiencing a remarkable interest in teaching foreign languages to young school age children, and even preschool age children, as parents and educators seek to prepare students for globalization. An early start to L2 learning in school has much to recommend it. Early exposure takes advantage of young children's natural language learning abilities (Genesee, 2004) and their openness to new experiences, including new languages and cultures. Moreover, the integrated approach to L2 instruction that is integral to immersion and other content-based approaches, such as CLIL, is

particularly appropriate and feasible in the early grades when education is often experiential and student-centered. It can be much harder to achieve such integration in secondary school grades when advanced, sophisticated language skills are needed to master academic content and skills that themselves are complex and abstract. Moreover, elementary school teachers are more likely to be accustomed and be prepared to integrate language instruction with content instruction (so-called 'language-across-the-curriculum') than secondary school teachers who see themselves as content area specialists and seldom as language teachers. An added advantage to starting L2 learning in the primary grades is that it affords students an early start at using and learning the L2 outside school. Extra-curricular language learning provides students additional opportunities to broaden their repertoire of language skills beyond what can be achieved in school settings. This is particular advantageous in communities where the target language is used, such as Montreal where French-speakers are

On the one hand, there is evidence that, other things being equal, children are more likely to attain native-like levels of oral proficiency or higher levels of proficiency in an L2 in the long run than learners who begin to learn an L2 when older (Long, 1990). On the other hand, conclusions regarding the advantages of early L2 learning are based largely on comparisons between child L2-learners and adolescent or adult L2learners, not between younger versus older school-age children. Moreover, data on age effects in L2 learning are based largely on learning in non-school settings and, thus, do not take into account the complexities of language learning in the context of schooling. Researchers in educational psychology increasingly distinguish between language for social communication and

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language for academic purposes. This distinction has generally been ignored in studies on age of acquisition effects. Thus, it would not be surprising if research that has looked at L2 acquisition in school settings for academic purposes produces different results than research on learners outside school. What does research on age of learning in school settings say?

Early vs. Late L2 Acquisition in School

This review focuses on students who are learning an L2 through content-based instruction (CBI; Snow & Brinton, 1997) or what is referred to as content-and-language-integrated learning (CLIL; Coyle, Hood & Marsh, 2010) in Europe; for example, German-speaking children in Germany who are in a CLIL program or English-speaking children in Canada in French immersion programs. Results on the effectiveness of more traditional L2 instruction will be referred to briefly to establish the generalizability of the CBI/CLIL results. The studies that are reviewed were carried out on students who were members of the majority group in the community in which they were being educated; it does not consider students who speak a language at home that differs from the societally dominant language – for example, Turkish-speaking immigrants in Western Europe (see Genesee & Lindholm-Leary, 2013, for a discussion of bilingual programs for minority language students). There is a considerable body of evidence on



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early L2 learning in comparison to late L2 learning in CBI from research on French immersion programs for English-speaking students in Canada (see Genesee & Lindholm-Leary, 2013, for a review), and there is a growing body of research on students in CLIL programs in Europe (see Muñoz, in press). Canadian studies are the focus of this review because these studies provide good descriptions of how much exposure students in alternative forms of immersion have, and French was the target L2 in all cases so the results are not due to language differences. Studies reviewed by Muñoz (in press) are also discussed since they are important in demonstrating the generalizability of the Canadian findings to different target languages and to programs with a variety of formats. There are different forms of immersion (IMM) in Canada. They vary with respect to the grade when use of the L2 for academic instruction begins and how much academic instruction is provided through the L2. In early total IMM, all academic subjects (e.g., in mathematics, science and social studies) in Kindergarten to Grade 2 are taught in French, and this gradually decreases until about 50% of instruction is provided in French and 50% in English by the end of elementary school (Grade 6). In early partial IMM, about 50% of instruction in each year of elementary school is provided in each language. In delayed immersion, use of the L2 for academic instruction is delayed until grade 3 or 4 at which time about 50% of instruction is through the L2. Finally, in late IMM, the L2 is not used for academic instruction until secondary school, beginning in Grade 7. At that time, about 80% of instruction is through the L2 and this can take place over one (i.e., Grade 7 only) or two consecutive years (e.g., Grades 7 and 8) (more detailed descriptions of Canadian IMM programs are provided in Genesee, 2004, and in Genesee & Lindholm-Leary, 2013). Students in delayed and late IMM receive traditional French-L2 instruction for limited periods of time (30-45 minutes/ day) in the grades preceding use of the L2 for academic instruction.

Evaluations of student outcomes in these programs have usually been conducted by

comparing the performance of students in one type of IMM to that of students in another type of immersion within the same community; for example, students in early total IMM versus students in two-year late IMM. Students in alternative programs are selected to be comparable with respect to socio-economic status and intellectual ability in some cases, so that these variables do not influence test performance in favor of one group more than the other. The focus of this review will be on studies that have assessed L2 proficiency using tests of speaking, listening, reading and writing; studies that have examined different kinds of linguistic outcomes are reviewed in detail in Muñoz (in press).

Systematic comparisons of the outcomes of early, delayed and late IMM reveal a complex picture which indicates that age alone is not necessarily the most important variable and that amount and quality of L2 instruction are also important; Muñoz reaches a similar conclusion in her review of programs in Europe. To facilitate this review, let's begin with comparisons between younger and older learners, setting aside issues related to amount and quality of exposure for the moment. However, it should be noted that students in early IMM and other CBI programs are often not only younger when they begin to learn the L2, they also have more exposure to the L2 than students in programs with a delayed or late start. In fact, it is often impossible to separate the effects of age from amount of exposure.

It has been found that, on the one hand, students in early total IMM programs in Canada generally achieve significantly higher levels of L2 proficiency than students in programs with a delayed (middle elementary grades) or late (secondary school) starting grade (Genesee, 1981; see also Wesche, Toews-Janzen and MacFarlane, 1996, for a review), suggesting that an early start is often better. On the other hand, Genesee (1981) found that students in two-year late IMM sometimes achieve the same or almost the same levels of L2 proficiency as students in early total IMM on a variety of language tests, including speaking, listening comprehension, reading and writing, attesting to the ability of older learners to acquire an L2 relatively quickly. Harley and Hart (1997) similarly found few significant differences between early partial and late partial IMM students on a battery of French language tests. In her review of European studies, Muñoz reports that studies by Lorenzo, Casal and Moore (2010) and Bret (2011) indicate that "older CLIL students benefit from CLIL more than younger CLIL students" (p. 10) insofar as they demonstrate more achievement in the target language. These findings are important because they encompass results based on a variety of outcome measures and from a variety of different CLIL programs. Taken together, results from Canada and Europe provide reassuring convergence from two different bodies of evidence that younger is not always better and, in fact, sometimes older can be just as good as younger.

There are a number of possible reasons why students in late IMM or CLIL programs can make such rapid progress in acquiring L2 skills despite reduced L2 exposure compared to younger L2 students. First, students who enroll in late immersion/CLIL programs may be selfselecting and, thus, may be more motivated and/or already have acquired some competence in the L2. Second, older students have the benefit of a well-developed first language (L1) and, in particular, they may have fully developed, or well developed, L1 literacy skills. Literacy skills acquired in one language can facilitate literacy development in an L2 (Genesee & Geva, 2006; Riches & Genesee, 2006); this is especially true for languages that are typologically similar and/or have similar orthographies (French, Spanish, and English, for example). In other words, older students are able to transfer many of their L1-based literacy skills to learning to read and write in an L2. Older students may also be faster L2 learners than younger students because language teaching and learning in the higher grades is generally more abstract and context-reduced than in the earlier grades (Cummins, 1981). As result, learning the L2 may call on acquisitional strategies that are more analytic and less experiential and that are better developed in older learners (see Harley & Hart, 1997, and Muñoz, in press, in support of this possibility). Thus far, we have seen that an early start to L2 learning in school is often more successful than a late start; but, not al-

Amount of Exposure

Let's return to the question of exposure, another controversial issue in discussions of L2 learning in school settings. It is often assumed that 'more exposure is better' when it comes to L2 learning in school; this is often referred to as 'time on task'. Indeed, one of the reasons schools begin instruction in certain subjects in the early grades (be it in second languages, mathematics, or other school subjects) is to provide more time for students to learn. Time is clearly important and often, although not always, students learn more when they spend more time studying a subject. This is true for L2 learning as well — up to a point. For example, Canadian research has shown that students in *early total IMM* programs, where the L2 is used to teach 100% of the time for the first three grades, generally acquire greater proficiency in the L2 than students in *early partial IMM* programs, where the L2 is used to teach only 50% of the time (Genesee, 1987; see also Muñoz, in press). But, there are probably upper and lower limits to the importance of time.

At the lower limit, variations in exposure to an L2 probably make little difference: 20 versus 30 minutes/day, for example, is probably an unimportant difference. Likewise, at the upper limit, there may be diminishing returns for extended exposure. As noted earlier, students in early total IMM programs in Canada do not always outperform students in two-year late IMM despite the fact that early total IMM students have significantly more exposure to the L2 (Genesee, 1981), suggesting that early IMM students do not benefit from all of the additional L2 exposure that they have. In an early review of research on age of L2 acquisition, Krashen, Long and Scarcella (1979) concluded that contrary to the early-isbetter hypothesis, older learners actually make faster initial progress in L2 learning than younger learners and that the advantage for an early start is only evident when learning occurs over an extended period of time.

Before leaving this discussion, let us consider the importance of amount of exposure from the point of view of the development of students' L1 skills in CBI. Evaluations around the world have consistently shown that, in the long run, there is no significant difference between the L1 skills of majority language students in IMM programs and those of similar students in L1-only school programs (see, for example, e.g., Mehisto & Asser, 2007), regardless of whether the languages are typologically similar, such as French and English, or typologically different, such as Japanese and English (Bostwick, 2001). To be more specific, detailed analysis of evaluations of alternative forms of IMM in Canada indicate that the English-L1 outcomes of Canadian IMM students are on par with those of control students regardless of when instruction in English begins in immersion (early vs. delayed or late) and regardless of how much instruction they receive in English (50% in the beginning or none) (Genesee, 1981).

Pedagogical Issues

That amount of exposure and age are not always linked to level of L2 proficiency should not be surprising. The extra time that young learners often have must be translated into effective learning opportunities. In other words, pedagogical factors are also probably important in accounting for differences in L2 achievement in different programs. Evidence of the importance of instructional factors comes from research by

It is concluded that while younger learners are often more successful than older learners, amount and quality of second language instruction are as, or more, important than age in school-based second language learning.

Steven (1983) who compared two types of late immersion – one that was teacher-centered and one that was student-centered. In the teacher-centered program, English-L1 students spent 80% of their school day immersed in French-L2, while in the student-centered program students spent 50% of their school day in the L2. Both groups of students were in Grade 7 when they were, on average, 12 years of age. Stevens found that, despite the time advantage of the students in the teacher-centered program, students in the student-centered program scored as well on a variety of L2 measures, especially speaking and listening comprehension. She attributed the impressive performance of the students in the 50% student-centred program to pedagogical factors. In particular, she argued that students in that program achieved such impressive L2 skills relative to students in the more extended program because their program permitted more active use of the L2 and, as well, learning was more individualized. In particular, students in the 50% program were given the opportunity to choose what they would study and how they would meet curricular objectives. For example, during science, students could choose to study different topics, such as oceanography, the rain forests, or the Arctic, to fulfill curricular objectives. There is growing discussion about pedagogical issues in CBI programs and, in particular, how best to integrate language and content instruction to maximize language learning (see Lyster, 2007).

Conclusions

Despite the widespread belief that early is better when it comes to L2 learning in school, evidence suggests that while this is often true, it is not always true. Debates about this issue often lose sight of the fact that an early start to L2 learning in school often means that learners have more time to learn; indeed, early L2 instruction is often recommended in order to extend learners' time to learn. However, neither an early start nor additional time for L2 learning will produce more learning than a later start or less exposure if the instruction that students are exposed to does not take advantage of the additional time and exposure. Effective instruction is critical if the extra time and early start are to be advantageous. Indeed, quality instruction may be more important than time and age of learning alone. We still have much to learn about effective L2 instruction in CBI programs, but we have begun to make significant progress in understanding this critical aspect of L2 learning in school (see Lyster, 2007). The available evidence suggests that schools and communities interested in extending children's opportunities for learning an L2 in school have options, and these include both an early and a later start.

Note

"second language (L2)" will be used generally to refer to second and/or foreign language learning and teaching

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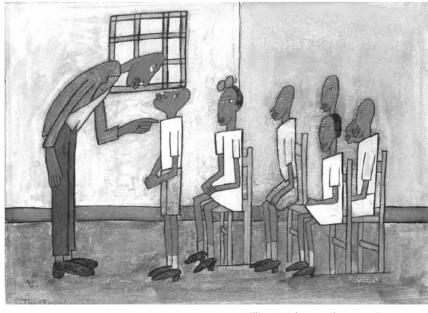
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William H. Johnson, Classroom Scene, 1946.