

Vowel production development of French-immersion students in Southern Alberta

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French immersion (FI) elementary school programs are a popular educational option for many non-Francophone families across Canada, with the commonly-cited goal of opening children's future opportunities by giving them the gift of bilingualism. That said, while some aspects of FI students' linguistic capabilities have been assessed (Rehner, Mougeon, & Nadasdi, 2003; Wesche, 2002), studies of students' ability to natively produce French by the end of the program appear to be inexistent. Because 'sounding native' is a large part of how second-language learners are perceived by native speakers as being successful learners, such information is important for these students and for educators in the system, to adjust the pedagogical approach or revise the curriculum if deficiencies are identified. The information is also valuable for school speech pathologists to understand the "norms" and to differentiate any deviance from these norms.

The goal of the current study addresses this lack of information on speech production of French in FI students, focusing on FI French vowel productions, an aspect that contributes significantly to L2 comprehensibility (Jung, 2010; Trofimovich, & Isaacs, 2003). In our study, a total 60 students from grade 1, 3, and 5 (n=20 for each grade) were recruited from a local FI elementary school. Children were engaged in a speech production study and their speech was recorded for transcription and acoustic analysis. The stimuli include words that contain 8 vowels in French that do not exist in English, including /ø/, /œ/, /ɔ/, /y/, /ɔ̃/, /ã/, /ẽ/, and /œ̃/. A native French speaker was asked to transcribe how correct these vowels were produced using 0s (incorrect) and 1s (correct). Our results indicated that students produced the vowel /ɔ̃/ best with an accuracy ranging from 95% to 98% for the three grades. They also improved their vowel articulations for /y/ (F[2,57]=7.47, p=0.001) and /œ/ (F[2,57]=7.01, p=0.002) as they progress from lower to higher grade. There are two vowels, however, /ø/ and /œ̃/ that are most challenging for FI students and were not produced accurately even by 5th graders (accuracy: 0.10 for /ø/ and 0.39 for /œ̃/). Acoustic analysis was also undertaken for these vowels. Both the transcription and the acoustic results will then be compared with those for students enrolled in Francophone schools (i.e. those with French-speaking members in their families). The analysis on Francophone is now underway. The comparison of the acoustic patterns in vowel productions between the two student populations will suggest ways of helping FI children improve their French vowel articulations.

References:

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