

# Examining the predictive utility of French Curriculum-Based Measurements (CBM) to assess the early (L2) literacy skills of Canadian French immersion K-3 students.

Since the inception of the first Canadian French immersion program forty years ago, immersion education in Canada and the United States has expanded at a phenomenal rate. While a substantial number of students continue to enrol in these programs, few empirical studies to date have explored the various dimensions of the *specific* L2 (French) reading skills of these students. Most students in French immersion programs are exposed to L2 print early and are expected to achieve some degree of L2 literacy. Research has shown that the process of learning to read in a first language is multi-faceted and complex, and takes considerable time and resources to develop. *Learning to read in a second language is a challenge for both students and teachers, and validated principles for optimizing reading performance are lacking.*

Convincing evidence substantiates that reading competence in English is causally influenced by proficiency in the foundational skills of phonological awareness, the ability to recognize speech sounds in words, and the alphabetic principle, i.e., the ability to map sounds onto letters (National Reading Panel, 2000). The research convincingly identifies these two skills as crucial components of word recognition and beginning reading achievement. A similar discussion about learning to read in a child's L2 is equally important. However, engaging in this research is difficult, as normed, standardized L2 (French) literacy assessment measures are lacking.

To address this need, a battery of tests known as *Indicateurs dynamiques d'habiletés précoces en lecture* (IDAPEL) was developed and initially validated with partial French immersion students in the United States. This study reports the findings of a subsequent longitudinal study examining the predictive utility of validated French Curriculum-Based Measurements (CBM) to assess the early L2 (French) literacy skills of Canadian French immersion (FI) K-3 students.

Chantal Dufour Martel<sup>1</sup>

## Method

The purpose of the study is to verify whether reading competence in a child's L2 is causally influenced by proficiency in the foundational skills of phonological awareness and the alphabetic principle in the L2 (French). If this is the case, what do the IDAPEL measures tell us about FI students' L2 foundational reading skills? Do we see a similar relationship between these skills in the L2 (French) and L1 (English)?

## Participants

All kindergarten (K) through third grade students from 15 classrooms in a Canadian school district enrolled in a total French immersion program and receiving French reading instruction at K through third grade were invited to participate. This school district has a large white student population (49%), a growing Hispanic student population (17%), and a large First Nation indigenous student population (17%). Data were collected over a two-year period. All schools remained in the study for two years. The number of participants fluctuated only minimally.

## Measures

All students in K through grade 3 were administered IDAPEL early literacy measures. The IDAPEL is a set of curriculum-based measures (CBM). A CBM provides a reliable and valid measure of general achievement. The IDAPEL measures provide specific information about students' early French reading skills. The measures assesses students' French phonological awareness and French alphabetic principle skills, accuracy and fluency

---

1 Please contact the author (chantal.dm@dibels.org) for data tables and other information on this study.

reading connected text in French, and ability to comprehend what they read. By design, students' performance on a measure is sampled over time to assess growth and development. Differences in scores are attributable to student growth, not differences in materials or assessment procedures. The IDAPEL measures are individually administered three times a year for screening purposes. An additional utility of the IDAPEL measures is that they allow reading skill assessment from K to grade 5. Table 1 presents the names and summary descriptions of each measure.

### Data Collection

All students were assessed by their classroom teacher at the three benchmark periods, i.e., fall, winter and spring in Year 1, and again at the same three benchmark periods in Year 2. There were no control groups. All K to grade 3 immersion teachers received training in the administration and scoring of IDAPEL measures prior to collecting fall data in the first year, and received refresher training prior to the winter benchmark data collection period in Year 1.

### Results

The first student cohort, the kindergarten (Year 1) and grade 1 (Year 2) group of students, was administered FSP and FNM across Year 1 and Year 2. Exploratory descriptive statistical results show student growth on the two foundational reading skills of phonological awareness and alphabetic understanding across the two years.

The second student cohort, the grade 1 (Year 1) and grade 2 (Year 2) student group, was administered FLO across Year 1 and Year 2 (except for the fall of grade 1). Exploratory statistical results again show oral reading growth across the two years. Similarly, the third student cohort, the grade 2 (Year 1) and grade 3 (Year 2) student group, shows evidence of oral reading growth across the two years on FLO. Preliminary results suggest that the IDAPEL measures do in fact assess French immersion students' L2 (French) phonological awareness and alphabetic principle skills as measured by IDAPEL.

To determine whether L2 foundational reading skills predict later reading outcomes, the measures' predictive utility was examined. Predictive validity examines the extent to which scores on one measure predict scores or forecast future performance on another measure at a later point in time. In other words, do students' early performances on measures of French phonological awareness and understanding of the French alphabetic principle predict how well they will be able to read in French later on?

Predictive within-year correlations are presented in Table 4. In Kindergarten, moderate correlations are seen between beginning of year FPS and end of year FSP (.53) and FNM (.52). In grade 1, moderate correlations are seen between beginning of year and end of year FSP (.47), with beginning of year and end of year FNM (.52), and with beginning of year FNM with end of year FLO (.50). In grade 2, a moderate correlations is observed between beginning of year FNM and end of year FLO (.57), and more robust correlations are seen between beginning of year FLO with middle of year (.82) and end of year (.80) FLO. In grade 3, very robust correlations are observed between beginning of year FLO with middle of year (.90) and end of year (.88) FLO.

Predictive across-year correlations are presented in Table 5. Moderate correlations are seen between end of year K FSP and beginning of year G1 FSP (.41), and G1 FNM (.40). End of year K FNM correlates moderately with middle of year G1 FNM (.42) and G1 FLO (.40). End of year G1 FNM positively predicts beginning of year (.60) middle of year (.61), and end of year (.64) G2 FLO. End of year G1 FLO strongly predicts beginning of year (.84) (.79), middle of year (.88), and end of year (.84) G2 FLO. Similarly, end of year G2 FLO strongly predicts beginning of year (.92), middle of year (.85), and end of year (.88) G3 FLO. Preliminary results suggest that the measures have moderate to very robust predictive utility on students' future reading performance across grades.

## Pedagogical Implications

Currently, our knowledge base about best classroom practices for optimizing the French reading performance of French immersion students in the early grades is scant. Preliminary findings of this study suggest that the IDAPEL measures are sensitive to student reading growth in the early grades and have practical predictive utility. The findings also strongly suggest that students are making progress on key foundational reading skills in French. Given the IDAPEL's primary advantage as easily administered, one-minute repeatable measures, classroom teachers could preliminarily administer

the measures to all classroom students in order to identify the lowest performing students on the early skills of phonological awareness and the alphabetic principle and consequently provide them with additional instructional support.

It is anticipated that continued IDAPEL research will increase our knowledge about the predictive utility of the measures and help determine grade-level benchmark goals for each measure. At best, measures such as IDAPEL provide a tangible resource for helping classroom teachers identify *early* students who may be at risk of not following the same reading trajectories as their peers.

**Table 1**

### Summary Descriptions of French Literacy Measures

1. <i>Facilité à dénommer des lettres (FDL)</i>	The student is presented with a page of upper and lower case letters arranged in random order and asked to name as many letters as possible within one minute. (K and G1)
2. <i>Facilité à reconnaître le premier son (FPS)</i>	In this task, the examiner pronounces a series of words one at a time and asks the student to produce the first sound in the word. (K)
3. <i>Facilité à Segmenter les Phonèmes (FSP)</i>	A word is presented orally and the student is asked to verbally produce the individual sounds in the word. (K and G1)
4. <i>Facilité à Lire des Non-Mots (FNM)</i>	The student is presented with a page containing randomly ordered French nonsense words and is asked to read each letter sound in the nonsense word or to read the whole word. (K, 1 & 2)
5. <i>Facilité en Lecture Oral (FLO)</i>	The student is instructed to read a passage aloud for one minute. The student reads three passages for one minute each. The median score is selected as the reading fluency score. (G1 – G5)
6. <i>Rappel Oral du Récit (ROR)</i>	The students are asked to talk about the reading passage they read. The measure is intended to provide a comprehension check for FLO. (G1 – G5)

## References

- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Report of the subgroups*. Bethesda, MD: National Institute of Child Health and Human Development.