Using Curriculum-Based Measurement Procedures to Assess French Reading Performance of K-3 French immersion students

Chantal Dufour-Martel, Ph.D.
IDAPEL Research Director
chantaldm@dibels.org
www.dibels.org

Dynamic Measurement Group
Supporting School Success One Step at a Time

October 2008

The issues

- *Many children around the world, bilingualism is a fact of life*
- *Bilingualism is not a well understood phenomena*
- *The gap in research knowledge poses a problem for educators who must assess and educate students from bilingual environments*
- *Best practices on the course and processes of language and literacy development are lacking*
- *This study looks at issues of biliteracy*

October 2008

Developmental Biliteracy
(Reyes & Halcón, 2000)

- *Developmental biliteracy is the process of learning to read and write in two languages simultaneously*
- *Early detection of reading difficulties among students learning to read and write in two languages simultaneously warrants well-focused research because currently little is known about:*

  (1) initial biliteracy reading outcomes

  (2) factors predicting successful reading outcomes

  (3) preventing early reading deficiency among bilingual students

  The knowledge gained from such research could make substantive contributions concerning the process of biliteracy development in the early grades.

October 2008

Few studies to detect problems

- *Few studies have looked at French reading skill development among French immersion students (Jared, 2008, Genesee 2007).*
- *There continues to be little empirical data available on the specific reading disabilities of French immersion poor readers (Wiss, 1993).*
- *The identification of a struggling bilingual reader is often difficult, and educators bear the burden of untangling complex issues (Lundberg, 2002).*
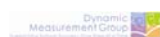
October 2008

Lack of assessment tools

- *Too often, students' educational needs are delayed due to a lack of useful assessment tools.*
- *To address this need, a battery of French language screening tools assessing the early skills of phonological awareness and the alphabetic principle was developed.*

October 2008

IDAPEL   INDICATEURS DYNAMIQUES D'HABILETÉS PRÉCOCES EN LECTURE

Compétences pertinentes à la lecture précoce	Les épreuves IDAPEL®
La conscience phonémique	*Facilité à Reconnaître le Premier Son* *Facilité à Segmenter les Phonèmes*
Le principe de l'alphabet et les connaissances alphabétiques	*Facilité à Lire des Non-mots* *Facilité en Lecture Orale*
La facilité de lire un texte imprimé avec précision	*Facilité en Lecture Orale*
La compréhension de texte	*Une combinaison de deux épreuves: Lecture Orale et Rapport Oral*

IDAPEL: Trousse d'outils d'évaluation diagnostique, standardisées; les épreuves sont chronométrées d'une minute.

October 2008

DIBELS *Dynamic Indicators of Basic Early Literacy Skills*

- *The measures were modeled after DIBELS*
- *These English literacy measures were developed based on measurement procedures used for curriculum-based measurement (CBM).*
- *The DIBELS measures function as indicators of student progress toward reaching an outcome and are recognized as strong predictors of later reading achievement (Good, R. H., Kaminski, R. A., Smith, S., Simmons, D., Kame'enui, E., & Wallin, J. 2003; Kaminski, R., Cummings, K. D., Powell-Smith, K. A., & Good, R. H., 2008; Baker, S.K., Smolkowski, K. et.al, 2008).*

October 2008

IDAPEL   DIBELS

IDAPEL like DIBELS are designed to determine student progress towards a benchmark goal.

✓*They identify quickly and early students at-risk of making sufficient reading gains*

✓*They are sensitive to growth and measure skill change over time*

✓*They are individually administered three times a year for screening*

✓*or more frequently for progress monitoring growth*

✓*and are used to evaluate the effects of intervention*

October 2008

Deux épreuves IDAPEL
Facilité à lire des non-mots   Facilité en lecture orale

October 2008

Purpose of Study

The primary purpose of this three year study is to validate IDAPEL measures with elementary level French immersion students (English L1) in order to assess their L2 (French) literacy outcomes and reading achievement. Evaluating students with early reading assessments of the same construct should help identify struggling readers in either French or English.
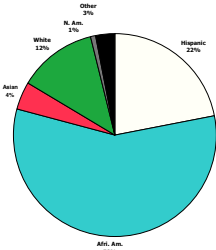
Year 1 outcomes are presented
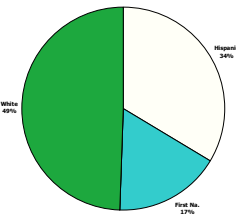
October 2008

---

590 Participants

American citywide school district servicing multicultural student population in American Midwest.

Canadian citywide school district servicing a growing ELL population of students k-12 in a western Canadian province.

October 2008

---

590 Participants

✓*Canadian school district services a higher proportion of white students but a rapidly growing ELL student population*

✓*American school district services a large proportion of African-American students, a smaller proportion of white students, and a growing ELL student population*

✓*Both districts have an early total French Immersion model whereby students receive French reading instruction first at the K level*

✓*Targeted population includes K to 3rd grade students*

American student population is 280

Canadian student population is 310

October 2008

Means across year on French reading measures of phoneme segmentation (FSP), nonsense word (FNM) and oral reading (FLO)

| K Cohorts			1st G. Cohort			2nd G. Cohort			3rd G. Cohort		
F FPS	W FSP	S FNM	W FSP	W FNM	S FLO	F FNM	W FLO	S FLO	F FLO	W FLO	S FLO
21.6 n=35	15.1 n=35	21.1 n=35	37.26 n=156	26.92 n=155	22.36 n=81	43.8 n=83	39.9 n=124	50.80 n=139	61.13 n=110	66.10 n=134	71.0 n=118

Correlational data:

The degree to which two or more IDAPEL measures are related and change together can inform us about the potential ability of the measure to predict later reading outcomes.

October 2008

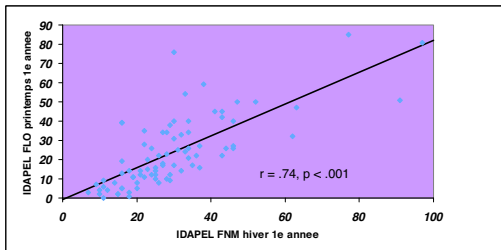## How well do the IDAPEL measures predict later reading outcomes?
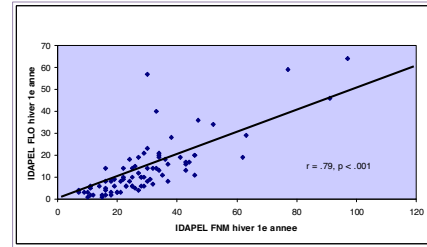
In first grade, Facilité à lire des non-mots administered in winter correlated highly with Facilité en lecture orale at the same benchmark period (r = .79; n = 83).

October 2008

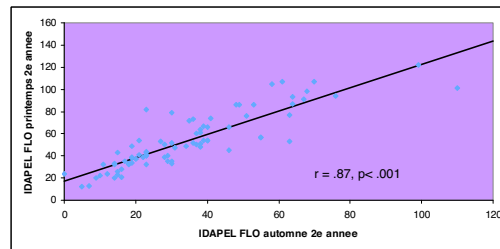## How well do the IDAPEL measures predict later reading outcomes?

In first grade, Facilité à lire des non-mots administered in winter correlated highly with Facilité en lecture orale in the spring (r = .74; n = 83).

October 2008

How well do the IDAPEL measures predict later reading outcomes?

In second grade, Facilité en lecture orale administered in the fall correlated highly with the same measure administered again in the spring (r = .87; n = 81).

October 2008

How well do the IDAPEL measures predict later reading outcomes?

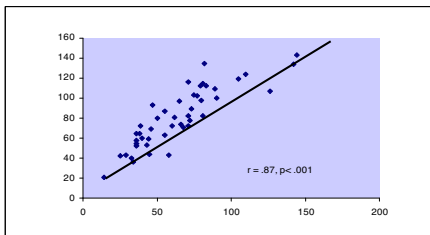*In third grade, Facilité en lecture orale administered in the fall correlated highly with the same measure administered again in the spring (r = .87; n = 47).*

October 2008

How well do the IDAPEL measures predict later reading outcomes?

DIBELS 2nd Grade Benchmark Goals for:		
	NWF (Nonsense W. Fluency)	ORF (Oral Reading Fluency)
Established = 50 correct by end of 1st Grade	F > 44 = low risk	
	W >68 = low risk	
	S >90 = low risk	
2nd Grade DIBELS Winter/Spring Outcome Performance		
	NWF	ORF
	Winter: 51.32	W: 65.33 S: 72.26
2nd Grade IDAPEL Winter/Spring Outcome Performance		
	FNM (Facilité Non-mots)	FLO (Facilité en Lecture)
	Winter: 42.12	W: 31.84 S: 41.68

With English nonsense word, students reached the English benchmark goal by Winter of 2nd Grade which means the skill is established later. The means of the English and French measure have a 10 point difference; this would indicate a fair understanding of the French Alphabetic Principle.

October 2008

Results

Regarding indicators of reading performance for English learners learning to read in French:

Erdos et al., (2008) identified phonological awareness (blending) and knowledge of alphabetic principle (letter sound/letter name knowledge) in L1 are good predictors of L2 reading outcomes in French Immersion.

October 2008

Indicator of reading performance for English learners reading in French

Nonsense word decoding is also an indicator of the alphabetic principle. Results of this study indicate that the French language nonsense word decoding measure (Facilité à lire des non-mots) may be relevant in explaining differences in students' French reading skill. It may be that this skill is not well established in French by early second grade, and the measure itself may make important contributions to our understanding of French immersion students' early French reading skills.

October 2008

Conclusions

English nonsense word reading skill (established later than English only students) provides evidence for learning L2 oral language, L2 phonology and rules for reading the French language.

French nonsense word reading skill falls within close range of English nonsense word reading indicating students are moving along the French alphabetic principle continuum of knowledge.

Overall, results provide evidence that these students appear to be making progress in their knowledge of the French alphabetic principle (French phonology) and with French oral reading fluency skills.

October 2008

Plans for the three yeas of the study

✓*To establish grade level underline benchmark goals or the level of skill indicative of adequate progress for this population of students for all of the current IDAPEL measures.*

Longitudinal research examining the level of early literacy skills that are predictive of later literacy outcomes will help us establish these benchmark goals.

October 2008

Questions?

Copies of presentation or interest in becoming involved with IDAPEL research, please contact me directly at:
chantaldm@dibels.org

October 2008

Selected References

- Baker, S.K., Smolkowski, K., Katz, R., Fien, H., Seeley, J. R., Kame'enui, E.J., & Thomas Beck, C. (2008). *Reading Fluency as a predictor of reading proficiently in low-performing, high-poverty schools. School Psychology Review, 37(1), 11-37.*

- Erdos, C., Genesee, F., & Savage, R. (2008, March). Predicting L2 Literacy Outcomes of English-L1 Students in French-L2 Immersion Programs. *Paper presented at the American Association for Applied Linguistics, Washington, DC.*

- Genesee, F. (2007). *Literacy outcomes in French immersion. Encyclopedia of Language and Literacy Development (pp. 1-8). London, ON: Canadian Language and Literacy Research Network. Retrieved 10/2007 from http://literacyencyclopedia.ca/pdfs/topic.php?topId=27*

- Good, R. H., Kaminski, R. A., Smith, S., Simmons, D., Kame'enui, E., & Wallin, J. (2003). *Reviewing outcomes: Using DIBELS to evaluate kindergarten curricula and interventions. In S. R. Vaughn & K. L. Briggs (Eds.), Reading in the classroom: Systems for the observation of teaching and learning (pp. 221-259). Baltimore: Brookes.*

- Jared, D. (2008). *Assessment of reading ability in French immersion students. Encyclopedia of Language and Literacy Development (pp. 1-7). London, On: Canadian Language and Literacy Research Network. Retrieved 4-10-08 from http://www.literacyencyclopedia.ca/pdfs/topic.php?topdl=239*

October 2008

Selected References

- *Kaminski, R., Cummings, K. D., Powell-Smith, K. A., & Good, R. H., (2008). Best practices in using Dynamic Indicators of Basic Early Literacy Skills for formative assessment and evaluation. In A. Thomas & J. Grimes (Eds.), Best practices in school psychology V (pp. 1181-1203). Bethesda, MD: The National Association of School Psychologist.*

- *Lundberg, I. (2002). Second language learning and reading with the additional load of dyslexia. Annals of Dyslexia. 52, 165-187*

- *Reyes, M. de la Luz, & Halcon, R. (Eds.) (2000). The best for our children: Critical perspectives on literacy for Latino students. New York: Teachers College Press.*

- *Wiss, C. (1993). Crosslinguistic comparisons of learning disabilities in French immersion poor readers. Canadian Journal of Special Education 9(2), 171-176.*

October 2008

Dynamic
Measurement Group