

Teachers' Reported Utilization of Reading Disabilities Research

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This study was conducted to explore elementary school teachers' uses of reading disabilities research. A modified version of Knott and Wildavsky's (1980) knowledge utilization framework underpinned the investigation. Teachers completed a questionnaire and participated in focus groups which elicited their reported uses of reading disabilities research. Results revealed that teachers read and understand, refer to, attempt, adopt into policy, implement, and implement with desired results research on reading disabilities "sometimes." The teachers' acquisition of research through passive reception or "actively seeking and finding it" occurred less often than using, adopting, implementing or referring to the research "sometimes." These findings are significant in light of the high incidence of reading disabilities. The findings suggest that students are not receiving evidence-based instruction that has the potential to alleviate or eliminate reading disabilities. This study has implications for increased research dissemination efforts and for continued investigations of obstacles to research use and means to facilitate the use of reading disabilities research.

Cette étude visait à étudier l'emploi que font les enseignants à l'élémentaire de la recherche sur les troubles de lecture. Une version modifiée du cadre d'utilisation des connaissances de Knott et Wildavsky (1980) a servi de fondement à l'étude. Les enseignants ont complété un questionnaire et ont participé à des groupes de discussion portant sur l'emploi qu'ils faisaient de la recherche sur les troubles de lecture. Les résultats indiquent que, relativement à la recherche sur les troubles de lecture, les enseignants la lisent et la comprennent, s'y réfèrent, tentent de la mettre en œuvre, l'adoptent comme politique et l'appliquent avec les résultats escomptés, et qu'ils font tout cela « parfois ». Quant à l'acquisition de la recherche de façon passive ou bien par une recherche active et réussie, les enseignants ont indiqué que cela se produisait moins fréquemment. Ces résultats sont importants en raison de l'incidence élevée des troubles de lecture. Ils portent à croire que les élèves ne reçoivent pas l'instruction que propose la recherche et qui aurait le potentiel d'atténuer ou d'éliminer les troubles de lecture. Les retombées de cette étude touchent les efforts visant la diffusion de la recherche, les études supplémentaires portant sur les obstacles à l'utilisation de la recherche et les moyens de faciliter l'utilisation de la recherche sur les troubles de lecture.

The underutilization of education research is an ongoing, current, and international concern (Levin, 2004) that has attracted attention dating as far back as 1867 (Coulson, 1983). In recent years, "observations concerning the gap between research and practice in education have become a mainstay of contemporary literature" (Gersten, Chard, & Baker, 2000, p. 453). Despite education research being a prominent interest of study, a review of the literature revealed that

few studies have examined the degree to which teachers' use of research on reading disabilities is being carried out. In addition, rarely are theoretical frameworks employed in the collection and analysis of data concerning education research use. A large-scale mixed methods study was therefore conducted to examine the extent of Ontario teachers' uses of reading disabilities research, reasons for underutilization, and means to increase the use of reading disabilities research by teachers. In this paper, quantitative data are reported to address the research question, to what extent do Ontario elementary school teachers use research on reading disabilities? The results of focus groups which were conducted as a means of member-checking are also reported. A knowledge utilization framework underpinned the methods, analyses, and implications of the study. The data were generated by a questionnaire which Ontario elementary school educators completed. Background information, the theoretical framework, methods, and findings of the one component of the study are reported.

Definitions

Reading Disability

Snow, Burns, and Griffin (1998) considered reading disability to be synonymous with dyslexia; therefore, for the purpose of this study, the following definition was adopted for reading disability:

Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge (International Dyslexia Association (2002) cited by Shaywitz, 2005, p. 132).

Research

Feuer, Towne, and Shavelson (2002) stated: "If a research conjecture or hypothesis can withstand scrutiny by multiple methods, its credibility is enhanced greatly" (p. 8). Therefore, for the purpose of this study, research was considered to be evidence of approaches to identify and instruct students at risk for reading disabilities that have been shown to be effective by multiple methods and/or studies. Participants in the current study were provided with this definition before they responded to questions regarding reading disabilities research.

Background

Research-based instruction is not only considered to be central to the reflective practice of school teachers (Williams & Coles, 2007), but evidence of effectiveness also constitutes the criterion for ethically responsible teaching (Herie & Martin, 2002). Various international measures manifest a drive for research-based education. For example, in the United Kingdom, efforts to elevate the profile of educational research have included the establishment of the Evidence-Informed Policy and Practice Centre, the National Education Research Forum, the Teacher Research Panel, and the Teaching and Learning Program (Levin, 2004). In addition,

there has been the development of the General Teaching Council for England and the National College for School Leadership's Networked Learning Communities program (Williams & Coles, 2007). A standards-based educational reform movement was initiated in the United States (Foorman & Nixon, 2006), and high quality training which is based in scientific research was mandated for teachers (No Child Left Behind, 2001). The United States Department of Education with the Campbell Collaboration established a "clearinghouse" of "what works" to screen and assemble reports of rigorous and scientific educational research (Levin, 2004). Likewise, in Canada, the Ontario government formed "a strategy to increase the role of research and evidence in Ontario education... focused on improving student outcomes through evidence-informed policy and practice" (Gitterman & Young, 2007, p. 2). To facilitate the research agenda, the Ontario Ministry of Education (OME) established a Researcher in Residence position in 2005, created an Assistant Deputy Minister's Research Steering Committee, and employed a Chief Research Officer in 2006. A thirteen member Ontario Education Research Panel was also formed in 2006 and an annual Ontario Education Research Symposia focusing on "closing the loop between research and practice" (Ontario Ministry of Education, 2007, p. 7) have been hosted by the Ontario Ministry of Education. Growing concern for evidence-based educational practice in Ontario has also been demonstrated by the Council of Directors of Education projects, the Evidence-Based Education and Services Team (E-BEST), the Canadian Centre for Knowledge Mobilization (CCKM), and the 2010 creation of a Knowledge Network of Applied Education Research (KNAER).

Furthermore, the value of evidence-based reading instruction has been particularly highlighted internationally in policy and theory as well. For example, PL 107-110, the *No Child Left Behind* legislation (2001) in the United States guaranteed funding to scientifically-proven instructional reading programs in an attempt to raise the reading performance of all children. Underpinning this legislation was the premise that the most effective reading instruction for all individuals is based on research findings (Council of Ministers of Education, Canada, 2009; McCardle & Chhabra, 2000; International Reading Association, 2010). Further to this belief are claims that decades of reading research have culminated in a consensus of what is necessary to prevent or remediate reading disabilities (National Reading Panel, 2000; Shaywitz, 2005; Snow, Burns, & Griffin, 1998). Evidence has demonstrated that early identification and appropriate instruction can prevent or alleviate 70% (Barnes, 2007) to 95% (Greenwood & Abbott, 2001) of potential reading disabilities; with research-based instruction, "at-risk readers can become both accurate and fluent readers" (Alexander & Slinger-Constant, 2004, p. 244).

The significant need for research-based reading instruction has been further underscored by accounts that 80% of all students with learning disabilities experience reading disabilities (Snow et al., 1998). This amounts to approximately 3.5% of the school population or more than 2 million children in the United States (Shaywitz, 2005). In Canada, Winzer (2007) reported a prevalence of reading disabilities ranging from 5% to 30% of the entire population. In addition, Sweet (2004) stated that 1/3 of fourth-grade students in the United States were unable to read simple books and many adults lacked the reading skills to decipher newspapers or bus schedules despite seemingly sufficient educational funding and qualified teachers. Another consideration is that most students with learning disabilities spend a minimum of 50% of their instructional days in regular classrooms (Ontario Ministry of Education, 2005), and up to 100% in fully inclusive schools. Therefore, classroom teachers as well as special education specialists should be cognizant of and employ current, evidence-based identification and instructional strategies with students who may be at risk of or who experience reading disabilities.

However, concurrent with the emphasis on research-based instruction is the widespread and perpetual concern that research findings are simply disconnected from educational practices (McLeskey & Billingsley, 2008); namely, there is a research to practice gap in education. This gap has attracted a great deal of attention over the years (Cochran-Smith & Lytle, 1990; Dagenais, Janosz, Abrami, Bernard, & Lysenko, 2008; McIntyre, 2005; McLeskey & Billingsley, 2008; Walberg & Genova, 1982; Weinert, Schrader, & Helmke, 1990; Williams & Coles, 2007). Cooper, Levin, and Campbell (2009) found more than 20 million hits with a Google search using the terms “research practice schools.” The divide between education research and practice demands attention because, as Carnine (1997) stressed, the “underutilization [of research] must be addressed comprehensively and concurrently if improvements in practice are to be realized,” especially for diverse learners (p. 514). Furthermore, the longer a gap between research and practice persists; the longer individuals wait for evidence-based instruction (Greenwood & Abbott, 2001). Therefore, the gap between research and practice in special and general education should be a matter of national concern (Greenwood, 2001).

Theoretical Framework

Knott and Wildavsky's (1980) theory of knowledge utilization was selected to underpin this study of reading disabilities research use. The theory proposes that knowledge utilization is not simply an “immediate and direct impact” (p. 542); instead, there are seven strands of utilization:

- Reception: Utilization takes place when policy-makers or advisors receive relevant information such as data.
- Cognition: Utilization occurs when the policy-maker reads, digests, and understands the information or studies.
- Reference: Utilization takes place when the information changes the views, the preferences or the policy-maker's understanding of the magnitude or probabilities of the impact.
- Effort: Utilization of information influences the actions of the policy-maker; effort is made to adopt the study's recommendations.
- Adoption: The measure of utilization is the whether the information is put into policy and whether it influences policy outcomes.
- Implementation: Utilization of information affects action if the information is implemented.
- Impact: Utilization at this stage means that the policy is implemented and it yields the desired effects.

A stage of “search and find” was added by the researcher for the current study in recognition of educators' capacity to receive knowledge by actively seeking and retrieving it. Knott and Wildavsky's (1980) second step, reception, was therefore divided into the stages of passive reception and another of active seeking and finding. The resulting framework delineated the meaning of “use” by defining specific stages of knowledge utilization; therefore the model could identify the degree to which research is used and at which stage research use may be compromised (e.g., is research received? Is research read?). The efficacy of this theoretical model for studying reading disabilities research use by teachers was tested and supported by a pre-pilot study before the theory was applied in this study (Davidson & Nowicki, 2012).

Method

A questionnaire on teachers' uses of reading disabilities research was completed by Ontario elementary school (Grades JK-8) educators in 15 school boards. The data were analyzed using descriptive statistics, regression analyses, and analyses of variance. Focus groups were conducted to verify or refute, elaborate on, and explain the questionnaire results. Transcribed records of the focus groups were analyzed thematically. Development and administration of the questionnaire and analyses of the results of the questionnaire and focus groups follow.

Instrument

The portion of the questionnaire which is being reported here consisted of Likert-style rating questions that were structured, closed, and purposely created to generate numerical information that was "amenable to statistical treatment and analyses" (Cohen, Manion, & Morrison, 2005, p. 247). The questionnaire emulated an instrument employed by Shultz (2007) who surveyed research use by university administrators. It reflected Knott and Wildavsky's (1980) seven stages of research utilization (reception, cognition, reference, effort, adoption, implementation, and impact) and the researcher's additional stage of search and find. Demographic data were also collected. These components of the questionnaire may be found in Appendix A. The online program Survey in a Box © (University of Western Ontario, 2003) was used to disseminate the questionnaire and collect responses. A paper version was available on request. Three iterations of the questionnaire were created before a copy was tested in a pilot study in which ten elementary school teachers participated. The pilot study results indicated that with refinement of the response options (e.g., removal of "neither agree nor disagree"), the information gathered answered the research questions and the instrument was unambiguous and convenient for respondents.

Procedure

Ethics approval for this study was granted by the Faculty of Education Sub-Research Ethics Board at the University of Western Ontario (Western University). The final online survey was posted by Media and Information Services in the Faculty of Education, University of Western Ontario at <http://www.edu.uwo.ca/readingdisabilities/> by way of the Survey in a Box © (2003) program from March 2, 2009 until June 30, 2009. Participants were recruited through four different avenues. First, professional organizations such as the Ontario College of Teachers, the Elementary Teachers Federation of Ontario, and the Ontario English Catholic Teachers Association were approached. Out of these three groups, only the Elementary Teachers Federation of Ontario advertised the questionnaire in its online newsletter. Second, 33 Ontario school boards were contacted and 15 approved the study. Third, the Learning Disabilities Association of Ontario and the Ontario Branch of the International Dyslexia Association also promoted the survey. Fourth, the researcher personally contacted teachers who may not have received the notice of the questionnaire via their school boards.

Focus group members were recruited by way of the final item on the questionnaire which asked: "Are you willing to participate in a 1 to 1 ½ hour group discussion about these results with 4-5 other teachers?" Interested respondents were invited to notify the researcher by email. Focus groups took place in November 2009 in two major southwestern Ontario cities. The

purpose of the focus groups was to collect teachers' feedback on the results of the questionnaire. The members were free to ask questions and discuss the information. The proceedings were audio-recorded and transcribed.

Data Analysis

The questionnaire data were coded and entered into the Statistical Program for the Social Sciences version 17 (SPSS; IBM, 2008) for analyses. Coding of responses to degrees of research use was as follows: very often = 5; often = 4; sometimes = 3; seldom = 2; never = 1; and no response and missing data = .999. To facilitate analyses, aggregated scores were calculated for age ranges, ranges of years in current teaching roles, ranges of years in past teaching roles, and for the categories of research use. Statistical analyses entailed: inter-item reliability; descriptive statistics for the demographic variables and for the rating questions; a one sample *t* test to compare the mean ages of the sample with the teacher population; and two univariate analyses of variance (ANOVA) to investigate the effects of current and past teaching roles on research use.

The transcribed focus group interviews were entered into WEFT QDA (Fenton, 2006) for coding and categorization. Reported here are the demographic results, statistical analyses, and a sample of the comments which were coded according to stages of research use. In order to establish inter-rater reliability, one-third of the comments coded by the researcher were also coded by a Master of Education student.

Results

Reliability

The inter-item reliability of the eight questions on research use produced a good alpha of .86. Inter-coder agreement of 82% was achieved in the coding of the focus group results. Discrepancies in coding were resolved through discussions between the coders.

Descriptive Data: Demographic

In total, 204 participants provided useful questionnaire responses. Table 1 presents the summary of the demographic features of the respondents. The data showed that there was a range of roles represented for the past and current teaching roles of the respondents. Specialized and primary grade teachers comprised significant groups of the respondents, and administrators and board personnel represented a very small portion of the sample. Years spent in their current positions ranged from 1 to 35 years ($M = 5.74$, $SD = 6.08$), and the teachers' total years of teaching experience ranged from 1 to 37 years ($M = 13.79$, $SD = 8.77$). The participants' ages ranged from 23 to 63 years ($M = 42.06$, $SD = 10.15$), with the largest representation from the 30 to 39 year age group. The average age and the relative sizes of the age groups closely resembled data reported in the Ontario College of Teachers 2008 Annual Report. The average age of the Ontario College of Teachers members was reported to be 42.56 years, with 18% at 20-30 years of age; 29% at 31-40 years; 23% at 41-50 years; 22% at 51-60 years; and 7% at 61 or more years of age. A one sample *t* test comparing the sample mean age with the teacher population mean age revealed no significant difference with $t(201) = -.70$, $p =$

Table 1

Demographic Features of the Questionnaire Respondents

Characteristic	<i>n</i>	Percent
Current Teaching Role		
Specialized	51	25.0%
Primary Grades	48	23.5
Junior Grades	38	18.6
Intermediate Grades	26	12.7
Other	24	11.8
Administration/School Board	9	4.4
No response	8	3.9
Previous Teaching Roles		
Mostly Primary Grades	53	26.0
Mostly Specialized	39	19.1
Mostly Junior Grades	38	18.6
Mostly Other	32	15.7
Mostly Intermediate Grades	22	10.8
Mostly Administration/School Board	7	3.4
No Response	9	4.4
Not Applicable	4	2.0
Years of Teaching Experience		
Current Position	165	81.3
1-9 years	26	12.9
10-19 years	10	5.0
20-29 years	2	1.0
30-39 years	1	0.5
No response		
Total		
1-9 years	81	39.2
10-19 years	59	29.4
20-29 years	54	26.5
30-39 years	10	4.9
Ages		
20-29 years	21	10.3
30-39 years	69	33.8
40-49 years	57	27.9
50-59 years	47	23.0
60+ years	8	3.9
No response	2	1.0
Gender		
Male	19	9.3
Female	176	86.3
No Response	9	4.4
Education		
Bachelor's Degree (General)	119	58.3
Bachelor's Degree (Honors)	38	18.6
Master's Degree	45	22.1
No Response	2	2.0
System		
Public	132	64.7
Separate	61	29.9
Private	1	0.5
No Response	10	4.9

.484. With respect to the gender of the questionnaire respondents, the female majority produced a male to female ratio of approximately 1:9, which is a considerably smaller than the 1:3 ratio of males to females reported by the Ontario College of Teachers (2008). Regarding the respondents' highest educational attainments, a bachelor's degree was the most prevalent ($n = 157$). Lastly, with the majority of the teachers employed by a public school board, the ratio of teachers in the separate school board compared to the public school board was approximately 1:2, which mirrored the Ontario College of Teachers statistics. However, the ratio of teachers from independent schools to public schools (1:132) was much smaller than the Ontario College of Teachers report of approximately 1:48. In summary, a wide range of educators responded to the questionnaire, and they were representative of the Ontario College of Teachers' members with respect to age and the public and separate school board affiliations.

Two focus groups with four teachers each were conducted. Seven of these participants had completed the online questionnaire, while one participant was recruited by a fellow group member. One focus group consisted of four females whose teaching experiences ranged from 10 to 30 years. They taught kindergarten, English as a second language, special education, and intermediate grades. The second group was comprised of three females and one male. Their teaching careers ranged from 1 to 35 years. One participant in this group was a supply teacher, and three held special education positions. In each focus group, one of the members taught in the separate school board, and three taught in the same public school board. Two members in each of the focus groups were acquainted with each other; however, they taught in different schools. The remaining members were unacquainted. This sample was one of convenience; teachers who volunteered and were in close proximity to each other determined who participated in the focus groups.

Descriptive Data: Questionnaire

The means of the responses to questions on the eight stages of research use are reported in Table 2. With the resultant range of mean scores between 2.58 and 3.30, the findings indicated that research was generally used "sometimes" (value of 3). Only means for the stages of "reception" and of "search for/ find" were below 3.00. In fact, almost one-third (32.3%) of the respondents indicated that they seldom or never received research on reading disabilities, and only 9.8% reported receiving research often or very often. The degree to which respondents searched for and found research was reported to be seldom or never by 22% of the participants and very often by 18.2%. In contrast, the respondents reported greater engagement in the remaining stages of research use (read/understand, reference, effort, adopt, implement, and impact) with more teachers using research often or very often than seldom or not at all. Only "impact" was rated as taking place most definitively "sometimes," with often/very often and seldom/never reported to the equal extents, each by 12% of the teachers.

Regression Analysis

A simultaneous linear regression analysis was conducted to discern the extent to which the teachers' ages, education, current and total years teaching were predictive of the aggregated variable of research use. Respondents in the pilot study and in Shultz's (2008) research had proposed that demographic variables may influence research use. Only the demographic features which were measured in interval or ordinal scales were included in the regression

Table 2

Mean Frequency Ratings of Reading Disabilities Research Use

Stage of Research Use	<i>n</i>	Mean	SD
Reception	144	2.58	0.91
Search/find	144	2.92	0.87
Read/understand	144	3.07	0.83
Reference	140	3.06	0.92
Effort	142	3.30	0.83
Adopt	140	3.24	0.85
Implement	126	3.17	0.71
Impact	127	3.00	0.71

Note. The range of possible scores was 1-5, with 1 = never; 2 = seldom, 3 = sometimes, 4 = often 5 = very often.

Table 3

Summary of Linear Regression Analysis for Demographic Variables Predicting Research Use

Variable	B	SE B	β
Teachers' Ages	.10	.06	.19
Teachers' Education	.16	.53	.02
Teachers' Years in Current Role	.11	.08	-.13
Teachers' Total Years Teaching	.10	.08	.16

Note. ** $p < .001$

analysis. All the variables were entered simultaneously in the regression analysis based on the projection that no one variable would be more predictive than another. Results of the regression analyses are reported in Table 3. None of the demographic features was found to be predictive of teachers' uses of research on reading disabilities.

Comparison of Means between Groups

An analysis of variance (ANOVA) was conducted to determine whether teachers' mean aggregated scores in research use (dependent variable) differed according to their current and past teaching roles (independent variables). A significant, moderate effect on the target variable of research use was found only for current teaching roles with $F(5, 122) = 3.09, p = .012, \eta^2 = .11$.

Tukey's Honestly Significant Difference (HSD) post hoc comparisons were undertaken to determine which teaching roles contributed most to above findings. Results indicated that research use by teachers currently in specialized roles ($M = 25.73, SD = 4.73$) was significantly greater than research use by intermediate grade teachers ($M = 20.81, SD = 6.09$).

Narrative Data: Focus Groups

With respect to the demographic data, members of the focus groups commented primarily on the male to female ratio and on the teaching roles of the questionnaire respondents. Members

relayed that the 1:6 ratio of males to females was not surprising, since the target group was elementary school teachers where male teachers are less prevalent than in secondary schools. Participants also remarked that the high representation of primary teachers relative to junior and intermediate educators was "typical of how you get response, even within a school."

The questionnaire data indicated that teachers used research "sometimes" across the eight stages of use, with the stages of reception and searching for research having lower frequencies than reference, effort, adopt, implement, and impact. The group members were largely astonished with these results. Although they considered that a response of "sometimes" was too vague, they concomitantly thought that teachers' reported use of research was overestimated. One group member suggested that respondents might have selected "sometimes" when they did not know what to choose. Another group member proposed that "sometimes" might reflect the use of research only twice, which is "bad." A different group participant stated that "sometimes" was a "shocking" response because it was not "concrete" enough. Yet, one member stated that "sometimes" was encouraging; it was better than "not at all."

In addition, feedback regarding the reported degree of research received by teachers included: "I was surprised, I mean, research, I don't think I've ever had PD on reading disability", "the only research in our board we get is what's the mandated way of doing it according to (name)'s particular wave at the moment, so.....we don't get the research," "they don't get it," and "we don't receive it directly....what we receive is somebody's version of what they want us to do, we are told what it is we are doing." Another member related that when she asks for the evidence from administration or from consultants, she might receive anecdotal accounts which she does not consider to be "scientific research." She believed that evidence should emanate from "controlled studies;" but, she exclaimed, "We do not receive that information...I have yet to receive an intelligent answer." Therefore, rather than receiving research on reading disabilities sometimes or seldom, the focus group members indicated that teachers do not receive such information at all.

With respect to searching for research, one member offered, "I chose to seek it out myself." Yet another member commented on teachers' reported levels of reading research with: "I have never in my 35 years seen a teacher during the day sit down and look at the research between classes." Additional comments which reflected the group members' disbelief concerning the reported use of research in the classroom were: "Research has nothing to do with what goes on in the classroom, absolutely nothing;" "I'm shocked. I don't see teachers use research;" "Most people are not going to fully implement it;" and "Most teachers teach according to what they learned themselves, what worked with them, or what worked, even if you just discovered it while going along, or what you are comfortable with." This lack of full implementation is how the focus groups rationalized the teachers' reports that they only sometimes achieved desired results from research use in teaching. With respect to the impact of research, one participant pointed out that although teachers reported searching for research, they still achieved expected results only sometimes; that was "amazing." Another questioned: "You also have to wonder...they're implementing it, but are they implementing [it] the way it's supposed to be implemented or are they implementing a skewed version of it and is that why the impact is only sometimes?" Overall, there was skepticism about the reported use of research and apparent inconsistencies.

Discussion and Summary

A sample of 204 Ontario elementary school teachers completed a reliable questionnaire on their

uses of reading disabilities research. The questionnaire, which was based on a modified version of Knott and Wildavsky's (1980) theory of knowledge utilization, elicited teachers' views on the extent to which they use reading disabilities research and stages at which research use may be problematic. Overall, teachers reported that they used such research (read and understood it, referenced it, attempted to use it, adopted it into practice, applied it, and used it with desired results) "sometimes;" however, the stages of "reception" and "search/find" reportedly occurred less often than "sometimes." While the majority of focus group members considered "sometimes" to be too vague and nondescript, they also believed it was in fact an overestimate of teachers' uses of reading disabilities research. As the focus group members pointed out, "sometimes" might be selected when teachers are unable to recall how frequently they use research or it might refer to use that took place only once or twice. An additional finding suggested that specialized teachers (e.g., special education teachers) use research more than teachers of the intermediate grades. The focus group confirmed this finding in their discussions of their own roles. The majority of the focus group members were specialized and they reported receiving and using research on reading disabilities more than classroom teachers do. A high percentage of respondents to the questionnaire were also specialized teachers. This fact may have inflated the reported extent of research use by teachers. Use of research "sometimes" may well be better than never; however, when one considers what the findings may actually signify and the number of students who need evidence-based reading instruction in order to prevent or overcome disabilities, "sometimes" is insufficient. This study demonstrated that a gap exists between reading disabilities research and Ontario elementary school teachers' uses of such research. The primary issue is the lack of reception; teachers are not receiving evidence-based information on reading disabilities in order to assist their students. This problem reportedly exists despite efforts in Ontario to increase the role of research and evidence in education (OME; E-BEST), to improve the mobilization of knowledge (CCKM), and to connect university researchers and educators (KNAER). Although opportunities for acquiring knowledge on reading by way of professional development or professional learning communities should be available, teachers have confirmed that reading disabilities are not a priority; for example, in professional learning communities, reading disabilities "is not a big concern to talk about" (Davidson & Nowicki, 2012, p. 336). Yet teachers in the present study did express a desire to gain knowledge about reading disabilities. Investigation of methods to improve the transmission of research on reading disabilities to teachers is therefore indicated. In addition, the study of further obstacles to research use and means to bridge reading disabilities research and practice is needed in order to maximize evidence-based identification and instruction of students who are at risk for or who have reading disabilities.

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Appendix A: The Questionnaire

The Research to Practice Gap in the Identification and Instruction of Students at Risk for Reading Disabilities: Teachers' Perspectives

Respondent

1. Please indicate your current teaching position: _____
2. Please indicate the number of years you have been teaching in this position: _____
3. How many years have you been teaching in total? _____
4. Please list other teaching positions that you have held and number of years spent in each:
 Teaching position: _____ Number of years: _____
 Teaching position: _____ Number of years: _____
5. What is your age?

6. Please indicate the degrees that you have obtained:
 Bachelor's (B.A. /B.Sc.) _____ Major: _____
 Bachelor of Education: _____
 Master's: _____ Major: _____
 Ph.D. / Ed.D.: _____ Major: _____
 Other: _____ No response: _____
7. Are you male _____ or female _____? No response _____
8. Do you teach in the public system _____, separate system _____, or private system _____?
 No response _____

Use of Research

In the following sections, *research* refers to:

Evidence of means to identify and instruct students who are at risk for or who have a reading disability; these means have been shown to be effective by multiple methods and/or studies.

How often do you do the following?

	Very Often	Often	Sometimes	Seldom	Never	No response
1. Receive research about reading disabilities?	<input type="radio"/>					
2. Search for and find research about reading disabilities?	<input type="radio"/>					

3. Read and understand research about reading disabilities?
4. Find that research about reading disabilities changes my views and/or I discuss research about reading disabilities with others.
5. Try some ideas from research about reading disabilities.
6. Plan to put ideas from research on reading disabilities into policy for my programming.
7. Implement ideas from research on reading disabilities (more than in #5).
8. Implement ideas from research on reading disabilities with the desired results.