

Enhancing the Impact of Evidence-based Publications on K-12 ESL Teacher Practices

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The reading of current research-informed publications is an essential component of teacher professional development that has the potential to lead to or reinforce the implementation of effective instructional practices. To our knowledge, no studies have examined kindergarten to grade 12 (K-12) ESL teacher engagement in professional reading related to the teaching and learning of ESL. Therefore, we conducted a survey of K-12 ESL teachers from four Canadian provinces to examine their reading practices. Results revealed that teachers mainly consulted professional newsletter articles to address classroom-related issues and indicated that key stakeholders (e.g., teachers' associations, school districts, and school principals) do little to enhance teachers' reading of TESL-related publications. Several recommendations to increase teacher reading engagement are included.

La lecture de publications courantes fondées sur la recherche constitue une composante essentielle du développement professionnel des enseignants et une qui a le potentiel d'entraîner la mise en œuvre de pratiques pédagogiques efficaces, ou de renforcer celles-ci. Nous ne connaissons aucune étude ayant examiné l'implication des enseignants K-12 dans la lecture de revues et d'ouvrages spécialisés portant sur l'enseignement et l'apprentissage en ALS. Nous avons donc entrepris une enquête auprès d'enseignants K-12 d'ALS dans quatre provinces canadiennes pour connaître leurs pratiques quant à la lecture. Les résultats indiquent que les enseignants consultaient surtout des articles de bulletins professionnels pour aborder des questions liées à leur pratique. Les enseignants ont également mentionné que les intervenants principaux (par ex. les associations d'enseignants, les districts scolaires et les directeurs d'école) faisaient peu pour encourager la lecture par les enseignants de publications portant sur l'ALS. Nous présentons plusieurs recommandations pour motiver les enseignants à la lecture.

Everard, Morris, and Wilson (2004) asserted that a degree in education or a teaching certificate or diploma no longer equips teachers for lifelong service; therefore, ongoing professional development (PD) is required. Professional associations, school jurisdictions, and school principals play a key role in providing professional development opportunities and encouraging teachers' participation in PD, and teachers are primarily responsible for setting and achieving their PD goals. Professional reading is one way to achieve these goals. Because English as a second language¹ (ESL) programming in schools is affected by numerous factors, such as governments' education policies, funding, and ever-changing immigration trends, K-12 ESL teachers, in particular, must engage in specialized PD to develop the expertise required to effectively meet the linguistic, cultural, and academic needs of the ESL learners in their classes.

Effective PD programs are not only grounded in research (Elmore, 2004), but they also promote participant ownership so that the focus is on specific teacher needs. In a yearlong teacher education project, Kubanyiova (2012) documented the effects of formal teacher development programs on “language teachers’ thinking and practices” (p. 4). Her findings indicated that “teachers’ goals, purposes and motivational orientations [must be considered] much more thoroughly; not so much in terms of *whether* the teachers are motivated to pursue their professional development, but *what* motivates them” (p. 102, emphasis in the original). Therefore, teachers need to be empowered to set their own PD goals (Carlin, 1997; McNaught, 2009; Richards & Farrell, 2005). The reading of self-selected teaching English as a second language (TESL) related publications is one cost-effective, convenient way to fulfill these goals and increase professional learning (Abbott, Rossiter, & Hatami, 2015).

Although educational stakeholders expect teachers to remain current with research in order to use knowledge gleaned from the literature to make teaching and learning as efficient and effective as possible, the extent to which this expectation is met may be somewhat dependent on the context. For example, the reading of published articles may be encouraged or completely neglected in teachers’ PD programs and/or plans. Since research findings often take many years to be reflected in professional learning and development programs, much relevant, current research may have no impact on educational practice if teachers do not have opportunities to read, discuss, and implement research findings. Cooper and Levin (2010) also point to a gap in the influence of research on policy making. District and school PD policies have the potential to positively impact the uptake of research in schools and to promote the recognition of the fact that ESL teacher knowledge and teaching pedagogy are more than just differentiated instruction and good teaching practices (Harper & de Jong, 2009). Teacher educators and researchers need to develop a better understanding of teachers’ professional reading habits in order to facilitate ESL teachers’ reading of credible, research-informed, TESL-related publications.

In this paper, we report the results of a survey of Western Canadian K-12 ESL teachers’ professional reading practices. We examined the extent to which engagement with TESL-related publications was reflected in their ongoing professional learning and teaching. We also explored ways in which cultures of engagement could be fostered by stakeholders (e.g., teachers’ associations, school districts, and school principals), given the wide variation in contextual resources and in the knowledge, training, experience, and attitudes of ESL teachers.

Literature Review

As professionals, ESL teachers are expected to keep up-to-date with current developments in the field of TESL. Considering the growing numbers of English language learners (ELLs) who are placed in mainstream classrooms for most or all of the school day (Davison, 2006; Leung, 2007), it is likely that all teachers would benefit from keeping abreast of current issues, trends, and innovations in TESL. Although specialized knowledge is required to effectively teach ESL learners (Harper & de Jong, 2009), many teachers, including some ESL teachers in Canada, have no formal TESL training (Howard, 2006). Harper and de Jong (2009) argue that ESL teacher expertise includes linguistic and cultural knowledge and skills that go beyond “general good teaching practices” (p. 137). Some of the key areas of which ESL teachers require in depth knowledge include the similarities and differences between first and second language learning; individual difference variables that affect the speed and effectiveness of second language learning; how linguistic differences between English and the ELLs’ first languages impact the learning of

English; bilingual language learning strategies; differences in bilingual and monolingual norms in acquiring English; and differences in cross-cultural communication. Applied linguists continue to advance our understanding of these differences by conducting and publishing research in these areas.

One way in which teachers can keep abreast of advances in the field is by reading research articles published by academics and other experts in peer-reviewed journals, such as the *TESL Canada Journal*, and research-informed publications, such as textbooks, that provide recommendations and implications for teaching and learning ESL. Despite Hemsley-Brown and Sharp's (2003) conclusion from their systematic review of the literature on the use of research in professional practice that "education practitioners appear to have very little incentive to access research findings and the language and presentation of research is perceived as alienating" (p. 460), PD that engages teachers in relevant professional reading can further their understanding of educational approaches and instructional interventions that have been demonstrated to be effective in the current research literature.

Researchers (e.g., Foorman & Moats, 2004; Spear-Swerling & Brucker, 2003, 2004) have established links between PD, teacher knowledge, and improved student outcomes. For example, Spear-Swerling and Brucker (2004) found that PD designed to increase teachers' knowledge of English word structure and phonics positively impacted native English-speaking students' word reading. Foorman and Moats (2004) reported findings from several studies that connected gains in student reading achievement to research-based PD initiatives. Although research connecting ESL teacher PD to improved outcomes in ESL student performance is lacking, it follows that ESL teachers who continue to develop specialized knowledge related to second language acquisition, linguistics, and cross-cultural communication will be better prepared to integrate recommended research-supported approaches, techniques, activities, and strategies into their instruction and thereby be better equipped to ensure the success of their ELLs.

Externally controlled forms of PD organized by teacher associations, school districts, and school leaders, where information is typically transmitted in discrete stand-alone sessions, are likely too general to be directly relevant to ESL teachers' classroom practices and ESL learners' instructional needs. To encourage teachers to voluntarily engage in PD, Bigsby and Firestone (2017) found that PD needs to be collegial in nature and must help teachers perform their duties better. The reading of professional literature, particularly peer-reviewed research, is a credible resource for autonomous teacher professional learning that has evidence-based pedagogical implications for the classroom. Teachers should be encouraged to engage in more meaningful learning by selecting and reading relevant articles that address their own professional goals, teaching contexts, and specific learner needs.

Unfortunately, the reading of articles may be neglected in teacher PD programs. For example, the Minnesota Department of Education's (2013) *Teacher Development, Evaluation and Peer-support Model: Implementation Handbook* mentions articles on only one page of the document, suggesting that articles could be included in a teacher's portfolio as "artifacts and evidence of practice" (p. 20). However, simply including an article in a portfolio constitutes very weak evidence of teachers having actually read it and implemented the findings in their classrooms. In Alberta, although teachers are mandated by government legislation to complete an annual teacher professional growth plan, they are not specifically required to read current research. Professional reading needs to be encouraged and supported by key stakeholders, such as school principals (Rudland & Kemp, 2004) rather than neglected. Rudland and Kemp (2004) regard principals as key influencers of professional reading. First-hand knowledge of current empirical evidence can

justify classroom practices and distinguish them from those that are based on misleading pseudoscience (Carter & Wheldall, 2008) or on neuromyths (Lethaby & Harries, 2016), which can be attributed to the misreading or misunderstanding of scientific facts. The reading of research-informed educational literature can assist teachers in creating inclusive classroom environments and providing quality instruction for all learners and, in particular, be used to help ESL teachers better meet the needs of their learners, who come from a wide-range of first language backgrounds and cultures.

Alvermann (1990) called for research into what teachers are reading and the type of reading that leads to positive changes in teachers' thinking and practices. Although no studies have specifically examined the professional reading practices of K-12 ESL teachers, the value of professional reading in shaping classroom practices and increasing teachers' educational and instructional knowledge is supported in the general educational research literature. In two large-scale surveys of K-12 teacher PD conducted in the United States (Commeyras & DeGroff, 1998; Littman & Stodolsky, 1998), professional reading was reported to influence classroom practice. For example, Commeyras and DeGroff (1998) found that the majority (69%) of teachers who read professionally indicated that they made changes to their instruction based on recommendations in the literature. The teachers in these surveys preferred to read pragmatic articles with teaching tips (Littman & Stodolsky, 1998) or teacher magazines (Commeyras & DeGroff, 1998) rather than academic (theoretical or research) papers. Commeyras and DeGroff also reported that professional reading enhanced teachers' educational and instructional knowledge. Despite the potential benefits of reading, Littman and Stodolsky noted time as a barrier and suggested that additional research is needed to better understand how teachers access readings and engage with the reading material. In a review of the literature pertaining to teachers' professional reading habits, Rudland and Kemp (2004) also identified time as a barrier to professional reading, in addition to the lack of relevance and availability of reading materials.

In Canada, there has been little research on K-12 teachers' professional reading habits. Before the advent of the Internet, when access to periodicals was limited, Hughes and Johnston-Doyle (1978) surveyed K-12 teachers in Eastern Canada to examine their use of professional periodicals. Of the 373 teachers who responded to their survey, only 19% "regularly read five or more professional or general interest publications" (p. 43), while 13% did not read regularly. Because general interest publications were included in these findings and "regularly" is not defined clearly, it is likely that few teachers were reading peer-reviewed research articles. They instead appeared to favour widely available teacher association publications such as newsletters. The professional periodicals the teachers reported reading most were the *Instructor* (32.7%) and the *Journal of Education* (14.7%), while the most widely read general interest periodicals included *Time* (12.9%), *National Geographic* (10.7%), and *Reader's Digest* (10.7%).

Today, with the sheer magnitude of information on the Internet, teacher access to professional literature is less restricted than in the past. However, the ability to locate quality publications is becoming more of a challenge. Erroneous information and misconceptions about TESL are abundant (see Harper & de Jong, 2004; Lethaby & Harries, 2016). For example, "good teaching for native speakers is good teaching for ELLs" (Harper & de Jong, 2004, p. 156) or "teaching to learning styles is more important in language learning than in other types of learning" (Lethaby & Harries, 2016, p. 19) are commonly held beliefs. Teachers may inadvertently access and implement the "less empirically tested research and teaching techniques that are widely available" (Rudland & Kemp, 2004, p. 14). These misconceptions may be attributable to the advent of readily available "alternative facts" and "junk science" found in open-access online predatory journals on

the Internet that charge authors to publish and forgo the rigorous expert peer-review and editorial processes provided by legitimate scholarly journals. The proliferation of predatory journals and the instant access to non-refereed information makes it challenging for teachers to locate credible research findings that can be relied upon to shape their instructional practices. In light of these changes in the accessibility and quality of available information, we became interested in whether and how ESL teachers were keeping abreast of current TESL-related professional literature. A better understanding of ESL teachers' professional reading practices may stimulate new ideas for research dissemination which could enhance teachers' understanding of current issues, trends, and innovations in ESL education.

The study reported in this paper extends our program of research on adult ESL instructor professional development (e.g., Abbott & Rossiter, 2011; Abbott, Rossiter, & Hatami, 2015; Rossiter, Abbott, & Hatami, 2013) to the K-12 ESL context. In a previous study conducted with instructors of adult ESL learners (Abbott, Rossiter, & Hatami, 2015), we examined Canadian adult ESL educators' engagement with peer-reviewed research articles, their perceptions of the impact of the reading of research on their professional practice, and strategies for fostering the reading of peer-reviewed research publications. Through national surveys of adult ESL program administrators and instructors, we found that participants had limited engagement with peer-reviewed research and that little or nothing was being done in their programs to facilitate engagement. Those participants who were reading research, however, reported that their reading had a positive impact on their work. We also solicited recommendations for enhancing practitioner engagement with research from TESL researchers (Rossiter, Abbott, & Hatami, 2013). Findings from all three surveys suggested that a systematic approach involving negotiation among key stakeholders in the Canadian context (i.e., professional TESL organizations, ESL program funders, program administrators, and instructors) would be the most effective way to promote the reading of peer-reviewed research.

While there is limited research on teacher engagement with research-informed publications in adult ESL contexts, no research to date in Canada or elsewhere has examined K-12 ESL teachers' perceptions of and engagement with TESL-related publications. To optimize teacher engagement and support teacher learning that informs practice, it is necessary to understand teachers' reading habits and to determine what would encourage them to read more TESL-related publications (particularly peer-reviewed research articles). The main research questions addressed in this study were as follows:

1. To what extent were K-12 ESL teachers reading TESL-related articles and books?
2. What TESL-related publications were they reading and why?
3. To what extent and how did their TESL-related reading impact their teaching?
4. How could their engagement with TESL-related publications be enhanced?
5. What are the characteristics of TESL-related articles that encourage educators to read them?

Method

Online Survey

Following a review of the teacher professional development and reading literature, a 24-item survey was developed, in accordance with recommendations for questionnaire layout, length,

instructions, question types, and scales in Dörnyei and Taguchi (2010), then piloted, and subsequently revised (see Appendix). The survey consisted of a variety of item types: yes/no, Likert-type, fill-in-the-blank, numeric response, and open-ended. Data collected included participants' educational background, teaching experience, position, and location; the extent of their engagement with TESL-related publications; which publication types and what topics they were reading and for what purpose; their perceptions of the impact of reading on their practice; which characteristics of articles encouraged them to read them; what is currently being done to encourage them to read; and how engagement with TESL-related articles could be enhanced within their teaching contexts. To avoid confusion with the reading of publications in the general education literature, in our survey, we defined TESL-related articles as "published articles related to the teaching and learning of English as a second language." This definition allowed teachers to determine what a TESL-related article was, thereby providing us with insight into the types of publications they considered to be articles. The online survey was hosted on and administered via a cloud-based software program (SurveyMonkey™).

Procedure

ESL teachers in K-12 schools in British Columbia, Alberta, Saskatchewan, and Manitoba were invited to complete the survey through an email disseminated via their professional teachers' association (i.e., British Columbia's Teachers of English to Speakers of Other Languages Provincial Specialist Association, the Alberta Teachers' Association's ESL Specialist Council, Saskatchewan's Teachers of English as an Additional Language, and Teachers of English as an Additional Language in Manitoba).

Data Analysis

Survey responses were imported from SurveyMonkey™ into SPSS 23.0. Frequencies and descriptive statistics for the quantitative survey items (Likert-type ratings, yes/no, and numeric responses) were calculated. In accordance with applied thematic analysis (Guest, MacQueen, & Namey, 2012), participants' open-ended responses were read carefully several times, and the salient themes identified in each reading were transformed into codes, confirmed in the other participants' responses (to ensure coding consistency and accurate representations of the participants' responses), verified for coding accuracy, and quantified. An ad hoc chi-square test of association was also performed to ascertain group differences (undergraduate, graduate) in the reading of peer-reviewed articles (yes, no). To facilitate comparisons with other studies of teachers' professional reading practices, our quantitative survey results are reported in percentages.

Results and Discussion

The key objectives of this study were to investigate K-12 ESL teachers' engagement with TESL-related publications, to ascertain the impact of these publications on their practice, and to discover ways to increase research-informed TESL knowledge utilization in schools. Our findings are presented and discussed in each of the following sections: (a) respondents' background; (b) reading engagement (frequency, sources, purposes and topics); (c) perceptions of the extent and nature of the impact of reading on teaching; and (d) enhancement of reading engagement

(characteristics of the publications that encouraged teachers to read, and current facilitation of and recommendations for enhancing the reading of TESL-related publications).

Respondents' Background Information

Sixty ESL educators from four Western Canadian provinces (British Columbia, 37%; Alberta, 55%; Saskatchewan, 7%; Manitoba, 2%) completed our survey, which represented approximately 9% of the total membership. They reported their highest level of education as follows: bachelor's degree (28%), education after-degree (38%), master's degree (32%), and doctoral degree (2%). Almost half (48%) had specialized in TESL, 12% in curriculum design and instruction, 9% in administration and leadership, and the remainder in a wide variety of fields (e.g., early childhood education, special education, religious education, library science). Respondents also provided information on their bachelor of education (BEd) route: 33% studied in the elementary stream, 55% in secondary, and 10% reported "other," which included early childhood and adult education. Five percent had completed their BEd as ESL majors (only the University of British Columbia granted a major in ESL at the time of dissemination), and 22% reported having an ESL minor. These educators had diverse full-time teaching experiences ranging from one to 42 years ($M = 14.9$, $SD = 9.7$; $Mdn = 15$; $Mo = 10$). Seventy-seven percent reported their current position as classroom teacher, 12% as consultant, and 22% as other (e.g., department head, coordinator, learning leader); the greater than 100 cumulative percentage for this question resulted from six participants working in more than one position (e.g., as both a classroom teacher and a consultant).

Engagement with TESL-related Publications

Number of articles or books read. When asked if they had read any TESL-related articles or books within the past year, 90% of the respondents indicated *yes*; 96% of them reported reading at least one article ($M = 16$, $SD = 27.6$; $Mdn = 6$; $Mo = 5$), and 35% had read books ($M = 4$, $SD = 8.9$; $Mdn = 2$; $Mo = 1$ and 2). The average number of articles and books read needs to be interpreted with caution—the distributions were severely positively skewed, as one participant reported 150 articles, one reported 50, and two indicated reading 40 books; therefore, the medians (center point) and mode (most frequently occurring number) are better representatives of the central tendencies. Consequently, the amount of reading is more accurately captured by the center point, which splits the distribution in half: median number of articles read ($n = 6$) and books read ($n = 2$). Of those who indicated that they had not read any articles or books, their reasons for not reading were "I don't have time" (100%) and "I have limited access to articles" (8.3%).

The ESL teachers in our study reported reading much more than the K-12 teachers in Hughes and Johnston-Doyle's (1978) study. This finding may be directly attributable to the fact that teachers today have greater access to articles and books due to the digitization of information and the resultant ease of access (i.e., quick and often free) via the Internet.

Publications read. Our investigation into the source of TESL-related reading material revealed that provincial teachers' association magazines were the source of reading of 40% of the respondents. Unspecified online resources, such as websites and blogs related to teaching, were the second-most prevalent sources of information (33%); unfortunately, relying on non-refereed Internet sources could be problematic, as some of the information may not be research-informed

and could therefore be misleading. Peer-reviewed journals (30%) were the third major resource accessed by teachers. Newsletters published by ESL associations constituted the fourth major publication type (23%).

Of those teachers who accessed peer-reviewed journals, almost all (89%) cited either the *TESL Canada Journal* or *TESOL Journal* as their source of TESL-related articles; the remaining 11% did not specify the refereed journal title. Although the *TESL Canada Journal* is an open-access journal, *TESOL Journal* requires a paid subscription; therefore, it is not surprising that the *TESL Canada Journal* was the most oft-cited peer-reviewed journal. Those who reported accessing the *TESOL Journal* were enrolled in graduate studies and were thus able to access the *TESOL Journal* through their university database. Further analysis revealed that the majority of teachers (89%) who accessed peer-reviewed literature held a graduate degree or were enrolled in a graduate program; moreover, 100% of the respondents who specified a journal either had a master's/doctoral degree or were currently enrolled in a certificate or graduate program. These results imply a direct effect of level of education on the reading of peer-reviewed research.

To further examine the relationship between level of education (undergraduate, graduate) and the reading of peer-reviewed articles (yes, no), we performed an ad hoc chi-square test of association. Respondents were divided into two groups: teachers with undergraduate degrees only and teachers with graduate-level training (i.e., those who held a master's/doctoral degree or were enrolled in graduated studies). The groups' responses were then cross-tabulated (i.e., whether or not teachers reported reading peer-reviewed/refereed journals). The chi-square test of association revealed a significant relationship between reading and group, $\chi^2(1, n = 60) = 20.01, p < .001$. Teachers who received graduate-level training were more likely to choose to read TESL-related articles in peer-reviewed journals.

These results add to the small pool of literature on Canadian K-12 teachers' professional reading practices. Similar to Hughes and Johnston-Doyle's (1978) findings gathered from teachers in Eastern Canada, only a subset of the Western Canadian ESL teachers in the current study reported reading peer-reviewed research. Peer-reviewed research articles were almost exclusively read by graduate-level trained teachers, suggesting that socialization into reading research for the purposes of enhancing teacher knowledge occurs mainly at the graduate level: Littman and Stodolsky (1998) also found a significant positive relationship between teachers' education level and professional reading. The finding that predominantly graduate level teachers are reading research from primary sources to keep up-to-date with the literature supports Everard et al.'s (2004) argument that more than an undergraduate teaching degree is required for an effective life-long teaching career. It should be noted, however, that teachers' preferences for association newsletters has not changed in the four decades since Hughes and Johnston-Doyle's survey. If the material in these newsletters is research-informed, then reading this type of publication could also assist teachers with undergraduate degrees in keeping current with best practices. Considering that effective PD is deemed to be best grounded in research (Elmore, 2004), the relatively high dependency on unspecified online sources (websites, blogs) cited in our study is rather disconcerting. Legitimate, credible, professional literature must now compete for an audience with predatory journals and less conventional sources that may not be grounded in research. Classroom practices guided by dubious evidence should be of concern to all educational stakeholders.

Reasons for reading TESL-related articles. Teachers were also asked why they chose to read TESL-related articles in particular (aside from books). Their responses were as follows: they read for professional development (72%), to address a classroom related concern (63%), because

it was required by their academic coursework (15%), because it was required by their employer (5%), and for other reasons (12%). Those who selected “other” indicated that their motivation for reading stemmed from personal interest. We also asked them to indicate their stated choices as a percentage of their total reason for reading. Their weightings were as follows: “required for academic coursework” ($M = 78\%$, $SD = 28.05$), “to address a classroom related issue” ($M = 66\%$, $SD = 27.07$), “other” ($M = 46\%$, $SD = 34.09$), and “for professional development” ($M = 44\%$, $SD = 31.43$). Most notably, few teachers weighted “required by employer” as their reason for reading ($M = 7\%$, $SD = 2.89$). Reasons teachers provided to justify their reading in the “other” category included “for personal interest” and for delivering PD to other teachers.

The high interest shown by the teachers in reading for professional development is commendable. As Abbott, Rossiter, and Hatami (2015) have emphasized, self-selected reading is a valuable form of professional learning, and the respondents in this study agreed with this perspective. Kubanyiova (2012) and Bigsby and Firestone (2017) found relevance to be a key motivational factor for PD; similarly, we found that teachers were driven to read by practical classroom concerns and/or by requirements for academic coursework. Reading relevant materials also promotes teacher ownership of their PD, as such readings can directly meet their needs (Elmore, 2004) and PD goals (Carlin, 1997; McNaught, 2009; Richards & Farrell, 2005). The fact that the teachers were reading for the purpose of finding a way to address classroom issues underscores the potential impact of reading on future classroom practices, a topic that we discuss in the Impact on Teaching section below. Our finding that most teachers were not required to read by their employers indicates that principals could do more to encourage teachers to keep up-to-date with current TESL-related publications.

Topics read. This survey question addressed Alvermann’s (1990) call to identify what teachers are reading. The teachers reported reading about a wide range of TESL-related topics: practical ESL classroom activities (65%), ESL teaching methodology (58%), resources for ELLs (57%), techniques for differentiating instruction to accommodate ELLs (55%), ELL assessment strategies (48%), second language acquisition (45%), learners’ cultural and linguistic backgrounds (42%), community support networks (18%), intercultural communication skills (15%), ELL policy and programming (13%), technology/computer assisted language learning (8%), other (8%). Included in the “other” category were more specific topics: supporting mainstream teachers with ELL students, ESL for Aboriginal students, response to intervention, and effects of socio-economic status. The high percentage of reading about practical ESL classroom activities, methodology, and resources is unsurprising considering that our participants were practicing teachers. The majority of the high school academic teachers in Littman and Stodolsky’s (1998) study also preferred practical readings.

Impact on Teaching

Extent of impact. We asked the teachers to rate, on a four-point Likert-type scale (not at all, minimally, moderately, extensively), the extent to which reading TESL-related articles impacted their teaching. The majority of teachers (67%) reported that their professional reading had a positive impact on their teaching (extensively = 12%; moderately = 55%); a minority reported reading had a minimal (18%) or no (2%) impact on their teaching. Commeyras and DeGroff (1998) also found similar results in that 69% of the K-12 literacy professionals in their study indicated that their professional reading promoted the implementation of research-informed practice. In the adult TESL context, 87% of the instructors in Abbott, Rossiter, and Hatami’s (2015) study

stated that reading positively influenced their teaching.

Nature of impact. Teachers reported numerous ways in which the TESL-related articles impacted their teaching: they provided new ideas, techniques, and resources for practice or curriculum design (57%); they increased teachers' understanding of research issues (38%); they provided information for students (10%); they confirmed teachers' beliefs about English language teaching practices (28%); and other (17%). In the "other" category, we found themes related to increasing teachers' confidence, helping provide material for leading professional development sessions, guiding reflections, promoting sharing with colleagues, and prompting refinement of department practices and policies. These results align with findings from previous surveys of K-12 teachers (Commeyras & DeGross, 1998; Littman & Stodolsky, 1998) and adult ESL instructors (Abbott, Rossiter, & Hatami, 2015) that highlight the influence of reading professional literature on teaching practices. In comparison with the adult ESL teaching context, 64% of the teachers in Abbott, Rossiter, and Hatami's study reported that reading "provided new ideas or resources for their instruction (or course design)" (p. 93). Educational stakeholders should take heed of the potential of research-informed TESL publications to shape teachers' practices, whereas the implementation of ideas gleaned from or confirmed in dubious sources—and the treatment of these ideas as actual fact or best practices—is highly problematic. University librarians and teacher educators play a key role in educating pre-service teachers in ways to identify predatory journals and evaluate the credibility of information available on the internet. As professionals, teachers have a responsibility not only to remain current with educational research but also to guard against the infiltration of pseudoscience and alternative facts into the classroom.

The observation that reading promoted collegial sharing is an important one. As Bigsby and Firestone (2017) found, collegiality is a motivator of teachers' engagement with PD. Our findings suggest that professional reading can establish a positive feedback loop—that is, reading can promote social sharing, which in turn motivates additional reading.

Enhancement of Reading Engagement

Article characteristics that influenced selection. We wanted to know what influenced the teachers' choices for selecting the particular TESL-related articles that they read. Three dominant article characteristics emerged: availability (67%), quality (40%), and relevance (38%). Related to availability, 75% of the teachers reported accessing free articles online. Furthermore, these respondents indicated that 68% of all of the articles they read were freely available on the Internet. The other access options teachers selected included personal subscriptions (33%), a colleague or employer (30%), school library (13%), and university library (3%).

As Rudland and Kemp (2004) emphasized, availability is a key issue that impacts the quantity of professional reading in which K-12 teachers engage. Our results corroborate their findings. Abbott, Rossiter, and Hatami (2015) also found the same ordering of characteristics (availability, quality, relevance) that influenced adult ESL teachers' choice of readings; in addition, the adult ESL instructors also relied on free online access as the main source of reading. However, the fact that free online access was the most prevalent outlet in the present study is of potential concern. Aside from a limited number of credible, open-access scholarly TESL publications, other free online material (predatory journals, websites, blogs) may be of questionable quality—an issue also identified by Rudland and Kemp (2004).

Current facilitation of engagement with TESL-related publications. From the responses to an open-ended question that asked survey respondents what was currently being

done to facilitate teachers' engagement with TESL-related publications, two common themes emerged: (a) schools and districts were doing very little to promote the reading of TESL-related publications, and (b) teachers were unaware of any supports or encouragement to increase their professional reading. Indicative of the first theme, many teachers (52%) simply stated either "nothing," "next to nothing," "not much," or "very little" was being done. Participants did not offer further insight, except for one who attributed the lack of encouragement to "too many budget cuts." With respect to the second theme regarding supports for professional reading, teachers (18%) claimed that they were either "not sure of," "unsure of," "unaware of," "not certain of" or "didn't know of" any available supports. One teacher who indicated that she was not certain of any supports stated "I just started teaching ESL this year and was not given any information from my school or school district."

Although our results demonstrate a general lack of TESL-related reading facilitation by school or district personnel, five participants reported instances of support:

Our vice principal puts them [publications] on the table for others to read and I share some with colleagues that are interested in learning more.

As a Diverse Learning Coordinating Teacher, I bring this [publications] to our teachers as do the DLCTs in other schools.

Books are purchased for and provided to teachers; book clubs are open to teachers to join (optional PD on a specific topic); relevant journal articles may be highlighted for teachers (sent or posted online).

References to articles [are sent] via email.

Some sharing of relevant journal articles among colleagues.

The sharing of articles by principals, consultants, and teachers has the potential to encourage professional reading. As discussed above, collegiality plays a key role in PD and we argue that it also can motivate professional reading.

Given the potential benefits of professional reading, it is unfortunate that respondents indicated minimal efforts by their schools and districts to disseminate and encourage the reading of TESL-related publications. These findings are similar to those found in the context of adult TESL (Abbott, Rossiter, & Hatami, 2015) where little was being done by key stakeholders to facilitate engagement with professional reading. Increased funding and time set aside for professional reading are logical steps, considering that reading is a cost-effective professional development activity. The five instances of facilitation reported above by teachers are positive strategies, but simply sharing an article may provide insufficient motivation to read it and then implement the relevant information in schools. For some, reading means in-depth study of an article, whereas others equate skimming with reading (Littman & Stodolsky, 1998). There are also some teachers who, despite being presented with and having read a relevant article, may fail to make any connections between the information in the article and their professional practice. As one respondent stated, "The ESL coordinator sends out stuff, most of it is irrelevant." The likelihood of the ESL coordinator consistently disseminating irrelevant readings is questionable; perhaps this particular teacher would benefit from additional guidance offered in a professional reading group where the teachers are encouraged to discuss ways in which the research findings could be implemented in their practice.

Enhancing the Reading of TESL-related Publications

When asked if they would be interested in increasing their reading of TESL-related publications, 85% of the respondents said “yes.” Those who said “no” were already reading a fair amount, i.e., between 5 and 150 (*Mdn* = 10) articles in the past year. We asked what would encourage the teachers to read more TESL-related publications: 82% selected “identification of relevant, interesting TESL-related publications by consultants/experts”; 42% chose “professional reading groups”; 37% selected “a workshop on how to access relevant, interesting TESL-related publications”; 37% checked “incentive(s) provided by the employer for engaging with TESL-related publications”; 32% checked “required reading of articles for discussion in staff meetings”; 20% chose “a workshop on how to access TESL-related article summaries”; 10% selected “a course on research methods”; and 7% chose “other.” Responses in the “other” category included “time to find” the articles, an “online webinar” explaining how to find articles, “a website” with suggested articles, and “free access.” Of the 37% who indicated that “incentive(s) provided by their employer” would encourage them to read more, 68% selected both “employer funding for academic coursework” and “additional paid professional development time,” and 5% specified “other” incentives, including “time to share with colleagues and try new strategies in the classroom,” “some kind of accountability,” and “subscription available to staff.”

Characteristics of TESL-related publications that encourage teachers to read. In an open-ended question, we asked teachers to identify characteristics of TESL-related publications that encouraged them to read. Thematic analysis revealed qualities related to practicality (58%), relevance to respondents’ teaching contexts (45%), language clarity (37%), free access (31%), article length (27%), interest (27%), and limited statistics (3%).

One participant indicated that she would read articles if they were “of excellent quality and vouched for by someone I trust then it’s worthy of my time.” Although many teacher-friendly, peer-reviewed journal articles meet these standards (quality and trustworthiness), teachers need to have access to such journals, especially considering that availability was the primary factor reported by the teachers in our study for choosing articles. Unfortunately, only a limited number of credible, peer-reviewed TESL journals are open-access (e.g., *TESL Canada Journal*, *TESL-EJ*). Funding for subscriptions to additional journals would address the issue of article availability. The value in subscriptions lies in the fact that there are several peer-reviewed TESL journals that are not open access but are written specifically for ESL teachers (e.g., *ELT Journal*, *TESOL Journal*). In addition, there are other peer-reviewed journals that publish articles in their focus on the classroom sections (e.g., *Canadian Modern Language Review*) which are written in a teacher-friendly style (i.e., relevant to the classroom, of interest to teachers, short, and clear). Unfortunately, most of these journals are also not open access.

Despite the importance that teachers place on the practicality of the articles, as reported in this section, the probability of articles being chosen and read increases if they are readily available (e.g., placed on the table in the staff room; or shared among colleagues in a paper copy or via an email). To reiterate an observation we made above, teachers chose articles based on their availability above quality or relevance. This suggests that although teachers value practical articles, the ones that they read are those that are readily available including online, non-peer reviewed sources in the form of blogs and websites. The reason for this is likely attributable to the limited time they have available for professional reading (Littman & Stodolsky, 1998; Rudland & Kemp, 2004).

Strategies for Enhancing K-12 ESL Teacher Reading Engagement

Based on our findings and in response to issues raised by the ESL teachers in our study, we provide the following strategies for key stakeholders (i.e., professional teachers' associations, school districts, principals, and teachers) to facilitate and support ESL teachers' engagement with TESL-related publications.

Professional Teachers' Associations

Considering that most K-12 teachers teach ELLs, provincial teachers' associations, along with their provincial TESL organizations, need to play strong roles in developing, promoting, and encouraging TESL-related professional development. Given the positive relationship between membership in a professional organization and professional reading (Littman & Stodolsky, 1998), it was not surprising that readily available professional associations' publications were a popular source of professional reading for the teachers in our study. Editors of association newsletters, magazines, or journals should be encouraged to solicit clear, concise TESL-related research summaries or research-informed best practice articles from academics. These summaries and articles would include references to original studies should teachers wish to explore the research cited in more detail. The inclusion of articles relevant to ESL education in provincial teachers' associations' publications such as the Alberta Teachers' Association's *ATA Magazine*, in particular, could have wider reaching effects on teachers' knowledge and understanding of best practices in TESL. Featuring university researchers' work in popular teachers' associations' publications could increase research knowledge utilization and also strengthen practitioner-researcher connections.

School Districts

School districts also have an important role to play in promoting research-informed knowledge utilization. However, our findings reflect a lack of district policy support and funding for professional reading. Districts could demonstrate the value of professional reading through the development of policies which require participation in regular professional reading activities (e.g., require teachers to read and report one article per month in their professional development plans). As sharing of readings amongst colleagues was found to encourage professional reading, funding could also be allocated for ESL/learning consultants to dedicate some of their time to locate, acquire, and disseminate TESL-related publications. In addition, the consultants should be provided with some funding for the purchase of publications and journal subscriptions that are not available through their provincial teachers' associations' libraries.

School Principals

Principals can influence the learning cultures of their schools by promoting engagement with professional readings that are relevant and practical, to better meet the needs of the school's ELL population. As school leaders, principals could model professional reading behaviours and share TESL-related articles with their staff by leaving them on a table in the staff room (as reported by one of our respondents). To address the issue of time and to increase teachers' reading accountability, principals could incorporate the reading and discussion of the articles into staff

meetings. Because there are likely a lot of special interests on a school staff, principals could invite those who are particularly interested or experts in a topic to facilitate a discussion of the articles. Principals could also demonstrate the value of professional reading by documenting the extent of teachers' engagement with professional reading in their performance appraisals and annual professional growth plans.

Teachers

Although professional reading is not required by many school districts or principals, evidence suggests that teachers and their students can benefit from the implementation of research-informed PD (Foorman & Moats, 2004; Spear-Swerling & Brucker, 2003, 2004). Therefore, teachers should set their own PD reading goals (Carlin, 1997; McNaught, 2009; Richards & Farrell, 2005). To address the difficulty of accessing credible sources, we recommend that ESL teachers find articles through professional teachers' association libraries and the Directory of Open Access Journals, on TESL researchers' websites, by subscribing to TESL journals' Table of Contents alerts and RSS feeds, or by searching for articles in Google Scholar. Teachers can read research summaries (e.g., those published by the Center for Applied Linguistics Solutions, 2015) and/or enroll in research-based courses. In addition, teachers can form professional reading groups (see Hord, 2004; Richards & Farrell, 2005) and subscribe to special interest electronic mailing lists such as TESOL.org. However, the onus to access and read the publications ultimately remains on the teacher.

Potential Limitations and Future Research

We recognize two potential limitations of our research: the relatively small sample size and the reliability of the self-reported data collected. It may have been the case that most of the teachers who took part in the study did so because they were either already engaging in professional reading or they were interested in enhancing the impact of their TESL-related knowledge through professional reading. Therefore, our findings may over-estimate the actual degree of ESL teacher engagement with TESL-related articles in the wider population. In addition, because self-report measures rely on the honesty of the respondents and are often only rough estimates, the number of articles read may also be over-estimates of the actual numbers read (i.e., attributable to social desirability bias). However, it is likely that the well-educated sample of teachers in this study were able to accurately estimate their reading behaviours.

Conclusion

The purpose of this study was to examine K-12 ESL teachers' professional reading practices, their views related to TESL-related publications, and ways to enhance their reading of research-informed literature. Research suggests that ongoing professional reading is a cost-effective form of professional learning that has the potential to bridge the research-practice divide and assist teachers in improving their practice in response to ESL learners' needs (Abbott, Rossiter, & Hatami, 2015; Rossiter, Abbott, & Hatami, 2013). Although much has been written regarding the potential and perceived benefits of professional reading, based primarily on self-reported survey research, little is known about the actual processes involved in developing and sustaining professional reading practices and the direct impact of professional reading on the teaching and

learning of ESL. Research is needed to document the evolution of professional reading groups and the effective practices in these learning communities that positively impact ESL instructors' professional reading and classroom practices, and their students' learning. With regard to key stakeholders, future research is also required to examine the implementation and effectiveness of the policies and supports that they provide to enhance ESL teacher professional reading and learning and promote positive student outcomes. Our ultimate goal is to enhance K-12 ESL teachers' understanding of evidence-based practices and the principles on which these are based, thereby assisting them to put research into practice, to foster more efficient learning, and to facilitate the academic success of their English language learners.

Acknowledgements

We would like to sincerely thank the provincial TESL organizations for disseminating our survey and the teachers for taking the time to respond to it.

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Note

1 In the Alberta K-12 educational context, the domain is referred to as English as a second language (ESL), for example, ESL programming, teachers, and consultants. The learners themselves are referred to as either ESL learners or English language learners (ELLs). However, in other provinces, such as British

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Appendix: K-12 Survey Questions

1. HIGHEST level of qualification completed:

- bachelor's degree
- after-degree certificate
- after-degree diploma
- master's degree
- doctoral degree

specialization _____

2. Education degree in _____

- elementary education
- secondary education
- other (please specify): _____

3. Education degree MAJOR:

- ESL
- other (please specify): _____

4. Education degree MINOR:

- ESL
- other (please specify): _____

5. Are you currently enrolled in a post-secondary program of studies?

- yes
- no

6. Experience teaching K-12

Total number of years of full-time equivalent experience: _____

7. Current position (please select all that apply):

- teacher
- principal
- consultant
- other (please specify): _____

8. Current location (province):

- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario

9. Within the past year, have you read any published articles or books related to the teaching and learning of English as second language?

- yes
- no

If yes, skip to question 11

10. In the previous question, you stated that you had not read any TESL-related articles. Please indicate your reason(s) for not doing so. (Select all that apply):

- I don't have time.
- I have limited access to articles.
- TESL-related articles don't interest me.
- They have limited practical application.
- They are boring to read.

Skip to question 20

11. Approximately how many TESL-related article(s) and/or book(s) have you read within the past year?

number of articles: _____

number of books: _____

12. Of those TESL-related articles and/or books that you read, which topics did they address? (please select all that apply)

- ESL teaching methodology
- practical ESL classroom activities
- techniques for differentiating instruction to accommodate English language learners (ELLs)
- assessment strategies for ELLs
- resources for ELLs
- community support networks
- learners' cultural and linguistic backgrounds
- intercultural communication skills
- second language acquisition
- technology / computer assisted language learning
- other (please elaborate): _____

13. Why did you choose to read these articles and/or books? Please specify the percentage that fall into the relevant categories below. (Total=100% maximum)

- to address a classroom related issue _____
- for general professional development _____
- required by employer _____
- required for academic coursework _____
- other _____

14. If you selected *other* in the previous question, please elaborate on your response.

15. Where did you find the TESL-related **articles** that you read?

- professional ESL association newsletters
- provincial teachers' association magazines
- other types of publications (please specify):

16. Why did you select these particular TESL-related **articles**? (please select all that apply)

- availability
- quality
- relevance
- other (please specify): _____

17. How did you access these TESL-related **articles**? Please specify the percentage that fall into the relevant categories below. (Total=100% maximum)

- school library _____
- university library _____
- free online access _____
- subscription _____
- from a colleague or employer _____
- other _____

18. To what extent, overall, did these TESL-related articles and books impact your teaching?

- not at all
- minimally
- moderately
- extensively

19. How did these articles and books impact your teaching, if at all? (please select all that apply)

- provided new ideas (techniques, resources) for practice or curriculum design
- increased my understanding of theory or research issues
- provided information for students
- confirmed my beliefs about English language teaching practices
- other (please specify):

20. What is currently being done to enhance teachers' reading of TESL-related publications in your school/district?

21. Would you be interested in increasing your reading of TESL-related publications?

- yes
- no

22. Which of the following would encourage you to read more TESL-related publications?
(please select all that apply)

- identification of relevant, interesting TESL-related publications by consultants/experts
 - required reading of articles for discussion in staff meetings
 - professional reading groups
 - incentive(s) provided by the employer for engaging with TESL-related publications
 - a workshop on how to access relevant, interesting TESL-related publications
 - a workshop on how to access TESL-related *article summaries*
 - a course on research methods
 - other (please specify):
-

23. If you selected *incentive(s)*, please indicate the type:

- employer funding for academic coursework
 - additional paid professional development time
 - other (please specify):
-

24. What are the characteristics of TESL-related **articles** that encourage you to read them?
(please select all that apply)

- clear language
- relevant to context
- practical
- not too long
- interesting
- freely accessible
- no / few statistics
- other (please specify): _____