Faire la lecture aux élèves du préscolaire et du primaire: Point de vue d'enseignantes[1] sur la planification de cette activité d'enseignement dans des écoles francophones de l'Ontario

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Résumé

Dans les classes du préscolaire et du primaire, les enseignants sont vivement encouragés à faire quotidiennement la lecture aux élèves. De nombreuses recherches ont mis en évidence les multiples avantages pouvant en résulter. Ces recherches soulignent également qu'une planification méticuleuse de cette activité est nécessaire pour arriver aux résultats escomptés. Or, la présente étude mène au constat que des composantes essentielles à une planification adéquate de cette activité d'enseignement sont négligées par des enseignants, ce qui risque de réduire le potentiel d'apprentissage que cette activité de lecture pourrait offrir à leurs élèves.

Introduction et problématique

L'activité d'enseignement qui consiste à faire la lecture à voix haute aux élèves suscite l'intérêt des chercheurs depuis déjà plusieurs décennies. Les nombreux bienfaits qui en découlent ont pu être démontrés à maintes reprises (p. ex., Galda et Cullinan, 1991; Holdaway, 1979; Snow, Burns et Griffin, 1998; Teale et Sulzby, 1987). Reconnue depuis longtemps comme étant un moyen d'éveiller les élèves aux plaisirs de la lecture (Barrentine, 1996), on considère maintenant qu'il s'agit d'une activité d'enseignement essentielle, particulièrement dans les classes du préscolaire et du primaire (Boudreau, Beaudoin et Mélançon, 2018; Desmarais, Archambault, Filiatrault-Veilleux et Tarte, 2012 ; Gunnings, 2016 ; McCaffrey et Hisrich, 2017). Selon Moss (2003), il s'agirait même de l'activité pédagogique la plus souvent recommandée aux enseignants afin de soutenir les compétences en littératie de leurs élèves.

Toutefois, des recherches ont démontré qu'il existe de grands écarts dans la façon dont les enseignants s'acquittent de cette tâche (Delacruz, 2013; Hadjioannou et Loizou, 2011). Alors que certains considèrent que faire la lecture aux élèves est simplement une activité de transition ou un moment de détente que l'on offre occasionnellement aux élèves, d'autres estiment qu'il s'agit plutôt d'un dispositif d'enseignement puissant qui est étroitement lié à la réalisation du programme d'études (Kindle, 2013). Le fait qu'il n'y ait pas consensus dans la façon de concevoir la finalité de cette activité contribue possiblement à maintenir un flou entourant la mise en œuvre de cette pratique pédagogique. Mais, au même titre que d'autres activités d'enseignement, les séances de lecture à voix haute que fait l'enseignant doivent être planifiées consciencieusement pour que les élèves puissent en retirer des avantages (Christenson, 2016; Gunning, 2016; McCaffrey et Hisrich, 2017; Pontimonti et Justice, 2010). En effet, il ne s'agit pas simplement d'ouvrir un livre pris au

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[1] Le féminin est utilisé dans le seul but de refléter le genre des personnes ayant participé à l'étude.

hasard et de commencer à en faire la lecture à voix haute devant les élèves (Morrow et Brittain, 2009). Il s'agit plutôt pour l'enseignant de réaliser une intervention pédagogique dont les objectifs sont clairement définis afin d'optimiser le temps d'enseignement qui est accordé à cette activité prépondérante. D'ailleurs, plusieurs aspects à prendre en compte par les enseignants soucieux de planifier des séances de lecture à voix haute qui soient profitables pour les élèves ont été mis en évidence par des chercheurs (p.ex., Delacruz, 2013; Fisher, Flood, Lapp et Frey, 2004; Lane et Wright, 2007; Layne, 2015; Gunnings, 2016; Shedd et Duke, 2008).

Cependant, certains chercheurs soutiennent que bon nombre d'enseignants ne parviennent pas à tirer profit de cette activité d'enseignement (Hadjioannou et Loizou, 2011; Santaro, Chard, Howard et Baker, 2008). Aussi, il a été démontré que la qualité des séances de lecture à voix haute varie considérablement selon les enseignants, ce qui aurait de l'influence sur les avantages qui en découlent (Pendergast, May, Bingham et Kurumada, 2015). Or, bien que ces études aient relevé des variations importantes dans la façon dont les enseignants font la lecture aux élèves, les chercheurs n'ont pas cherché à savoir comment les enseignants préparent ces séances de lecture à voix haute qu'ils sont pourtant encouragés à mettre en œuvre quotidiennement. Somme toute, on ne sait pas s'ils tiennent compte des divers éléments qui, selon les chercheurs, contribuent à en rehausser la valeur pédagogique. Compte tenu de sa notoriété et du fait que l'on encourage libéralement les enseignants à y consacrer quotidiennement du temps d'enseignement, il semble impératif de connaitre leur point de vue sur la planification de cette activité, car il pourrait bien s'agir d'un aspect déterminant quant à la qualité de leurs interventions.

Dans cette étude, nous nous sommes intéressés au processus de planification des séances de lecture de 22 enseignantes du préscolaire et du primaire qui intègrent régulièrement la lecture à voix haute aux élèves dans leur programmation scolaire. Nous avons voulu savoir l'importance qu'elles accordent à la planification de leurs séances de lecture à voix haute en discutant de la façon dont elles tiennent compte de diverses composantes de la planification dont les influences positives ont été démontrées par les chercheurs. Pour atteindre cet objectif, notre question de recherche s'énonce comme suit : Comment des enseignantes du préscolaire et du primaire s'acquittent-elles des diverses composantes de la planification reconnues comme étant favorables à l'efficacité des séances de lecture à voix haute?

Contexte théorique

La littérature scientifique portant sur la lecture à voix haute aux élèves est foisonnante. Pour circonscrire les idées se rapportant à l'objet de la présente étude, nous définissons d'abord en quoi consiste cette pratique d'enseignement tout en rappelant brièvement les avantages dont les élèves peuvent en retirer. Par la suite, nous décrivons les composantes qui, selon divers auteurs, doivent être considérées lors de sa planification.

Faire la lecture aux élèves

Selon des auteurs qui s'intéressent aux pratiques pédagogiques dans les classes préscolaires et dans les classes du cycle primaire, faire la lecture à voix haute aux élèves est l'activité qui est la plus souvent recommandée aux enseignants soucieux de soutenir le développement des habiletés de littératie, les compétences langagières et les connaissances

sur le monde de leurs élèves (Moss, 2003; National Early Literacy Panel, 2008; Snow, Burns et Griffin, 1998). Pour cerner ce dispositif pédagogique, à l'instar de Fountas et Pinnell (2019), nous considérons que la lecture à voix haute consiste pour l'enseignant à faire une lecture dynamique et expressive d'un texte en incorporant intentionnellement des questions, des commentaires et des pauses pour susciter les interactions avec les élèves avant, pendant et après la lecture. Ces derniers sont invités à réfléchir, à discuter et à réagir au texte en considérant les éléments langagiers (p. ex., le vocabulaire, les structures syntaxiques, les formes verbales), les idées et le sens du texte. C'est aussi l'occasion pour l'enseignant de modéliser une lecture fluide ou des stratégies de compréhension, d'enrichir le vocabulaire des élèves et d'élargir leurs connaissances sur le monde. Ce genre de lecture à voix haute, que l'on considère comme étant une lecture interactive, incite les élèves à interagir entre eux et avec l'enseignant, ce qui les amène à prendre une part active dans leurs propres apprentissages.

Des recherches soutiennent que lorsque la lecture à voix haute est réalisée de façon interactive, elle peut être très profitable pour les élèves. En outre, elle permet d'établir un dialogue autour du texte allant au-delà des informations explicitement présentées par les mots et les images, ce qui s'avère particulièrement bénéfique pour le développement de leur vocabulaire (Godin, Godard, Chapleau et Gagné, 2015; Hiebert & Cervetti, 2011; Wasik, Hindman et Snell, 2016). Il a aussi été démontré que la lecture interactive offre un soutien important au développement de leur compréhension en lecture (Dupin de Saint-André, Montésinos-Gelet et Morin, 2012). De plus, elle offre l'occasion à l'enseignant d'exposer ses élèves à des textes variés tout en les amenant à comprendre de nouveaux concepts qui se rapportent à des matières scolaires telles que les sciences, les arts ou les mathématiques (Beck et McKeown, 2001; Kuhn, Rausch, McCarty, Montgomery et Rule, 2017). Par ailleurs, les enseignants sachant tirer profit de ce dispositif d'enseignement instaurent dans leur classe un climat positif entourant la lecture et ils suscitent des interactions qui amènent les élèves à réfléchir aux conventions de la langue écrite (Pellegrini et Galda, 2003). Bref, faire la lecture à voix haute tout en favorisant l'interaction des élèves est une activité d'enseignement dont les nombreux avantages ne sont plus à démontrer.

Par ailleurs, plusieurs auteurs (i.e. Delacruz, 2013; Fisher et al., 2004; Hadjioannou et Loizou, 2011; Johnston, 2016; Kindle, 2011; Lane et Wright, 2007; Pendergast et al. 2015; Shedd et Duke, 2008) estiment que lors de la planification de la lecture à voix haute aux élèves, les enseignants doivent tenir compte de diverses composantes pour que leurs séances de lecture à voix haute aux élèves puissent mener aux résultats escomptés qui viennent d'être rapportés. Ces composantes sont décrites dans ce qui suit.

Planifier les séances de lecture aux élèves
Il semble y avoir peu d'études portant spécifiquement sur le processus de planification des enseignants qui se préparent à faire la lecture à voix haute aux élèves. Les travaux de Fisher et al. (2004) font toutefois exception. Après avoir observé 25 enseignants

de la 3e à la 8e année perçus comme étant des experts[2] dans la mise en œuvre de la lecture interactive auprès des élèves, les chercheurs les ont interrogés au sujet de la planification de cette activité. Les points communs mis en exergue par ces enseignants experts ont mené les auteurs à établir un modèle pour la planification pédagogique de la lecture à voix haute aux élèves, lequel comporte les sept étapes suivantes : sélectionner les textes, faire une lecture préparatoire, établir des objectifs pédagogiques, se préparer à faire une lecture fluide, prévoir l'animation de la lecture, préparer des questions de discussion, prévoir d'autres activités de lecture ou d'écriture en lien avec le texte choisi.

De part et d'autre, ces composantes de la planification ont également été considérées par d'autres chercheurs qui eux aussi, ont démontré leur influence sur la qualité pédagogique des séances de lecture à voix haute (Delacruz, 2013; Hadjioannou et Loizou, 2011; Johnston, 2016; Kindle, 2011; 2013; Lane et Wright, 2007; Maloch et Beutel, 2010; McCaffrey et Hisrich, 2017; Pendergast et al., 2015; Shedd et Duke, 2008). Afin de refléter leurs propos tout en évitant les possibles redondances, nous les avons rassemblés selon cinq composantes qui suivent.

Choisir les textes pour la lecture à voix haute. La majorité des auteurs cités précédemment insistent sur l'importance de choisir judicieusement les textes qui sont lus à voix haute aux élèves. Comme Johnston (2016), ils soutiennent qu'à cette étape initiale, l'enseignant doit penser à l'intérêt qu'ils peuvent avoir pour leurs élèves. Leur qualité littéraire est un autre facteur qui doit guider la sélection effectuée (Lane et Wright, 2007 ; Pendergast et al., 2015). De plus, les textes choisis par l'enseignant doivent lui donner l'occasion d'exposer ses élèves à une variété de genres littéraires et à une diversité de personnages (Shedd et Duke, 2008). Aussi, les enseignants sont encouragés à opter pour des textes qui sont en lien avec les divers programmes d'études, comme les arts, les sciences ou les mathématiques (Edwards Santoro, Baker, Fien, Smith et Chard, 2016), puisqu'ils peuvent ainsi rejoindre des intérêts variés chez leurs élèves. En faisant sa sélection, l'enseignant doit également juger si les textes retenus lui offrent la possibilité, pendant qu'il en fera la lecture à voix haute, de démontrer ses propres processus cognitifs qui soutiennent la compréhension en lecture (Delacruz, 2013). Lane et Wright (2007) ajoutent que les textes qui permettent de modeler une lecture fluide et expressive s'avèrent également de bons choix. Quant à Shedd et Duke (2008), ils soutiennent que ces textes doivent aussi offrir de multiples possibilités en ce qui concerne l'enseignement du vocabulaire.

Lire à l'avance les textes sélectionnés. Même s'il peut sembler évident que les enseignants ont avantage à lire à l'avance les textes qu'ils choisissent de lire à voix haute aux élèves, il semblerait que cette étape de la planification soit loin d'être effectuée de façon unanime (McCaffrey et Hisrich, 2017). Shedd et Duke (2008) insistent sur la nécessité de cette étape essentielle. La lecture effectuée préalablement peut permettre

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[2] Fisher et al. (2004) définissent un expert comme étant un enseignant que la direction de l'école choisirait comme modèle à imiter pour les autres enseignants. C'est aussi un enseignant qui présente régulièrement ses stratégies pédagogiques dans des forums de développement professionnel, ou qui est généralement reconnu pour l'excellence de son enseignement.

d'éviter les situations fâcheuses liées à un contenu jugé comme étant peu approprié ou encore, de constater la présence de notions ou de mots nouveaux pour l'enseignant lui-même. De plus, elle lui permet de repérer les endroits propices pour poser des questions qui suscitent des interactions permettant de présenter de nouveaux concepts ou d'enseigner de nouvelles compétences. Cette lecture préparatoire permet aussi de réfléchir à des moyens de susciter l'intérêt et l'engagement des élèves pendant la lecture. Selon Johnston (2016), avant de lire un texte aux élèves, l'enseignant doit prendre le temps qui lui est nécessaire afin de le comprendre et de l'apprécier selon plusieurs dimensions en tenant compte de la diversité des personnages, de l'intrigue, de la structure du texte, du langage utilisé par l'auteur et des thèmes qui sont abordés dans son œuvre. Il doit également s'attarder aux illustrations en considérant les rapports qu'elles entretiennent avec le texte.

Fisher et al. (2004) soutiennent que l'enseignant doit aussi s'exercer à lire le texte à voix haute à l'avance en vue d'en faire une lecture fluide et expressive lorsqu'il fera la lecture devant les élèves. Dans leur étude, ils ont pu observer que les enseignants qui s'étaient exercés à faire une lecture fluide et expressive prononçaient tous les mots correctement et sans hésitation, et ce, même lorsque les textes comportaient des mots rares ou difficiles à prononcer. En lisant à l'avance les textes sélectionnés pour leurs séances de lecture à voix haute, les enseignants étaient également en mesure d'en faire une lecture expressive. Dans ce sens, Pendergast et al. (2015) ajoutent que la lecture préalable du texte permet aux enseignants de prévoir les variations de la voix afin de parvenir à mettre l'accent sur les émotions et les humeurs des divers personnages. Ils sont également à même de recourir à des mouvements, à des expressions faciales et à une prosodie adéquate afin d'insuffler de l'énergie à leur lecture, ce qui a pour effet de captiver les élèves tout en favorisant leur engagement et leur compréhension.

Établir des objectifs pédagogiques pour la séance de lecture. En planifiant les séances de lecture à voix haute, l'enseignant doit établir des objectifs pédagogiques en fonction des besoins de ses élèves. Dans ce sens, Lane et Wright (2007) soulignent l'importance de sélectionner des livres permettant de soutenir les objectifs ciblés. Par exemple, selon le contenu particulier de chaque livre, il pourrait choisir un abécédaire pour faire l'apprentissage de l'alphabet, un livre documentaire pour transmettre des connaissances sur le monde, un livre de conte pour modéliser les prédictions, etc. Par ailleurs, comme l'indiquent Shedd et Duke (2008), l'enseignant doit aussi réfléchir à la façon dont un texte pourrait être utilisé pendant plusieurs jours ou tout au long d'un thème en visant divers objectifs pédagogiques. Aussi, selon Delacruz (2013), il convient de mettre l'accent sur l'enseignement des stratégies de compréhension en choisissant des extraits propices pour modéliser les stratégies pendant la lecture à voix haute. L'enseignant peut aussi prévoir l'étude de certains éléments lexicaux ou l'enseignement de nouveaux mots de vocabulaire (Kindle, 2011), ou encore miser sur une modélisation de la fluidité en lecture (Johnston, 2016). Enfin, selon Shedd et Duke (2008), quels que soient les objectifs pédagogiques visés, il importe de planifier des interventions qui soutiennent l'apprentissage des élèves pour que les séances de lecture à voix haute soient efficaces. Cependant, au moment même où l'enseignant fait la lecture à voix haute et réalise ses diverses interventions, il doit tenir compte de la façon dont les élèves réagissent au texte et

faire des ajustements en conséquence afin de maintenir leur intérêt et leur engagement dans l'activité de lecture.

Favoriser l'engagement des élèves. Les enseignants qui encouragent les interventions spontanées des élèves avant, pendant et après la lecture du texte créent un environnement favorisant leur engagement dans la construction du sens du texte (Maloch et Beutel, 2010). Cependant, comme l'ont démontré Hadjioannou et Loizou (2011), plus de la moitié des enseignants auraient plutôt tendance à adopter un style directif pendant la lecture à voix haute. Les interactions qui ont lieu consistent alors, pour l'enseignant, à poser des questions fermées qui suscitent des réponses courtes et peu élaborées de la part des élèves, ou encore à dominer la conversation sans prendre en compte les propos des élèves qui souhaiteraient réagir au texte. Selon Pendergast et al. (2015), il revient à l'enseignant de déterminer comment les interactions seront incorporées dans la discussion et à cet égard, il doit réfléchir à la façon dont il dirigera les interactions. Il doit également planifier soigneusement les commentaires et les questions qui l'aideront à susciter l'engagement des élèves.

Shedd et Duke (2008) ont démontré que les enseignants qui favorisent les questions ouvertes pendant la lecture à voix haute sollicitent un plus grand engagement de la part de leurs élèves et que ces derniers ont alors tendance à fournir des réponses diversifiées et plus élaborées, développant ainsi leurs compétences langagières, leur vocabulaire et leur pensée critique. Quant à Fisher et al. (2004), ils proposent de contrebalancer les questions qui mènent les élèves à prendre en compte des informations précises se trouvant dans le texte, et les questions qui les incitent plutôt à partager leurs pensées, leurs réactions, leurs prédictions ou leur appréciation du texte lu. Les auteurs indiquent également qu'il est parfois préférable que l'enseignant fasse des commentaires au lieu de poser des questions aux élèves, ce qui lui permet ainsi de modéliser ses propres réactions à la lecture du texte. Ils suggèrent aux enseignants de préparer leurs questions et leurs commentaires en les écrivant sur des notes autocollantes placées dans le livre aux endroits stratégiques. Enfin, Kindle (2013) nous rappelle que l'enseignant doit continuellement faire les ajustements nécessaires afin de préserver le plaisir ressenti par les élèves lors de la lecture. Il doit donc être en mesure de jauger la fréquence adéquate des interactions, de sorte qu'elles ne deviennent pas une entrave à l'appréciation du texte. Un dialogue excessif pourrait avoir des effets non souhaitables quant à l'appréciation de l'activité de lecture.

Établir des liens avec des activités subséquentes. Les textes qui sont lus à voix haute par l'enseignant lors des séances de lecture peuvent constituer le point d'ancrage pour de multiples activités. Comme l'indiquent Shedd et Duke (2008), la fin du livre ne signifie pas que l'apprentissage qui en découle est terminé. Il peut s'ensuivre une variété d'activités qui exploitent la richesse du texte et la discussion ayant eu lieu lors de la séance de lecture. En outre, le simple fait de susciter les réactions des élèves vis-à-vis du texte peut les mener à développer des habiletés de la pensée de haut niveau, tout comme les divers projets pouvant être réalisés par la suite. Les discussions entourant le texte peuvent aussi mener à des activités connexes qui pourraient avoir lieu ultérieurement. À cet égard, Fisher et al. (2004) ont observé que les enseignants experts veillent à ce que leurs séances de lecture à voix haute ne soient pas des épisodes isolés dans la programmation scolaire,

mais plutôt des activités faisant partie d'une programmation générale, en lien avec les autres activités de la classe. Ils s'assurent de faire des transitions logiques entre les séances de lecture à voix haute et les activités qui ont lieu par la suite. Lane et Wright (2007) soutiennent également que les séances de lecture à voix haute doivent être reliées à l'ensemble du curriculum scolaire. Ils indiquent que les enseignants auraient avantage à considérer comment les textes choisis pour la lecture à voix haute s'intègrent dans les unités d'apprentissage. Leur contenu serait alors plus signifiant pour les élèves.

En résumé, on constate que faire la lecture à voix haute est une activité d'enseignement qui demande une planification rigoureuse que l'enseignant doit faire en coulisse avant la mise en œuvre de la séance de lecture. L'étude de Fisher et al. (2004) montre que des enseignants de la 3e à la 8e année qui possèdent une expertise reconnue en la matière portent une attention particulière à divers enjeux dont l'importance est d'ailleurs reconnue par d'autres chercheurs. Cependant, on peut se demander comment ces pratiques exemplaires en ce qui a trait à la planification de la lecture à voix haute aux élèves sont répandues parmi les autres enseignants. Par exemple, il est possible que ceux qui font la lecture aux élèves pour leur offrir un moment de détente n'accordent pas la même importance à sa planification. On peut aussi penser que les enseignants du préscolaire et du premier cycle du primaire n'ont pas les mêmes préoccupations lors de la planification de cette activité. Compte tenu de l'importance que l'on accorde à la lecture à voix haute comme moyen de soutenir le développement des compétences des élèves dès le début du préscolaire et pendant les premières années du primaire, il semble important de considérer le point de vue des enseignants en ce qui a trait à la planification de cette activité qu'ils sont encouragés à intégrer quotidiennement dans leur programmation scolaire. La présente étude tente d'apporter des éclaircissements à ce sujet en cherchant à savoir comment ils s'acquittent des diverses composantes qui favorisent l'efficacité de leurs séances de lecture à voix haute.

Méthodologie

Cette étude s'insère dans un programme de recherche concernant la lecture à voix haute que font les enseignants dans les classes du préscolaire et du primaire. Seules les considérations méthodologiques se rapportant au sujet traité dans le présent article sont rapportées dans cette partie.

Participantes

Cette étude a été réalisée dans des écoles francophones de l'Ontario. Dans cette province canadienne, le français est une langue minoritaire. Dans les écoles où nous avons mené la recherche, l'enseignement est offert uniquement en français. Nous avons effectué le recrutement des participantes par l'entremise des directions d'écoles qui ont accepté de transmettre notre invitation à participer à la recherche aux enseignantes et aux enseignants du préscolaire et du primaire (de la maternelle à la 3e année). Pour y participer, elles ou ils devaient avoir déjà intégré la lecture à voix haute aux élèves à leurs pratiques pédagogiques. Dans l'ensemble, 22 enseignantes se sont portées volontaires pour prendre part à la recherche. Notre échantillon s'est constitué de 10 enseignantes qui travaillent dans des classes du préscolaire (maternelle et jardin) et de 12 enseignantes qui sont titulaires d'une classe au cycle primaire (1re à 3e année). Comme formation, les participantes

possèdent minimalement le baccalauréat en éducation. Elles comptent en moyenne 13 années d'expérience en enseignement (entre 2 et 28 années).

Instrumentation

Un questionnaire administré lors de la première rencontre avec chaque enseignante a permis de recueillir des informations démographiques, de même que des informations concernant ses pratiques de lecture à voix haute, notamment la fréquence de cette activité au cours d'une semaine, de même que la durée habituelle de cette activité. En tout, ce questionnaire comptait huit questions. Le but était de recueillir des informations démographiques et de vérifier auprès de l'enseignante si la lecture à voix haute aux élèves faisait partie de ses pratiques pédagogiques. Ce questionnaire n'a pas été soumis à une procédure de validation.

À la fin du programme de recherche, des entrevues individuelles semi-dirigées ont été réalisées. Ces entrevues ont porté en partie sur le processus de planification des séances de lecture à voix haute. Cinq questions de base ont permis d'orienter la discussion vers les cinq composantes de la planification dont il a été question dans le cadre théorique. Pour ce faire, le protocole d'entrevue comportait une question relative à la sélection des textes lus à voix haute aux élèves (qu'est-ce qui influence votre choix lorsque vous faites la sélection d'un texte pour en faire la lecture à vos élèves?), une question portant sur la nécessité de faire (ou non) une lecture préparatoire des textes sélectionnés (pourquoi est-il nécessaire/n'est-il pas nécessaire pour vous de lire à l'avance le texte que vous lirez à voix haute pour vos élèves?), une question se rapportant aux objectifs pédagogiques poursuivis lors des séances de lecture à voix haute (quels sont les objectifs pédagogiques qu'il vous est possible de viser en faisant la lecture à voix haute aux élèves?), une question portant sur la façon de susciter l'engagement des élèves (comment parvenez-vous à favoriser l'engagement des élèves pendant que vous leur faites la lecture à voix haute?) et une question portant sur des liens avec des activités subséquentes (après que vous avez lu un livre à voix haute à vos élèves, qu'est-ce qui se passe habituellement?). Selon les réponses des participantes, des questions de précision leur ont parfois été posées.

Déroulement

Une rencontre individuelle avec chaque enseignante nous a permis de lui fournir les informations relatives à la recherche et d'établir un calendrier pour l'ensemble des activités au programme. Le questionnaire était alors rempli et remis aussitôt à la chercheuse. L'entrevue était la dernière activité prévue. Avant la réalisation des entrevues, à deux reprises, la chercheuse s'était rendue en classe pour observer l'enseignante alors qu'elle faisait la lecture à voix haute aux élèves. Lors de ces périodes d'observation, nous avons étudié les interactions extratextuelles des enseignantes alors qu'elles faisaient la lecture à voix haute d'un texte documentaire aux élèves. Nous avons comparé ces premières observations à celles que nous avons effectuées alors qu'elles leur faisaient plutôt la lecture à voix haute d'un texte de fiction. Les détails concernant ces observations sont rapportés ailleurs (Dionne, 2016), mais il importe de signaler ces activités de recherche, car à l'occasion, nous faisons référence à ces séances de lecture lorsque nous rapportons les résultats des entrevues dans le présent article.

D'une durée d'environ 45 minutes, les entrevues ont été enregistrées sur support audionumérique et retranscrites intégralement. Le verbatim a été transmis par courriel à chaque participante pour qu'elle puisse corroborer ses propos ou signaler des erreurs dans la transcription. Cette étape a été réalisée dans le but de favoriser l'authenticité et la crédibilité de nos résultats, deux critères de scientificité importants selon Corbière et Larivière (2014). Il est à noter que toutes les participantes ont confirmé l'exactitude des propos transcrits dans le verbatim de leur entrevue.

Considérations éthiques

Avant de commencer la collecte des données, des certificats de déontologie ont été obtenus auprès du comité d'éthique de la recherche de l'université de rattachement de la chercheuse et auprès des conseils scolaires responsables des écoles où enseignent les participantes. Lors de la rencontre initiale, chaque participante a été informée des étapes de la recherche et de la nécessité de signaler son consentement de manière libre et éclairée en signant un formulaire permettant la collecte des données et la publication des résultats. Dans les analyses de données et dans les publications subséquentes, des codes et des pseudonymes ont été attribués aux enseignantes afin d'assurer leur anonymat.

Analyse des données

Les données obtenues par l'entremise du questionnaire ont été traitées statistiquement par le calcul de fréquences et de moyennes. En ce qui concerne les entrevues, leur transcription a été soumise à une analyse de contenu. Une grille de codage comportant des catégories prédéterminées a été développée à cet effet. Ces catégories correspondent aux cinq composantes dont il a été question dans notre cadre théorique, c'est-à-dire la sélection des textes, la lecture préparatoire, les objectifs pédagogiques, l'engagement des élèves et les liens avec des activités subséquentes. Puisque la grille de codage découle du cadre théorique, sa validité est établie par le fait qu'elle s'harmonise avec les composantes de la planification dont il a été question dans cette partie de l'article. D'autre part, la validité est également établie par les procédures d'accord interjuge dont il est question dans ce qui suit.

Nous avons analysé les données narratives issues des entrevues afin de « découvrir les thèmes saillants et les tendances qui s'en dégagent » (Fortin et Gagnon, 2016, p. 364). L'ensemble des entrevues a été analysé par la chercheuse, alors qu'une assistante de recherche, après s'être familiarisée avec la grille de codage, a procédé à l'analyse de cinq entrevues. En tenant compte de la concordance des unités de sens ayant été classées dans les mêmes catégories par la chercheuse et l'assistante de recherche, un accord interjuge supérieur à 87 % a été obtenu pour les cinq composantes. En ce qui concerne les entrevues, les résultats sont donc présentés en fonction de la catégorisation des unités de sens ayant été établie par la chercheuse.

Résultats

Nous présentons en premier lieu quelques statistiques découlant de l'analyse du questionnaire. En deuxième lieu, à partir des verbatims des entrevues, nous relevons les propos des enseignantes se rapportant aux cinq composantes de la planification que nous avons ciblées.

Le questionnaire

Le questionnaire a permis de vérifier dans quelle mesure la lecture à voix haute aux élèves est une activité pédagogique qui est mise en pratique par les enseignantes. Trois des 22 enseignantes (13,6 %) ont indiqué qu'elles font la lecture aux élèves plus d'une fois par jour, alors que dix autres (45,5 %) le font chaque jour. Pour sept enseignantes (31,8 %), cette activité a lieu trois fois par semaine et, pour deux autres (9,1 %), elle a lieu une fois par semaine. La durée moyenne des séances de lecture pour l'ensemble des enseignantes serait d'un peu plus de 19 minutes. À partir de ces informations, on peut stipuler que pendant une année scolaire, les participantes disent passer en moyenne 59 heures à faire la lecture à voix haute aux élèves.

Les entrevues

Les statistiques découlant du questionnaire permettent de contextualiser les informations ayant été recueillies lors des entrevues. Nous présentons maintenant ces informations en fonction des cinq composantes qui ont été décrites précédemment dans le cadre théorique. Rappelons que les prénoms qui apparaissent sont des pseudonymes[3] que nous avons utilisés pour désigner les participantes.

La sélection des textes. Les enseignantes ont mentionné des critères qui guident la sélection des textes qu'elles choisissent pour leurs séances de lecture à voix haute. La qualité des illustrations s'avère être l'un des critères le plus souvent mentionnés. Il leur semble tout aussi important de sélectionner des textes courts. Selon plusieurs, ceux-ci conviennent mieux aux élèves. Certaines ont signalé qu'elles choisissent des livres qui correspondent aux intérêts des élèves. D'autres portent aussi leur choix sur des livres se rapportant aux thèmes saisonniers, aux fêtes du calendrier, à des situations vécues par les élèves (p. ex., perdre une dent) ou bien aux thèmes abordés dans des matières scolaires telles que les sciences sociales, les mathématiques ou les sciences. Par exemple, Béatrice indique : *« Si je tombe sur un livre où le personnage doit résoudre un problème de mathématique comme on fait en classe, c'est certain que je vais le prendre pour le lire aux élèves ».* Quelques enseignantes ont mentionné que le vocabulaire du texte influence leur sélection. Certaines recherchent des livres qui offrent un vocabulaire riche, permettant de présenter de nouveaux mots aux élèves. Mais pour Alice, il s'agit plutôt de choisir des livres dans lesquels le vocabulaire est simple *« sinon, les élèves ne comprendront pas ».* Annie est la seule enseignante qui sélectionne des livres en fonction des stratégies de lecture ou les connaissances linguistiques qu'elle souhaite enseigner. Elle donne cet exemple : *« Quand je veux montrer aux élèves la différence entre une phrase interrogative et une phrase simple, je prends un livre où l'auteur en a mis plein [de phrases interrogatives] ».*

Cependant, il semble que pour plusieurs enseignantes, la sélection des livres pour les séances de lecture à voix haute ne résulte pas d'un examen initial des livres ou d'un choix réfléchi. Par exemple, Armande prend généralement l'un des livres qui est dans la

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[3] Nous avons attribué des pseudonymes commençant par la lettre P aux enseignantes du préscolaire (maternelle ou jardin). Les pseudonymes commençant par la lettre A dénotent les enseignantes de la 1re année, ceux commençant par la lettre B indiquent qu'il s'agit des enseignantes de 2e année et ceux commençant par la lettre C correspondent aux enseignantes de la 3e année.

bibliothèque de sa classe, alors que Charlotte demande aux élèves de choisir le livre qu'ils veulent se faire lire parmi ceux qu'ils ont empruntés à la bibliothèque. Quant à Pénélope, elle s'en remet aux livres que sélectionne pour elle la bibliothécaire. Elle choisit de façon aléatoire, parmi ceux qui lui sont ainsi proposés. Elle précise : *« C'est que je n'ai pas du tout le temps d'aller fouiller à la bibliothèque »*.

La lecture préparatoire. La moitié des répondantes considèrent qu'il n'est pas nécessaire de faire à l'avance la lecture des textes qu'elles liront à voix haute à leurs élèves. Lorsqu'on leur demande pourquoi cette étape de la planification n'est pas nécessaire, certaines indiquent simplement qu'elles n'en voient pas l'utilité puisque ces textes sont très faciles à lire. Pénélope explique : *« C'est quand même des livres pour enfants. Y'a jamais de grande surprise. J'prends le livre pis j'fais – Ah! Madame Sylvie a choisi ça pour nous. J'me demande bien c'est quoi l'histoire »*. Quant à Pélagie, elle dit : *« Moi, je les lis pas à l'avance; je regarde seulement le titre pi* (claquement des doigts/rire) *je me lance à deux pieds joints. J'y vais de façon très spontanée »*. Cordélia pense aussi qu'il n'est pas nécessaire de faire une lecture préparatoire, car elle connaît déjà très bien les livres qu'elle lit aux élèves année après année. Néanmoins, certaines enseignantes reconnaissent qu'elles auraient avantage à lire à l'avance les livres qu'elles lisent aux élèves. Par exemple, Pauline explique qu'en lisant l'album *Ma maman du photomaton* (Nadon, 2006), elle a soudainement réalisé que cet album parlait du suicide, un sujet qu'elle ne souhaitait pas aborder avec ses élèves. Autre exemple, comme l'indique Caroline : *« Des fois, y'a des mots difficiles que je ne peux même pas prononcer dans ces livres-là; là j'pense : j'aurais dû m'pratiquer avant! [rire] »*.

Par ailleurs, les enseignantes qui considèrent qu'il est nécessaire de lire les textes avant les séances de lecture le font principalement dans le but de planifier l'animation de la lecture. Aline précise : *« Oui, je lis le livre, car ça me fait penser à des objets que je peux amener en classe ou bien aux différentes voix des personnages. Pour faire une belle lecture, il faut se pratiquer à l'avance »*. Pour quelques enseignantes, cette lecture préparatoire est effectuée dans le but de planifier les stratégies de lecture qu'elles pourront modéliser lors de la séance de lecture. Ces mêmes enseignantes en profitent également pour prendre en compte le vocabulaire qui se trouve dans les livres. Par exemple, Annie explique : *« Je choisis toujours quelques mots que j'explique avant de commencer à lire. Les élèves en ont besoin pour mieux comprendre. Après, c'est pas fini, on choisit un de ces mots pour l'ajouter à notre mur »*. Angélie considère aussi qu'une lecture préparatoire est essentielle, car cela lui donne l'occasion de penser aux questions qu'elle posera aux élèves pendant la lecture. Elle est également attentive aux connaissances linguistiques qu'il lui est possible d'enseigner à partir du livre choisi. Quant à Patsy, la lecture préparatoire lui permet de voir si elle comprend bien l'histoire ou si elle a suffisamment de connaissances en lien avec le sujet abordé dans le livre.

Objectifs pédagogiques. La plupart des enseignantes affirment qu'elles font la lecture à voix haute aux élèves principalement pour leur offrir un moment de détente ou encore, parce que c'est une façon agréable de faire la transition entre deux périodes d'enseignement. D'ailleurs, Alicia soutient que : *« Il faut leur apprendre que la lecture, ça sert à s'détendre, c'est un passe-temps. Moi, j'essaie de leur donner le goût de lire avec*

des livres qui font rire, comme ceux de Robert Munsch ». Ces enseignantes valorisent cette activité pour le plaisir qu'elle procure aux élèves. Cependant, elles ne considèrent pas qu'il pourrait aussi s'agir d'un dispositif pédagogique permettant d'offrir un enseignement lié à d'autres objectifs pédagogiques de leur programme d'études. Comme le dit Charlotte : *« J'lis pas pour leur enseigner quelque chose. Je veux seulement qu'ils relaxent un peu à la fin de journée »*.

Néanmoins, certaines enseignantes indiquent qu'elles font aussi la lecture aux élèves en fonction de divers objectifs pédagogiques. Ceux-ci sont parfois d'ordre général. Par exemple, pour Pétra, il s'agit d'exposer les élèves à la langue française. Elle précise: *« En lisant aux élèves, je leur fais entendre du français. C'est juste à l'école qu'ils entendent cette langue. Les livres leur montrent un bon français »*. Certaines enseignantes établissent toutefois des objectifs pédagogiques plus précis. Par exemple, selon Patricia : *« Il faut toujours qu'il soit possible d'apprendre quelque chose. Ça peut être les formes, les couleurs, les lettres, ou bien comment prendre soin de son chat, mais on doit lire pour apprendre quelque chose »*. Pour Caroline, il importe d'établir des objectifs pédagogiques visant à soutenir le développement des compétences en lecture ou en écriture des élèves. Elle précise : *« Je leur demande souvent de ressortir la structure du récit à l'aide des affiches que tu vois là-bas. C'est toute une affaire pour eux, en 3ᵉ année »*. Par ailleurs, Aline, Annie et Angélie font la lecture à voix haute aux élèves principalement dans le but de soutenir leur apprentissage du vocabulaire. Angélie indique : *« Mon défi que je leur dis au début de l'année à mes élèves, c'est que je vais leur apprendre un mot compliqué à chaque jour »*. Elle précise que ce mot provient toujours des livres qu'elle lit quotidiennement aux élèves.

Engagement des élèves. La moitié des enseignantes considèrent qu'en posant des questions, elles favorisent l'engagement de leurs élèves lors des séances de lecture à voix haute. Cependant, plusieurs, comme Perline, précisent qu'il s'agit de questions récurrentes: *« C'est toujours les mêmes questions qu'on pose. Moi, c'est toujours – as-tu déjà vu ça? ou as-tu déjà été là? – pour qu'ils fassent des liens avec leurs connaissances antérieures »*. Pour d'autres enseignantes, l'animation du texte et la lecture expressive qu'elles en font sont des aspects qui contribuent à maintenir l'engagement des élèves. À cet effet, Pascale raconte : *« Ils trouvent ça drôle quand Madame change sa voix pour parler comme une petite souris ou un gros ours! Mais c'est pas quelque chose que je prépare. Ça vient tout seul »*. Certaines enseignantes disent qu'elles favorisent l'engagement des élèves en leur demandant de répéter certaines expressions, de reproduire des onomatopées, de faire des gestes ou de chercher un objet dans la classe. Patricia donne un exemple : *« On voit les formes dans le livre et je leur dis : lève ta main si tu vois quelque chose dans la classe qui est un carré, un cercle, un triangle »*. D'autres moyens visant à favoriser l'engagement des élèves sont aussi mentionnés. En outre, Caroline dit qu'elle montre les images seulement à la fin de la lecture pour susciter la curiosité des élèves; Paméla intègre souvent l'humour à sa lecture; Cordélia informe les élèves qu'il y aura des questions après la lecture. Cependant, elles affirment que ces interventions sont faites de façon intuitive et elles ne résultent pas d'une planification réfléchie.

Activités en lien avec le livre. Il semble que très peu d'enseignantes proposent aux élèves des activités découlant des textes qu'elles lisent lors des séances de lecture à voix haute. En fait, la plupart d'entre elles n'ont pas été en mesure d'indiquer une activité allant en ce sens. Tout au plus, quelques enseignantes indiquent que les livres lus servent parfois à introduire un thème (par exemple, une fête au calendrier) ou une unité d'apprentissage, mais il ne semble pas y avoir d'activités d'apprentissage qui leur sont reliées par la suite. Deux enseignantes indiquent qu'à l'occasion, elles offrent aux élèves des activités de coloriage. Quant à Pierrette, il arrive qu'après la lecture, elle apprenne aux élèves une comptine ou une chanson qu'elle peut associer au livre lu. Elle donne comme exemple : *« Quand j'ai lu Les habits neufs de l'empereur, ça m'a fait penser de leur apprendre la chanson Le bon roi Dagobert. On s'est bien amusé! ».* Pour Betty, une activité en lien avec les textes lus à voix haute consiste à revenir parfois sur les mots nouveaux qui ont été appris. Quant à Aline, il lui est déjà arrivé de proposer aux élèves une activité de classement. Elle explique : *« Je ne me rappelle pas le titre, mais après j'avais fait classer des vêtements dans deux valises différentes : une pour l'hiver; une pour l'été ».*

Discussion

Considérant les nombreux bénéfices qui en découlent, l'activité pédagogique qui consiste à faire la lecture à voix haute aux élèves semble être un moyen incontournable pour favoriser la réussite scolaire des élèves. Cependant, une planification rigoureuse doit être faite en amont afin de maximiser le temps d'enseignement qui lui est consacré (Fisher et al., 2004; Johnston, 2016). La présente recherche mène au constat que certaines enseignantes accordent peu d'importance à la préparation de cette activité d'enseignement. Ceci se manifeste par le fait qu'elles se préoccupent peu de la plupart des composantes devant être prises en compte lors de la planification de leurs séances de lecture à voix haute.

Nos résultats font écho à ceux de McCaffrey et Hisrich (2017) qui rapportent que jusqu'à 70 % des enseignants déclarent qu'ils accordent peu d'importance à la préparation de la lecture à voix haute aux élèves. Mais pourquoi en est-il ainsi? Les propos que nous avons recueillis dans la présente étude semblent indiquer que lorsque les enseignantes font la lecture à voix haute aux élèves, c'est souvent dans le but de leur offrir un moment de détente ou encore, une façon agréable de faire des transitions pendant la journée scolaire. De tels motifs sont évoqués autant par les enseignantes du préscolaire que celles du primaire. Cette façon de concevoir cette activité de lecture est peut-être la raison pour laquelle elles jugent qu'une planification rigoureuse n'est pas essentielle. En effet, comme le soutiennent Wasik et al. (2016), la façon dont les enseignantes réalisent les séances de lecture à voix haute est influencée par leurs conceptions de cette activité. Ainsi, il y a lieu de penser que celles qui considèrent qu'il s'agit d'un dispositif pédagogique sont davantage portées à planifier des interventions visant à soutenir les compétences des élèves alors que ce n'est pas le cas de celles qui y voient plutôt une activité occupationnelle. Comme Kindle (2013), nous pensons qu'il y a lieu pour les enseignantes d'élargir leurs conceptions vis-à-vis de cette activité d'enseignement afin d'y intégrer davantage des interventions visant à soutenir les apprentissages des élèves, que ce soit dans les classes du préscolaire ou du primaire. C'est donc dire qu'elles doivent porter une attention accrue aux diverses composantes de la planification qui sont négligées.

Il nous semble toutefois que la sélection des textes en vue d'en faire la lecture à voix haute est la composante de la planification dont les enseignantes se préoccupent le plus. N'empêche qu'elles évoquent des critères de sélection qui donnent à penser que de façon générale, leur pragmatisme l'emporte sur le caractère éducatif que pourraient offrir les textes. Par exemple, de belles images et des textes courts sont les deux critères qui sont les plus recherchés quand vient le temps de faire une sélection. Par ailleurs, certaines enseignantes parviennent même à contourner cette étape initiale de la planification en prenant un livre au hasard ou encore, en lisant un livre qu'elles n'ont pas sélectionné elles-mêmes. Le manque de temps est l'une des raisons évoquées pour expliquer cet état de fait. À cet égard, Johnston (2016) souligne que le temps qui est passé à choisir méthodiquement un livre pour la lecture à voix haute, même s'il peut sembler astreignant, est souvent nécessaire pour permettre à l'enseignant de juger de sa valeur éducative. D'ailleurs, cet investissement en temps est rentabilisé lorsque les textes choisis permettent d'offrir un enseignement qui correspond véritablement aux besoins des élèves.

D'autre part, la sélection judicieuse des textes ne garantit pas en elle-même l'efficacité des séances de lecture à voix haute. C'est en lisant attentivement les textes à l'avance qu'il est possible d'en découvrir les multiples facettes qui peuvent être mises à profit lorsqu'ils sont lus à voix haute devant les élèves (Delacruz, 2013; Fountas et Pinnell, 2019; Johnston, 2016). En toute logique, il nous semble que cette lecture préparatoire est une composante déterminante pour planifier l'ensemble d'une séance de lecture à voix haute aux élèves. Cependant, la moitié des enseignantes de notre étude jugent qu'il n'est pas nécessaire de faire cette lecture préparatoire. Il n'est donc pas surprenant de constater qu'elles négligent aussi les autres composantes de la planification, notamment l'établissement d'objectifs pédagogiques clairs et précis propres à chaque séance de lecture.

Les enseignantes interrogées font la lecture à voix haute principalement dans le but d'offrir une expérience qui soit agréable à leurs élèves. Cet objectif est tout à fait louable, car de telles occurrences peuvent donner lieu à des interactions enrichissantes susceptibles de favoriser une attitude positive envers la lecture (Lane et Wright, 2007). Mais, même dans cette visée, il nous semble que le potentiel d'apprentissage découlant de la lecture à voix haute aux élèves est diminué sans une préparation adéquate. Aussi, comme le soutient Kindle (2013), cette activité doit être abordée avec le même niveau de préparation que toute autre expérience pédagogique au cours de la journée. Par ailleurs, on remarque que bien peu d'enseignantes intègrent à leurs séances de lecture à voix haute des interventions visant d'autres objectifs pédagogiques. Pourtant, elles disent y consacrer en moyenne 59 heures d'enseignement par année. C'est pourquoi il semble urgent de les conscientiser au fait qu'il est possible de rendre ce dispositif d'enseignement encore plus profitable pour leurs élèves. Considérant la responsabilisation qui incombe aux enseignantes, il importe que ce temps d'enseignement soit utilisé à bon escient afin qu'elles puissent offrir de nombreuses occasions d'apprentissage à leurs élèves. On peut se réjouir du fait qu'elles intègrent déjà la lecture aux élèves dans leur programmation scolaire. Mais pour rendre cette activité d'enseignement encore plus profitable, il serait intéressant qu'elles y intègrent des interventions visant à favoriser le développement langagier (Wakik et al. 2016), les compétences en littératie (Fountas et Pinnell, 2019) et l'acquisition des connaissances sur

le monde (Kuhn et al. 2017) de leurs élèves, tout en continuant à favoriser leur attitude positive envers la lecture.

En ce qui a trait à la composante de la planification qui consiste à prévoir des interventions visant à soutenir l'engagement des élèves pendant les séances de lecture à voix haute, on remarque que plusieurs enseignantes ont recours au questionnement. Ceci pourrait s'avérer un moyen efficace de les faire participer à la construction de sens du texte qui est lu (Delacruz, 2013; Kindle, 2013). Cependant, elles s'en tiennent surtout à des questions générales, sans prendre en compte les spécificités des livres qui sont lus. Pourtant, selon McCaffrey et Hisrich (2017), il importe d'élaborer des questions pertinentes et de déterminer à l'avance les endroits où il est propice de les poser si l'on souhaite favoriser le développement de la pensée critique des élèves. D'autre part, il est tout aussi important de déterminer les moments les plus opportuns pour solliciter les questions et les commentaires des élèves. Lorsqu'ils s'engagent ainsi dans l'activité de lecture, il en découle des apprentissages importants. Par exemple, ils peuvent noter des éléments se rapportant à l'écrit, poser des questions découlant des illustrations ou faire des liens entre différents textes ou avec leur propre univers (Kindle, 2013). Cependant, ce genre d'intervention ne semble pas faire partie des séances de lecture à voix haute de l'ensemble des enseignants. Une autre façon de susciter l'engagement des élèves est de leur proposer des activités qui sont en lien avec les livres qui leur sont lus (Fisher et al., 2004; Shedd et Duke, 2008). Toutefois, cette composante de la planification est celle dont les enseignantes que nous avons interrogées se préoccupent le moins. En fait, on pourrait avoir l'impression, comme le décrivent Fisher et al. (2004), que leurs séances de lecture à voix haute sont des activités isolées qui se font parallèlement au programme d'études. Pourtant, il peut être assez facile d'établir des liens avec d'autres activités telles que des recherches sur l'Internet, des lectures personnelles, des centres de littératie, etc. Pour leur part, Shedd et Duke (2008) suggèrent que l'enseignant peut aussi amener les élèves à explorer les textes de façon personnelle. Les discussions ayant lieu avec l'ensemble des élèves contribuent à la construction d'un sens partagé. Mais des activités individuelles en lien avec les arts, les sciences, l'écriture, la musique ou le théâtre peuvent mener chaque élève à une exploration encore plus approfondie ou plus personnelle des textes ayant été lus par l'enseignant. Toutefois, les enseignantes ayant participé à la présente étude ne planifient pas de telles activités à partir des livres qu'elles lisent à voix haute à leurs élèves.

Conclusion

Cette recherche a permis de relever des lacunes importantes en ce qui a trait à la planification de la lecture à voix haute aux élèves. Par l'entremise des entrevues réalisées auprès des enseignantes, on constate que celles-ci accordent peu d'importance aux diverses composantes de la planification qui pourraient rehausser la valeur pédagogique de cette activité d'enseignement. À notre connaissance, les études antérieures s'intéressant à ce dispositif pédagogique n'avaient pas signalé une telle situation, car elles portaient principalement sur les bénéfices en découlant. La présente étude porte plutôt sur sa planification. Certes, elle ne permet pas de juger de l'efficacité des séances de lecture à voix haute que réalisent les enseignantes. Cependant, les lacunes qui ont été relevées en ce qui concerne leur planification donnent à penser qu'elles risquent de ne pas être pleinement profitables aux élèves. Il nous semble juste de penser que la qualité des expériences

d'apprentissage qui leur sont ainsi offertes dépend largement de la façon dont les enseignantes conçoivent cette activité d'enseignement. Conséquemment, il nous semble qu'il soit impératif d'offrir un soutien aux enseignantes pour les amener à élargir leurs conceptions en ce qui a trait à la lecture à voix haute qu'elles font régulièrement aux élèves. Par ailleurs, étant donné l'influence considérable que l'on attribue à cette activité d'enseignement, il est tout aussi important d'offrir aux futurs enseignants de multiples occasions d'en comprendre les fondements, notamment les diverses composantes à prendre en compte lors de sa planification. Les constats qui découlent de la présente étude peuvent servir de tremplin à d'autres recherches s'intéressant à mesurer les effets d'une formation intensive portant sur la planification et la mise en œuvre des séances de lecture à voix haute aux élèves. Une telle formation pourrait mettre l'accent sur le caractère interdisciplinaire de la lecture à voix haute aux élèves, laquelle permet d'aborder l'ensemble des contenus d'apprentissage se trouvant dans les divers programmes d'études.

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Les effets d'une approche littératiée sur la communication orale en classe de mathématiques de 7e/8e année dans un programme d'immersion française

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Résumé

Cet article traite des principaux résultats d'une étude ayant comme objectif de mesurer les effets d'une approche littératiée sur les habiletés de communication orale en langue seconde lors d'un cours de mathématique dans une classe de 7e/8e année dans un programme d'immersion française précoce au Manitoba, Canada. Certains tests paramétriques ont démontré un effet positif sur la structure syntaxique à l'oral, ce qui suggère que l'approche littératiée peut jouer un rôle clé dans la facilitation de la communication orale en mathématiques en contexte immersif.

Abstract

This article reports the primary results of a study exploring the effects of a literacy-based approach on oral accuracy in second language during a Grade 7/8 mathematics class in a French Immersion program in Manitoba, Canada. Some of the parametric tests showed a positive effect on sentence structure in oral communication, which suggests that a literacy-based approach can play a key role in the facilitation of oral communication in mathematics in in an immersion setting.

Mots-clés

communication orale, français langue seconde, immersion française, littératie, precision langagière, mathématiques, géométrie

Introduction

Selon le Commissariat aux langues officielles (2018), 17,9% des Canadiens parlent l'anglais et le français, les deux langues officielles au Canada, alors que 8,9% de la population manitobaine parlent les mêmes deux langues. Ces récents effectifs sont susceptibles d'augmenter puisque les programmes d'immersion française (IF) sont en croissance au Canada et que plusieurs provinces telles que le Manitoba connaissent une hausse annuelle d'inscriptions de 5% depuis les cinq dernières années (Statistique Canada, 2018). Comme dans la plupart des autres provinces canadiennes, le point d'entrée en IF précoce au Manitoba est communément la maternelle ou la première année et l'enseignement de la majorité des matières scolaires, incluant les mathématiques, se fait uniquement en français. Pour atteindre les exigences du programme d'IF précoce, un minimum de 75% de l'enseignement doit se faire en français de la 1re à la 6e année et

jusqu'à 80% du temps en 7ᵉ et 8ᵉ année. Pour la plupart des élèves inscrits en IF, le français est une langue académique et les situations d'échange en français langue seconde (FL2) sont très rares hors de l'école (Mandin, 2010). Conséquemment, c'est à travers leur scolarité en IF que la majorité des élèves qui utilisent souvent l'anglais comme langue première (L1) réussissent à atteindre un niveau de bilinguisme fonctionnel (Cammarata, Cavanagh, Blain et Sabatier, 2018). Ainsi, le programme d'IF au Manitoba, tout comme au Canada, est avant tout un programme de langue et un milieu privilégié pour apprendre le français (Lyster, 2016).

Sous la lentille de la théorie socioconstructiviste de Vygotsky (1962), la langue joue un rôle fondamental dans le développement des connaissances et des habiletés des apprenants et ce processus d'apprentissage nécessite un certain niveau de compétences communicatives dans les programmes de l'IF. En ce sens, la pédagogie immersive promeut un environnement riche en interactions orales où la précision langagière est ciblée par le biais de l'enseignement de toutes les matières scolaires. Cette philosophie immersive voulant que chaque élève puisse s'exprimer avec précision, c'est-à-dire avec facilité et spontanéité, exige qu'une priorité équivalente soit accordée à l'enseignement de la langue et de la matière afin de faire progresser les habiletés communicatives qui ont généralement besoin d'être développées, surtout au niveau lexical et grammatical (Cammarata et Haley, 2018; Lyster, 2016). Ainsi, l'étude actuelle s'intéresse au développement de la communication orale des élèves inscrits dans un programme d'IF précoce.

En mathématiques, moins de 40% des élèves de la maternelle à la 8ᵉ année atteignent les attentes provinciales (Commission sur l'éducation de la maternelle à la 12ᵉ année du Manitoba, 2019). Une des catégories évaluées sur le bulletin scolaire est la communication en mathématiques ; l'élève doit pouvoir justifier et expliquer clairement sa compréhension en utilisant un répertoire langagier précis, en français. Sachant que c'est en mathématiques que le rendement scolaire est le plus étroitement lié aux compétences linguistiques des élèves qui étudient dans un programme de deuxième langue (L2) (Morgan, Craig, Schütte et Wagner, 2014), la pédagogie immersive doit tenir compte des besoins langagiers des élèves afin de leur offrir un encadrement particulier.

Au fil des ans, des recherches canadiennes ont démontré les apports cognitifs et langagiers d'une approche pédagogique préconisant le mariage de la langue et du contenu en IF (Cormier et Turnbull, 2009; Laplante, 2000; Lyster, 2016). Parallèlement, la langue semble être l'un des véhicules d'apprentissage les plus importants à la transmission des connaissances et des habiletés mathématiques en IF (p. ex. Culligan, 2017; Tang, 2008). Néanmoins, aucune étude n'a vérifié l'effet de l'enseignement explicite d'éléments langagiers dans le contexte des mathématiques en IF.

Bien qu'un programme d'IF devrait offrir à tous les élèves une abondance de situations de communication orale significatives, les occasions d'échange verbal dans la classe de mathématiques s'avèrent limitées (Berger, 2015). Les recherches indiquent un besoin de travailler la précision langagière, y inclus le vocabulaire, les structures de phrase et la grammaire afin de favoriser la compréhension conceptuelle en IF (Culligan, 2017; Culligan, Dicks, Kristmanson, et Roy, 2015; Le Bouthillier et Bourgoin, 2016). En ce sens, l'objectif de l'étude était d'explorer les effets d'une approche littératié sur le développement de la précision langagière, à l'oral, des élèves de niveau scolaire intermédiaire apprenant les mathématiques en IF.

Cadre théorique

La communication orale en mathématiques

  Le processus de communication est une des compétences clés au cœur de tous les programmes d'études de mathématiques canadiens. Étant le fil conducteur de l'apprentissage, la communication orale s'avère primordiale à l'apprentissage en mathématiques, car c'est en articulant leurs pensées que les élèves approfondissent leur compréhension (Hattie, Fisher, Frey, Gojak, Moore et Mellman, 2016; Zwiers et Crawford, 2011).

  À travers le monde, plusieurs programmes de L2 ont examiné la communication orale dans les cours de mathématiques, comme dans le cas des élèves qui apprennent l'anglais, tel qu'en Afrique (p. ex. Setati et Adler, 2000), en Europe (p. ex. Barwell, 2005 et Berger, 2015) et en Amérique du Nord (p. ex. Moschkovich, 2015). Au Canada, d'autres se sont penchés sur les bénéfices de l'interaction orale à travers le processus de construction de sens en mathématiques chez des élèves en L2 et plus spécifiquement en IF (p. ex. Culligan, 2017; Le Bouthillier et Bourgoin, 2016; Tang, 2008).

  Étant donné qu'un contexte social s'avère fondamental à l'apprentissage des mathématiques, les élèves en IF ont conséquemment besoin de maintes opportunités d'utiliser le vocabulaire et les structures reliés aux mathématiques et, par ricochet, approfondir leur compréhension des concepts enseignés (Culligan et coll., 2015). Bien qu'apprendre les mathématiques dans une langue autre que sa langue maternelle est plus exigeant au niveau cognitif et langagier, ce modèle d'apprentissage s'avère en même temps un atout pour les apprenants en IF (Berger, 2015). En fait, les élèves en IF obtiennent des résultats en mathématiques en FL2 équivalents ou même supérieurs aux élèves qui apprennent les mathématiques dans leur L1 (Turbull, Hart et Lapkin, 2003). Il s'agit d'outiller les élèves pour qu'ils deviennent de plus en plus à l'aise et efficaces à avoir des conversations spontanées en français à propos des mathématiques, processus souvent peu naturel pour les élèves en immersion, mais si bénéfique pour eux (Culligan, 2017). Ainsi, afin de maximiser les habiletés communicatives et interactionnelles des apprenants en IF, la planification du contenu académique devrait stratégiquement tenir compte du développement simultané de la langue et du contenu (Cormier et Turnbull, 2009; Lyster, 2016). Avant d'explorer différents modèles de l'intégration de la L2 en contexte académique, nous nous sommes penchés sur la définition de la précision langagière afin de mieux comprendre quels éléments langagiers devraient être ciblés lors de l'enseignement des mathématiques.

La précision langagière en mathématiques

  Dans le contexte de la communication mathématique, le terme précision langagière est complexe et peut avoir de multiples interprétations. Pour cette étude, nous retenons celle de Morgan et coll. (2014) qui définissent la précision langagière comme étant le choix de mots utilisés et la façon dont ceux-ci sont combinés grammaticalement pour communiquer mathématiquement. Cette définition succincte s'aligne le mieux avec les besoins communicatifs qu'exigent les programmes d'étude de mathématiques et est à l'essence des fondements de l'IF (ministère de l'Éducation du Manitoba, 2014). Puisque les éléments langagiers associés à la précision langagière découlent des objectifs

spécifiques des programmes d'études, des objectifs langagiers devraient logiquement faire partie de la planification et de l'enseignement des matières scolaires en IF.

L'enseignement des mathématiques en L2 requiert une pédagogie judicieuse qui vise l'acquisition d'un lexique étendu et l'emploi de structures de phrases riches et variées. Afin d'assurer que les élèves en IF puissent avoir des conversations significatives en utilisant le langage mathématique et le langage courant, des stratégies d'enseignement interactives permettant de développer la précision langagière devraient être mises en place. Il en va de soi qu'à travers diverses expériences d'apprentissage riches, les élèves apprennent et utilisent certains termes mathématiques, mais parler avec précision en contexte académique en L2 ne s'apprend pas au hasard. Pour s'assurer que les élèves s'approprient d'un lexique précis, déjà prédéterminé par les programmes d'études, il faut l'enseigner directement (Le Bouthillier et Bourgoin, 2016). Par conséquent, les tâches reliées aux activités académiques (et de mathématiques, nous présumons) exigent des compétences communicatives spécifiques et ces objectifs langagiers sont donc obligatoires à enseigner (Laplante, 2000). De surcroît, l'enseignement du vocabulaire doit contribuer au développement des habiletés communicatives des apprenants en L2. La sélection des termes mathématiques devrait inclure les noms communs, les adjectifs, les adverbes, les verbes, les marqueurs de relations et les mots de transitions ainsi que les structures syntaxiques et les aspects grammaticaux nécessaires à la rencontre des objectifs disciplinaires (Le Boutillier et Bourgoin, 2016). Étant conscients de la nature des éléments langagiers qui devraient être ciblés en mathématiques, nous nous sommes intéressés à mieux comprendre la méthodologie privilégiée de l'intégration de la langue et du contenu mathématique en IF.

L'intégration de la langue immersive et du contenu mathématique

Le ministère de l'Éducation du Manitoba promeut une vision renouvelée de la pédagogie en IF où la précision langagière devrait être ciblée dans l'enseignement de toutes les matières scolaires, en contexte d'interaction social. La classe de mathématiques est un milieu propice au développement langagier en IF. Le décloisonnement de la langue au cœur de l'apprentissage des concepts mathématiques requiert pourtant une compréhension de la pédagogie immersive et nécessite une méthodologie spécifique au contexte d'apprentissage dans la L2 (Culligan, 2017 ; Le Boutillier et Bourgoin, 2016). La planification doit tenir compte des habiletés langagières dérivées des objectifs académiques tout au long du transfert graduel de l'apprentissage et c'est à travers l'échafaudage langagier et académique que les élèves en IF approfondiront leur compréhension de la matière et développeront leur conscience métalinguistique (Lyster, 2016).

Le modèle de l'approche littératiée de Cormier et Turnbull (2009) a particulièrement fait avancer la pédagogie de l'enseignement du langage et du contenu en IF. Selon l'approche littératiée, à travers maintes activités langagières de nature socio constructive, les apprenants utilisent la langue d'apprentissage comme véhicule cognitif et développent graduellement une autonomie communicative, compétence-clé à la réussite scolaire en L2. Cormier et Turnbull (2009) ont démontré que l'approche littératiée a contribué au développement langagier et cognitif dans un cours de sciences de 7e année en IF. Ces résultats prometteurs nous ont particulièrement inspirés et c'est à partir de ce modèle que nous avons formulé nos deux questions de recherche.

Questions de recherche

Nous précisons que la recherche discutée dans cet article s'inscrit dans une étude quantitative plus vaste portant sur les effets d'une approche littératiée sur le raisonnement mathématique, la communication orale et le langage écrit. L'article actuel porte sur l'analyse complète de l'effet de l'intervention d'une approche littératiée sur la précision langagière en communication orale dans une classe de mathématiques. Nous avons exploré notre objectif de recherche selon deux perspectives, une pédagogique et l'autre théorique. D'abord, nous voulions refléter le processus d'évaluation qu'utiliserait un enseignant pour avoir une vue globale du portrait langagier des élèves dans la classe de mathématiques. Aussi, nous souhaitions faire avancer les connaissances théoriques en IF par le biais d'une évaluation détaillée des mêmes profils langagiers. Subséquemment, deux questions ont guidé cette étude:

1. Quels sont les effets de l'intégration d'une approche littératiée en classe de mathématiques sur le niveau global de précision langagière des élèves en IF?
2. Quels sont les effets de l'intégration d'une approche littératiée en classe de mathématiques sur les acquis langagiers en précision langagière des élèves en IF?

Nous présenterons dans la prochaine section la méthodologie et les résultats concernant les effets de l'intégration d'une approche littératiée en mathématiques.

Méthodologie

Pour explorer l'objectif de cette recherche à devis quasi expérimental (Pelletier et Demers 1994), nous avons utilisé une approche quantitative (Creswell, 2009) afin de mesurer le développement de la communication orale, avant et après une période d'intervention, par l'entremise d'une approche littératiée fondée sur la théorie du socioconstructivisme. Ainsi, nous voulions mesurer les effets d'enseigner explicitement des éléments de la précision langagière, c'est-à-dire une liste spécifique de mots de vocabulaire et de structures langagières, sur les habiletés de communication orale.

Participants

Tel que Cormier et Turnbull (2009), nous avons choisi comme participants des élèves de niveaux intermédiaires puisque c'est souvent à ce temps que ceux-ci atteignent un plateau langagier (Lyster, 2016). Tous les élèves de deux enseignants de classes combinées de 7e/8e ont été invités à participer à cette étude. En tout, 23 participants, soit 52% du total d'élèves dans les deux classes, ainsi que leurs parents, ont donné leur assentiment de participation à cette étude. Selon les réponses à un questionnaire langagier (Paradis, 2011), tous les participants venaient de la même école, avaient commencé à apprendre le français comme L2 en maternelle et avaient l'anglais comme L1. Les participants utilisaient et étaient exposés au français et à l'anglais de façon égale et leurs parents n'ont rapporté aucune préoccupation quant au développement langagier, académique et cognitif. La répartition de ceux-ci se trouve dans le tableau 1.

Tableau 1

Groupe expérimental (N=13)		Groupe contrôle (N=10)	
7ᵉ année (âge moyen 12,5)	8ᵉ année (âge moyen 13,8)	7ᵉ année (âge moyen 12,6)	8ᵉ année (âge moyen 13,6)
3 filles	3 filles	2 filles	3 filles
5 garçons	2 garçons	3 garçons	2 garçons

Procédure

Procédure d'intervention

Cette étude fût complétée durant le cheminement régulier d'un module de géométrie portant sur les transformations, les objets en 3D et les figures, dans deux classes de 7ᵉ/8ᵉ année. Durant six semaines consécutives, les deux enseignants ont enseigné les mêmes concepts mathématiques à partir du manuel scolaire et d'un livret d'activités qu'ils avaient planifié ensemble. Toutefois, ce qui a différencié les deux classes est que le groupe expérimental a reçu un enseignement (intervention) selon une approche littératiée (Cormier et Turnbull, 2009) où l'enseignant a enseigné le vocabulaire et les structures langagières visés à travers les activités d'apprentissage communes, alors que l'enseignant du groupe contrôle a enseigné le même module de mathématiques en suivant sa programmation régulière, sans tenir compte intentionnellement de la langue.

Afin d'assurer que l'enseignement des mêmes concepts mathématiques se fasse parallèlement dans les deux classes, les deux enseignants avaient initialement collaboré sur une planification à moyen terme, selon les objectifs d'apprentissage du programme d'études. Suite à cette planification à rebours initiale, l'enseignant de la classe expérimentale et la première auteure se sont inspirés du modèle de l'approche littératiée (Cormier et Turnbull, 2009) afin de déterminer les compétences langagières qui découlaient naturellement des objectifs disciplinaires visés et d'identifier les éléments langagiers qui s'y rattachaient. À partir des programmes d'études de mathématiques, l'enseignant de la classe expérimentale et la première auteure ont identifié 44 mots de vocabulaire reliés aux objectifs de géométrie de 7ᵉ année et 36 termes reliés aux objectifs de 8ᵉ année (voir le vocabulaire visé dans l'Appendice A). De ces listes, 28 mots faisaient partie des termes mathématiques des années scolaires précédentes, mais nécessaires à revoir, étant donné que typiquement, les élèves utilisent peu cette terminologie hors de la classe et que les concepts de géométrie n'avaient pas été enseignés depuis un an. De plus, 10 mots étaient communs aux deux listes. Pour chaque niveau scolaire, l'enseignant a visé l'apprentissage de 10 nouveaux mots de vocabulaire par semaine. Un total de 12 structures de phrases furent aussi ciblées afin d'aider les élèves à communiquer en phrases complètes (voir les phrases visées dans l'Appendice B). Il est à noter qu'il était interdit à l'enseignant de la classe expérimentale de dévoiler cette liste de mots et de structures à l'enseignant du groupe contrôle. La première auteure et l'enseignant de la classe expérimentale ont créé des cartes de vocabulaire qui furent ajoutées au mur de mots au fur et à mesure que les termes étaient introduits. Les structures de phrases furent affichées devant la classe et sur les tables de travail des élèves tout au long de l'intervention.

Dans la classe expérimentale, le déroulement des leçons s'est concrétisé selon les étapes suivantes : a) la modélisation, b) la pratique interactive encadrée et c) la pratique communicative autonome. Lors de la modélisation, l'enseignant introduisait les concepts à l'étude en communiquant avec précision à l'aide des mots de vocabulaire et des structures visés; les élèves prenaient conscience de cette utilisation intentionnelle et stratégique de la langue et interagissaient en employant les éléments langagiers modélisés pour expliquer leur compréhension en phrases complètes, avec le soutien de l'enseignant et de leurs pairs. Les élèves devaient choisir quelques mots de vocabulaire présentés, les illustrer et les expliquer dans leurs propres mots dans leur lexique mathématique.

Lors de la deuxième partie de la leçon, la pratique interactive encadrée, les élèves devaient utiliser le vocabulaire et les structures ciblés à l'oral et à l'écrit dans des jeux interactifs et des tâches ouvertes reliées à la géométrie. Pendant ces activités d'apprentissage collaboratives, l'enseignant observait, posait des questions et offrait de la rétroaction aux élèves afin de maximiser les échanges entre élèves, clarifier leurs pensées et leur faire réinvestir les éléments langagiers ciblés. Par exemple, les élèves ont décrit les « transformations » dans des courtepointes à l'aide d'une liste de mots-clés et de structures, « Dans cette courtepointe, je remarque que… Aussi, je vois… » et ils ont comparé les similarités et les différences entre « droites parallèles » et « droites perpendiculaires » à l'aide d'un diagramme de Venn. Les élèves ont aussi participé à des activités de lecture collaborative lors de résolutions de problèmes, de jeu de devinettes et d'activités d'association de termes mathématiques et de définitions. L'objectif de l'approche intégrée (Cormier et Turnbull, 2009) était d'amener les participants à élargir leur champ lexical et syntaxique à travers multiples opportunités de lecture, d'écriture et de communication orale tout en développant leur compréhension conceptuelle.

La troisième étape consistait à réinvestir les apprentissages en pratique communicative autonome. Ce transfert des apprentissages de la langue et du contenu a pris la forme de présentations orales et écrites. Ainsi, les participants présentaient fréquemment devant la classe afin d'expliquer en dyades leur compréhension tout en interagissant avec l'enseignant et leurs pairs. Ils écrivaient aussi régulièrement dans leur cahier d'exercices, le même que celui de la classe contrôle, mais en répondant en phrases complètes et en réinvestissant les éléments langagiers à l'étude. Bien que la pratique autonome à long terme misait sur la communication mathématique spontanée au quotidien, les participants avaient toujours accès aux supports visuels tels que leur lexique mathématique, le mur de mots et les structures de phrases affichées dans la classe.

Enfin, pendant l'intervention de six semaines, les deux enseignants ont enseigné les mêmes concepts mathématiques à l'aide des mêmes outils pédagogiques. Toutefois, ce qui a différencié les groupes, nous le rappelons, est que l'enseignant de la classe expérimentale a enseigné des éléments langagiers spécifiques, c'est-à-dire le vocabulaire et les structures de phrases, alors que l'enseignant de la classe contrôle a enseigné le module de géométrie en suivant une programmation régulière, sans tenir compte intentionnellement du développement langagier.

Procédure de la collecte des données

Dans un premier volet, des entretiens semi-dirigés d'une durée de dix à quinze minutes par groupes de deux ou trois élèves ont été enregistrés par audio et vidéo et ont été

utilisés pour évaluer les habiletés de communication orale en mathématiques au Temps 1(T1) et au Temps 2 (T2) (Savoie-Zajc, 2009). La source principale de collecte de données est provenue des transcriptions des entretiens semi-dirigés qui ont pris place avant et après la période d'intervention. Pendant les entretiens, les élèves étaient invités à collaborer afin de répondre à la même série de questions ouvertes à propos des concepts de géométrie enseignés à leur niveau scolaire. Afin que les participants soient à l'aise de s'exprimer, ceux-ci ont été regroupés par leurs enseignants, selon leurs niveaux scolaires distinctifs et la compatibilité de leurs personnalités. L'intention était de recréer un environnement propice à l'échange social tel que le modèle de l'intervention dans la classe expérimentale.

Lors des entretiens semi-dirigés, les élèves étaient invités à expliquer oralement leur compréhension des concepts mathématiques à l'aide de représentations concrètes, symboliques et imagées, selon leur choix et préférence. Tout d'abord, la première auteure leur a posé une question ouverte afin de déclencher la discussion. Puis, à partir d'une banque de questions-guides, des questions d'approfondissement et de précision furent posées afin de sonder les élèves, de les faire parler et interagir entre eux. Chaque questionnaire ciblait les objectifs d'apprentissage spécifiques au niveau scolaire de soit la 7e, soit la 8e année et était divisé en deux différentes tâches. Après l'intervention, le même processus fut répété et les mêmes groupes de participants ont répondu à une différente série de questions très semblables à celles de la première séance.

Afin d'assurer que l'intervention progresse telle qu'initialement planifiée, les deux enseignants ont gardé un journal de bord dans lequel ils ont documenté le déroulement des leçons et le nombre de minutes d'enseignement par leçon. L'enseignant de la classe expérimentale y a aussi noté ses observations sur le progrès de ses élèves. Le journal de bord de l'enseignant de la classe contrôle confirme que les mêmes concepts mathématiques furent enseignés pendant le même nombre d'heures.

La première auteure a aussi tenu un journal de bord dans lequel s'y trouvaient des notes détaillées du déroulement de l'intervention, des pistes de questionnement, des photos de l'intervention en action et des réflexions découlant des communications et des rencontres avec l'enseignant de la classe expérimentale qui ont eu lieu au moins deux fois par semaine. Tel que prévu, moins de communications avec l'enseignant de la classe contrôle ont eu lieu, à part des échanges au niveau procédural et administratif.

Bien que les informations qualitatives tirées des journaux de bord tenus par les enseignants et la chercheuse n'ont pas fait partie d'une analyse, celles-ci ont guidé l'intervention et ont servi de documentation additionnelle pour bonifier l'interprétation des résultats et assurer la validité des sources primaires.

Procédure de l'analyse des données

Afin de vérifier l'objectif principal qui était de mesurer les effets d'enseigner des éléments langagiers à travers une approche littératiée sur la précision langagière en mathématiques chez des élèves de 7e/8e année en IF, nous avons complété une série d'analyses statistiques en utilisant des tests paramétriques (modèle mixte ANOVA) pour évaluer l'interaction entre les habiletés langagières des deux groupes (facteur intra sujets) avant et après la période d'intervention (facteur inter sujets). Le modèle mixte ANOVA est approprié selon la taille de l'échantillon dans la présente étude (Jennings et Cribbie, 2016). Nous avons calculé l'ampleur de l'effet pour chaque test statistique (η^2) et avons utilisé le

critère Cohen's *D* pour déterminer l'ampleur de l'effet : 0,1 = petit ; 0,3 = moyen ; > 0,5 = grand (Sullivan et Feinn, 2012).

En premier lieu, nous avons complété une analyse globale du niveau de précision langagière afin de projeter une vue d'ensemble du profil langagier des participants. Pour ce faire, nous avons visionné et analysé les entretiens au T1 et au T2, à partir d'une grille d'évaluation incluant des descripteurs s'échelonnant sur quatre niveaux de rendement (1 = limité à 4 = excellent) pour le vocabulaire mathématique, la constitution des énoncés, la structure syntaxique et la présence de l'anglais (voir la grille dans l'Appendice C). Cette grille d'évaluation de la précision langagière globale fut construite à partir de deux outils d'évaluation formative reconnus au Canada et communément utilisés par des enseignants dans la division scolaire dans laquelle cette étude a pris place : le référentiel des compétences orales pour les élèves apprenant le français de l'Association canadienne des professionnels en immersion, ACPI (Karsenti et Collin, 2007) et la grille d'évaluation de la communication mathématique provenant de *Professional Resources and Instruction for Mathematics Educators* (PRIME) (Small, 2008).

Dans un deuxième temps, nous avons complété une analyse détaillée des acquis langagiers en précision langagière en vérifiant le niveau de la fréquence du vocabulaire (nombre total de mots, nombre de mots différents, ratio type-token, nombre de mots anglais, nombre de mots de vocabulaire mathématique) et de la structure syntaxique (nombre d'énoncés, nombre de phrases et catégories de structure syntaxique) au T1 et au T2. Puisque la capacité de construire des phrases pour produire du sens est la compétence centrale à la communication, nous étions particulièrement intéressés à la constitution des phrases produites, définies comme étant les énoncés qui sont formés d'au moins un groupe-sujet et un groupe-verbe et porteurs de sens (Lefrançois, Montésinos-Gelet et Anctil, 2016). Afin de catégoriser et de comparer les phrases produites, nous avons créé un guide d'analyse de la structure syntaxique (Appendice D), adapté du référentiel des compétences à l'écrit en IF de l'ACPI (Dicks, Roy et Lafargue, 2016). Bien qu'il s'agit d'un outil d'évaluation formatif de la communication écrite, à notre connaissance, celui-ci est le seul illustrant la progression du degré de complexité de la phrase dans le contexte immersif canadien. Nous avons identifié cinq principales catégories : a) les phrases simples [Ps], b) les phrases combinées [Pc], c) les phrases complexes [PC], d) les phrases complexes mixtes [PCM] et e) les phrases complexes élaborées [PCÉ]. Pour refléter la conjugaison et l'accord des verbes à travers les niveaux de complexité syntaxique, nous avons ajouté des sous-catégories : Ps, Pc et PC non conjuguées, Ps, Pc et PC conjuguées et Ps, Pc et PC conjuguées-accordées. Enfin, puisqu'un des critères des phrases complexes mixtes [PCM] et des phrases complexes élaborées [PCÉ] était que les verbes devaient être correctement conjugués et accordés, ces sous-catégories n'ont pas été incluses dans le guide d'analyse de la structure syntaxique. Les entretiens entre élèves ont été transcrits dans le programme CHAT et chaque catégorie de phrase a été cotée et analysée à partir du programme CLAN (MacWhinney, 2000).

Résultats

L'objectif principal de la présente recherche, nous le rappelons, était de mesurer les effets d'enseigner le vocabulaire et les structures langagières à travers une approche littératiée sur les habiletés de communication orale auprès d'élèves qui apprenaient le

français comme langue seconde dans un programme d'IF canadien. Cette section rapportera les résultats des tests paramétriques (modèle mixte ANOVA) et l'ampleur des effets reliés à l'analyse globale et à l'analyse détaillée de la précision langagière.

Question de recherche 1 : Analyse globale du niveau de précision langagière

Tel qu'illustré dans le tableau 2, les données découlant de l'analyse globale de la précision langagière indiquent que l'interaction entre le facteur Groupe x Temps pour la structure syntaxique était statistiquement significative (η^2 = ampleur moyen), alors que les deux facteurs n'étaient pas significatifs. Spécifiquement, la classe qui avait reçu un enseignement selon l'approche littératiée a démontré une plus grande augmentation selon l'échelle de structure syntaxique après l'intervention comparativement à la classe contrôle. Un apprenant en immersion peut se trouver à un même niveau selon la grille d'évaluation pour l'analyse globale (p. ex. niveau 2 = acceptable) pendant plusieurs années. Par conséquent, il n'est pas surprenant de constater que les moyennes sont demeurées stables entre le T1 et le T2 pour les autres éléments de la communication orale, incluant le vocabulaire mathématique, la constitution des énoncés, la structure syntaxique et la présence de l'anglais, étant donné la courte période d'intervention.

Tableau 2

Capacité globale à communiquer oralement (échelle de 1= limité à 4 = très bon à excellent)

Catégories	Groupe expérimental N=13 Moyenne (écart-type)	Groupe contrôle N=10 Moyenne (écart-type)	df	F	p	η^2
Mots mathématiques (T1)	1,38 (0,51)	1,70 (0,48)				
Mots mathématiques (T2)	2,15 (0,55)	2,20 (0,63)				
Temps x Groupes			1,00	1,80	,20	0,08
Temps			1,00	39,77	,01*	0,65
Groupes			1,00	0,77	,39	0,04
Constitution des énoncés (T1)	2,15 (0,38)	2,30 (0,48)				
Constitution des énoncés (T2)	2,23 (0,44)	2,30 (0,48)				
Temps x Groupes			1,00	0,76	,39	0,04
Temps			1,00	0,76	,39	0,04
Groupes			1,00	0,36	,56	0,02
Structure syntaxique (T1)	2,00 (0,58)	2,40 (0,52)				
Structure syntaxique (T2)	2,23 (0,44)	2,30 (0,48)				
Temps x Groupes			1,00	4,05	,04*	0,16
Temps			1,00	0,63	,44	0,03
Groupes			1,00	1,42	,25	0,06

Présence de l'anglais (T1)	3,08 (0,49)	2,90 (0,57)				
Présence de l'anglais (T2)	3,08 (0,49)	3,10 (0,32)				
Temps x Groupes			1,00	2,97	,10	0,12
Temps			1,00	2,97	,10	0,12
Groupes			1,00	0,16	,69	0,01

Note : *Les valeurs sont statistiquement significatives (p < ,05).

En examinant la performance individuelle de chaque participant pour la structure syntaxique, nous avons constaté que les participants du groupe contrôle sont demeurés au même niveau au T2, à l'exception d'un participant qui a atteint un niveau plus bas. Pour cette même catégorie, entre le T1 et le T2, un participant du groupe expérimental a progressé du niveau 2 au niveau 3 et deux participants ont progressé du niveau 1 à 2. Ces derniers participants ont aussi progressé du niveau 1 à 2 au niveau du vocabulaire mathématique.

Question de recherche 2 : Analyse détaillée des acquis langagiers en précision langagière

Suite à la première série d'analyse globale de la précision langagière, nous avons entamé une série d'analyses détaillées. Les résultats de ces analyses seront présentés prochainement selon les catégories suivantes : 1) présence du vocabulaire mathématique ; 2) constitution des énoncés ; 3) structure syntaxique et 4) présence de l'anglais.

Présence du vocabulaire mathématique

Premièrement, nous avons mesuré la présence du vocabulaire mathématique ciblé lors des entretiens semi-dirigés. Nous avons compilé le nombre de termes mathématiques produits et bien utilisés au T1 et au T2. Les données recueillies ont démontré que l'interaction et le facteur groupe n'étaient pas statistiquement significatifs alors que le temps fut significatif (η^2 = ampleur grand), c'est-à-dire que le nombre de mots mathématiques produit par les deux groupes a augmenté entre le T1 et le T2 (voir tableau 3).

Deuxièmement, nous avons mesuré l'étendue du vocabulaire en calculant le ratio de mots mathématiques différents par rapport au nombre total de mots mathématiques *(Ratio type-token, RTT)*. Nous voulions savoir si les groupes avaient utilisé une variété de mots mathématiques ou s'ils avaient répété les mêmes mots lorsqu'ils ont expliqué leur compréhension à l'oral. Les données ont démontré une interaction significative du RTT (η^2 = ampleur moyenne), indiquant que le groupe contrôle a connu une diminution dans l'étendue du vocabulaire alors que le RTT s'est stabilisé chez le groupe expérimental (voir tableau 3).

Tableau 3

Analyse du vocabulaire mathématique

Catégories	Groupe expérimental N=13 Moyenne (écart-type)	Groupe contrôle N=10 Moyenne (écart-type)	*df*	*F*	*p*	η^2
Mots mathématiques (T1)	16,69 (10,66)	9,10 (5,49)				
Mots mathématiques (T2)	32,77 (20,02)	33,80 (7,89)				
Temps x Groupes			1,00	2,51	,13	0,11
Temps			1,00	56,12	,01*	0,73
Groupes			1,00	0,49	,49	0,02
Mots différents (T1)	113,44 (40,12)	116,10 (45,66)				
Mots différents (T2)	136,23 (45,21)	152,30 (29,59)				
Temps x Groupes			1,00	0,95	,34	0,04
Temps			1,00	18,07	,01*	0,46
Groupes			1,00	0,35	,56	0,02
Total de mots (T1)	385,69 (196,83)	396,60 (274,48)				
Total de mots (T2)	463,62 (251,54)	589,20 (153,61)				
Temps x Groupes			1,00	1,95	,18	0,09
Temps			1,00	14,01	,01*	0,40
Groupes			1,00	0,53	,47	0,03
RTT (T1)	0,34 (0,10)	0,35 (0,11)				
RTT (T2)	0,33 (0,96)	0,27 (0,04)				
Temps x Groupes			1,00	6,41	,02*	0,23
Temps			1,00	11,32	,01*	0,35
Groupes			1,00	0,47	,50	0,02

Note : *Les valeurs sont statistiquement significatives (p < ,05).

Malgré l'intégration d'une approche littératiée favorisant le développement lexical et langagier, nous ne pouvons pas confirmer un lien significatif entre l'intervention et le développement du vocabulaire mathématique, ce qui appuie les résultats observés lors de l'analyse globale de la précision langagière. Généralement, les deux groupes ont développé le vocabulaire mathématique de façon positive et comparable pendant les six semaines d'enseignement du module de géométrie.

Constitution des énoncés

Afin d'analyser la constitution des énoncés, nous avons compilé le nombre total d'énoncés (c'est-à-dire les prises de paroles) et le nombre de phrases (c'est-à-dire les

énoncés formés d'au moins un groupe-sujet et un groupe-verbe et porteurs de sens), pour ensuite établir le ratio entre les deux. Comme rapporté dans le tableau 4, ni l'interaction ni le facteur groupe n'étaient statistiquement significatifs alors que le facteur temps le fût par rapport au nombre total d'énoncés et de phrases (η^2 = ampleur moyenne). Ce résultat indique une augmentation du nombre total d'énoncé et de phrases entre le T1 et le T2 pour les deux groupes.

Tableau 4

Analyse de la constitution des énoncés

Catégories	Groupe expérimental N=13 Moyenne (écart-type)	Groupe contrôle N=10 Moyenne (écart-type)	*df*	*F*	*p*	η^2
Énoncés (T1)	60,84 (31,07)	71,60 (36,91)				
Énoncés (T2)	74,69 (30,88)	95,50 (24,60)				
Temps x Groupes			1,00	0,79	,39	0,04
Temps			1,00	11,09	,01*	0,35
Groupes			1,00	1,79	,20	0,08
Phrases (T1)	31,00 (16,10)	31,50 (23,93)				
Phrases (T2)	40,31 (21,92)	48,50 (13,19)				
Temps x Groupes			1,00	1,66	,21	0,07
Temps			1,00	19,44	,01*	0,48
Groupes			1,00	0,33	,57	0,02
Ratio phrases (T1)	0,52 (0,15)	0,41 (0,11)				
Ratio phrases (T2)	0,52 (0,10)	0,51 (0,05)				
Temps x Groupes			1,00	3,85	,06	0,15
Temps			1,00	3,61	,07	0,15
Groupes			1,00	2,75	,11	0,12

Note : *Les valeurs sont statistiquement significatives (p < ,05).

Structure syntaxique

Puisque la première série d'analyse globale avait indiqué que les élèves du groupe expérimental avaient démontré un progrès plus important au niveau de la structure syntaxique, nous étions particulièrement intéressés à la composition des phrases produites par les deux groupes. En examinant les résultats de l'analyse détaillée des catégories principales de la structure syntaxique présentées dans le tableau 5, nous constatons que l'interaction et le facteur groupe ne sont pas significatifs. Or, l'effet de temps est

statistiquement significatif pour les Ps, Pc et PCÉ (η^2 = ampleur moyenne). Spécifiquement, les deux groupes ont démontré une augmentation des Ps et Pc avant et après l'intervention, alors qu'il y a eu une diminution au niveau des PCÉ. Dans le contexte plus vaste du projet de recherche, nous avons complété une seconde analyse syntaxique à partir des sous-catégories suivantes : Ps, Pc et PC non conjuguées, Ps, Pc et PC conjuguées et Ps, Pc et PC conjuguées-accordées, mais celle-ci dépasse le but de cet article et n'est pas inclue à l'analyse actuelle. Nous précisons qu'aucune différence statistiquement significative en fût ressortie.

Tableau 5

Analyse des catégories principales de la structure syntaxique

Catégories Ps Pc PC PCM PCÉ	Groupe expérimental N=13 Moyenne (écart-type)	Groupe contrôle N=10 Moyenne (écart-type)	*df*	*F*	*p*	η^2
Ps total (T1)	23,62 (12,32)	23,00 (16,18)				
Ps total (T2)	31,46 (17,60)	35,80 (10,18)				
Temps x Groupes			1,00	1,34	,26	0,06
Temps			1,00	23,32	,01*	0,53
Groupes			1,00	0,11	,75	0,01
Pc total (T1)	2,62 (2,22)	2,10 (2,28)				
Pc total (T2)	3,77 (2,21)	4,50 (2,22)				
Temps x Groupes			1,00	0,74	,40	0,03
Temps			1,00	6,04	,02*	0,22
Groupes			1,00	0,03	,86	0,01
PC total (T1)	3,69 (3,17)	4,60 (4,60)				
PC total (T2)	4,31 (3,35)	7,00 (3,86)				
Temps x Groupes			1,00	1,03	,32	0,05
Temps			1,00	2,95	,10	0,12
Groupes			1,00	1,94	,18	0,08
PCM (T1)	0,69 (0,95)	0,90 (1,45)				
PCM (T2)	0,54 (1,13)	1,10 (0,88)				
Temps x Groupes			1,00	0,42	,52	0,20
Temps			1,00	0,01	,93	0,01
Groupes			1,00	1,03	,32	0,05
PCÉ (T1)	0,38 (0,65)	0,90 (0,88)				
PCÉ (T2)	0,23 (0,44)	0,10 (0,32)				

			1,00	4,39	,50	0,17
Temps*Groupes						
Temps			1,00	9,56	,01*	0,31
Groupes			1,00	0,92	,35	0,04

Note : *Les valeurs sont statistiquement significatives (p < ,05).
Ps=phrases simples, Pc=phrases combinées, PC=phrases complexes, PCM=phrases complexes mixtes, PCÉ=phrases complexes élaborées

Présence du vocabulaire anglais

Toujours parallèlement à l'analyse globale de la précision langagière, nous avons mesuré l'effet de l'intervention sur la présence de l'anglais en comparant le nombre de mots anglais produits et en calculant la proportion de ces mots par rapport au nombre de mots au total. Selon les résultats présentés dans le tableau 6, ni l'interaction ni le facteur de groupe n'étaient statistiquement significatifs. Seul le facteur temps était significatif ($\eta2$ = ampleur moyenne), indiquant qu'il y a eu une augmentation du nombre de mots anglais utilisés par les deux groupes à travers le temps. Non seulement le groupe contrôle et le groupe expérimental ont parlé davantage au T2, mais les deux groupes ont aussi plus eu recours à l'anglais pour communiquer. Afin de connaître la nature des mots anglais produits par les participants, nous avons classé ces mots en quatre catégories : a) les mots de transitions tels que like, so, well ; b) les mots de la vie courante qui n'avaient pas un contexte mathématique tels que yesterday, towel, curtain, ; c) les mots mathématiques qui ne faisaient pas partie de la liste visée tels que graph, unit, amount, et d) les mots mathématiques visés lors du module de géométrie tels que angle, diagonal, clockwise. En conclusion, la majorité des mots anglais produits furent des mots de transitions et la proportion de ces mots demeura la même pour les deux groupes du T1 au T2, soit 81 % pour le groupe expérimental et 85% pour le groupe contrôle.

Tableau 6

Analyse de la présence de l'anglais

Catégories	Groupe expérimental N=13 Moyenne (écart-type)	Groupe contrôle N=10 Moyenne (écart-type)	*df*	*F*	*p*	η^2
Mots anglais (T1)	10,23 (10,79)	13,50 (10,37)				
Mots anglais (T2)	11,31 (9,87)	23,60 (17,42)				
Temps x Groupes			1,00	3,36	,08	0,14
Temps			1,00	5,15	,03*	0,20

Groupes			1,00	2,98	,09	0,12
Ratio mots anglais (T1)	0,03 (0,02)	0,05 (0,04)				
Ratio mots anglais (T2)	0,02 (0,02)	0,04 (0,03)				
Temps x Groupes			1,00	0,01	,99	0,01
Temps			1,00	1,44	,24	0,06
Groupes			1,00	3,39	,80	0,14

*Les valeurs sont statistiquement significatives (p < ,05).

En somme, l'ensemble des résultats de l'analyse détaillée de la précision langagière démontre que les deux groupes d'élèves ont progressé de façon positive et équivalente à travers le temps. Contrairement aux résultats de l'analyse globale révélant que l'intervention a eu un effet positif sur les habiletés langagières du groupe expérimental au niveau de la structure de phrase, la deuxième série d'analyse détaillée n'a pas révélé cette même tendance. Nous discuterons dans la prochaine section de ces résultats tout en considérant différents facteurs qui pourraient expliquer la disparité entre les résultats obtenus dans la présente étude et ceux de recherches antérieures.

Discussion

Cette étude quantitative avait comme objectif de mesurer les effets d'une approche littératiée en mathématiques sur la précision langagière des élèves en IF par le biais d'analyses statistiques, une des seules études de cette nature, à part les travaux de Cormier et Turnbull (2009). La première question de recherche s'intéressait aux effets de l'intégration d'une approche littératiée sur le niveau global de précision langagière. Les résultats préliminaires concernant la présence du vocabulaire mathématique, la constitution des énoncés et la présence de l'anglais n'ont pas fait ressortir des preuves statistiquement significatives. Toutefois, l'analyse de la structure syntaxique démontre que l'enseignement des mathématiques selon une approche littératiée a eu un effet positif sur la qualité des phrases formulées par les participants. Bien qu'il s'agit d'un petit échantillon, l'intervention a démontré un impact positif plus considérable sur les participants qui présentaient des habiletés communicatives à l'oral plus faibles au T1. Ces résultats informent la pratique courante de l'enseignement des mathématiques tout en préconisant qu'un encadrement pédagogique axé sur le développement de la précision langagière peut avoir des répercussions positives sur la communication orale en IF, ce qui vient appuyer les travaux avancés par Cormier et Turnbull (2009) et Laplante (2000) démontrant les bénéfices d'une approche littératiée sur le développement langagier dans d'autres matières scolaires, telles que les sciences.

La deuxième question de recherche s'intéressait aux effets de l'intégration d'une approche littératiée sur les acquis langagiers en précision langagière. Les résultats de la seconde série d'analyses statistiques portant sur une étude détaillée des mêmes éléments de la précision langagière en communication orale ont abouti à des résultats peu concluants. Notamment, les résultats de l'analyse détaillée de la structure syntaxique n'ont pas révélé

la tendance soulevée lors de l'analyse globale. Les différentes méthodes utilisées pour évaluer les compétences reliées à la structure syntaxique pourraient possiblement expliquer ce manque de cohérence entre les résultats de l'analyse globale et ceux de l'analyse détaillée. La première évaluation de la structure syntaxique, nous le rappelons, portait sur une vue d'ensemble de l'emploi de structures de phrase, selon une échelle de 1 à 4. La deuxième évaluation cependant, quantifiait le nombre de phrases simples, combinées et complexes ainsi que le nombre de verbes conjugués et accordés au sein de ces phrases. L'autocorrection des erreurs de syntaxe n'a pas été prise en considération lors de l'analyse détaillée, comme ce fût le cas lors de l'évaluation globale. Nous reconnaissons que cette dernière méthode d'examen à la loupe de la structure syntaxique surpasserait la routine évaluative d'un enseignant alors que la première série d'analyse reflète davantage le processus d'évaluation de la précision en communication orale en salle de classe. En ce sens, les analyses détaillées de la structure syntaxique nous ont permis de mettre en évidence le portrait linguistique des apprenants en FL2 tout en approfondissant notre compréhension de la complexité linguistique reliée à l'apprentissage des mathématiques en IF.

Différences méthodologiques, limitations et recherches futures

Le nombre limité de participants s'avère une limite importante qui est aussi ressortie de l'étude quasi-expérimental de Cormier et Turnbull (2009). Nous avons aussi noté des différences méthodologiques entre notre étude et les travaux des recherches antérieures de Cormier et Turnbull (2009) et de Laplante (2000) qui ont démontré les retombées langagières positives d'une approche littératiée dans des classes de sciences en IF au Canada. Ainsi, nous discuterons prochainement de ces différences méthodologiques, en particulier au niveau de la livraison de l'approche littératiée, des concepts d'apprentissage en mathématiques et de la durée de l'intervention, qui ont potentiellement influencé les résultats obtenus. Nous suggérons que ces facteurs pertinents qui seront discutés prochainement soient pris en considération par les autres chercheurs qui continueront de faire avancer la recherche.

Livraison de l'approche littératiée

Tout d'abord, contrairement à l'étude de Cormier et Turnbull (2009) où un seul pédagogue était chargé de l'enseignement, deux différents enseignants ont participé à notre étude, un dans la classe expérimentale et l'autre dans la classe contrôle. Bien qu'un suivi régulier fut établi entre l'enseignant du groupe expérimental et la première auteure, il est possible que les différents styles d'enseignement et les pratiques pédagogiques propres à chaque enseignant ont eu une influence sur l'apprentissage des participants. Cette limite méthodologique fut aussi identifiée par Berteau (2015), qui a observé que les différents styles d'enseignement auraient un impact sur l'apprentissage lexical dans le contexte de l'enseignement de cours de français en IF. Dans cette étude, l'information fournie dans le journal de bord de l'enseignant du groupe contrôle était limitée, ne nous permettant pas d'être familiers avec le déroulement spécifique de chaque leçon. Il se pourrait que ce dernier ait indirectement enseigné plusieurs termes mathématiques visés à partir du manuel scolaire et du cahier d'exercices par exemple. Tel que décrit par Baumann et Graves (2010), l'enseignement de la terminologie mathématique se fait parfois de façon instinctive par les

enseignants au fur et à mesure que les concepts sont introduits dans les leçons. Pour éliminer le facteur que chaque enseignant aurait possiblement influencé l'apprentissage de ses élèves différemment, nous aurions pu adopter le modèle méthodologique de Cormier et Turnbull (2009) où le même enseignant enseigne aux deux groupes et incorpore l'approche littératiée dans la classe expérimentale strictement bien que cette solution proposée n'éliminerait pas toutes limites possibles.

Concept d'apprentissage en mathématique

Un deuxième facteur méthodologique qui a possiblement influencé nos résultats est le domaine mathématique à l'étude. Selon les enseignants dans l'étude actuelle, la géométrie n'avait pas été enseignée depuis un an, ce qui pourrait expliquer pourquoi les participants n'avaient retenu qu'une portion de la terminologie reliée aux concepts déjà enseignés. Puisque les participants parlaient seulement l'anglais à l'extérieur de l'école, le temps cloisonné consacré à l'enseignement de la géométrie, en français, était la seule occasion d'apprendre et d'utiliser le langage mathématique. Il serait pertinent d'évaluer l'approche littératiée lors de l'enseignement de concepts reliés au sens du nombre par exemple, puisque celui-ci est interrelié aux autres domaines mathématiques, à d'autres matières scolaires et à la vie courante (Small, 2008).

Nous notons aussi que le domaine de performance académique le plus faible en mathématiques est la géométrie (Lappan, 1999). L'anglais est souvent utilisé par les élèves en IF lorsque les concepts mathématiques deviennent plus complexes (Culligan, 2017; Tang, 2008). Ainsi, la présence importante de mots de liaison anglais dans les analyses détaillées de la précision langagière reflète possiblement des alternances codiques favorisant la communication et le développement cognitif des élèves. Ce comportement linguistique pourrait être expliqué par le « processus d'adaptation » caractérisant les apprenants d'une L2 qui utilisent la L1 stratégiquement, que ce soit consciemment ou pas, afin de différentier les idées et de mettre l'accent sur certains points (Moore, 2002). Puisque la plupart des participants n'avaient pas encore atteint le niveau conceptuel souhaité au T2, il se pourrait que ceux-ci aient eu recours à leur L1 comme outil cognitif (Swain et Lapkin, 2013).

Durée de l'intervention

La durée accordée à l'intervention pourrait aussi expliquer le développement limité de la précision langagière. Guidé par les travaux de Cormier et Turnbull (2009) et de Laplante (2000), nous avions planifié un bloc d'enseignement de six semaines pour permettre l'implantation de l'approche littératiée. Le ministère de l'Éducation au Manitoba (n.d.) recommande que 17% de l'horaire hebdomadaire soit consacré à l'enseignement des mathématiques en 7e et 8e année, ce qui représente 1500 minutes. Au cours de l'intervention, à cause de plusieurs activités parascolaires imprévues, les élèves ont reçu 750 minutes d'enseignement en mathématiques, ce qui correspond à la moitié de l'instruction originalement planifiée. Ainsi, il est possible que le nombre d'heures d'enseignement fût insuffisant pour que les participants puissent s'approprier des éléments langagiers ciblés.

Dans un contexte d'apprentissage d'une L2, l'enseignant devrait aborder de 5 à 10 nouveaux mots de vocabulaire par semaine par matière scolaire (Beck, McKeown et

Kucan, 2013). Puisque les participants étaient dans une classe combinée, ils furent exposés à presque le double de mots mathématiques, sans compter les autres mots et expressions qui ne furent pas explicitement enseignés, mais qui faisaient partie du lexique nécessaire pour parler de la géométrie. Sachant qu'il est nécessaire de rencontrer et d'utiliser un nouveau mot de vocabulaire de huit à douze fois avant de pouvoir l'assimiler (Berteau, 2015), les participants n'ont vraisemblablement pas eu assez de temps pour apprendre et maîtriser les éléments langagiers nécessaires à la communication précise en mathématiques. Enfin, un projet final de design architectural était prévu, mais faute de temps, celui-ci n'a pas eu lieu. Cette dernière étape du transfert autonome des apprentissages aurait permis aux participants de s'engager dans le processus cognitif et langagier, étape cruciale à la rétention du vocabulaire en L2 (Schmitt, 2009). Nous pourrions donc conclure que le nombre limité de minutes consacré à l'enseignement de la géométrie n'a pas permis d'atteindre des résultats semblables à ceux de Cormier et Turnbull (2009) et de Laplante (2000).

Conclusion

Cette étude fait écho aux recommandations de recherches canadiennes précédentes datant de plus de 30 ans mettant en valeur comment les apprenants en IF communiquent en contexte académique (Cammarata et Haley, 2018; Cormier et Turnbull, 2009; Lyster, 2016). L'intention principale de cette étude était d'explorer la relation entre une approche littératiée, explicitement axée sur le vocabulaire et les structures langagières, et le développement de la précision langagière en communication orale en français (L2) dans un programme d'IF. Si on s'en tient à la vue d'ensemble, on pourrait avancer qu'au niveau pédagogique, l'approche littératiée a eu un effet positif sur les habiletés langagières des participants qui ont généralement mieux communiqué pour expliquer leur compréhension mathématique, ce qui nous semble en soit un succès. Cependant, nous voudrions explorer l'effet de l'approche littératiée sur la communication orale dans une classe de mathématiques en tenant compte d'une intervention plus directe, intensive et de plus longue durée.

Le fruit de cette recherche renforce l'idée que la classe de mathématiques est un contexte authentique privilégié pour développer les compétences communicatives en IF mais il est évident que ce processus prend du temps et ne suit pas un parcours linéaire. Nous avançons que plus de recherches sont nécessaires afin d'explorer le rôle complexe du langage oral dans l'apprentissage des mathématiques en IF. D'autant plus, une approche littératiée basée sur l'approche socioconstructiviste de Vygotsky peut bénéficier tous les élèves qui apprennent le français comme langue additionnelle. Cependant, la mise en pratique de cet « échafaudage linguistique en mathématiques » n'est pas évidente pour ceux et celles qui sont sur le terrain éducatif (Cammarata et coll., 2018). Ainsi, plus de recherches examinant le rôle de l'enseignant comme facilitateur de la pensée mathématique en FL2 bénéficieraient grandement l'évolution des pratiques pédagogiques propres au contexte immersif canadien.

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Appendice A- Vocabulaire mathématique

Géométrie-7ᵉ année		Géométrie-8ᵉ année	
Vocabulaire technique	Vocabulaire sous-technique	Vocabulaire technique	Vocabulaire sous-technique
des droites parallèles	les coordonnées	un dessin isométrique	un plan
des droites perpendiculaires	une médiatrice	l'axe de réflexion	un dallage
un segment de droite	une figure	le centre de rotation	le point
une bissectrice	une image	une translation	une figure
un plan cartésien	une réflexion	une figure composée	l'aire
l'axe des x, des y	une rotation	la conservation de l'aire	la base
une paire ordonnée	une transformation	un segment de droite	le sommet
un angle aigu	les quadrants	la vue d'un objet	la rotation
un angle obtus	une orientation	un prisme	une réflexion
un angle droit	une reproduction	un polygone	une transformation
un triangle équilatéral	un point	un hexagone	le déplacement
un triangle isocèle	un déplacement	un octogone	la face
un triangle scalène	les étiquettes	un heptagone	une arête
un parallélogramme	le sommet	un nonagone	l'alignement
un losange	un trapèze	un parallélogramme	adjacent
un polygone	l'aire	un triangle acutangle	congruent
un pentagone	les degrés	un triangle obtusangle	convexe
un hexagone	une échelle	le sens horaire	
le centre de rotation	l'origine	le sens antihoraire	
une translation	congruent		
dans le sens des aiguilles d'une montre	faire subir		
dans le sens inverse des aiguilles d'une montre			

Appendice B- Structures langagières de 7ᵉ et 8ᵉ année

Structures langagières
Je remarque qu'il y a… Aussi, je vois que… Voici un exemple…   *Je vois que… Cela signifie que…*   *Je sais que… parce que…*   *Si… alors… Donc…*   *Dans ce dallage, il y a …. Aussi, il y a… Mais il n'y a pas…*   *Les similarités entre ces 2 objets sont… <u>tandis que</u> les différences entre ces 2 objets sont que…*   *Cela s'explique parce que…*   *Pour faire la rotation de cet objet, j'ai…*   *Je suis d'accord-Je ne suis pas d'accord parce que…*   *Premièrement, … Ensuite… Puis … Finalement, …*   *Je me demande …*   *Est-ce que tu dis que…?*

Appendice C- Grille d'évaluation de la précision langagière globale

	NIVEAU 1 Limité	**NIVEAU 2** Acceptable	**NIVEAU 3** Bon	**NIVEAU 4** Très bon à excellent
Vocabulaire mathématique	L'élève a un vocabulaire très restreint et utilise très peu de termes mathématiques. Le vocabulaire n'est ni clair ni précis.	L'élève a un vocabulaire restreint et utilise quelques termes mathématiques. Le vocabulaire est minimalement clair et précis.	L'élève utilise le vocabulaire mathématique avec suffisamment de clarté et d'exactitude pour communiquer ses idées.	L'élève utilise un vocabulaire mathématique varié pour communiquer ses idées avec clarté et précision.
Constitution des énoncés	L'élève utilise des mots et énoncés isolés et des expressions figées.	L'élève fait des phrases courtes constituées de groupes de mots ou d'expressions figées.	L'élève fait des phrases complètes et utilise plusieurs expressions figées correctement.	L'élève utilise différents types de phrases, des périphrases et une variété d'expressions figées fréquemment et efficacement.
Structure syntaxique	L'élève fait un usage très limité de structures syntaxiques appartenant à un répertoire mémorisé.	L'élève fait des erreurs élémentaires de syntaxe. Il utilise des connecteurs simples tels que *et, mais, parce que*.	L'élève utilise des structures syntaxiques courantes. Il peut enchaîner et relier une série d'éléments courts, simples et distincts.	L'élève fait peu d'erreurs de syntaxe et le plus souvent les corrige lui-même. Il structure sa production par des connecteurs.
Présence de l'anglais	L'élève utilise peu de mots et d'énoncés en français et ceux-ci sont isolés ou insérés dans des phrases en anglais. L'élève utilise toujours l'anglais pour communiquer avec ses pairs.	L'élève utilise l'anglais lorsqu'il ne parvient pas à exprimer sa compréhension mathématique en français. L'élève utilise parfois le français et parfois l'anglais pour communiquer avec ses pairs.	L'élève a recours à l'occasion à l'anglais pour exprimer sa compréhension mathématique. L'élève communique avec ses pairs en français la plupart du temps.	L'élève a rarement recours à l'anglais pour exprimer sa compréhension mathématique. L'élève communique avec ses pairs uniquement en français.

Appendice D- Guide d'analyse de la structure syntaxique

- € **phrase simple** (groupe sujet et groupe verbe-non conjugué) =1
- € phrase simple (groupe sujet et groupe verbe-conjugué) =2
- € phrase simple (groupe sujet et groupe verbe conjugué et bien accordé) =3

- € **phrase combinée**: bon emploi des conjonctions de coordination simples (et, ou, mais, donc) entre 2 phrases simples (au moins 1 verbe non conjugué) =4
- € phrase combinée: bon emploi des conjonctions de coordination simples (et, ou, mais, donc)* entre 2 phrases simples (verbes conjugués) =5
- € phrase combinée: bon emploi des conjonctions de coordination simples (et, ou, mais, donc)* entre au moins 2 phrases simples (verbes conjugués et accordés) =6

- € **phrase complexe**: bon emploi de conjonctions de subordination (si, que, quand, comme, parce que, lorsque, après que, afin que, pour que) entre au moins 2 phrases simples (au moins 1 verbe non conjugué) =7
- € phrase complexe: bon emploi de conjonctions de subordination (si, que, quand, comme, parce que, lorsque, après que, afin que, pour que) entre au moins 2 phrases simples (verbes conjugués) =8
- € phrase complexe: bon emploi de conjonctions de subordination (si, que, quand, comme, parce que, lorsque, après que, afin que, pour que) entre au moins 2 phrases simples (verbes conjugués et accordés) =9

- € **Phrase complexe mixte:** bon emploi d'une conjonction de subordination ou de coordination entre une phrase simple et une phrase combinée (la face de ce cube est devant **et** je fais une rotation de 90° **parce que** je tourne dans le sens horaire) OU bon emploi d'une conjonction de coordination entre une phrase simple et une phrase complexe (**si** je fais la rotation de 90° **et** *que* je tourne dans le sens horaire, la face va être ici, **mais quand** je fais la rotation de 270, la face va être là.) (verbes conjugués et accordés) =12

- € **Phrase complexe élaborée**: bon emploi des conjonctions de subordination (dans une combinaison de phrases combinées ou complexes (verbes conjugués et accordés) =18

The Name Jar Project: Supporting Preservice Teachers in Working with English Language Learners

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Abstract

Classrooms are becoming more linguistically and culturally diverse and many educators are feeling unprepared to meet the varied needs of English language learners (ELLs). Through a larger design-based research doctoral study, I collaborated with 11 preservice teachers and 28 ELLs in Grades 2 and 3 to design and implement a literacy intervention that focused on cultivating literacy engagement to foster English language development. This paper documents the positive impact the implementation of the literacy intervention, also known as the Name Jar Project, had on supporting the preservice teachers' emerging practice. Analysis of focus group data, preservice teachers' written reflections, and field notes revealed that (a) the preservice teachers, through their informal learning experiences, were able to empathize with the ELLs' strengths and challenges of learning English; (b) the service learning model provided a safe learning environment for preservice teachers to gain practical experience working with ELLs; and (c) through the research design, preservice teachers connected practice and theory to inform their future teaching experiences.

Keywords

English language learners, ELLs, preservice education, literacy, language learning

Background

Kindergarten to Grade 12 (K–12) classrooms are becoming more linguistically and culturally diverse with an increasing number of students who speak a language other than English at home (Samson & Collins, 2012; Statistics Canada, 2017). I use the term English language learners (ELLs) to refer to learners who do not speak English as their mother tongue. It has been well recognized that many ELLs face challenges in achieving high literacy levels (August & Hakuta, 1998; Collier, 1995a, 1995b; Roessingh, 2018; Roessingh & Kover, 2003). Academic language becomes gradually more difficult for ELLs as they try to keep up with the conceptual and linguistic demands of the curriculum (Linan-Thompson & Vaughn, 2007; Roessingh, 2018). In this regard, as ELLs move on to higher grades, they are required to read and understand increasingly difficult texts in the curricular content areas. This complexity reflects academic language with a high vocabulary load, including many low-frequency and technical words that are seldom used in typical conversation (Cummins, 2011a; Roessingh, 2018).

For educators, this also presents many difficulties as they try to support both the language and literacy needs of a diverse student population. Many inservice and preservice teachers also feel challenged in being responsive to the linguistic and cultural diversity in their classrooms (Alberta Teachers' Association, 2014; Kapoyannis, 2019; Goldenberg,

2013; Howard Research & Management Consulting, 2006, 2009; International Literacy Association, 2017; Roessingh, 2011; Samson & Collins, 2012). To address the literacy and language needs of young ELLs, it is essential for educators to continue to reflect on the role of first language and culture in classrooms (Kapoyannis, 2019; Cummins, 2011a, 2011b; Cummins & Early, 2011; Goldenberg, 2013; Naqvi et al., 2012; Roessingh, 2011; Toohey & Dagenais, 2010).

Using design-based research (DBR) principles, I collaborated with 11 preservice teachers to design and implement a literacy intervention called the Name Jar Project to support the literacy and language needs of 28 ELLs in grades 2 and 3. This literacy intervention was part of a larger doctoral study that took place in a diverse urban school board in Calgary, Alberta that inquired into the primary research question: How can educators cultivate literacy engagement to support English language development? The study took a two-pronged approach where I examined the impact the literacy intervention had on meeting the literacy and language needs of the young ELLs and how the implementation of the intervention supported the preservice teachers' emerging practice. This paper focuses on the latter prong, the positive impact the DBR study had on supporting the preservice teachers' practice, and explores the following questions:

- What experiences and/or background did the preservice teachers have in supporting the ELLs coming into the study?
- How did the implementation of the designed literacy intervention support the preservice teachers' emerging practice in being responsive to the linguistic and cultural needs of ELLs?

Literature Review

Supporting ELLs in Alberta

A review initiated by Alberta Education on Kindergarten – Grade 12 (K-12) English as a Second Language (ESL) education provided key findings and recommendations (Howard Research, 2006, 2009). The purpose was to identify the optimal supports and strategies needed to support the educational achievement of ELLs and to assist Alberta Education with decisions related to curriculum development, resource allocation, and support provision (Howard Research, 2006). The report summarized that in order to personalize instruction for ELLs, there is a need for all educators, not just ESL teachers and ESL assistants, to have a greater understanding about the pedagogical knowledge related to working with ELLs in the mainstream classroom. This pedagogical knowledge includes a more informed understanding about the process of second language acquisition and acculturation, instructional design that supports linguistic and conceptual understanding, and ways to work more closely with parents and communities to understand the linguistic and cultural profiles of ELL learners (Goldenberg, 2013; Roessingh, 2014). Preservice teacher education was also specifically addressed noting that data collected from case studies and expert-stakeholder meetings indicated that preservice teachers are limited in the number and breadth of ESL-related courses that can be included in their undergraduate programs. The review's recommendation strongly promoted creating more opportunities for inclusion of ESL related courses in teacher education programs and more placement opportunities for student teachers in schools with large numbers of ELLs

(Howard Research, 2006). The reports also underscored the importance of professional development and professional development opportunities for inservice and preservice teachers and that being responsive to the needs of ELLs was more than good teaching practices. There was a priority on working more closely with pre-service teachers around the pedagogical knowledge needed to work more effectively with ELLs and on the importance of school leaders in supporting their school staffs around this professional learning process.

This is echoed in the current literature, indicating that educators need to continue to reflect on the implications of linguistic diversity for educational practice (Cummins, 2011a, 2011b; International Literacy Association, 2017; Ntelioglou et al.,2014) This sentiment is supported in a recent synthesis of literature on responsive instruction for ELLs. Goldenberg (2013) asserted, "Although generic effective instruction is almost certainly a necessary base, it is probably not sufficient to promote accelerated learning among English Learners" (p. 6). He further highlighted the importance of focusing on intentional English language development for ELLs and promoted promising instructional practices such as using the home language to support academic development.

Theoretical Lenses

Multiliteracies Approach.

Alberta Education's (2010) definition of literacy is rooted in a multiliteracies approach where multiple modes of meaning making, and communication are emphasized. Literacy teaching is seen beyond skills and competence where meaning making is active, dynamic, and process oriented. Multiliteracies approach, first proposed by the New London Group (1996) disrupts traditional notions of reading and writing to include broader notions of literacy, including linguistic, visual, audio, spatial, and performative modalities. These broader notions of literacy are premised on the changing dimensions of language use today, which emphasize the need for learners to figure out differences in patterns of meaning from one context to another. It also embraces that meaning is made in multimodal ways to respond to new information and communication media of 21st century learning environments (Cope & Kalantzis, 2009).

To build a sense of belonging and equitable opportunities in classrooms today, not only must the role of first language and culture be recognized within a multiliteracies approach, but also opportunities for students to represent their learning through a multilingual and multimodal lens must be provided.

Literacy Engagement Framework

The design of the literacy intervention draws on the instructional dimensions of the literacy engagement framework (Cummins & Early, 2011) which explores literacy engagement through the lens of working with linguistically and culturally diverse students. Cummins (2011a) discussed the critical relationship between literacy engagement and literacy achievement and argued that this relationship has not been explicitly articulated in school policies for ELLs. Access to print materials and extensive reading play a causal role in students' literacy achievement through opportunities to cultivate strong reading comprehension skills and broaden vocabulary knowledge (Lindsay, 2010). Literacy

engagement will be enhanced when (a) students' prior knowledge is activated, (b) their ability to understand and use academic language is supported through specific instructional strategies, (c) their identities are affirmed, and (d) their knowledge of and control over language is extended across the curriculum (Cummins& Early, 2011).

There is consensus in the current literacy research about the relevance of scaffolding instruction, activating background knowledge, and extending language of literacy engagement (Cummins & Early, 2011), but there is minimal acknowledgement of how educators affirm students' identities. In recent years, many researchers have expressed the need for first language and culture to be acknowledged in the development of the English language if educators are to affirm a student's identity and embrace plurilingualism (the continued development of home languages) in classrooms (Kapoyannis, 2019; Cummins, 2011a, 2011b; Cummins & Early, 2011; Naqvi et al., 2012; Roessingh, 2011; Toohey & Dagenais, 2010).

Informal Learning Experiences

The research study provided preservice teachers an informal learning experience through the service- learning project. Formal learning is typically institutionalized, sponsored, classroom-based, and highly structured. Most adult learning occurs outside of formal education and is referred to as informal or experiential learning (Dominice, 2000). Informal learning is not typically classroom based or highly structured, and control of learning rests primarily in the hands of the learner. Through authentic learning experiences, adult learners reflect on what is known and how meaning is extracted from experience.

Professional learning applying current research findings on languages and diversity is imperative if educators are to meet ELLs' personalized needs and ensure academic achievement (Kapoyannis, 2019; Cummins & Early, 2011; Escamilla, 2009; Goldenberg, 2013; Naqvi et al., 2012; Roessingh, 2011). To assist the participating preservice teachers in implementing the Name Jar Project, I designed three structured workshops (approximately 2 hr per session) at the local university the preservice teachers attended. I was able to gather information on the personal and professional experiences that they were bringing to the study as well as what they were hoping to gain from their participation. I summarized the literature review and theoretical framework informing the study and gave an overview of the research problem and questions. I encouraged the pre-service teachers to ask questions and to contribute their insights into the research problem. The sessions also included lesson and material development in preparation for the contact hours with the students at the research site. These coaching and professional learning opportunities provided the first-year pre-service teachers with the time to expand on their understanding of second language pedagogy, to collaborate with peers to design learning tasks based on the objectives of the intervention, and to prepare themselves for the 20 hr of contact time with the ELLs at the research site.

To provide an exemplar of how the preservice teachers explored the theoretical underpinnings informing the study, I invited them to consider the use of artifacts as a way to engage the students they would be working with. I asked the pre-service teachers to come prepared to discuss the storybook *The Name Jar,* which would be used during the literacy intervention and to bring an artifact that was meaningful to them in connection with their names. We discussed how they could model this for the young ELLs during the

intervention. I began this professional learning opportunity by sharing my own artifact to model the process and begin the conversation. The preservice teachers shared their artifacts in small groups as they learned more about one another, their languages, and their cultures. The artifacts included sentimental gifts from home countries, photos and jewelry. Together, the pre-service teachers and I debriefed as a large group, reflecting on the use of artifacts as a way to engage ELL students through this multiliteracies approach and how they could be used in creating an identity text. I was able to write field notes during these initial professional learning sessions to deepen my understanding of the preservice teachers as participants, their experiences coming into the study, and their perspectives about supporting literacy and language needs of young ELLs.

Throughout the research project, we created a community of practice (CoP) to meet the preservice teachers professional learning needs. A CoP is defined as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger et al., 2002, p. 4). In our CoP, we held weekly meetings to discuss the literacy sessions and create an emergent support system. The meetings provided informal opportunities to bridge theory and practice by discussing how the literacy sessions were going, looking at student work, and sharing instructional strategies with one another. This job-embedded professional learning also provided the preservice teachers an opportunity to reflect on their lessons with their peers, share ideas, and, with guidance, make adjustments to the design of the lessons. The COP also had an online component through the Desire to Learn (D2L) shell that I created to support the teachers with sample lessons, instructional strategies, models, and readings.

Methodology

Setting and Participants

The 11 preservice teachers, two men and nine women, were recruited from the first-year cohort of a two-year Bachelor of Education (BEd) After Education degree at a local university who had volunteered to participate in a service- learning project to support ELLs. This service- learning project was one of many opportunities offered to undergraduate students to gain more experience in working in diverse settings. All 11 participants had completed first degrees in various disciplines and had a keen interest in learning more about how to meet the diverse needs of young ELLs in their practice. They were appreciative of the opportunity to be part of a cohort of 11, continuing in the same school to complete their four-week practicum requirements.

The preservice teachers committed to 20 contact hours with the grade 2 and 3 students and an additional five hours of professional learning time with me and with other staff members at the school site. Literacy sessions at the school site took place twice a week for 60 min per session.

Only one of the 11 preservice teachers had any formal coursework in supporting ELLs as he was specializing in teaching English as an additional language in his program.

The project took place in an elementary school (K-6) within a large urban board in Alberta that prioritized literacy as an overall school focus. The school demographics reflected the learning needs of a linguistically and culturally diverse school population and

benefitted from the proposed intervention. The school's population during the project was 544 students with 114 of them coded as ELLs. Working with the school administration, 29 students in grades 2 and 3 were identified as meeting the criteria for the study: (a) identified as an ELL by Alberta Education in grades 2 and 3 and (b) had an intermediate (level 3) English language proficiency and higher according to the provincial ESL Benchmarks (Alberta Education, 2012). The participants were both foreign born (301) born outside of Canada and Canadian born learners (303) coded as ELLs. I chose this proficiency criterion purposefully to ensure that the emphasis was not on teaching beginning early literacy skills such as phonemic awareness but to rather on vocabulary tasks that would build background knowledge and comprehension to support academic literacy.

Design Based Research (DBR)

DBR emphasizes a pragmatic orientation involving a choice of mixed methods and a variety of research tools to respond to complex and authentic educational problems (Brown, 1992). This methodology takes an interventionist approach; it is collaborative, grounded in the literature, and shaped by field testing and participant expertise (McKenney & Reeves, 2012). The research project took place over a 6-month period to allow for the four core phases of DBR research to take place. These four core phases of DBR are further elaborated on below:

Phase 1 of DBR begins with an investigation of the problem at hand, entailing an exploration and analysis of the existing situation in terms of current knowledge and practice. The educational problem that the research will address is identified and analyzed through a literature review and in consultation with practitioners.

Moving into Phase 2, the design/construction phase, the emphasis is on drafting and prototyping solutions for the research problem and questions being explored. The literature is consulted again to find relevant theory to guide the solution as well as existing design principles that may address the research problem and questions. This informs the design of the planned intervention with draft principles, which will be reflected in practice within the learning environment.

Phase 3 is the implementation and evaluation of the proposed solution in practice, which will inform the first implementation cycle of the intervention. In this phase, there are considerations as to how the design solutions will be implemented and evaluated. This includes who the participants will be, what procedures will be used to implement the solution, and what data will be collected and analyzed to inform the research questions.

Phase 4, the final phase of evaluation and reflection, incorporates the idea that results influence subsequent design cycles and the need for reflection as part of the process to produce design principles and impact implementation of solutions (McKenney & Reeves, 2012). Data is gathered to determine the impact of the intervention and the reflections and insights inform future cycles of implementation.

Designing the Literacy Intervention

Using DBR principles (Amiel & Reeves, 2008; Anderson & Shattuck, 2012; Brown, 1992), I worked with the preservice teachers (also known as the ELLs' university buddies) to design and implement the literacy intervention. The designed literacy intervention, called the Name Jar Project, used the storybook *The Name Jar* (Choi, 2001)

to anchor sequenced and linked literacy tasks that resulted in the creation of identity texts about how ELLs make meaning of their names.

The storybook was chosen as an exemplar of a culturally relevant text which provides students with the opportunity to engage with texts that connect to their cultural backgrounds (Freeman & Freeman, 2004). These books can also include dual language books written in both English and L1 to reflect the language and cultures of the students. They focus on deeper concepts such as belonging, legacy, cultural artifacts, and relationships that form semantic networks for understanding and making sense of the world (Kramsch, 2004).

Using the Name Jar book provided an anchor to develop literacy tasks to support the ELLs in creating identity texts as part of the intervention. Identity texts are practical and pedagogically sound artifacts focused on embracing the student's first language and culture by creating a learning space where students' identities are reflected back in a positive manner (Cummins & Early, 2011; Naqvi et al., 2012; Roessingh, 2011). These texts can take on multimodal forms: written, spoken, visual, dramatic, or a combination of arrangements (Cummins & Early, 2011; Cummins et al., 2015; Stille & Prasad, 2015). The literacy intervention was delivered by the preservice teachers through a progression of 10 lessons using the *Learning by Design* (Roessingh, 2010) curricular framework implemented over 20 literacy sessions in small group configurations. I used the Learning by Design website (Roessingh, 2010a) as a curricular framework to guide lesson planning for the literacy sessions focusing on how young ELLs made meaning of their names. This framework incorporated both linguistic and conceptual learning objectives through opportunities to integrate multimodal and multilingual literacy tasks.

Through consultation with the relevant literature and input from the preservice teachers, we created design principles to guide the literacy intervention focused on cultivating literacy engagement to support English language development (see Table 1). Using these design principles and strategies for implementation, the preservice teachers delivered the intervention through 10 guiding lessons that made up the curriculum for the literacy sessions and provided a prototype of the intervention. Through this adaptable implementation, we had opportunities to modify and redesign lessons to personalize the literacy sessions and for the preservice teachers to provide input into future iterations of the intervention. For a more detailed description of the curricular framework and how the intervention was implemented, please see (Kapoyannis, 2019).

Table 1

Design Principles Guiding Literacy Intervention

Design principles guiding intervention	Strategies to support implementation
Provide intentional scaffolding and modeling opportunities for English language development	Use of learning by design curricular framework (Roessingh, 2010) for lesson development, additional scaffolding, and modeling resources for preservice teachers to use on D2L shell.

Promote and value use of first language and culture	Encouragement of first language and culture through dual language opportunities, shared reading of culturally relevant text, name artifacts, and creation of identity texts
Provide opportunities for extension of academic language	Extension of academic language through a focus on developing and recycling tiered vocabulary, curricular connections, vocabulary development tasks with multiple exposures to new words.
Support practitioners through experiential and situated learning opportunities	Reflection on literacy sessions, D2L shell to provide resources and models to support preservice teachers.

Note. D2L (Desire2Learn) is an online learning platform.

Data Sources

In this section, I describe each of the data sources collected during the research project, including field notes, focus group data, and preservice teachers' reflections of the literacy sessions.

Field notes. I wrote field notes and memos as I observed the literacy sessions in the small group configurations, reflected on the professional learning sessions, and situated myself overall at the research site with the staff, ELLs, and preservice teachers. I kept these notes in my field journal and secured them within the ethical guidelines of this study.

Focus group data. I conducted two focus groups with preservice teachers to gather data about their experiences with literacy practices supporting ELLs. Both were audio-recorded and transcribed, using pseudonyms. Focus groups are a form of qualitative interviewing that provides the opportunity for participants who share a similar background to engage in meaningful conversations about the topics researchers wish to understand (Morgan, 2008). I moderated the focus groups and used semi structured questions (see Appendix A) to get the preservice teachers' perspectives and insight on literacy engagement and this intervention.

Literacy session reflections: Secondary data. As part of the lesson template (see Appendix B), the preservice teachers could record their observations and reflections. Each week, they typed their reflections on their literacy sessions and submitted them to me. These observations became secondary data and were concurrently collected and analyzed to help guide and redesign the literacy intervention as the study progressed.

Data Analysis

Using constant comparison analysis (Onwuegbuzie et al., 2009; Parry, 2004; Strauss & Corbin, 1998), a three-stage analysis process of open, axial, and selective coding was used to analyze the data. Analysis begins with open coding where the data is chunked

into smaller units attaching a code or descriptor to the unit. The codes are emergent, meaning that the descriptors emerge from the data. During the second stage, which is referred to axial coding, the codes are grouped into categories of information and positioned within a theoretical model. In the last stage, quotes are placed into the relevant categories and one or more themes are then developed that express the content of each of the categories referring to the final stage of selective coding (Strauss & Corbin, 1998).

In analyzing the focus group data, I used memos (Morgan, 2008) to capture reflections that came to mind, with particular attention to topics that generated high levels of interest from most participants in each focus group as well as the consistent repetition from a single participant about a particular topic or theme. Morgan (2008) discussed how "capturing notes of what you see and hear creates a secondary back up record of the session and it can fill important blanks when you start analyzing the recorded materials (p. 36). As I conducted two rounds of focus groups with the pre-service teachers, it was important to look for themes, patterns, and relationships across the data. It was also essential to explore the outlying data that did not fit the patterns emerging. This is critical to the analysis by exploring exceptions and contradictions around a particular theme. This early data analysis shaped the gathering of additional data through following up with individual participants to ensure data checking and gain further insight to inform other questions to address in the second focus group.

Through this process, themes emerged to determine the positive impact the designed literacy intervention had on supporting the preservice teachers' emerging practice. Through constant comparison analysis, a point of saturation is reached where no new information and understanding are generated. Findings are grounded in the data set, and the themes that are identified can be illustrated though multiple data fragments (quotes) (Lincoln & Guba, 1985). This first implementation cycle of the literacy intervention, implemented by 11 pre-service teachers over 20 literacy sessions, provided multiple sources of data to guide future iterations. This triangulation of data provided internal validity and also contributed to the reliability of the study referring to what extent the study can provide the same results when replicated.

Findings

Three major themes emerged in response to the research questions: (a) the preservice teachers were able to empathize with the strengths and challenges of learning English through their informal learning experiences, (b) implementing the intervention through the service learning model provided a safe learning environment for preservice teachers to gain practical experience working with ELLs, and (c) implementation of the intervention provided the preservice teachers with opportunities to connect practice and theory and to inform their future teaching experiences. I present the themes with relevant data as evidence.

Finding 1: The preservice teachers were able to empathize with the strengths and challenges of learning English through their informal learning experiences.

The 11 first-year preservice teachers identified few formal learning experiences in their education program to support linguistic and cultural diversity. They were not required to take any formal coursework in Teaching English as an Additional Language (TEAL).

Of note, they had only completed one field experience, focused mostly on observation, before starting the Name Jar Project. The preservice teachers identified their personal experiences working with ELLs, the need for more support in their education program in learning how to differentiate for diversity, and their perceptions of the strengths and challenges in learning English for ELLs.

Making sense of experience: Informal and formal learning experiences. The preservice teachers explained in the focus group that they were exposed to some initial theoretical underpinnings and strategies in their pragmatics course to support the ELLs, but they identified the need to have more formal and informal learning opportunities in their education program to work with ELLs and be able to differentiate for linguistic and cultural diversity. Christina noted a lack of support on this topic: "[The pragmatics professor] taught us a lot in our pragmatics class, so I think I have had a great introduction, . . . but other than that, I don't have a lot." Yana said, "You don't get support around differentiating for diversity in this program unless you take inclusive or ELL specialization."
Jessica agreed:

> Yeah, my interactions were mostly in school, in grade school. They (ELLs) were pulled out of class but I don't think until I was in this kind of role and in this school that you see how often they are pulled out and how much it can affect them. I think we take it for granted, our interaction with the language, and say, "Oh, it's simple." But even working with these kids, . . . it's like they use the common use of the word "good" for so many things. Like, when I was in Grade 2, I was using harder words, using more advanced words, but you take it for granted. You don't think about it like that.

These quotes reinforce that the preservice teachers had few formal learning experiences working with ELLs coming into the project. Yana's quote captures the perception that differentiating for diversity is addressed only through the inclusive and ELL specializations and not part of other education courses. All preservice teachers consistently identified the need for more support in learning how to differentiate for linguistic and cultural diversity in their education courses.

Identifying the strengths and challenges in learning English for young ELLs. Through reflecting on their personal experiences, the preservice teachers identified strengths in learning English for ELLs as well as the challenges many ELLs and their families may face within their schooling experiences. Elliot shared an anecdote on the diverse learner profiles of ELLs:

> I know some people; they are remarkable. She's a speech pathologist, and he is an elementary principal. He is from Slovakia, and she's from here, and the first two kids are adopted, and they are Blackfoot. So then they learned English and Slovakian, because the grandparents speak Slovakian, and then they go to French immersion school. So, they learn English at home, Slovakian on Saturdays. They already knew Blackfoot, and they are going to school for French. Then they have three biological kids, all under 10 years old, and they are all learning the three languages.

The preservice teachers also perceived strengths in learning other languages. As Ariana noted,

> I nannied . . . for the same family for seven years. . . . So their mom is German, and their dad is Canadian, but their mom only spoke German to them. The youngest one was born in the United [Arab] Emirates and only spoke German with his mom. When he went to preschool, he didn't know that much English even though she [the mother] speaks fluent English. She spoke to them in German because she wanted them to learn German. And then much later, they moved to Switzerland. All of them had a hold of spoken German but couldn't read and write in it. Because he [the youngest] only spoke German going in, he picked up English much easier.

Both of these quotes speak to the diverse global profile that is part of 21st century classrooms, where multiple languages and cultures are represented. The preservice teachers also recognized that linguistic and cultural experiences vary based on personal experiences, the motivation to learn different languages, and family dynamics, among other factors. They realized that English language development is not a static process. In these examples, the preservice teachers elaborated on their positive perceptions towards learning other languages and how first language learning supports the learning of additional languages.

The preservice teachers also described the challenges they perceived in learning other languages and the time it takes to develop competency in English. Kaitlyn provided a personal example related to her partner's English language proficiency and her perspective on learning English:

> Actually, my partner is an ELL, and he has only been in Canada for five years. . . . [He] studied English in Mexico since he was eight years old. What I've really realized is that he still needs a lot of help with English even though he is working on a job in Canada and doing well for himself. Learning English or a second language is a lifelong endeavour, something you will always be working on, and it won't be the same as if it was your first language. I just thought it was interesting that he [still] needs a lot of help.

Kaitlyn's personal experience has allowed her to observe her partner's English language proficiency, recognize the complexity in learning a second language, and understand that learning a second language requires time, is a long process, and needs to be supported.

Finding 2: Implementing the intervention through the service learning model provided a safe learning environment for preservice teachers to gain practical experience working with ELLs .

The preservice teachers saw participation in this service- learning project as a positive, relevant, and practical opportunity to become more confident in meeting the needs of young ELLs in linguistically and culturally diverse classrooms. They appreciated the opportunity to stay in the same school as a cohort for both the service-learning project and their second one-month practicum. In this section, I elaborate on how the preservice teachers viewed service learning as a way to gain practical experience, the power structures that are perceived in field experiences, and how CoPs can support emerging professionals.

Service Learning as a way to gain practical experience. During the focus groups, the preservice teachers described the project as a way to gain practical experience with ELLs without the pressure they have sometimes felt with more formal field experiences.

The preservice teachers started to take more risks in trying out different strategies and then adjusting their lessons based on their observations and reflections. Working with fewer students, they started to gain more confidence as the project progressed without feeling that they were being evaluated. Elliot commented, "It's nice to do it on your own without teachers watching you and you're more nervous. It's like, 'I'm going to try this today, and if it doesn't work, I'm going to change it next time.'" Yana seconded this observation:

> I would like to add confidence to that. You're building personal relationships on a smaller level with individual students, and then you gain the confidence to use the strategies you are using in your practicum with your classroom. It just makes you gain confidence and comfort, as was mentioned.

Both of these quotes illuminate the importance of the service- learning project in bolstering the preservice teachers' confidence to reflect on their practice, adjust their lessons in a safe environment, and apply their learning to the larger classroom.

Preservice teachers' vulnerability and power structures within field experiences. Through the focus group data, preservice teachers' lesson reflections, and my field notes, the theme of power became apparent. The preservice teachers came into the project with some hesitation, unsure if they could implement the intervention. They brought up several times that not being evaluated gave them the space to gain more confidence in their own practice.

I started to think about my role as a researcher and how it was influencing the learning environment and my relationship with the preservice teachers. Being reflexive in the process is important in recognizing the biases and assumptions a researcher brings to a study. Simons (2009) stressed that it is important for researchers to situate themselves within the research process and to reflect on how their values and judgments affect their portrayal of them with the research participants. My background and experiences as an educator, student, and ELL myself, allowed me to make sense of many observations in the field, but I had to be cognizant of when my emotions were engaged and how it was influencing the process. In most of my experiences working with preservice teachers, I have had an evaluative role within formal learning experiences. I reflected on how the power dynamic started to shift for me, too, within the DBR process. By design, I was not there to evaluate the preservice teachers but to collaborate with them to glean insight into the research questions. This shift contributed to a safe learning environment where all project members gained confidence in what was being done and worked together to support the young ELLs. This informal service-learning opportunity thus orchestrated an environment where the preservice teachers felt safe to take more risks. There was enough structure in the models and resources available to them to scaffold the lessons, yet they also appreciated the encouragement to adjust lessons and use different strategies when they were ready to do so.

The following lesson reflections from two of the preservice teachers capture this idea. Blake said, "I know at the beginning it felt a bit overwhelming, but we have so many resources that are available with this project that we can use, which is very helpful." Christina commented,

> I really appreciated overcoming my fear that I wouldn't be able to do this. We had a lot of fun doing it, and that gave me a lot of confidence moving forward. I learned

about building a rich context around the language building and bringing something concrete, like artifacts. That was helpful for me to see this process. I think I talked about this in my last reflection. This aha moment I had that students were making connections between their first and second language and how cool it was that that was part of their identity.

These quotes capture the preservice teachers' initial hesitation and uncertainty about their own abilities in participating in this project, and their appreciation of the resources that were in place to support them with the literacy intervention. Brown (2012) spoke about vulnerability as encompassing uncertainty, risk, and emotional exposure, and described how people can use vulnerability to positively impact lives. The preservice teachers exposed their vulnerabilities in coming into this project with uncertainties about their own abilities to support the students. They were grateful to have been given the space to take some risks, learn, and gain confidence through the process.

CoPs to support emerging professionals. The literacy sessions and the CoP supported the preservice teachers in implementing the literacy intervention. They were quickly immersed into the project and implemented the literacy intervention in their small groups with a diverse group of young ELLs. As the intervention progressed, the preservice teachers also appreciated that they were a cohort of 11 at the research site and could depend on one another for support. In the focus groups, they elaborated upon the significance of the peer support through the cohort opportunity. Ariana said, "We have also all collaborated with being in the hall, and we talk about what is working and what is not working." This sentiment was reinforced by Seong, who said, "It's so nice to have people you can talk to and a support system! [And] eat lunch with." Finally, Elliott added,

Even when we met with [the practicum advisor], our first meeting for practicum, and we were going around . . . there were one or two people that are only at the school, and it adds another element of how crazy and intimidating your practicum can be.

These three quotes capture the preservice teachers' appreciation of the cohort of 11 at the same school and the importance of the relationships they formed with one another and other school staff before starting their practicums.

Finding 3: Implementation of the intervention provided the preservice teachers with opportunities to connect practice and theory and to inform their future teaching experiences

Using DBR principles speaks to the importance of connecting theory and practice to address complex research problems. The preservice teachers identified a desire to have more exposure to practical learning experiences in working with ELLs and differentiating for diversity. In many ways, this project allowed the preservice teachers to connect the practice of doing to the theoretical underpinnings of supporting linguistic and cultural diversity for young ELLs. In this regard, the preservice teachers were able to make practical connections to the instructional dimensions of the Literacy Engagement Framework and provide the young ELLs with opportunities to engage with their learning through multimodal and multilingual literacy tasks. In the next section, I describe how the

intervention deepened their pedagogical knowledge to support ELLs and allowed them to reflect on how linguistic and cultural diversity would impact their future practice.

Deepening of preservice teachers' pedagogical knowledge to support English Language Learners. The preservice teachers deepened their understanding of the seminal constructs of BICS and CALP (the difference between conversational and academic language). The distinction between conversational, social language and academic language skills is essential in understanding the complexity of literacy and language development for young ELLs (Cummins, 1989). Cummins (1981a) stated that while it may take up to 2 years to achieve social, conversational skills (Basic Interpersonal Communication Skills [BICS]), it will take 5 or more years for ELLs to achieve academic language proficiency (Cognitive Academic Language Proficiency [CALP]). While younger ELLs sound good and acquire BICS type language quickly (Roessingh 2018), CALP language, where there are cognitively demanding and context reduced situations, presents difficulties for them as curricular and linguistic demands escalate. There are fewer contextual clues to support students' understanding, and the language is more formal and abstract. They saw how the ELLs' language skills seemed strong at the onset of the project, but with more exposure, they realized how students were challenged with their academic language and in particular struggled with the project's writing opportunities. This finding is reflected in the following three quotes from the focus group data. Blake said, "I thought that the buddies would be at a lower level and was surprised at how much they knew, but at a closer look you realize how their comprehension is not really there." Jennifer added, "They would always ask me how to spell a word. I would ask them to try, but they didn't want to because they didn't want to be wrong. They didn't understand the phonics, really. They struggled a lot." And finally, Ariana said,

> I think I learned a lot just in . . . how language is learned through a kid's eyes. Spoken is so strong, but then written you're like, "You don't have the phonics." . . . They really struggled with [blending sounds]. Didn't get the "Th" sound. Conceptually they got things, but when it came to writing, it was a total disaster. Interesting.

The three quotes capture how the preservice teachers made sense of theoretical concepts such as BICS and CALP through their practical work with the ELLs and their reflections on their lessons. This pedagogical knowledge was important in assessing the ELLs' English language development and redesigning the lessons to differentiate the instruction.

Looking forward: Impact of cultural and linguistic diversity on future practice. The preservice teachers also recognized what impact cultural and linguistic diversity might have in their own practicum experiences and future classrooms. As Yana described,

> How the ELLs are being assimilated into classes—they really need support. Even in the ELL class, they were coming up to me asking me for help in Arabic. It opened up my eyes to the ELL component, and when I am a future teacher, how many students are learning English, and how it would affect your overall classroom, and how you would have to take that and tweak that. It was really eye-opening for me. Helen described her experience as follows:

I think it was such a neat experience being at such a diverse school and seeing how they treat the diversity and acknowledging it with the big map at the front of the school and really being proud of how many languages are spoken in the school. It was nice to see that because really, in the courses here at university, you don't really understand how diverse schools can be. Last semester at the practicums, the schools I was at, they were not very diverse.

The preservice teachers appreciated the opportunity to be in a diverse school for the service-learning project and recognized the value of first language and culture in their practice. They also reflected on the impact of the importance of affirming identity in the instructional design. Christina's lesson reflection captured this outcome as she described the impact Scribjab (Toohey & Dagenais, 2010) had on affirming the students' identity and influencing her understanding. Scribjab is a multilingual digital storytelling application that was used in the literacy intervention to incorporate first language into the lessons.

I think Scribjab helped to establish their first language as something that is legitimately important. It's almost like they trust technology, and if the technology exists for this and if other people are doing this (as they see from the online Scribjab books from other authors), then being bilingual and having these cultural connections must be important. [S] and [Y] really enjoyed reading the books written by other authors in Arabic and Urdu. They were even critiquing the stories, wondering why the authors didn't write more, or asking questions indicating that they wanted to know more. I realized the importance for them of seeing the connection between the two languages being side by side simultaneously. (Christina)

Christina's quote is powerful as she critically reflected on how the ELLs responded to the use of Scribjab and how they related to the first language keyboards. Christina also recognized that the ELLs' engagement with the dual language aspect of the project was more evident during their use of Scribjab than it had been in previous lessons.

The preservice teachers started to make practical connections to theoretical underpinnings of the literacy engagement framework and a multiliteracies approach to instructional design by implementing the literacy sessions and reflecting on the strengths and areas for development of the lessons. Being part of the Name Jar Project provided the opportunity to have an informal learning experience in a diverse school setting where they could observe, try different strategies, and start to make their own connections between practice and theory. The pedagogical intent to embed first language and culture through the design provided insight into the use of strategies to include dual language instruction and affirm ELLs' identities. The preservice teachers also recognized the complexity of learning English and began to understand how that complexity could impact them as future teachers in their own classrooms. The literacy session reflections and the CoP allowed them to reflect on their own practice and how it has influenced them as emerging professionals. Being part of the service- learning project also supported their practicum experience as they employed strategies from the designed intervention.

Discussion and Implications

The preservice teachers consistently reflected on the service- learning project as a practical and valuable learning opportunity to deepen their understanding of how to

differentiate instruction to support the ELLs' linguistic and cultural needs in a safe learning environment. The focus on experiential learning and the CoP structure (Wenger et al., 2002) was integral to supporting the preservice teachers in taking risks in adjusting their lessons, recognizing the importance of peer support in providing strategies and feedback, and beginning to critically reflect on their own values, perceptions, and assumptions about linguistic and cultural diversity. It would be worthwhile to continue these conversations at the postsecondary level and to provide opportunities for service-learning projects to expose pre-service teachers to creative informal learning opportunities to deepen their professional learning.

These findings also reinforced the need to continue to explore the role of differentiation for linguistic and cultural diversity within the coursework in education programs. The preservice teachers' perceptions that more support is needed in teacher education programs to differentiate instruction for ELLs is echoed in the literature (International Literacy Association, 2017; Kapoyannis, 2019; Ntelioglou et al., 2014). There was also the perception that supporting ELLs was only focused on in the ELL specialization courses within their program. The findings in this study revealed that the preservice teachers felt their teacher education program fell short of providing the pedagogical knowledge and experiential learning opportunities needed for them to feel prepared in effectively supporting the needs of ELLs. Continued exploration is needed in how preservice teacher education programs can provide opportunities for all preservice teachers to feel confident and knowledgeable in supporting the linguistic and cultural needs of ELLs.

The preservice teachers identified that being part of a cohort of 11 at one school was positive and valuable. Starting with the service-learning component, and then continuing to complete their field requirements, provided the preservice teachers opportunities to establish relationships with their students, their peers, and the larger school community. They had exposure to diverse learner profiles of students in different grades and learning environments, which fostered the opportunity to deepen their pedagogical knowledge and reflect on their practice as emerging professionals (Goldenberg, 2013; Roessingh, 2014). Although these types of cohort configurations may be difficult to arrange in a singular school setting, the positive implications are worthy of continued exploration.

Of critical importance was the preservice teachers' powerful observations made about the role of first language and culture in affirming the students' identity within the literacy intervention. As was amplified in the literature review, this is an area where educators need to be more intentional in their literacy practices (Cummins & Early, 2011; Naqvi et al., 2012; Roessingh, 2011). The findings captured the positive influence on the young ELLs as they were encouraged to learn more about their languages and cultures and to share this learning with their peers through the use of the artifacts, creation of their identity texts and dual language opportunities. Preservice teachers need to continue to reflect on how to affirm their students' identity in their instructional design. Cummins reinforced the power of identity texts (Cummins & Early, 2011; Cummins et al., 2015; Stille &Prasad, 2015) where "students can showcase their intellectual, literary, artistic and multilingual talents in ways that challenge the devaluation of their cultures and identities in the school and wider society" (Cummins & Early, 2011, p. 145).

It is my hope that the Name Jar Project may provide stakeholders who are invested in preservice and inservice education with a positive exemplar to reflect on as educators respond to the diversity within multilingual and multicultural classrooms. The best DBR has a visionary quality, driven by potentiality of what can be (Bereiter, 2002). This is an exciting idea as educators look to inspire the next generation of diverse learners in Canada.

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Appendix A: Focus Group Questions

Initial Focus Group

1. How would you describe literacy engagement?

2. What have your experiences been so far working with ELLs as preservice

teachers?

3. How would you describe your readiness in supporting literacy practices for

ELLs?

4. What do you hope to gain from participating in this research project?

Second Focus Group

1. What has your experience been participating in this ELL literacy intervention?

2. What do you feel is working well with the intervention and why?

3. What challenges have you encountered with the literacy intervention and why

do you believe these are challenges?

4. What would you recommend to further improve the intervention?

Date:
Project: The Name Jar: Identity
        Age/Grade: 2–3

Lesson Overview

Objectives

Language Learning Objectives	Concept/curricular Objectives	Strategy Objectives

Teaching Phase

- **Warm Up:** Review/recycling
- **New language, concepts, strategies**
- **Planning for next lesson**

Learning tasks: Transforming, Practicing, Reinforcing, Extending

-
-

Vocabulary	Grammar, Function, Focus
NEW RECYCLED	

Observations and Reflections
My observations and reflections:

Observations: During the lesson, I observed... (Factual, descriptive)
-use of first language
-connections to background knowledge
-student interactions
-concept/language difficulty
-cultural connections
- completion of learning tasks
-students' response to learning task: interest, motivation, curiosity

Possible Guiding Questions for reflection:
- What went well and why?

- How would you adjust the lesson?

- What will you consider for future lessons

"I'm Not the Only Writer in The Room": A Framework for Co-Creating Confident Writing Classrooms

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Abstract

This study is rooted in social cognitive theory, specifically Bandura's work on self-and collective efficacy. The authors explore self-reported confidence levels with writing instruction from secondary teachers across subjects in Canada and the United States by pairing a self-efficacy scale developed by Locke and Johnston (2016) with semi-structured interviews conducted via Skype. 60 teachers participated in the survey, with 25 from Canada and 35 from the United States. Although teachers report relatively strong levels of self-efficacy in writing instruction, the responses of participants regarding collective efficacy are more mixed. Based on these results, coupled with six interviews (split evenly between teachers in Canada and the United States), the authors propose a framework to help teachers of all subject areas increase their confidence in writing instruction while also helping students develop their own confidence as writers. This three-pronged framework of identity, context, and authority, relies on co-creating community with students. The potential of this framework is creative, offering teachers (and students) multiple ways into a conversation about writing that will not only enhance confidence, but will create a classroom culture in which diverse writing strategies and perspectives are valued.

Introduction

Writing in the secondary classroom—and beyond—can serve a variety of functions; to borrow the language often used to speak of assessment, we can write for learning, of learning, and as learning (Ontario Ministry of Education, 2013). Despite the ease with which the language of assessment maps onto writing, many students and teachers continue to experience writing exclusively as a form of summative and final assessment. Students often express distrust, fear, or even loathing when asked about writing, and their teachers regularly feel ill-equipped to teach writing in a meaningful way (Lewis, 2009). In order to gain a deeper understanding of the areas of writing instruction that high school teachers feel most confident about, we designed a mixed-methods study open to current intermediate and secondary (I/S) teachers in Canada and the United States that centered on two core questions: How confident do secondary teachers feel about teaching writing? And, how can teachers leverage their confidence with individual aspects of writing instruction to support student learning?

Our decision to engage with teachers across the border stems from our experiences as learners and teachers. Jen learned to teach in the United States and spent the first decade of her career there, teaching intermediate and secondary English, before first moving to

Canada for graduate studies and then returning to the United States as a teacher-educator. Pamela has extensively taught primary and junior (P/J) students and future P/J teachers in Canada, specifically in Ontario. Our perspectives became even more nuanced throughout our collaborations, as Pamela shaped Jen's understanding of early literacy, and Jen's experiences with secondary students became a counterpoint in our conversations as we talked about what counts as writing across levels. Through our collaborations and conversations, we found ourselves wondering if the differences between writing curriculum in our two contexts would develop dramatically different teachers of writing. Jen began to realize that, despite her training and experience in the classroom, she had never been formally taught how to teach writing, certainly not the way Pamela had been with her P/J orientation toward literacy, and we began to wonder about similar experiences of secondary trained educators.

Theoretical Framework: Social Cognitive Theory
　　　　No single writing theory guides pedagogy when it comes to writing across secondary classrooms. The reality is that teachers are taking strategies from a variety of theoretical sources to create the unique blend of strategies that work for them in their particular classrooms (Hodges, 2017; Parker, 1988). Hodges (2017) highlights cognitive process, sociocultural, social cognitive, and ecological theories for their applicability in writing instruction, while Parker (1988) focuses on exploring the ways in which teachers develop their personal theories of writing instruction which may support or hinder their continued ability to teach writing. We acknowledge the role these theories, both personal and codified, play in helping teachers develop confidence in writing instruction. For the purposes of this study, we have chosen to root our work in social cognitive theory (Bandura, 1986). The questionnaire at the heart of this study (Locke & Johnston, 2016) is built to measure social cognitive aspects of writing instruction, such as modeling various forms and processes.
　　　　Self- and collective efficacy research in education draws on the work by Bandura (1986) and has been used in a variety of different contexts (Klassen, Tze, Betts, & Gordon, 2011). According to Bandura, "Perceived self-efficacy is a judgement of one's capability to accomplish a certain level of performance, whereas an outcome expectation is a judgment of the likely consequence such behavior will produce" (1986, p. 391). Also pertinent to this study is the idea of collective efficacy, which Bandura describes as having the ability to "influence what people choose to do as a group, how much effort they put into it, and their staying power when group efforts fail to produce results" (1986, p. 449).
　　　　Although Bandura draws a distinction between confidence (essentially, self-worth without specific parameters) and self-efficacy (the ability to perform at a certain level on a certain task), we have opted to use the terms "confidence" and "self-efficacy" interchangeably in this article, following the wording of Locke and Johnston's (2016) Teacher of Writing Self-Efficacy Scale (TWSES). The questions on the survey use the language "how confident are you" to frame each point, and since that is the language that we introduced with all of our participants, that is the language we have used throughout this manuscript. Corkett, Hatt, and Benevides (2011) used self-efficacy measures with students and teachers in Ontario to explore possible correlations between perceptions of self-efficacy and student ability related to reading and writing, while Ciampa and

Gallagher's 2018 study explores pre-service teachers' self-efficacy surrounding literacy by comparing two literacy methods courses in Canada and the United States. Their work found slightly lower self-efficacy reported around writing instruction than other literacy skills, but indicated little difference between the Canadian and American-educated teachers overall.

Daisey's (2009) study reports on the importance of writing development in teacher education, but also note that, according to the National Writing Project, or NWP,, writing methods courses are not a requirement for many teacher education programs (Daisey, 2009, p. 157). More than 20% of the respondents to Troia and Graham's (2016) survey indicated that they had received no formal instruction in writing pedagogy during their teacher education programs (p. 1725), and even after time in the classroom, the survey respondents indicated that they "do not feel that professional development efforts have been sufficient to achieve successful implementation" of the Common Core writing standards (Troia & Graham, 2016, p. 1738). The same dissatisfaction and sense of unpreparedness was reported by the middle grade educators surveyed by Graham and their colleagues in a 2013 study. And despite initiatives like the NWP to provide professional development in writing in the United States, teachers still express complicated emotions about teaching and practicing writing.

Peterson and McClay's (2014) cross-Canadian study focusing on 216 middle grade educators across content areas reveals a more process-driven approach. These Canadian teachers reported more confidence in their preparation to teach writing, with a quarter of participants specifically citing support from their colleagues as an important factor to their own readiness (2016, p. 36), than the American teachers in Troia and Graham's (2016) study. However, teachers in both Canada and the United States generally expressed confidence in their ability to teach writing effectively (Peterson & McClay, 2016, p. 36; Troia & Graham, 2016). Middle grade educators are an interesting category: in Canada, they fall under the P/J umbrella, whereas in many teacher education programs in the United States, the middle grades straddle elementary and secondary preparation courses. Because of this ambiguity, we felt that, although not strictly secondary, this article offers a valuable perspective to guide our work.

Confidence in writing instruction is nuanced, and as these studies indicate, such confidence does not always stem from formal teacher preparation or professional development, but is rather built over time, often with the support of colleagues. As with the multi-phased approach Peterson and McClay employed in their study, we decided that the best way to explore how confident secondary teachers feel about teaching writing and to better understand how these teachers might leverage their confidence with individual aspects of writing instruction to support student learning, was through the combination of survey and interviews, explained in the following section.

Methods

This study followed a sequential explanatory mixed methods design (Plano Clark & Creswell, 2015), with quantitative data collected during phase one informing the design of the semi-structured interview guide administered during phase two. This design was selected to offer both breadth and depth in participant responses, despite the limited size of this study: the quantitative component (n = 60) provided a numerical representation of the

survey data while the qualitative data (n= 6) contributed a deeper understanding of the topic by offering "an intricate fabric composed of minute threads, many colors, different textures" (Creswell, 2013, p.42). Participant sampling employed both convenience and snowball sampling via social media dissemination for recruitment for the TWSES component of the study. Links to the questionnaire were posted on social media sites including, but not limited to: Facebook, Twitter, blogs, LinkedIn, and Pinterest, in an effort to connect with teachers in both countries without the limitations of physical location. For the interviews, teachers who participated in the survey were able to self-select if they were interested in speaking with the researchers further. We contacted everyone who expressed interest and received replies from the six teachers featured here.

Data Sources

The Teacher-of Writing Self-Efficacy Scale. During phase one, teachers were asked twenty-five self-efficacy questions and 7 collective efficacy questions, with a Likert scale of four choices: (1) not confident at all, (2) not very confident (3) quite confident, (4) very confident. The TWSES developed by Locke and Johnston (2016), has been used with the original researchers' permission. This scale, which Locke and Johnston (2016) developed to address self- and collective-efficacy in secondary and post-secondary settings, includes questions such as "how confident are you that you can model a writer "identity" myself as an example to students?", and "how confident are you that you can establish a supportive writing community in my classroom?" This survey was an appropriate measure for this exploratory study since it is specifically designed for administration with secondary educators.

Semi-Structured Interview. Following the administration of the TWSES, a semi-structured interview guide was created to probe topics of teacher identity, academic literacy, and self- and collective efficacy. These questions were based on the competencies outlined in the TWSES, with an emphasis on experiences that led to self and collective efficacy, and initial analysis of the survey results informed the development of the interview guide (see Table 1).

Table 1

Semi-Structured Interview Guide

Connection to TWSES	Possible Questions
Background	• Can you tell me about your teaching background?
Background	• Can you describe your literacy program?
Self-Efficacy	o In your classroom?
Collective	o In your school?
Orientation	• How would you define the term "academic literacy"?

Orientation	• How much experience do you have with academic literacy as a learner?
Motivational and Orientation	• How much experience do you have with academic literacy as a teacher?
Self and Collective	• How did you learn how to teach writing?
Motivational and Orientation	• How confident do you feel teaching writing?
Self and Collective	• What is the best thing about teaching writing in the secondary classroom?

Motivational	• Do you consider yourself a writer?
	    ○ If so, in what way?
	    ○ If not, why not?

Final Thoughts	• What relationship or tension (if any) do you see between creative writing and academic writing?
Final Thoughts	• Do you have anything further to add about academic literacy and teaching writing, or the interview or questionnaire?

Participants and Procedure

        Intermediate and secondary [I/S] teachers (grade 7-12) of all subject areas were recruited for phase one and two through convenience and snowball sampling via social media sites including Facebook, Twitter, and LinkedIn. In the letter of information and consent form, participants were told that exiting the survey at any time before completion was their way of withdrawing permission. As such, only TWSES responses that are complete have been analyzed.

        Although 88 participants began the survey, 60 participants completed the survey: 25 were in Canada and 35 were in the United States. These teachers represented a diverse range of subjects, years of experience, and grade levels, as shown in Tables 2 and 3.

Table 2

Subject Areas Taught, TWSES

Subject(s) taught	# of responses	Subject(s) taught	# of responses
English	40	Adult education	1
History	10	College Process	1
Advanced Placement (AP) and/or International Baccalaureate (IB)	10	Geography	1
Literature	5	Guidance	1

Writing Electives (creative, technical, writer's craft, etc.)	5	Indigenous Studies	1
Business and Careers	4	Music	1
Health & Physical Education	3	Mythology	1
Composition	2	Psychology	1
Foreign Languages/ ESL/ ELL	2	Social Studies	1
Family studies	2	Sociology	1
Math	2	Public Speaking	1
Science	2	Support Staff	1
Special education	2	Technical Courses	1

Table 3

TWSES Demographics

Grade(s) Taught	%	Years of Experience	%
Grade 7	3.47%	<1 year	3.23%
Grade 8	6.94%	1-5 years	22.58%
Grade 9	20.83%	6-10 years	20.97%
Grade 10	21.53%	11-15 years	20.97%
Grade 11	23.61%	16-20 years	12.90%
Grade 12	23.61%	More than 20 years	19.35%

Teachers who completed the TWSES were invited to provide contact information to participate in the phase two interviews. After following up, seven teachers agreed to be interviewed. Three were in Canada, while four were in the United States. For the purposes of this article, we focus on the 6 high school teachers who were interviewed, with 3 from each country. As with the TWSES, the interview participants represented some diversity of subjects and grade levels taught (see table 4).

Table 4

Interview Participants

Pseudonym	Descriptor	Location	Years Teaching	Subject Area(s) Taught at Time of Interview
Frank	Second Career	US	>10	HS English

Mark	Published Author	US	>20	HS English, College Composition
Sue	AP Teacher	US	>20	AP Courses and Drama
Anne	History Department Head	Canada	>10	HS History
Lauren	Early-Career	Canada	<1	HS English
Brendan	Early-Career	Canada	< 1	HS Math and History

Analysis

In order to answer our first question, how confident do secondary teachers feel about teaching writing? We first approached the survey data. Using a 2 x 2 contingency table (cross tables), Pearson's chi-square tests of independence (chi-square test) were used to determine if there were any significant associations between location and collective or self-efficacy on the TWSES responses. A chi-square test using z-test of column proportions with Bonferonni adjustments to significance level ($\alpha = 0.05$) was employed to identify significant differences between teachers in Canada and the United States.

Building on the examples of the strongest and weakest areas of confidence that emerged from the survey analysis, we turned to the interview data for a deeper understanding of the ways teachers leverage confidence with individual aspects of writing instruction to support student learning. Following Boeije's (2002) explanation of five steps of the Constant Comparative Analysis method, we determined that the nature of the interview data lent itself to the first three steps: "comparison within a single interview" (p. 395), "comparison between interviews within the same group" (p. 397), and "comparison of interviews from different groups" (p. 398). In order to focus first on the individual statements teachers made, the transcripts were broken into units of thought—discrete statements which contain a complete thought, which are usually bounded by a pause in the participant's speaking and indicate a new or different idea from the thought unit before and after it (Lincoln & Guba, 1985). Using NVivo 12 software, we then uploaded the "unitized" transcripts and coded them inductively, allowing codes to emerge from the text (Saldaña, 2016). Finally, we returned to the transcripts with a wholistic orientation, exploring the statements of each teacher and then considering these complete transcripts in relation to each other.

Findings and Discussion

To return to the questions of this study, we sought to explore the aspects of writing instruction that high school teachers approach with confidence, as well as the elements of writing instruction that they feel less confident about. When we speak of teacher confidence, we are referring to teachers' self-reported sense of their ability to do certain tasks related to writing instruction, as well as to teachers' responses to interview questions such as, "how confident are you that you can teach writing effectively?" With the exception of three aspects of writing instruction, teachers who responded to the survey expressed high confidence in their own abilities to teach writing. However, their feelings of confidence in their colleagues were more mixed, as explored below.

In the following section, we explore the results from the TWSES and the interviews in greater detail, focusing on the emergent themes of community, context, authority, and identity as they relate to writing instruction. We have opted to integrate these two sets of data, since the interviewees shed specific light on questions from the TWSES in their conversations. Before we can proceed, however, we would like to introduce you to the six teachers whose voices are featured here. Frank, Mark, and Sue offered their voices from their classrooms in the United States, while Anne, Lauren, and Brendan hailed from Canada. Their teaching careers span one year to more than two decades, with Lauren and Brendan having spent the least amount of time as classroom teachers, and Mark and Sue having spent the most. They brought a range of experiences into our conversations; from the diversity of subject areas they have taught over the course of their careers to their individual experiences with writing. Only one, Mark, is a published author, but Frank has written grants in his work prior to becoming a high school teacher. Sue has taught theater arts courses as well as writing-intensive Advanced Placement courses, while Anne has served as the department chair for history in addition to teaching ELA. Brendan has a background in history and math, a combination that surprised us when he expressed a desire to participate in this work. All told, these passionate teacher-writers offer a range of insights into their classroom practices in the sections that follow.

The Importance of Community

One major theme that emerged from both the TWSES and the interviews is the interconnected role of community and identity in writing. Teachers in both Canada and the United States had mixed responses when asked how confident they were that their colleagues saw themselves as teachers of writing, in direct contrast to the high rates of self-efficacy surrounding questions of writerly identity.

Although many of the participants in this study ranked themselves with high levels of self-efficacy, the collective efficacy scores were more evenly distributed. Results were statistically significant regarding the question "Teachers at this school know how to make writing meaningful for their students." ($X2$ [1, N=58] = 4.079, p = .043). Specifically, teachers who worked in Canada were more likely to mark this statement "true" or "mostly true" (80%) than teachers in the United States, who were more split in their assessment of collective efficacy: 45% of U.S. respondents answered this statement as "false" or "mostly false". Two participants opted not to answer this question. All other collective and self-efficacy questions showed no statistical significance in the difference between teachers in Canada and the United States. Because of the divergence in the collective efficacy questions from the scores of the self-efficacy questions, a section of the interview was developed to probe issues of collective efficacy. As in the TWSES, responses to this question in the interview were diverse. Two of the interview participants expressed confidence in their school communities. Both participants were from Canada. One participant (also from Canada) was noncommittal. The participants in the US spoke of the struggle to get colleagues engaged in writing instruction with frustration, lack of trust, and a sense of solitude in their pedagogy and practices. Most of the interview participants could not articulate a shared school or district level vision for writing instruction. In general, the teachers in this study reported lower collective efficacy than self-efficacy.

Interestingly, Lauren, one of the early career teachers from Canada, expressed a great deal of confidence in her colleagues, primarily because, as she said, "there's a lot of support from the administration and a very strong push for the students to do well and succeed both in school and in their lives outside. It's a really supportive school environment." Even as a brand-new teacher, Lauren presented herself as generally confident in her ability to teach writing, but particularly confident in the strength and support of her colleagues.

Conversely, Frank, an experienced teacher who came to teaching as a second profession, expressed a great deal of confidence in his own abilities, but was frustrated when considering his colleagues, specifically due to attrition: Frank spoke as someone who has been in his current position for 11 years, which he said was rare for his school:

> I'm confident in certain individuals' ability, but if you're asking about our school as a whole, my confidence goes down, because on any given semester, it might be different; new teachers, or substitutes and long-term substitute teachers. It makes it tough, tough for the students.

However, despite the shaky confidence he feels in his school as a whole, Frank works to create a community of writers within his classroom, emphasizing the value he places on dialogue: "Sometimes, students think it's cheating to talk about an essay prompt before they start writing it, and I'm trying to convince them that there is no answer, we're just coming up with stuff right now."

Like Frank, Mark explicitly works to create a writing community in his classroom. Because of his experiences as a published author, he focuses on a workshop approach to help students see themselves as writers:

> When a student says, 'I don't really understand how to do this part', I can empathize and I can say, 'I've reached that same point and this is how I overcame it.' Or I can open it up to the class as a writing community… because I'm not the only writer in the room.

Mark's willingness to cede control to his students echoes not only the structure of writing workshop, but also the idea of the impact of learning within a community of practice (Lave & Wegner, 1991), where the hierarchy of the classroom gives way to a community in which student voices are given weight.

Given the mixed nature of teacher responses when asked about their communities of writing at the professional level, it is not surprising that, according to the TWSES, teachers leaned heavily into motivating student writers to participate in a community of writers, as shown in table 5.

Table 5

TWSES Confidence Level: Individual and Collective Writer Identity

How confident are you that you can…	Confidence Level
… Model a writer "identity" myself as an example to students.	78%
… Establish a supportive writing community in my classroom.	80%

The complicated, social nature of writing instruction, whether as a writing community or in the one-on-one interactions between students and teachers, was a strong thread throughout the interviews, as teachers expressed their (sometimes frustrated) desire to co-create supportive writing communities in their classrooms and schools.

Developing an Authentic Context for Writing

Another area that emerged from both the TWSES and the interviews was the participants' overall confidence in establishing authentic contexts for their students, and the importance of doing so. In terms of collective efficacy, teachers in both Canada and the United States reported mixed feelings about their colleagues' abilities to "make writing meaningful". However, on an individual level, all six of the interview participants stressed the importance of providing students with opportunities to write in authentic contexts, and many of them linked authenticity with creative expression. For example, Mark approached his writing instruction with an eye toward the possibilities of publication afforded by blogging and other multimedia platforms as a way to cultivate authentic context. He also emphasizes the reality of revisions for published writers, telling them that "revision is how the real world works. When an editor sends something back to you, it's not because they hate it, it's because they saw something that you didn't see that needs to be corrected." In pursuit of helping his students shift their mindset to considering what writing looks like in "the real world", Mark emphasizes the importance of writing for a context that reaches beyond the classroom:

> You [students] don't turn this into me because I'm the teacher and I'm going to give you a grade. You are writing this for an audience, and I'm someone outside who'd going to help you craft this message for them.

The importance of audience and purpose to inform the context of writing in the secondary classroom, while complicated, was still an area in which the teachers in this study felt relatively confident, even beyond the English classroom. Anne, Brendan, and Lauren, the Canadian history teachers, emphasized that their classrooms provided a different context than English classes, discussing the importance of context when reading historical documents in preparation of a written response. Lauren in particular drew attention to the range of creative writing that occurs in secondary classrooms:

> Depending on the grade and depending on the subject, we do traditional essay writing and short paragraph writing, but we also do some more creative things, like writing in character or trying to write from a particular time and place.

Frank echoed Lauren's statement, speaking from the context of his own classroom about the ways in which he ties creativity to authentic writing by asking students to put themselves in the minds of different fictional characters:

> There's a written assessment on the book, but students are also doing a project where they're writing a eulogy from different characters' perspectives […] They'll be doing projects as creative as I can come up with but keeping the rigor of the standards.

Stepping beyond the curriculum, Frank also actively sought opportunities for his students to write for audiences beyond the classroom: when we spoke, he had just wrapped up a poetry project that culminated in an open-mic night at a local coffee shop. That experience,

of helping students use their voices beyond the classroom context, was his favorite in the current school year, which he described as "a breathtaking experience."

Developing the Authority to Write (and Teach Writing)

We refer to authority as the permission and confidence to tackle a writing task. In the interviews, authority manifested in two distinct ways: some teachers spoke about empowering their students to claim their individual authority as writers, while others spoke about their own authority to teach writing. When it came to helping students claim their authority as writers, the teachers we spoke with were incredibly confident not only in their ability to do so, but in the perceived value of such authority for their students, an interesting contrast to the survey results where teachers expressed high confidence in empowering their students, and more mixed confidence when it came to perceiving themselves as authorities on writing, as shown in Table 6.

Table 6

Canadian and American Collective Efficacy Surrounding Context and Identity

	Question: Teachers at this school know how to make writing meaningful for their students.			
	(1) false	**(2) mostly false**	**(3) mostly true**	**(4) true**
Canada	4%	16%	72%	8%
United States	12%	32%	47%	9%
	Question: Teachers at this school see themselves as teachers of writing.			
	(1) false	**(2) mostly false**	**(3) mostly true**	**(4) true**
Canada	0%	56%	32%	12%
United States	15%	29%	47%	9%

Mark spoke at length of the ways in which he wants his students to claim their authority as writers:

> Too many times, students turn in papers to me like, 'I'm done, here it is, I don't care.' And that attitude! Would you like it if your chef did that to you? 'Gee, thanks, I can't wait to consume it.' Too often, students are like that […] so a challenge we have as high school English teachers, as teachers of writing, is to get students to care because it shows up in the product.

Sue has faced that challenge by pushing students "to go deeper into their thoughts", as she puts it, encouraging students to return to their work and dig into their textual interpretation

and analysis. She has found it helpful, in part because of the student population she works with: "At the AP level, the desire of the students to be successful has made teaching writing that much better."

Frank takes a different approach to helping students claim their authority in his teaching. For him, authority is tied tightly to context and identity, and he cultivates opportunities for his students to share their writing in real-world ways, including writing letters to political officials and sharing their poetry publicly at a slam event. For Frank, context feeds authority:

> You can't measure that boost of confidence. You can't measure that kind of finding a voice that wasn't there before. That, for me, is the most important thing about learning to write, rather than can I talk about two short stories. When a student is motivated to express an idea and they know how to do it, **that** is important. [Emphasis in audio]

Despite the confidence these teachers expressed in the ways in which they guide their students to claim their own authority as writers, when it came to their own authority as writing teachers, the teachers we spoke with expressed feelings that were less confident. For example, Anne spoke about her distant experiences as an undergraduate student feeling a lack of authority as a writer, and the impact that experience had on her teaching:

> One of the things I've noticed when I teach now that has sort of stuck in my mind, I felt that as a first year student or second year student, I came to this realization that I did not write well, or did not write as well as I thought I did […] That has impacted my practice when I teach students.

Later in our conversation, when she was speaking about how she learned to teach writing, she linked her own lack of authority to the support she received from colleagues, echoing Lauren's experiences that led her to lean on her school community to co-create her authority as a writing teacher:

> A lot of it came from my own past experience, my own confidence and lack of confidence, and then reaching out to colleagues who had been doing it for awhile and building up what I wanted to do, how I wanted to go about doing it, in the best way that I could.

Anne, like Sue, struggled with her authority as a teacher of writing, but unlike Sue, Anne's confidence in her authority increased through collaboration with her colleagues. For Sue, however, despite feeling confident in her ability to help her students develop their own authority, her sense of her own authority as a writing teacher was shaky at best:

> There was a long time I felt like I'd missed the memo. I was alone in my room. It's a really weird, terrible feeling now. We're wholescale teaching this crucial skill set, and yet, I felt very qualified to talk about textual interactions and reading literacy, but I don't feel that about writing.

Not all of the teachers felt uncertain about their own authority. Drawing on his past career as a grant writer, Frank told us how his previous writing informed his pedagogy:

> I didn't know how to be effective [with writing] until I was in the workplace and writing for grants, and people were depending on my writing and it was getting critiqued in a real way. So, I took that experience and I started thinking systematically about how you build a text, whether it's a paragraph or an essay. And this is how I teach it. I try to scaffold each step from point A to point Z, and

try to get them to follow a map of how to get there, and then to transfer that skill so they're creating that map in their own minds, in their own writing.

Like Anne, Frank's early experiences with writing taught him that there was more he needed to learn, and he leveraged those experiences to empower both himself and his students by approaching writing in a systematic way.

Mark also spoke openly about the relationship between past experiences with writing and the authority to teach writing, although he framed this relationship in general terms, rather than personal:

If you don't have confidence in your writing, and that can be anchored back to your middle school experiences as a student—if you're not confident in your own writing, it will impact the degree to which you are influential or impactful as a writing teacher. It will alter your instruction and your effectiveness as an instructor. We can only really teach what we know.

For many of the teachers in this study, questions of empowering their students to claim their individual authority as writers was tangled up with their own experiences with writing as students, and Mark, Sue, and Frank all spoke about teaching writing as a quest to help their students (and themselves) reclaim a time when writing was enjoyable, playful, and filled with possibility.

Developing a Writerly Identity

The question of what it means to be a writer is complex, and no clear answer emerged from the teachers we spoke with. For example, Mark's writerly identity was inextricably tied to both his pleasure in the written word and his experiences with publishing, both of which inform his teaching practice:

The more I saw that personalization and flexibility I had in my craft, the more I loved it. […] So, I'm growing and trying to identify as a writer, and now I've got some life lessons that I can share with students because I've been on the other side of publishing.

But Mark's perspective as a published author was unique among the teachers in this study, and yet all of the other participants we interviewed told us that they did consider themselves to be writers. Frank even qualified his response by telling us that "Even when I wasn't a good writer, I kind of considered myself a writer, but I'm not a published writer. But I do really enjoy writing, crafting." That tension between enjoying writing and feeling that publication is a certain mark of writer identity is intriguing, but not something we delved deeply into with these participants. However, it presents an interesting seed for future research.

Sue linked her writerly identity to "journals and journals and journals and terrible teenage poetry", while Brendan emphasized short stories as his chosen genre, telling us that because "writing is a common form of expression for me, I think it does inform my teaching. Lauren also expressed confidence in her writing, rooted primarily in her enjoyment of it and her view that writing is ubiquitous:

There are so many different aspects of writing that you don't necessarily consider yourself a writer until you think about it, but then you realize, I write daily emails to my boss, so in that sense, you're a writer. It's very much a part of your daily life.

Although Anne only tentatively claimed a writer identity for herself in our conversation, she did say that she felt more like a reader than a writer, primarily because

> in my personal life, I feel like I wrote more and now I don't have time to do that, and I feel like generally speaking in my work life, it's more that I read a lot rather than write specifically.

Based on these responses, time spent writing is one factor that might lead to a writerly identity, as well as taking pleasure in writing. But as we mentioned at the beginning of this section, the idea of who counts as a writer is complex and individualized, as shown by these responses. However, for all of the teachers we spoke with, their identities as writers played an important role in their approach to writing instruction, regardless of how they defined themselves as writers.

Implications

Tellingly, the importance of creativity or ownership of the students paired with writing for authentic purposes, contexts, and audiences appeared in all the conversations. As Mark noted,

> I think technology has helped; it can make everybody an author (hashtag blog), but the more you do that, the more you get feedback from your audience or not, there's a little bit of confidence boost of knowing I'm not hiding this in a notebook in the bottom of my dresser; it's out there. There's a little bit of risk, a little bit of play. And the more you get that, the more confidence you have to keep going.

Many of these participants spoke of their non-academic writing experiences as being foundational to the way they approached writing instruction in their classroom contexts. Based on the overall high levels of teacher confidence with most aspects of writing instruction on the TWSES, it seems that teachers across curricular and cultural contexts are well-positioned to develop confident writing communities in their classrooms. Putting this confidence to work in the service of creating a classroom community of writers may also boost collective efficacy, as teachers share their strengths with their colleagues and work toward a shared vision of authentic writing instruction in their schools and communities. For teachers who may not feel quite as confident, we offer the following framework as a place to grow from.

A Framework for Supporting the Co-Creation of Confident Writing Communities

Considering the ways in which confidence transcended teacher context in this study, we focus our recommendations on working from that confidence in order to cultivate writing classrooms that recognize the interplay between confidence, context, and authority. And, since teaching writing occurs within classroom, school, and professional communities, our framework is oriented toward a co-creation of confident writing practices, rather than expecting teachers to grapple alone, as Sue has done. That co-creation will look different in each context, and could apply to the community built among students and one instructor, the collaborations between teachers in the same school, or the wider conversations that occur within professional learning networks as teachers continue to explore what teaching writing looks like for them. We propose three overlapping facets of writing instruction that teachers can focus on in order to increase confidence with writing for both teachers and students: context, authority, and identity (Figure 1). These facets may

be approached in any order, but we suggest teachers start with the area they feel most confident with.
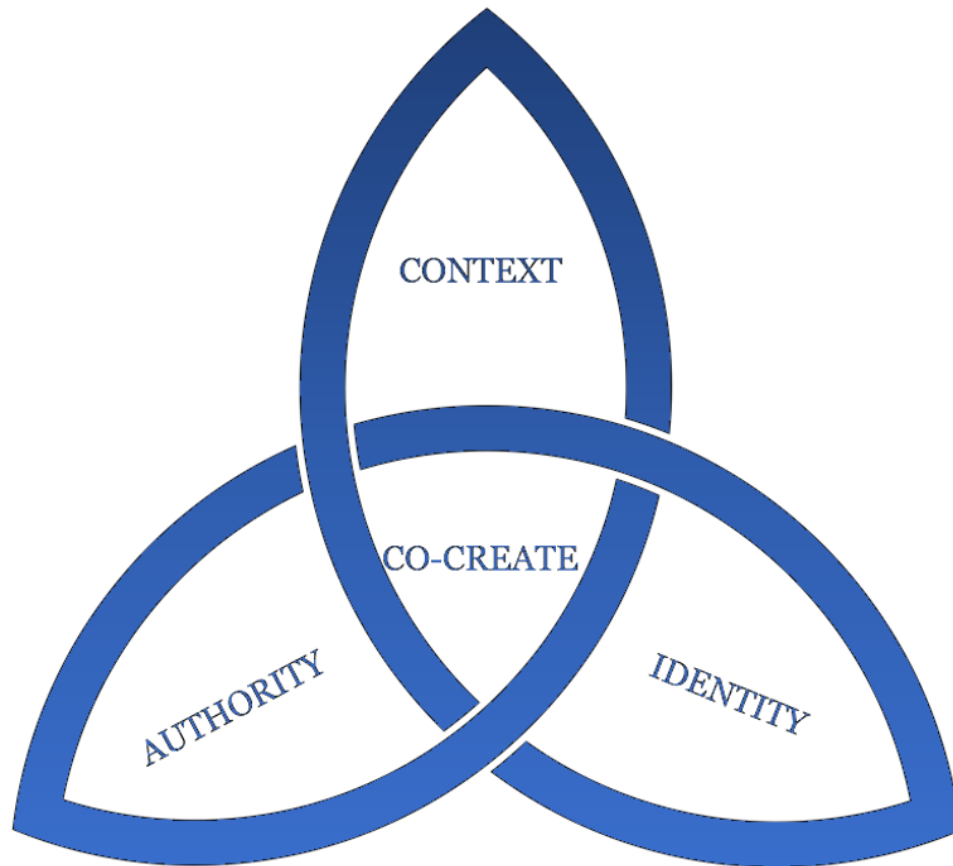

Figure 1. A Framework for Co-Creating a Confident Writing Community, McConnel and Beach, 2020.

The context of writing. Based on the data presented here, one entry point for the teachers in the study might be the context of assigned writing. Context, as has already been discussed, matters a great deal in individual writing work, but it is also a vital component to building an authentic writing community: "when we write for others, we engage in conversation with our readers. When we write with others, we work with colleagues toward a common product. And when we write among others, we create a community of writers" (Sword, 2017, p. 135). When students are made aware of the context of their writing, whether it is within the classroom writing community or intended for a wider audience, students' confidence increases.

Emphasizing the context of any writing that occurs in the classroom can help students approach the work with passion and authenticity. And Thaiss and Zawacki (2006) remind us that writers develop confidence and skill "by *writing to a variety of assignments under the guidance of a range of committed teachers*" (p. 140, emphasis in original): the role of the teacher to shape students' confidence in writing cannot be overemphasized, and,

as this study indicates, many teachers already feel comfortable guiding students through an understanding of the various contexts that will inform their writing.

The authority of a writer. Working with students (or professional colleagues) as a community of writers, the next area of emphasis might be on authority in texts and authority in the writing community, where all members work to co-create and strengthen their individual and collective understandings of what it means to write with authority. When teachers and students approach writing with the attitude that "I'm not the only writer in the room", as suggested by Mark, all parties may develop the confidence and creative problem solving needed to pursue writing from a more authentic space. As Sword points out, "a flourishing writing community can inspire creativity and embolden individuals to follow their own instincts rather than bowing to disciplinary convention. Paradoxically, writing among others can give you the courage to stand out from the crowd" (Sword, 2017, p. 144). Developing a sense of authority of a writer includes understanding the skills, styles, and content that are appropriate to any given task, and choosing between the various tools of the writer's toolbox in order to approach the task from a place of ownership and confidence. Developing authority as a writer (and a teacher of writing) is closely linked to the third aspect of the framework: identity.

The identity of a writer. As the community shifts its attention toward issues of identity, they might begin by exploring the ways in which identity is enacted and developed through writing. In her exploration of her work with various writer's groups, including with adolescent women, Luce-Kapler notes, "Engaging in writing practices together, raising our critical awareness of texts, and feeling the confidence to speak out offered new possibilities for writing, new ways of understanding our subjectivity, and perhaps changed the color of our future" (Luce-Kapler, 2004, p. 166). The value of identity work in our classrooms cannot be ignored. As the second career teacher in the US told us, "getting to work with young people who are coming into their own is a treat…a real treat."

The potential of this framework is creative, offering teachers (and students) multiple ways into a conversation about writing that will not only enhance confidence, but will create a classroom culture in which diverse writing strategies and perspectives are valued. Work that "is concerned with meaning making, identity, power, and authority, and foregrounds the institutional nature of what counts as knowledge in any particular academic context" (Lea & Street, 2006, p. 369) is at the heart of academic literacy, regardless of the confines of the local or national curriculum, and this framework is one way to encourage students to engage more deeply with their own writing practices in any context. And that sense of liberation can work both ways: following this framework, a teacher who may not feel confident in all aspects of writing instruction still has multiple ways to approach writing with students. If we can co-create our writing practices, we can also co-create our confidence as writers and teachers and learners.

Limitations

The relatively small sample size for this study is a limitation, particularly when considering the quantitative phase of the study. Future research might seek a larger quantitative sample in order to explore possible correlations between instructor location

and self- and collective efficacy. We acknowledge that learning to write, and, more pertinent for this article, learning to teach writing cannot be distilled into an overly simple set of instructions. A myriad of factors is at play throughout a teacher's career, and there is no "one size fits all" way to become a teacher of writing. However, exploring the ways contemporary teachers learn to teach writing bears further investigation. Another area for additional research is to ask students what areas of writing *they* feel confident in; due to the focus of this study, we recognize that the student perspective is absent, and we would encourage future research that bring together student and teacher voices related to the co-construction of confident writing communities. Future studies that integrate both the teacher and student perspective on writing instruction at the secondary level are necessary to help us build a more complete understanding of the complexities at play when we (and our students) sit down to write.

Conclusion

Teachers develop confidence in writing instruction through individual and collective experience, and as the voices in this study show, the power and potential of writing in secondary classrooms is vast when approached with an eye toward authentic contexts, authorial power, and writerly identity. There is great power in writing within our classrooms, and teachers and students who explore their own relationships with writing may develop deeper confidence with what, exactly it means to write (and teach writing) together. It might be easy to dismiss such a suggestion as the particular bias of English teachers, but all of the teachers we interviewed spoke passionately about the importance of writing, regardless of their disciplinary differences. This work reminds us that it is important for all members of an educational community to nurture writing in a myriad of forms, and to build writing spaces where students and teachers can co-create their power as writers together.

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Literary Scholars' Disciplinary Literacy Orientations

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Abstract

This study examines how four university-based literary scholars in the United States read literary texts. Findings suggest that the scholars used four related literary literacy orientations in their reading: They attended to their affective experiences with literature, built recursive interpretations of literature, contextualized literature, and recognized and managed literary complexity. As broad-level disciplinary ways of navigating literature, these literary literacy orientations included the scholars' meaning-making practices as well as their beliefs, feelings, and attitudes about literature and making sense of it. Findings support and build upon existing scholarship on English disciplinary literacies and offer paths for further research.

Introduction

When asked about the role of literature in his field, literary scholar, Oscar said, "It's the core of what English does." Oscar's words capture the centrality of texts in academic domains, such as the English language arts, and the sense that readers should "do" something with them. But how do readers "do" literature? What do they "do" with it? And when should they "do" it? The production, interpretation, and use of literature plays an important role in English disciplinary literacy, in large part because it draws attention to "doing" literature in ways that align with disciplinary ways of working, thinking, and constructing meaning (Goldman et al., 2016). To date, much of the limited scholarship related to English disciplinary literacies has focused on identifying individual strategies literary scholars and other English experts use to make sense of texts (e.g. Peskin, 1998; Reynolds & Rush, 2017). Although this work has made important contributions to the field, disciplinary privileged ways of knowing in English have received sparse attention in the empirical literature (Rainey & Moje, 2012), leaving researchers, educators, and students with limited understanding of the range of disciplinary tools, practices, and experiences literary scholars use in their work with literary texts.

From a disciplinary literacy perspective, this study explores how literary scholars "do" literature by looking closely at the way four university-based literary researchers, theorists, and practitioners in the United States construct meaning of literary texts. The following questions operationalize this focus:

1. What disciplinary situated approaches do literary scholars use to read literature?
2. What disciplinary experiences shape these scholars' approaches to literature?

Although literacy strategies are an important part of developing expertise in English and other fields, strategies alone are not enough to do the work of the disciplines. Moje (2011) argued that "strategies – absent some level of knowledge, a purpose for engaging in the literate practice, and an identification with the domain or the purpose for reading – will not take readers and writers very far" (p. 52). Learners need deep content knowledge

and conceptual understanding of how disciplines work in order to use strategies effectively to construct disciplinary knowledge (Pearson, 2011). As a field, we must understand more about scholars' ways of knowing with literature, what Rush and Scherff (2013) referred to as "the mysteries of disciplinary discourse, practices, and knowledge" (p. 320). This requires a fuller conceptualization of literacy learning and instruction that lies at the intersection of knowledge, discourses, and identity and consists of social, cultural, and affective experiences that go beyond "the accumulation of skills" (Moje, 2015, p. 255).

Guided by the aforementioned research questions, this study explores issues related to English disciplinary literacy by attending to literary scholars' literacy orientations, or broad-level disciplinary ways of experiencing and navigating literature that consist of scholars' core beliefs, attitudes, feelings, and approaches to literary text. Richer and more inclusive than individual reading strategies that have been central to much of the extant English experts' literacy research, literary literacy orientations offer robust disciplinary ways of seeing, experiencing, and engaging with literature. Attention to literary scholars' literacy orientations can add important insights to our understanding of how the English discipline works and how literary scholars engage with and "do" literature.

Theoretical Framework and Relevant Literature

Disciplinary Literacy

Literacy is always domain specific insofar as it occurs in certain contexts, with certain texts, for certain purposes. Disciplinary literacy is also domain specific; however, it emphasizes the development of disciplinary knowledge in specific domains of study, such as mathematics, history, science, or English (Shanahan & Shanahan, 2018). As part of socially constructed "conceptual contexts" (Grossman & Stodolsky, 1995) or disciplinary (sub)cultures (Ball & Lacey, 1984) that have distinctive linguistic representations (Fang, 2017) and their own norms of behavior, histories, epistemologies, and expectations for developing and using knowledge, disciplines are primarily defined by their differences. These differences help frame the work of the disciplines and create the specialized contexts that inform what counts as literacy (Shanahan & Shanahan, 2012). Indeed, disciplines, as communities of discourse, are highly specialized human constructs that require learning specific practices, procedures, conventions, and rituals (Moje, 2015). Developing this specialized knowledge of how disciplines work helps position one, in socially recognizable ways, as an insider with the appropriate sets of tools and understandings valued in specific domains of study.

Importantly, because disciplinary literacy conceptualizes disciplines as contexts in which domain-specific knowledge is produced, it recognizes the strategic ways of generating this specialized knowledge (Shanahan & Shanahan, 2008). This includes attention to the habits, practices, and ways of reading, writing, working, and thinking engaged in by those who generate and use disciplinary knowledge, a process Fang and Coatoam (2013) refer to as the development of "disciplinary habits of mind" (p. 628). Mathematicians, for example, privilege precision, economy of expression, and quantification more than other disciplines. As they work through the linguistic, symbolic, and visual systems common in mathematical texts (Schleppegrell, 2007), mathematicians tend to "read slowly, carefully, word-by-word (or figure) to understand the text fully and

to reduce the likelihood of error" (Shanahan & Shanahan, 2018, p. 297). For historians, texts are interpretations of history that reverberate with "a cacophony of voices" (Wineburg, 2005, p. 662). To navigate these voices, historians consider the time, place, and situation in which a document was produced (contextualization), issues of authorship such as who wrote the text and why (sourcing), and the nature of connections and (dis)agreements among related documents (corroboration) (Wineburg, 1991). For their part, literary scholars examine fictional representations of the world – literature, poetry, and drama, for example – through the analysis of figurative language, characterization, narrative development, and other literary elements (Goldman, et al., 2016). Their work involves "the ability to wrestle with complexities that characterize the conundrums of the human condition" (Lee, Goldman, Levin, & Magliano, 2016, p. 168) and unlike other disciplines, in literary studies emotional investment and affective response are appropriate elements of interpretation (Levine, 2014; Thein, Guise, & Sloan, 2015). Among these and other disciplines, the specialized approaches experts use to generate, communicate, and evaluate knowledge are informed by the distinct features, structures, and cultures of their respective domains of study.

Empirical Studies of English Disciplinary Approaches to Literacy

Notwithstanding the centrality of English language arts as a domain of study and schooling, there has been a limited amount of empirical research devoted to understanding English disciplinary approaches to literacy (Rainey & Moje, 2012). Research designed to understand how literary experts engage with and attempt to understand literature is, however, growing. As derived from the existing literary expert performance study research, three related assumptions inform the present study: Literary scholars use domain-specific practices to understand literature, they approach literature more skillfully than literary novices, and less-well documented, but still apparent, literary experts have affective experiences with literary texts.

In an early literary performance study, Dorfman (1996) evaluated the interpretive strategies of graduate students in English and computer science majors. Participants read short stories with different levels of accessibility and complexity and then responded to them across four dimensions: comprehension, affect, interpretative, and literary/critical. Compared to novices, experts knew more about literary interpretive conventions, were able to assess a text's quality apart from their ability to understand it, and developed layers of literary understanding. Experts also enjoyed literary texts more, found them to be more interesting, and were more willing to draw inferences from texts that they may not have understood. In a related study, Peskin (1998) compared the approaches English doctoral students and undergraduates used to make sense of two difficult and unfamiliar poems. Peskin argued that the experts' comparatively rich reservoir of literary knowledge allowed them to make more allusions to other texts, quickly identify genre conventions and historical contexts, and anticipate what was coming in the poems. The literary experts also provided more in-depth explorations of the poems' significance, looked for meaning at the intersection of contradictions, and employed specific tools to interpret the poems, such as using language and poetic structures as interpretive cues. More so than the novices, the experts were satisfied with their literary experiences, conveying appreciation and enjoyment of the poems.

The literary scholars in Rainey's (2017) study demonstrated a set of shared, disciplinary literacy practices, approaches to teaching, and orientations. The scholars constructed knowledge of literary texts by looking for patterns, identifying strangeness or confusion, and considering various contexts that informed a literary work, such as the time of its creation, the scholarship surrounding it, and relevant authorial information. These shared literacy practices rested upon two literary literacy orientations. The first dealt with the social nature of literary studies in that the scholars indicated they were part of a larger, academic or interpretive community that guided their work. The second orientation addressed the importance of constructing disciplinary knowledge by "pursing literary problems" (Rainey, 2017, p. 61). Aligned with previous English disciplinary literary research, Reynolds and Rush (2017) studied how English professors and college freshman read literature. They found key differences in the approaches used by both groups. Novices, for example, read for basic comprehension while experts appeared to build interpretations of the texts. More so than novices, literary experts hypothesized about the texts' language, character relationships, and tone. Experts and novices also both asked questions as they read, but the experts used their questions as jumping-off points for more in-depth literary interpretations, self-dialogue about the texts, and opening "new pathways of analysis" (Reynolds & Rush, 2017, p. 210). Novices tended to ask questions without attempting to address them. Asking a question was the end of novices' literary meaning-making processes, not, as it was for the experts, the beginning.

As a means of identifying English experts' literary meaning-making practices, extant research has made important contributions to English disciplinary literacies. But gaps remain. The research, for example, addresses literary scholars' affective experiences with literature, but it does so rarely and in limited ways. Moje (2015) argued that literacy learning and instruction should include attention to "affect and emotion, imagination and curiosity, value and purpose" (p. 255). She also asked, "How do we support the development of disciplinary literacy practice as a human, social construction rather than merely the learning of discrete skills?" (p. 255). To date, the research on English scholars' literature-based literacies has privileged the identification of individual, literacy practices and/or measurements of literary domain knowledge and has seldom sought to empirically identify broad-level disciplinary conceptualizations, values, and experiences that organize and guide scholars' literary meaning-making work.

These gaps provide openings for improving our understanding of the role and nature of literary scholars' work with literature. The present study adds important disciplinary contours to the current body of research by looking beyond discrete skills to identify some of the literacy orientations that explain literary scholars' text-based, cognitive, and affective literary literacy experiences. Literary literacy orientations, by design, convey core beliefs and attitudes about and basic approaches for conceptualizing and engaging in the construction of literary meaning. Orientations are broader than and inclusive of individual literacy skills and practices and represent English-oriented ways of thinking about, experiencing, and engaging with literary texts. Identifying guiding English disciplinary literacy orientations adds another layer to this body of research by offering new ways of understanding literary scholars' meaning-making approaches to literature.

Research Design and Methodology

Participants

Participants were selected for their disciplinary affiliations and levels of expertise. Two of the participants were English professors and two were English instructors. David, Louis, and Sophie had terminal degrees in English and Oscar had an M.A. in English (all names are pseudonyms). The participants received their highest degrees from Princeton University, University of Edinburg, and University of Hawaii-Manoa, all of which are research intensive institutions (Carnegie Classification of Institutions of Higher Education, 2018; Times Higher Education, 2019). The scholars had a range of specializations, years of experience in the field, and taught a variety of graduate and undergraduate courses. All participants were employed full-time in English departments at research institutions in the United States and were actively engaged in literature-based analysis, publication, and instruction. One participant was female. Three were male (Table 1).

The number and nature of experts involved in this study is consistent with some of the current research on disciplinary experts' literacy practices (McCarthy & Goldman, 2019; Reynolds & Rush, 2017; Shanahan, Shanahan, & Misischia, 2011). The participants in this body of research are characterized by their advanced academic degrees and expertise in relevant fields of study. Given the academic credentials and literary experiences of the scholars in the present study, they represent a purposeful sample (Maxwell, 2013) of a diverse population of literary experts. Although the literary scholars in this study were drawn from a variety of specializations in English, there was coherence in their approaches to literature.

Data Sources and Collection

Mindful of the contributions interviewing research has made in understanding the nature of skillful performance in cognitive science (Newell & Simon, 1972), reading comprehension (Pressley & Afflerbach, 1995), and literary literacy research (Rainey, 2017), this study employs it to examine the ways in which literary scholars read literature. Consistent with Seidman's (2013) conceptualization of interviews as meaning-making processes, the two types of interviews for this study were designed to provide the participants with opportunities to (re)construct accounts of their experiences with literary texts (semi-structured interviews) and how they generated meaning from them (performance interviews).

Semi-Structured Interviews. Aimed at developing insights that were not directly observable, the semi-structured interviews were designed to explore scholars' views of and past experiences with English, literacy, motivation for literacy, and literacy teaching and learning. These interviews lasted 60-90 minutes. Of the six types of questions Patton (2015) suggested to stimulate participant responses, the semi-structured interviews included four: background, experience, opinion, and knowledge questions. Although feeling questions were not an intentional part of the protocol, participants readily shared their feelings about relevant experiences, which seemed to "tap the affective dimension" (Patton, 2015, p. 444) of the experts' interactions with literature. The semi-structured nature of these interviews allowed a focus on key issues related to the study and the flexibility to follow relevant

threads of inquiry as they emerged. Because it was not possible to directly observe the literary experts' experiences with literature in the semi-structured interviews, performance interviews provided another lens for observing and understanding how they constructed meaning of literary texts.

     Performance Interviews. To capture the scholars' complex, "constructively responsive" (Pressley & Afflerbach, 1995, p. 2) literary meaning-making processes, the second interview primarily involved concurrent and retrospective verbal reading protocols (Hilden & Pressley, 2011). Participants selected texts to read for the verbal protocols that they were familiar with or used in their instruction (Table 1). These interviews began with questions about the scholars' familiarity with the texts they selected and a brief explanation of the purpose of the interview, which was to understand how they read literature. The interviewer then asked the participants to read their texts aloud as they normally would, but pause to share their thinking as they read. The participants were told that everything they thought was important and that they should share their thoughts as they came to them (Ericsson & Simon, 1993). As they read, the interviewer prompted the scholars with "Please keep talking," and "What are you thinking?" After reading their texts, the participants were invited to reflect on their experiences and the processes they used as they read. Including the pre- and post-verbal protocol questions, these interviews lasted 45-60 minutes.

Table 1

Profiles of Participants and Verbal Protocol Text Selections

Pseudonym	Position	Highest degree	Years of experience	Specializations and academic interests	Text selection
David	Professor	Ph.D.	38	Biography and life writing, literary theory, drama and performance, research methods, professional editing	Play excerpt: Tony Kushner (2013). *Angels in America: A Gay Fantasia on National Themes.*
Louis	Professor	Ph.D.	22	19th-century British literature, 19th-century popular culture, Sir Walter Scott, Robert Louis Stevenson	Fable: Robert Louis Stevenson (n.d.). 'The Cart-Horses and the Saddle-Horse'.
Sophie	Instructor	Ph.D.	6	Poetry and national identity, long-form poems, science fiction poetry, poetry as technology, composition, pedagogy	Novel excerpt: Anne Carson (2013). *Red Doc >.* Book excerpt: Seamus Heaney (1995). *The*

					Redress of Poetry.
Oscar	Instructor	M.A.	6	Creative writing and composition, Asian-American literature, Pacific literature, representation and identity	Poem: Kalani Akana (2014). 'Da 23rd Psalm'. Poem: Emelihter Kihleng (2008). 'Lokaiahn Wai'.

Together, the pair of interviews provided insight into some of the literary experts' observable (performance interview) and unobservable (semi-structured interview) experiences with literature. They also allowed the participants to (re)construct accounts of their literary-based experiences with questions that tapped into their background, opinions, knowledge, experiences, and feelings as they related to literature and making sense of it. Formal analysis occurred after all the semi-structured and verbal protocol interviews were transcribed.

Analytic Procedures
Informed by methods of constant comparative analysis (Corbin & Strauss, 2015), a colleague and I read and reread the semi-structured interviews, engaging in extended micro-analyses individually and then meeting to discuss our codes and our coding processes. We coded the data with tentative labels that focused on identifying how the scholars constructed meaning of literature. Early on we noticed that in addition to explaining their literary literacy practices, the scholars also shared their experiences, feelings, interests, and attitudes with and about literature that appeared to influence how they interacted with it and made sense of it. We developed a coding scheme that included "literary literacy practices" and a new category we labelled "literary literacy experiences" to more completely capture the scholars' responses. The first round of analysis yielded a wide variety of inductive and descriptive codes that came directly from the data and described the scholars' literary literacy practices and experiences.

We then arranged the codes by scholar and began looking within and across the responses for larger categories that helped explain the relationships among the practices and experiences. Specifically, we examined the similarities and differences among the codes, wrote relational statements and analytic memos, and tried to identify broader organizing principles for the codes. We recognized that the scholars' beliefs, attitudes, approaches, and experiences often coalesced around central and repeating ideas. In time, our processes produced four categories, or orientations, which suggested ways of engaging with literature that were broader and more abstract than the individually coded practices and experiences. Ninety-four percent of the initial codes were accounted for by the four orientations: attending to affect, building interpretations, contextualizing texts, and managing complexity.

Table 2

Coding Scheme and Data Exemplars

Orientation	Definition	Data Exemplar
Attending to Affect	Paying attention to emotive, personal, or aesthetic experiences with literature.	"I adore that in her work . . . . I love that image . . . . I have an aesthetic appreciation for it" (Sophie). "I love that no matter what I'm reading is going to give me a different kind of connection. So, I'm going to feel like I'm part of that book" (Oscar).
Building Interpretations	Developing informed explanations of language, structure, and ideas through recursive interpretations of literature.	"The old dissecting room strategy where you take something, put it on the table, and everybody looks at it. You take it apart and they can see that it does have parts" (David). "It's very important to discuss what the writing is as much as what the writing is doing" (Oscar).
Contextualizing Texts	Situating literature within relevant historical, social, or theoretical contexts.	"It's very important to have a historical sense" (David). "[I read for] details of time, place, and context. So, I'm reading *The Master of Ballantrae* for about the fifth time right now. So, time, place, and context, but [I'm looking for the] nuance as well of all those things, amongst other kinds of historical research that I can bring to the narrative" (Louis).
Managing Complexity	Recognizing and managing the various complexities of literature.	"There's difficulty in general with the expectation that they are trying to solve the problem, which is reading the text" (Sophie). "I don't know how familiar you are with *Richard III,* but it's so complex" (Louis).

We then analyzed the verbal protocol interviews for supporting and contesting evidence of the orientations and additional literacy practices and experiences. Analyses of the verbal protocol interviews provided additional codes that fit into the existing orientations and many more instances of the practices and experiences identified previously. The four orientations mapped very closely on to the verbal protocol interview data, suggesting a high degree of alignment between the literary scholars' stated (unobservable) and enacted (observable) literacy practices and experiences with literature. Continuing to think through the data, we made theoretical comparisons between the developing orientations and extant scholarship on disciplinary literacy (Moje, 2007, 2015; Shanahan & Shanahan, 2008, 2012) literary literacy (Rainey, 2017; Reynolds & Rush, 2017), and literary theory (Iser, 1978; Rosenblatt, 1978). As we made our final passes through the data, we felt confident that the four disciplinary literacy orientations not only represented some of the literary scholars' core beliefs about and approaches to constructing

meaning of literature, but were aligned with current literacy and literary research and practice.

<p align="center">*Literary Literacy Orientations*</p>

Analyses indicate that all of the scholars identified four shared literary literacy orientations that guided their literary reading: attending to affect, building interpretations, contextualizing texts, and managing complexity. Although presented separately for clarity, the scholars discussed and used these orientations flexibly and in combination with each other to engage with and construct meaning of literature. The internal composition of the orientations varied. Some were heavy on literary practices, others on personal experiences with literature, and others were more distributed. The examination of each orientation includes a detailed description of the orientation, several in-depth examples to demonstrate what it looked like in practice, and a brief summary of the orientation.

Attending to Affect

Signaling the affective nature of their interactions with literary texts, scholars attended to emotional, aesthetic, and personal experiences with literature. The valence of these affective experiences was overwhelmingly positive. The scholars explained how much fun they had reading literature, the beauty of what they were reading, and the enthusiasm they had for it. The scholars also discussed their individual relationships with literature and explained how literature influenced them as readers and people. For them, constructing meaning of literature included a personal dimension that made reading a decidedly human and satisfying experience that Oscar hoped would lead young readers, over time, to discover that they "love the discipline." Speaking about readers' experiences with literary texts, Sophie said "because they mean something to me, I'd probably want them to mean something to you."

Louis talked about the personal bond he had with literature, explaining that he had "a relationship with the authors. I mean, truly. I know Stevenson, Walter Scott, and Joseph Conrad." Speaking of Conrad's (1990) *Heart of Darkness,* Louis said, "I'm pretty intimately related to that text; so immersed in that text." Throughout his first interview, he used "intimate" to describe his relationship with *Dr. Jekyll and Mr. Hyde* (Stevenson, 2002)*, Frankenstein* (Shelley, 1994)*, Hamlet* (Shakespeare, 2012)*,* and other literary works. "Let's be honest," Louis said. "They become your friends." To demonstrate the close relationship he developed with literary texts, Louis shared the following experience:

> And I don't know how personal you want this to get, but I've been dealing with a lot of health issues, specifically cancer. I'm okay. That's what these scars are from. And honestly, reading these texts, like *Hamlet*, got me through more things than I care to relate because it just constantly touches on the themes that you're dealing with in real time. . . . So, it does become very intimate.

Louis and the other scholars talked about authors and literary works as one might speak about a close friend. *Hamlet,* for example, helped Louis manage an illness by addressing issues he was dealing with in the moment. Much like a friendship, reader and text grew closer as they spent time together, in this case, during a difficult experience. And like a friendship, there appeared to be layers to what scholar and text could share, and had shared.

Speaking about Seamus Heaney, Sophie said "There have been times in my academic life where it felt like I really needed his guidance." Oscar explained his relationship with literature and literary authors by saying he "felt a lot of kinship" with them and that he had "a deep connection to the literature." As demonstrated by the scholars' experiences, the relationships they had with authors and literary texts were beautiful, poignant, and "hugely important to us [and] our understanding of ourselves." David offered the following example of his developing relationship with literature:

> I suddenly started realizing in these [Victorian novels] that I've been reading for 20 years that the middle-aged characters were actually interesting. I've been finding the elderly characters – I didn't even notice they were there before, but actually they're really interesting. The books and literature and stories are companions to your life and they are a kind of gauge as to your own development and what's important along the way. Books actually provide templates for understanding the world.

As a guide for his personal development, literature helped David navigate and rethink his experiences. Literature, it seemed, provided a way for David to understand the world and that stories could be companions for him. To some degree, literary texts were tools for living. Moving beyond a strictly academic relationship, literature appeared to provide the scholars with ways for thinking about their lives and how they could live in a complex world. The scholars' affective orientation toward literature suggests that emotional and personal experiences and relationships with literary texts provided a lens for understanding them. That is, how the scholars felt about literature and the nature of their relationship with it was a way of coming into contact with literature and generating literary knowledge. At some level, reading literature was about understanding the problems of the human experience, in part, through their own experiences with it.

Building Interpretations

The scholars also developed explanations of literary language, structure, and ideas through recursive interpretations. For the scholars, literature never meant only one thing. There was always more to discover. The scholars' work involved generating additional possible readings of literary texts based on their experiences, purposes, knowledge, interests, and language and text structures. For them, interpretations offered depth, perspective, and understanding.

As she read Anne Carson's (2013) *Red Doc >*, Sophie focused on examining "ionizes" in the line "She ionizes the room as a Taoist rainmaker raises his voice to the clouds at the very moment the dragons come charging out" (p. 110). "I love the phrasing," Sophie said. Then, looking more closely at the use of language, she explained, "I think she's trying to communicate this sense of energy, like when somebody does something and it's either really thrilling or it's really risky and happening in front of an audience." Here, Sophie offered insight into Carson's use of "ionizes" by suggesting a way to interpret the word as it was embedded in a phrase, as part of a larger text. Sophie developed her insight through an example that demonstrated the type of energy she imagined the word invoking: A public display of "thrilling" or "risky" behavior. Sophie continued building her interpretation by considering the internal state of those who "ionize a room":

You're not supposed to – you're not sure if everybody's okay with it. And if they're not okay with it, is that because they're embarrassed or because they're uncomfortable? Like, how much is it because of their own insecurities versus how much of it is because [social conventions] have been transgressed in some way?

As she developed her interpretation, Sophie drew on an understanding of human nature, wondering aloud why energizing a room with one's actions would be socially dicey. Is it because "you're not supposed to" do it, or because you are embarrassed? And does this stem from personal insecurities or from a realization that one is violating social conventions? In her examination of Carson's use of language, Sophie moved toward a social psychology of action, providing another way of understanding literature that was grounded in the text and her reading of it. She called this process "intellectual work" and "textual work" of the kind that builds disciplinary "willpower . . . and a cognitive capacity for inference."

Asking questions also helped the scholars build interpretations. All the scholars asked questions during their verbal protocol interviews and discussed the role of questions in their literary instruction. Oscar, for example, used a three-question approach for developing literary knowledge. He started with "What does it mean?" and followed up with "how" or "why." This approach might be seen to extend Sophie's interpretation of Carson's use of "ionizes" insofar as Sophie's interpretation sought meaning. Oscar's three-question approach asked a question that took possible meanings as a starting place and then examined the evidence for those interpretations – how one might have reached them or why one might think the way they do. There were no easy answers to the scholars' questions. Indeed, part of the value of their questions was giving them opportunities to wrestle with literary uncertainties, or as Sophie stated, developing the capacity "to be comfortable with ambiguity," which kept interpretive possibilities alive.

Asking questions to build interpretations extended literary inquiry, or as Oscar argued, promoted depth of understanding by inciting disciplinary thinking or "a disciplinary mindset" (Spires, Kerkhoff, & Paul, 2020, p. 10). Recursive questioning also conveyed the disciplinary reality that "there's always more. There's always a question after a question" that can help readers excavate literary texts. Each line, as Sophie explained, was potentially "so rich that it wouldn't be possible to get everything [out of it]." Asking questions as a way of building interpretations could encourage readers "to think 'Why would this be cool?'" and begin to realize that a text, a line, or a word may mean more than one initially thought. Asking questions of literature may be one representation of the scholars' disciplinary curiosity. They appeared to relish the work of building interpretations and developing new ways of understanding texts, authors, language, and ideas. Oscar called literature and attempts to understand it "the core of what English does." David argued that narrative is "absolutely fundamental to the way that we understand the world." In some ways, interpretation was the lifeblood of meaning-making for the scholars as they sought to understand literature in ways that problematized assumptions about language and form and extended their understanding of the human experience.

Contextualizing Literature

As part of their disciplinary meaning-making work, all of the scholars situated literature within historical, social, cultural, and theoretical contexts in an effort to

understand it. Louis contextualized his reading by drawing attention to "details of time, place, and context." This included being familiar with an author's history with a text, understanding some of the culturally situated knowledge that informed the creation of a text, and knowing the people and texts that influenced their understanding of a literary idea and the development of a literary work. The guiding assumption for the scholars appeared to be that literature was a product of its environment and, therefore, being familiar with the influences that gave it life could help one make sense of it.

For example, scholars indicated that developing culturally situated knowledge helped generate literary meaning. In the following excerpt, David explained some of the knowledge and ideas one would need to understand to make sense of Hawaiian literature: "You actually have to be able to distinguish between crustaceans. You need to know certain winds. You need to know certain plants because the metaphors that are being used assume that you will know those things." David referred to the development of this knowledge as "build[ing] up a kind of geographic and biological and botanical library" of the local, cultural context that one may need to draw from when reading Hawaiian literature. He conceptualized the development of contextual literary knowledge in terms of how you, as a reader, "situate yourself in relation to the material."

Relatedly, Oscar selected a Hawaiian representation of Psalm 23 entitled *Da 23rd Psalm* (Akana, 2004) to read for his verbal protocol interview. The text was written in pidgin, used Hawaiian words, and referenced local objects, institutions, and ways of living. Oscar worried that a decontextualized reading of *Da 23rd Psalm* would disadvantage readers and lead them to misinterpret the text and think it was trying to be disrespectful. The concreteness of *Da 23rd Psalm* may strike some, as Oscar feared, as overly casual, pedestrian, or even disrespectful. "He go give me gel for my hair—make me look sharp/ Hook me up lai dat," for example, may be difficult for some to reconcile literarily with "Thou anointest my head with oil." Oscar argued that situating the text culturally could provide a richer reading experience, allowing one to appreciate *Da 23rd Psalm*'s culturally situated approach to a traditional literary work.

In his interview, Oscar provided some useful cultural context, explaining that the Halawa Valley Maximum Security Prison referenced in *Da 23rd Psalm* was a local, material manifestation of despair representative of "the valley of the shadow of death." Oscar also explained that "brah," pidgin for "brother" and an abbreviation of "bruddah," was often used with close associates and suggested a sort of intimacy and trust between the speaker and the reader. "Brah" can also be used as emphasis. Understanding some of the cultural references and uses of language underscores the determination – and faith – demonstrated by the speaker: "Cuz he no like me fall/ Even tho I stay in Halawa valley maximum security/ Brah/ I no scared/ Cuz he stay watch my back."

The scholars' approach to contextualizing was also demonstrated in their use of key texts, authors, characters, and genres to understand literary concepts and literary works. Oscar explained Ursula LeGuin's (1968, 1970, 1972) attention to language and power in *The Earthsea Trilogy*. "If you can know the true name of things," Oscar said, "then you have power over that thing." This, he argued, was demonstrated theoretically by Foucault. In an effort to clarify the structure of a poetic novel she was reading by David Rakoff (2013), Sophie explained Rakoff's use of tetrameter by comparing it to Shakespeare's use of pentameter. She compared the consistency of Rakoff's form to an epic poem and gave

two examples, *The Iliad* (Homer, 1990) and *The Odyssey* (Homer, 1996). Using literature as examples, reference points, and a kind of short-hand helped the scholars understand other literary texts. Literature, in this case, was situated within literature. Literature was a context for understanding literature, suggesting that literary texts are not read in a vacuum and that one might use literary knowledge of one thing to generate meaning of another. Here, contextualizing literature appeared to sensitize the scholars to the broader environments surrounding literary works by providing additional material, lenses, and knowledge to aid in the explication of those works. For the scholars, understanding literature was informed in part by an understanding of the histories, cultures, and experiences that influenced its production.

Managing Complexity

The scholars also indicated that literary literacy involved recognizing and managing literature's complexities. They described making sense of literature as various forms of work and characterized the nature of the work as "really difficult," "complicated," and "problematic." Although navigating literature was difficult, it was not the "dreary surrender to convention" (McGraw & Mason, 2019, p. 5) that some readers experience. The scholars welcomed the challenge. They seemed enlivened by it. David believed that challenge and complexity were baked into the discipline. "A fundamental tenant of English," he argued, "[is] that complication is really important." All the scholars recognized the place of complication in their disciplinary meaning-making insofar as literature was composed of "problem[s] to be solved."

Given the complex nature of literature and the difficulty of making sense of it, the scholars developed approaches to manage these complications. Louis used limited-focus reading. Because *Richard III* (Shakespeare, 2018) was difficult for students to understand Louis drew students' attention to specific elements of the text, and away from others. He told students:

> We're going to start with the hardest thing you'll ever probably read in your life. You're going to spend three weeks doing it, but all I want you to focus on is Richard's character, the way the character either developed or is portrayed. I will explain the plot, so don't worry about that.

Drawing students' attention to Richard's character development was an attempt to help students manage the play's complexity. Given the play's challenges for readers, Louis wanted to "make sure not to freak them out," so he condensed their interaction with it into something he believed was less cumbersome, yet serviceable for constructing meaning. Recognizing that limiting students' attention to specific elements of the play would also limit their understanding of other elements of the play, Louis took it upon himself to fill in some of the gaps that were likely to occur, such as plot.

Another approach the scholars used to manage the complexity of literary literacy was approaching literature as a puzzle. Similar to limited-focus reading, a puzzling approach to literature sought to narrow the scholars' attention to specific areas they could investigate without taking on the entire work. Sophie described poetry as "very puzzle-like," and explained approaching it like she might approach a problem, asking, "How do I figure out what this means? What do I need to do? What would be a way [to] approach that text to figure out what [the author] is doing?" In her reading, Sophie demonstrated how

she "figured out" problems in literature by narrowing her attention to specific areas that she sought to understand more clearly. Noticing, for example, issues related to Rakoff's (2013) poetic form, Sophie began looking for puzzles that, in this instance, focused on replicating his form: "[How do I] figure out how he made it? How would I start writing in this way? How would I reproduce this form?" As she continued reading, related puzzles emerged. Sophie considered how Rakoff made his narrative decisions, how he built fluidity among his ideas, and how he managed character actions. Clearly unable to address every aspect of the text, Sophie narrowed her literacy work to select problems that helped her manage the complexity of the literary meaning-making process.

Oscar approached literary challenges by identifying the nature of the struggle: "So, figure out what the struggle is," Oscar said. "Is it a language issue? . . . Is it a structure issue? . . . Is it that I don't have enough context to understand this?" In Oscar's experience, uses of language, organization of texts, and situating texts in appropriate contexts could be particularly problematic when reading literature. Identifying the type of struggle could help manage these challenges by directing readers toward resources and tools for working through them. These meaning-making tools, Louis explained, allowed readers of literature to "appreciate a finite amount of material in more depth." Shaped in part by the place of complication in their field, Louis, Oscar, and the other scholars sought to manage the complexity of the literary meaning-making process, which was seen as a difficult, yet essential and rewarding task in their disciplinary literacy work.

Discussion and Implications

Consistent with theory and research on the disciplinary literacies of various academic domains, this study empirically identifies some of the ways literary disciplinarians conceptualized and engaged in their literacy work. Specifically, this study addressed two questions: What disciplinary situated approaches do literary scholars use to read literature? What disciplinary experiences shape the scholars' approaches to literature? Findings suggest that to construct meaning of literary texts, the scholars attended to their affective experiences with literature, built recursive interpretations of literary texts, contextualized literature, and recognized and managed literary complexity. These approaches represent core beliefs, attitudes, practices, and assumptions about what literary scholars "do" with literature and consist of individual literacy practices and experiences that demonstrate the scholars' literary literacy orientations, or broad disciplinary ways of conceptualizing and approaching literary-based meaning-making. These findings support and build upon existing scholarship on English disciplinary literacies and offer paths for further research.

Rainey (2017) identified two literary orientations – the social nature of literary studies and the pursuit of literary problems – that were foundational to the literary practices and instructional approaches used by the scholars in her study. Explicitly identifying broad-level conceptualizations that informed literary scholars' meaning-making approaches with literature, these orientations are a jumping-off point for additional research. The present study extends Rainey's work by identifying and naming additional literary literacy orientations that English scholars used to inform their work with literature. These orientations are, by design, multivariate. Managing literary complexity, for example, highlights the complex nature of literature, the privileged status of complication, nuance,

and conflict in English, and the several ways the scholars attempted to address them. Managing literary complexity, like the other orientations, is a broad-level literary literacy construct consisting of many domain-specific ways of experiencing and navigating literature that offers insight into literary scholars' work with texts. Meaning-making constructs at the orientation level may offer a profitable way of conceptualizing the literacy practices identified in English disciplinary literacies research as part of larger, more complex and domain-specific approaches to texts. Future work could investigate this new and developing literary literacy orientations space.

The literary literacy orientations in this study consisted of numerous practices, experiences, beliefs, and attitudes. Although these organizations seemed reasonable and in-line with existing literary and literacy theory and research (Peskin, 1998; Reynolds & Rush, 2017; Iser, 1978; Rosenblatt, 1978), I recognize the flexibility of the orientations' make up. In this and other English-expert studies, for example, questioning serves an interpretive function (Rainey, 2017; Reynolds & Rush, 2017); yet, questioning occupies a larger, disciplinary meaning-making space within the English domain that goes beyond interpretation. Depending upon the nature of one's questions, they might also be tools for contextualizing an indigenous poem, managing the complexity of a particularly dense literary passage, or solving issues of characterization or narrative conflict. In a word, questioning can serve many purposes and may be situated in ways that provide different disciplinary contours for constructing meaning and orienting readers' minds and experiences in relation to literature. The same may be said of other practices, experiences, and orientations within this study. Future research should be sensitive to the organization of disciplinary literacy practices and the way literary attitudes, experiences, discourses, and beliefs hang together to inform scholars' literary meaning-making work. What is the nature of these relationships? What are the situations in which their organizations shift? What theories might explain these shifting literary literacy relationships? Attention to these issues could improve our understanding of the composition and use of literary scholars' approaches to texts.

To date, a limited amount of English disciplinary literacies research has attended to literary scholars' affective and personal experiences with literature. Peskin (1998) and Dorfman (1996) found that literary experts appreciated their experiences with literature and enjoyed the work and processes of constructing meaning. The novices in both studies, by comparison, were less satisfied with literary texts, in part because they struggled to understand them. Recent research suggests that emotion is a key part of the English language arts context and plays a central role in students' literary learning and interpretation (Thein, Guise, & Sloan, 2015). Levine (2014) and others (Levine & Horton, 2013) have also argued that affect-laden evaluation is a useful heuristic for teaching students to interpret narrative texts. Yet, on the whole, literary experts' personal, affective experiences with literature has received scant attention and with rare exception is not studied as part of their meaning-making practice. This study identifies scholars' emotional and otherwise personal experiences with literature and conceptualizes it as an important aspect of their disciplinary work, not as an appendage to it. In this study, personal enjoyment of literature thread its way through much of the data. This is consistent with Thein et al. (2015) who argued that "emotion is always already in the fabric" of English language arts (p. 202). Future work in this area could investigate the nature of literary

scholars' personal and affective experiences with literature and how these experiences inform their meaning-making practices. Future research, for example, might consider how affect and emotion – both positive and negative valences – work with skills and practices in the English language arts. What does this affect-intellect relationship look like across texts, genres, and authors in English-related contexts and with specific instructional activities?

In a study of the different reading practices among chemistry, mathematics, and history experts, Shanahan, Shanahan, and Misischia (2011) found that all the participants used similar strategies, but in different ways, for different purposes. Applicable to a different degree, the authors' observation could inform future work related to this study. This study makes no distinctions among the participants' various disciplinary specializations, treating them as essentially the same area of study. With a finer-grained approach that sought to identify the different literacy orientations according to the participants' specializations within the larger field of English, the shape of the findings may have been different. That is, attention to the subtleties of literary practice and experience among the various English disciplines could have provided new ways of understanding their approaches to texts. How did David's expertise in biography and Sophie's expertise in poetry, for example, influence their respective aesthetic responses to literature, if at all? Future research could look more thoroughly at the meaning-making approaches, experiences, and attitudes of the disciplinary subcultures (Ball & Lacey, 1984) that clearly exist among the range of English disciplines. How do literary scholars' various specializations inform their approaches to texts? How do poets engage with literary texts in ways similar or different than literary theorists? Do literary critics approach narrative texts like dramatists? Do compositionalists experience the creation of texts differently than novelists? Are there places of overlap? These and other questions suggest a range of intricacies ripe for further examination within the various Englishes that are or can be represented in English disciplinary literacies.

The present examination of experts' literary literacy orientations also raises issues related to the professional foundation of prospective English language arts educators. Given the traditional attention to the study of literature in English language arts (Hillocks, 2016) and secondary and postsecondary students' widespread struggles with literature and literature-based courses (ACT, 2018; Xu, 2016) it is a mistake to assume that literary novices will develop a robust understanding of the discipline without clearly understanding disciplinary approaches of engaging with literature. A useful professional foundation for prospective ELA educators should include understanding literary experts' specialized meaning-making processes, including, for example, the orientations identified in this study. Knowing that these approaches exist is, of course, not enough. Nor is simply hoping students will intuit what are often latent disciplinary literary processes and use them appropriately with disciplinary texts. A more suitable pedagogy would be to teach novices disciplinary specialized approaches to interrogate literary texts through explicit, targeted instruction. Such instruction could include identifying specific approaches to literature and explaining their place, purpose, and value, demonstrating the approaches using relevant literary texts, providing frequent opportunities for novices to practice using the approaches with instructor support and feedback, and on-going evaluation of novices' use of the approaches and conversation about how they inform their construction of meaning of

literature. Targeted, scaffolded instruction not only helps readers learn when, why, and how to use literary literacies to construct meaning, it may also aid in ameliorating "the hesitation – if not outright refusal" of some readers, including literary experts, to engage with unfamiliar literary texts (Warren, 2011, p. 369). Using appropriate instructional approaches to help literary novices learn to navigate the often complex "territory of literature" (Hillocks, 2016, p.109) in ways that align with the processes used by literary experts is an important part of a robust professional foundation for prospective ELA educators.

Conclusion

Notwithstanding the importance of disciplinary literacy in developing a clearer understanding of how disciplines work and identifying the specialized meaning-making practices of disciplinary experts (Shanahan & Shanahan, 2018), research examining English-orientated approaches to literacy is scant. Much of the extant work has focused on measuring English scholars' domain knowledge and identifying their individual literacy practices. Moje (2015) has suggested a more comprehensive approach. Rather than focusing on "discrete literacy skills," Moje argues that disciplinary literacy should be more of "a human, social construction" (p. 255) that accounts for a range of experiences, values, and attitudes. For its part, the present study responds to this call and extends current disciplinary literacy research by moving beyond a focus on individual literacy skills to look more carefully at a fuller range of the text-based, social, and affective influences on literary scholars' approaches to literature. Specifically, this study empirically identifies and explores the nature of broad-level orientations that guide and inform the meaning-making work of literary scholars.

Moving forward, to improve the development of disciplinary literacy theory and practice, literacy researchers and educators must know more about the literacy processes that guide disciplinary experts. As a field, when we have a clearer view of how English experts conceptualize, organize, and engage in their meaning-making work we can make more informed decisions about how to prepare secondary teacher candidates and practicing teachers to develop (and problematize) the privileged frames of mind, discourses, and specialized approaches to literature. Moreover, with this clearer understanding, we will be better positioned to help learners understand how reading happens – or can happen – in literature-based classrooms in ways that align with disciplinary ways of "doing" literature.

Ethics

The research for this article was approved by the Institutional Review Board of Brigham Young University-Hawaii and was conducted in compliance with ethical and legal guidelines for social science research with human participants.

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Access and Use of Digital Technologies in Early Childhood: A Review of Mixed Messages in Popular Media

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Abstract

This paper reports on an analysis of 60 print and online articles collected in a metropolitan area in Canada that describe children's digital engagement through a focus on 'early literacy' or 'digital literacy'. Findings reveal mixed messages about children's use of digital technology that create competing frames for adults supporting (or not) young children's digital literacy practices. Digital technology was often characterized as something to limit/control, except in school, where digital literacy was characterized as holding a proper place when controlled by educators. Consistent across media messaging was the promotion of traditional, print-based texts as an essential early literacy practice.

Many children lead media rich lives literally from birth (Gillen et al., 2018) as they are encouraged to use digital technology and to develop digital skills (Kervin et al., 2018; Marsh et al., 2017; Ozturk & Ohi, 2019). This uptick of use among children under five-years of age has led to an increase in scholarly interest and debate about the effects of "screen time" on learning and development. Multiple disciplines have taken up this investigation (i.e., education, social policy, childhood studies, psychology, child development, etc.) but have not always coexisted harmoniously (Livingstone, 2016). Scholars coming largely from qualitative epistemologies have highlighted the positive learning experiences that can arise when using digital technology. Other scholars have tended to focus on causal effects that construct explanations for "complex real-world conditions that give rise to harms or benefits" of digital technology (Livingstone, 2016, p. 9) more narrowly. Meanwhile, these debates between experts about the risks or

opportunities of children's digital technology use are played out publicly in popular media. Parents and caregivers are told to 'keep up' with digital technology to ensure children's future successes (Livingstone & Franklin, 2018) while simultaneously being told digital technology might be harmful.

Central to the debate is the notion of 'screen time' - the amount someone interacts with a screen (e.g., computer, phone or tablet, television, video game) in a given time frame (Orben, 2020). The increasing sophistication of modern digital technology and the diverse array of applications digital devices now perform (e.g., smartphones and tablets) presented a need to conceptualize behaviour under a common term. Hence, the umbrella term 'screen time' proved helpful in expressing concerns on the part of some people about an increasingly digital world (Orben, 2020). Influential organizations, such as the American Academy of Pediatrics ([AAP] 2011, 2016) and the Canadian Paediatric Society (2018) urged parents and caregivers to limit or restrict the screen time of children under the age of five years. Children between two and five years were recommended no more than one-hour of daily screen time while those under 24 months were recommended no screen time.

However, as Livingstone and Blum-Ross (2020) argue, the umbrella concept of screen time overshadows important contextual considerations such as "what (the content), how, where, when (the context), why, and with whom (the connections) children are watching, playing, and doing things with media, along with people's judgments and values regarding these activities" (p. 56). Therefore, screen time is helpful for articulating caution and concern, yet it also fails to recognize the potential benefits young children gain when interacting with screens in their daily lives.

As researchers interested in families' literacy practices in the home and community, the inclusion of digital literacy has become a larger focus of our collective work. Recently, with the COVID-19 pandemic, these interests have been amplified as early learning settings were disrupted and digital technologies became increasingly more important in daily life. It is within this context that we frame this paper.

The term digital literacy has many definitions (Burnett, 2009). We conceptualize digital literacy as being bound by social, cultural and ideological contexts. People become digitally literate by interacting with other members of their community and using relevant digital devices (or digital tools) within digital networks. Operational skills are necessary in order to successfully use a variety of digital tools (e.g., computer, iPad, streaming TV, or smartphone), navigate networked screens (e.g., Cloud technologies) and use social media (e.g., Facebook). Yet, digital literacy encompasses more than a list of skills associated with operating digital technology. It includes a mindset to negotiate meaning from a variety of digital contexts. As an example, a digitally literate person may be able to log in and access social media (i.e., operational skill) while also understanding the social contexts of their voice within specific media spaces and across media spaces (e.g., personal, business, or professional uses of Twitter). We use the term 'digital technology' to categorize electronic and computerized technology composed of data in the form of binary digits. Digital technology is a broad term for the multitude of media and devices that are used for communication, entertainment and gaming.

We were struck by the polarized perspectives in the research literature on young children's digital tool use (e.g., Madigan et al., 2019; Orben, 2020). As such, we sought to examine how research findings and policy statements were taken up in news media and on

organizational websites in Vancouver, a multicultural metropolitan area of Canada. Therefore, we examined the narratives or messages that online and print media created when describing children's digital engagement. Furthermore, we were interested in the congruency between the explicit and implicit messages in the images and in the text as they related to "literacy", as well as to "digital".

Through a lens of critical discourse analysis (e.g., Fairclough, 2013; Gee, 2014), in this paper we explore the narratives that online and print media created when describing children's digital engagement. The following research questions guided our work:

1. How is literacy or early literacy defined in online and traditional newspaper publications?
2. What images are used to depict literacy in media publications?
3. How is young children's digital technology use framed in these publications?
4. What is the overall message these definitions and views convey?

Our analysis provides evidence of how two discourses in news media and on provincial websites operated in the same time period, thereby creating mixed messages about the role of digital technology in children's lives.

Background

Research on young children and digital tools can be categorized as falling into two camps: those advocating for, and supporting children's digital engagement and those advocating that children's screen time be strictly limited and controlled. Ultimately, parents' and caregivers' attitudes and beliefs influence the decisions of what tools they make available to children in their homes and communities. However, these beliefs are informed and shaped by the ideologies and messages in circulation in the society in which they live, what Bronfenbrenner (2005) called the macro system.

Digital Literacy in Young Childhood

For almost 20 years, researchers have observed and documented the use of digital technology in the lives of young children (e.g., Marsh 2004; Marsh et al., 2017; Plowman et al., 2008; Plowman & McPake, 2013; Wohlwend, 2009, 2013, 2017). These largely qualitative studies have shown that digital technology can provide young children with opportunities to: engage in relevant communicative practices before being able to read and write conventionally (McPake et al., 2013); extend their knowledge and understanding of the world (Davidson, 2009); develop "cultural awareness" (Plowman et al., 2008, p. 309); and, understand the roles of digital technology in everyday life (Kervin et al., 2018; Livingstone & Blum-Ross, 2020; McPake et al., 2013; Wong, 2015).

Young children draw from their experiences with, and knowledge of, digital technology in their play activities, such as dressing up like favored characters, or re-enacting scenes from their favourite TV and movie programs (Huh, 2015); using discarded mobile phones or laptops as props during imaginative play (Wohlwend, 2013); or incorporating digital tools into their offline play activities (e.g., bringing a tablet inside a pillow fort) (Marsh et al., 2015). Although sometimes favoring digital technology for entertainment, children continue to engage with traditional toys and enjoy outdoor activities (Gillen et al., 2018; Stephen et al., 2008; Teichert & Anderson, 2014). Virtual worlds resemble offline play (e.g., dressing up avatars) and they afford peers opportunities

to play together during times they otherwise could not (Shapiro, 2018; Wohlwend et al., 2011). Scholars who support children's early digital use focus on the benefits of these tools in young children's development and learning and urge that digital play be recognized and valued in the same way as traditional play (Edwards, 2013; Marsh et al., 2016). For example, Marsh et al. (2016) adapted Hughes' (2002) definitions of play-type to reflect contemporary children's digital realities and define digital play. Hughes, for instance, drew from Vygotsky (1972), when describing symbolic play as, "when children use an object to stand for another object, [and for example] a stick becomes a horse" (p. 246). Marsh et al. extended this definition into the digital sphere by defining symbolic play as, "when children use a virtual object to stand for another object [and for example] an avatar's shoe becomes a wand" (p. 246). In total, Marsh et al. redefined 16 types of play to include digital activities.

Researchers such as those just cited, describe benefits for young children engaging with digital technology. However, much of this research entailed smaller, qualitative studies that cannot be generalized to wider populations or the findings come from self-reported survey data. As well, much of this work has been conducted with white, middle-class families. While it is an emerging area of study (Livingstone & Blum-Ross, 2020), not enough data is yet available on the roles of digital technology in the lives of multicultural families.

Limiting Screen Time

Conversely, scholars concerned about young children's digital engagement emphasize children's need for social interaction and hands-on exploration, and generally discourage access to digital technology in early childhood. They argue that too much digital engagement can negatively impact children's health, cognitive development, and learning (e.g., AAP, 2016; World Health Organization, 2019) and have suggested digital technology (and media more generally) make children "passive learners and take away from more active, worthwhile activities" (Razfar &Yang, 2010, p. 120). The amount of time spent watching screens is frequently cited as contributing to the following problems: rising obesity rates among children (AAP, 2016); reduced sleep (Hale & Guan, 2015; Cheung et al., 2017); aggressive behaviour (AAP, 2011); attention deficits (Christakis et al., 2004; Miller et al., 2007); and language and cognitive delays (AAP, 2016; Courage, 2017). Madigan et al. (2019) found that children aged 24 months and 36 months with higher levels of screen exposure had poorer performance on assessments for developmental milestones at 36 and 60 months than children with less screen exposure.

With respect to potential cognitive delays, the AAP identified possible negative development of 'executive functioning' and "transfer deficit" (Barr, 2013, p. 206) as concerning. Executive functions manage self-regulation and some research has indicated a relation between early screen exposure and poorer executive functioning (see Courage, 2017 for a detailed analysis). However, causation has yet to be determined as researchers cannot determine whether young children with more challenging temperaments watch screen media as a calming mechanism, or if it is the screens that create these temperaments (Courage, 2017). Transfer deficit, which is the ability to transfer understanding from one context to another, has also been identified as an issue in children's use of digital technology. For example, Radesky and Zuckerman (2017) found that children could imitate

what they saw on screen, but it was limited. They found children had difficulty transferring the knowledge gained from two-dimensional screen media to their three-dimensional experiences (i.e., giraffe on a TV is not easily transferred to understanding a giraffe at the zoo).

However, critics of the research on screen effects noted that studies warning of the negative effects of digital technology use between birth and five-years found small or no effects and argued the concerns were overstated (e.g., Viner et al., 2019 for the Royal College of Paediatrics and Child Health, UK). Przybylski and Weinstein (2019) conducted telephone interviews with 20,000 caregivers in the United Kingdom who cared for children between the ages of two and five years. Their findings suggested there was little or no support on the part of respondents for the claim that there are harmful links between digital screen use and young children's psychological well-being. They explained that their study "informs an existing literature with older children and adolescents which finds mixed support for the links between screen use and wellbeing, with some studies showing harmful effects and others showing negligibly small and non-significant correlations indicating harm" (p. 61). Orben (2020), in her narrative review of 82 systematic reviews and meta-analyses, concluded there was a lack of clear cut or concrete evidence for a "link between digital technology use and well-being" (p. 407). She indicated that there is a dearth of high-quality research in the field, which has resulted in "the production of much conflicting evidence" (p. 412).

Others have argued that effects-based research has focused on TV or computer screen viewing and that these findings cannot be transferred to touchscreens such as smart phones and tablets. Cheung (2016) concluded that:

> The problem is that touchscreens are not the same as TV or computers; they combine both elements of passive entertainment of TV and interactivity of videogames. Active interaction with touchscreens can generate dynamic stimulation, and, if used appropriately, may be just as engaging and cognitively stimulating as traditional toys or books (n.p.).

Some researchers have found positive effects for toddlers' use of screens. For example, Strouse and Ganea (2017) noted an increase in attention and positive affect when reading electronic books compared to printed books. Likewise, Bedford et al. (2016) noted a positive association between active scrolling on a touchscreen and fine motor skills (e.g., stacking blocks, pincer grip) and did not find evidence of a negative association between infants' first use of a touchscreen and later developmental milestones.

Parents'/Caregivers' Attitudes and Beliefs

As this brief review demonstrates, the research on young children's use of digital technology is contradictory with some studies highlighting positive effect, others the opposite. Yet, it is parents and caregivers, who are left to make sense of the competing claims made by researchers as they are reported in news outlets, on the websites of agencies and organizations, and on social media. Some parents and caregivers believe that children's use of digital technology is good and contributes to brain development (Vittrup, Snider, Rose & Rippy, 2014). Parents and caregivers have also described how they believed digital technology contributed to children's learning and development and that it is a necessary tool in today's society and prepares children for the future work force (Dias et al., 2016;

Gillen et al., 2018; Schlembach & Johnson, 2014, Vittrup et al., 2014). For example, the parents who Aubrey and Dahl (2014) interviewed believed that digital technology helped their children develop basic skills, like letter, number and colour recognition. Other studies described parents and caregivers who actively scaffold their children's digital technology use by modeling how to use devices, giving direct instructions, explaining how to use digital devices, and praising children's uses (Gillen et al., 2018; Kervin et al., 2018; Kumpulainen et al., 2020; Ozturk & Ohi, 2019; Plowman & McPake, 2013; Stephens et al., 2013).

However, other studies have documented that some parents and caregivers are apprehensive about the effects of screen time on children's overall development (O'Hara, 2011; Stephen et al., 2013; Teichert, 2017). This belief led these adults to limit children's access to digital technology and direct their children to engage in more traditional childhood activities, such as drawing or outdoor play (Dias et al., 2016; Teichert, 2017; Wolfe & Flewitt, 2010). Kucirkova et al. (2018) found parents were more concerned about boys' digital engagement and the possible ill health effects of digital technology than they were about girls.

Yet, not all research has depicted families as either for digital technology or against it. Plowman et al. (2012), in their study involving 14 families, described parents' beliefs about digital literacy practices on a spectrum. Parents fell anywhere between negative views, ambivalent views, and positive views. Families' uptake of digital tools reflected more their beliefs than it did their socioeconomic status. Livingstone and Blum-Ross (2020) also noted parents' attitudes towards children's use of digital technology fell on a spectrum. Importantly, though, their recent work highlighted the nuanced ways that families negotiated digital technology use in their homes. They described some parents who were ambivalent, others against digital technology, and some for digital technology; these positions were constantly shifting and reshaping. Parents in the same home may at times differ in their values and beliefs and negotiate with each other on what the best approach may be for their children. For example, Livingstone and Blum-Ross (2020) demonstrated this tension when describing participants Lara and Pawel Mazur. Lara believed digital technology provided their six-year old son with opportunities to "build his confidence and make him independent" (p. 1) while Pawel was cautious and worried about online risks, "especially after [son's friend] introduced him to a violent video game" (p.1). Pawel therefore set passwords on all devices in an attempt to monitor and control his son's access.

News media reports tend to alternate between the damaging effects of screens on family relationships and advocating for the potential of screens to help families stay connected. Readers and viewers are left "fearful or hopeful, and oftentimes just plain confused" (Gee et al., 2018, p. 2) about how to navigate a complex technological world. This situation may lead parents to feel guilty about the decisions they make and uneasy about how to 'do right' for their children (Livingstone & Blum-Ross, 2016, 2020; Teichert, 2017, 2020).

<center>*Theoretical Framework*</center>

Bronfennbrenner's Bio-Ecological Theory

This study is informed by Bronfenbrenner's (2005) bio-ecological theory that posits that children's development and learning are influenced by different systems or spheres. The microsystem, consisting of family, neighbors and teachers, most directly influences development and learning. However, the macrosystem - the "belief systems, resources, hazards, lifestyles, opportunity structures, life course options and patterns of social change…" (p. 149) of the larger society - also affects development and learning. For example, in an individual child's microsystem, their access to digital tools, the parents'/ guardians' beliefs about the role of digital technology in their child's development and learning, and their own engagement with and use of technology, their interactions with peers in their community, the families' socio-economic status, and their exposure to digital tools at school or in the early childhood center, influence the role (if any) that digital technology plays in their development and learning. Likewise, at the macro-level, the policies of governments and educational authorities, institutions' and organizations' perspectives about the role of digital technology in young children's lives, and dominant ideologies about the issue held by the wider society indirectly influence the child's microsystem. In terms of this study, the messages about young children's digital tool use conveyed by popular media and represented on organizations' websites constitute part of the macrosystem of children living within the geographical area where the study took place, and according to bioecological theory, potentially affects young children's development and learning, particularly in terms of digital technology.

Critical Media Theory

In contemporary western societies, the media are an important part of the macrostructure, as they hold significant power in shaping the meanings that people construct and the realities that they experience (e.g., McLuhan, 1964). As Kellner and Share (2019) point out, "all cultural texts have distinct biases, interests, and embedded values, reproducing the point of view of their producers and often the values of the dominant social groups" (p. 17). Furthermore, they posit, "Media culture shapes our views of the world into categories of "us" and "them," influencing our deepest values: what we consider good or bad, positive or negative, moral or evil" (p. xi). McLuhan wrote during the analog age of media communication, while today society interacts with a multitude of digital platforms. At their base, platforms are the infrastructure on which applications (apps) are built; however, on a social level, they are also spaces that facilitate social and economic exchange (Gillespie, 2010; Nichols & LeBlanc, 2020). Srnicek (2017) used the term 'platform societies' to frame the social, technical, and economic relations between people and platforms. Most relevant to our study is the social aspect of platforms and how people integrate apps into their daily lives and how these apps interact with each other and the media messages derived from these platforms. Theorists posit platforms create "new value regimes and economies" (Helm & Seubert, 2020, p. 187) as powerful platforms (e.g., Google, Apple, Amazon, Facebook, and Microsoft) set terms for how people interact and communicate with one another (van Dijck et al., 2018). Given this influence and the fact that parents and caregivers hold varying perspectives of the roles that digital technology

should or should not play in early childhood (e.g., Teichert, 2018), it is important to examine the messages contained in media.

Methodology

This study is part of a larger study investigating the digital literacy practices of families with young children in their homes and communities. With respect to this paper, we examined the narratives that online and print media created when describing children's digital engagement. Furthermore, we were interested in the congruency between the explicit and implicit messages in the images and in the texts as they related to "literacy" as well as "digital".

The authors are educators and researchers with an interest in, and focus on, early childhood literacies. We are also committed to working toward greater access, equity and inclusivity in terms of educational, economic and socio-political opportunity for children and families who live on the margins of society. In terms of digital technology and digital literacy, we are concerned with the digital divide (van Dijk, 2000) as well as the conflicting messages presented by popular media and organizational websites whose intended audience include parents and caregivers of young children, about the role of digital technology during the early childhood years.

Data Collection

The data are drawn from two rounds of online and print media scans. All materials collected were contained by geography (i.e., publications accessible in the focal neighborhood in Vancouver) and by time.

Vancouver was an appropriate site for this study, for several reasons, in addition to the pragmatic one that, at the time of data collection, the authors worked or studied and lived there. The city had a number of newspapers that were freely and widely distributed in neighborhoods. It is also a culturally and linguistically diverse city with many new immigrant and refugee families, representing varying educational experiences and views about child-rearing, education and learning. The city also has great socio-economic disparities, and one of its neighborhoods is often referred to as the poorest postal code in Canada (Lupick, 2019). As well, since 2001, the province has aimed to be a knowledge-based society, when the Premier of the province at that time established the Premier's Technology Council. The premier's vision for education in the 21st century partially influenced a revision of the province's K-12 curriculum, a document that encourages the incorporation of digital technology from kindergarten onwards (See Teichert, 2014, for further analysis). In summary then, the city represents the realities of many contemporary metropolitan areas in Canada and elsewhere in an era of increasing movements of people (Vertovec, 2021) in a world becoming more connected through digital technology.

The first collection occurred between August 1, 2016 and September 30, 2016 resulting in 47 articles that focused on either early literacy or digital literacy (and sometimes both). Data came from five newspapers: four available in both online and print formats, three of which were free publications, and one print-only weekly publication. The second round of collection occurred during November 2018, lasting 30 days and yielded 13 articles from five newspapers (four online/print; two free). Table 1 provides a summary of the news media publications collected in both rounds of data collection. As well, we

reviewed seven pertinent local websites in both rounds of data collection. The websites were selected based on their involvement in educational programing and/or health programing, in the geographical area of the study and included the following: Ministry of Education, local district school board, local district StrongStart (a government supported early childhood initiative), local public library, local public health agency, a local parent program (website available on school board website), and a provincial health strategy website. As noted, parents and caregivers of young children are part of the intended audience of these sites. Data were collected from all seven websites during the 2016 scan; however, only three websites contained content relevant to the study during the 2018 scan. None of the magazines that we reviewed yielded pertinent articles during these scans.

Table 1

Summary of Data Sources

Newspaper Name	Scan publication collected in	Description (including width of coverage)	Mediums available	Publication frequency	Cost
The Globe and Mail	Both	One of two major national newspapers in Canada. Distributed across the country.	Online and print	Daily Monday-Saturday	Subscription
The National Post[a]	2018 only	One of two major national newspapers in Canada. Distributed across the country	Online and print	Daily Monday-Saturday	Subscription
The Vancouver Sun	Both	One of two province-wide newspapers in Vancouver. Distributed to communities across the province.	Online and print	Daily Monday-Saturday	Subscription
Metro[b]	Both	A chain of newspapers published in five major cities across the country. Publications provide local editions for each city it is published in.	Online and print	Daily Monday-Friday	Free
24 Hours[c]	2016	A local publication distributed within the community of study and its surrounding suburbs.	Online and print	Daily Monday-Friday	Free
The Vancouver Courier	Both	A local publication distributed within the community of study and its surrounding suburbs.	Print	Weekly	Free

[a] This publication was scanned in 2016 but did not yield articles relevant to the study.
[b] At the time of the study, the publication was still available in print. As of 2019, it is an online-only publication.
[c] This publication ceased publication prior to the 2018 data collection.

Data Analysis

Drawing from Foucault's (1972) discourse theory, we considered what knowledge was promoted, how this knowledge was passed on, what function it held for the "constitution of subjects and the shaping of society" (Jäger, 2001, p. 33); and finally, the impact the knowledge could potentially have in the overall development of society. Our unit of analysis was media content containing text and/or images relevant to "digital technology", "early literacy" or "children's digital engagement." With a critical discourse analysis lens (Fairclough, 1995; Gee, 2014; Kress & van Leeuwen, 1996) we analyzed the rhetoric of online and print media texts for their discursive, or argumentation strategies (Meyer, 2001), and considered the role of audience. Also informing our analysis was Gee's (2014) notion that language is always ideological or political, and for example, we examined how the texts in our corpus explicitly or implicitly conveyed the message that access to and use of digital technology in early childhood was something to be avoided or to be embraced. We read the texts multiple times in their entirety. We then reread them, highlighting the discourse or language that was used to describe literacy and digital technology. That is, we examined critically the "language associated with a particular field" (Fairclough, 2013, p. 179) (i.e., literacy and digital technology), identifying the explicit and implicit meanings and whether digital technology was portrayed negatively, neutrally or positively. Discourses play a role in shaping social meanings and realities (Mackenzie, 2019). Therefore, we noted not only themes present in our corpus of texts, but considered the information being disseminated by news media and how it might shape parents' and caregivers' beliefs about digital technology, and consequently, their children's access and usage. Codes were created under categories of "negative", "neutral", or "positive" that demonstrated the argumentation strategies used by the author. For example, under the "negative" code, phrases/words like "limit", "detox", or "control" were noted. Table 2 provides an example of this analysis from the "digital technology-negative" code and "digital technology-positive" categories. The bolded text are examples of key rhetoric and argumentation used by the author.

Table 2

Representation of Digital Technology Codes

Source	Date	Summary	Key phrases	Sub Code	Image	Digital?
Vancouver Sun[a]	Monday November 26, 2018	Article reports on Cyber Monday by Nature Canada, a review of existing research on screen time. Authors concluded children spend too much time with screens and should spend more time outside. The quoted author	"When I put it all together and saw the story the research was telling, I was shocked," [author] said. "We all know **kids are spending too much time with screens**, but the	Screen time Control		Yes

Source	Date	Summary	Key phrases	Sub Code	Image	Digital?
		suggests parents limit screen time and create screen free zones.	impact of that is much greater than I imagined."			
The Globe and Mail[b]	Tuesday November 27, 2018	The benefits of playing Fortnite with 10 year old son (with reference to similar online video games)	I relented. His friends were playing it, and **they were able to communicate via headsets.**	Communication Social digital tech	Desktop screen, *Fortnite* on screen. Angle: taken from behind youth.	yes- text and image

Note. All data samples were collected during the second round of collection in 2018.
[a] This data was drawn from the broader category "digital technology-negative"
[b] This data was drawn from the broader category "digital technology-positive"

Images

We drew from Kress and van Leeuwen (1996) to analyze each image and identified: i). who was represented, ii). what they were doing and where, and iii). what literacy(ies) was/were represented, and iv). what digital tools were depicted (if at all). An example of this process comes from an image collected in the 2016 scan. The code was "school-based literacies" and the image accompanied an article outlining tips for parents and caregivers and their children to ensure a smooth transition back to school. The image depicted a mother and son sitting beside each other looking at a print novel. The son held the book while the mother looked over his shoulder. Behind them was a chalkboard with a weekly schedule written on it. It depicted literacy as print-based as no digital tools were present and the implicit message was that reading print books assisted a smooth transition back to school.

Results

Contradictions in Narrative

We noted contradictions in how media framed young children's engagement in digital literacy. In both 2016 and 2018, we collected data that described digital technology as beneficial or positive while also finding sources that cautioned about the negative uses of digital technology. For example, in 2016, five newspaper articles encouraged "coding" as a required course for children, including those in the early years. At the same time, eight newspaper publications continued to highlight the need for limited screen time in children's lives. Interestingly, school was cited as a space to promote digital technology, most notably through coding skills, but also in 'back to school' articles that included digital tools as necessary for school success. Four images accompanied articles about school (i.e., 'back to school') that included a digital tool (e.g., student working at a computer).

However, within the context of using digital technology in schools, contradictions existed. While five articles touted the need for coding and digital technology in elementary school, two articles argued student-owned devices should not be permitted in the classroom (i.e., student-owned mobile phone or tablet). For example, one local newspaper opinion writer suggested this was because "school is a place for learning" and the potential for private, non-school use of digital technology was enough to exclude personal devices. As the writer stated, "it would be impossible for teachers to monitor their students' use."

Contradictions also were present within the same institutional or organizational body. The Ministry of Education website, acknowledging the realities of children's digital worlds and contemporary society, had begun including coding and technology skills in the provincial curriculum, and explicitly "encouraged the use of technology" for all grade levels. Yet, a local school board (that operates under the auspices of the Ministry) promoted print-based reading for kindergarten students and ignored digital texts and devices.

The data collected in two rounds of collection contained two conflicting discourses that operated simultaneously in news media and on provincial websites: digital technology is beneficial and that screen time must be limited and controlled.

Digital Literacy as Beneficial

In total, 15 newspaper sources were coded for positive messages related to digital technology. Of these sources, seven came from comic strips, two highlighted commercial products, and two were advertisements. These messages generally fell into two categories: skill development and intergenerational bonding.

Skill development. Three articles advocated for coding as a requirement in children's schooling in preparation for future employment. Phrases such as, "In the future, every job will have a technical aspect" (*Vancouver Sun*, September 2016) and, "By prioritizing coding, Canadian children will be better prepared for the jobs of the future" (*The Globe and Mail*, August 2016) highlighted the importance of this skill set in newspapers and on the Ministry of Education website. In addition, digital technology skills were framed as important "so that kids understand the way the world around them works". The attention to this digital priority may be a result of where these publications were produced, given that in 2016, the British Columbia Ministry of Education introduced a revised curriculum, championing digital technology and digital literacy as a reflection of 21st century learning principles.

In 2016, the local *24 Hours* newspaper reported on the University of British Columbia's eSports association and its outreach to youth in the community. The emphasis was on dispelling the negative depiction of video-gaming and eSports by highlighting the positive role video games played in overall skill development, such as "use gaming as a basic platform to develop other skills, including project management, marketing, and more". Notably, the association wanted to provide youth "a positive environment to grow in".

Intergenerational bonding. In 2016, *Pokémon Go* was at the height of its popularity and two comic strips (*Betty* and *Family Circus*) published a series related to the virtual app. Both comics depicted an intergenerational aspect to the game and the comradery between

players. For example, *Family Circus* depicted a grandmother sitting on a couch while her grandson jumped up and down on the floor. In the first comic panel, he explained the game. In the final panel, the text read, "well, you'd like it Grandma!" The popularity of the game also extended to advertising as Bell Media, a national telecommunications provider, used the game to promote a smartphone and data plan. In total, six data sources referenced *Pokémon Go*.

In 2018, the game *Fortnite* had exploded in popularity and the *Globe and Mail* published an opinion article that described the benefits of the author's 10-year old son playing the game. Phrases used by the author emphasized the social nature of the game, as users could communicate with each other through headsets. The game was framed as a way to build bonds between pre-adolescent children and their parents using phrases such as "could give me a *Fortnite* lesson", and "… get him started on V-Bucks or his Battle Pass, and there's no stopping him. He can talk for days." Central in the promotion of the video game, however, was the "play together" aspect.

Screen Time Should be Limited and Controlled

More frequently, however, news media articles cautioned about the use of screens for children. Twelve articles describing the need to limit screen time were collected, eight in 2016 and four in 2018. Of the 12 articles collected, three were published in national newspapers (i.e., Canada-wide circulation). In 2016, the *Vancouver Sun* published four articles negatively depicting digital technology in a 30 day span. Articles used phrases such as "more green time (and) less screen time" (*Vancouver Sun*, November 2018) and "sedentary screen time has become an ever-increasing risk for kids" (*24 Hours*, September 2016) to express concern about children's health. This characterization often led to recommendations that, "screen time [be] limited and closely monitored" (*24 Hours*, September 2016). One province-wide health initiative (i.e., advocating for 60 minutes of rigorous physical activity daily) directly stated that screen time limited physical activity (www.healthyfamiliesbc.ca). The website page was titled, "Make room for play!" and led with statistics about how much screen time Canadian children engaged in and recommended that children's screen time be limited. The organization advertised how they could provide "you" with skills to turn children's "virtual play into real, active play!" Other phrases described developmental concerns, such as "teach [children] to thrive without depending on their devices" (*24 Hours*, September 2016) or ""Do you every give yourself time to daydream?" (*Vancouver Sun*, August 2016). In another example, the need to disengage from digital technology was described with the phrases "screen free" and "digital detox" (*Globe and Mail*, August 2016) and emphasized the need for children to have non-digital spaces.

In contrast to the social benefits arguments for *Pokémon Go* and *Fortnite* cited earlier, articles expressed concern about a lack of interaction when children use digital technology. For example, one description stated, "I had some friends come over along with two young kids and their parents sat the five-year-old down with his computer. His games were creative and amazing, but there was no interaction" (*Vancouver Courier*, September 2016). Other articles highlighted the potential for antisocial behaviour, such as bullying. When describing social interaction online through social media apps, the description was

negative, for example, "addictive behaviour" (*Globe and Mail*, August 2016); "addicted to social media" or "preoccupation with peer drama" (*Vancouver Sun*, September 2016)

One 2016 article was particularly negative in assessing children's digital engagement. The writer suggested parents providing children with cellphones was an example of "over-protective, over-involved parents interacting with their kids throughout the school day … from chit-chat to getting the latest gossip, to messages about pick-up time and supper." Students' use of digital tools and texts in learning was questioned,

> As real books and libraries dwindle in significance in the classroom, following suit with how society in general now goes to social media and online sources for news and information, so too do they direct their students to go to the Internet to do research … Of course, the quality of that research is indeterminate (*Vancouver Sun*, September 2016).

The author polemically concluded the piece by proclaiming that the use of digital technology was an "unfolding tragedy" and that talk of "responsible use of social media" was "like raising kids on whiskey or cocaine and then in the midst of it prattling about how to use it responsibly."

It is important to note that the above findings did not explicitly describe "digital literacy" but rather emphasized digital technology broadly in either positive or negative ways. What we found when analyzing the data was that literacy was still largely constrained to print-based skills.

Print-Based Literacy Texts to Depict Literacy

The majority of the images that we analyzed depicted literacy activities as print-based, such as: photographs of a child sitting between her parents, all looking at a book; two young, males sitting back-to-back, each holding a picture book; mother and son sitting with a book shared between them. In total, 12 images, were collected in 2016; eight of these depicted print-based tools, such as a book or writing tools (i.e., pencil and paper), while four showed a digital tool. In 2018, seven images were collected and four contained digital tools. One of these images (an advertisement), however, showed both print and digital: a father and daughter sat side-by-side on a couch looking at a tablet. Behind them was a large bookcase full of books.

Articles that encouraged adults to limit children's screen time were paired with images of children outdoors in nature. None of the websites in the scan included images of children using digital technology. We did, however, collect seven images that contained examples of traditional print literacy- five images of book reading and two images of alphabet manipulatives (i.e., Scrabble pieces and magnetic letters).

Interestingly, in articles focused on school-related topics (e.g., curriculum reform; social inequality), the images included students of varying ages using a digital device, such as a tablet (young female) or laptop (teenaged male). Images depicting digital technology outside of school did so in a negative manner, for example, a mother sitting on a couch beside her teenage daughter, scowling while the daughter looks at her cellphone. Another notable finding was that images with digital technology mostly showed one user while images of books most often showed people reading together (i.e., adult-child).

Print-Based Books Most Valued

Nine articles emphasized book reading in traditional print formats as the most valuable activity when describing literacy. For example, in a list of Christmas gifts, books were, 'the greatest gifts of all. Nothing comes close" (*Vancouver Sun*, November 2018) and that "they're wonderful to share with youngsters, especially at bedtime" *(Vancouver Sun*, November 2018). Other phrases included, "you can never have enough books" (*Vancouver Sun*, September 2016) and "Everyone is a reader, some just haven't found their favourite book yet" (*Vancouver Sun*, September 2016). One article offered advice on encouraging children to read and suggested, "intentionally model positive reading habits and provide time and opportunities for my older children to read ... Read physical books ... Subscribe to print newspapers and magazines" (*Vancouver Sun*, September 2016). To return to an article that we previously referenced, use of online resources in school-based research was given lesser value to books, negatively describing teachers who "direct their students to go to the Internet to do research" while "real books and libraries dwindle in significance in the classroom" (*Vancouver Sun*, September 2016).

Discussion

News media play a role in shaping the discourse around digital technology and shaping social norms. They are an important constituent of the macrosystem and its more distal, but yet important influence on young children's development and learning (Bronfenbrenner, 2005). News reports attribute general statements about the world to experts and other authorities (van Leeuwen, 2008). News media purport themselves to be neutral and as providing a space for public discourse; however, this is sometimes a fallacy (Fairclough, 1992; Wodak, 2001). Using 'the first day of school' rhetoric as an example, van Leeuwen (2008) explained that by attributing general statements to experts, news reports "not only report what the expert has said, it also, though only obliquely, counsel readers who are also parents of young children" (p. 14). Frequently, news media have focused on harms to children and spent less time highlighting the positive aspects and benefits of screen media (Livingstone & Blum-Ross, 2020) and have often exaggerated the size of the effect or inferred causation from correlational findings (Livingstone & Franklin, 2018). Our findings echo this: when reporting on children's engagement with digital technology, conflicting discourses were present. Digital technology was portrayed as both beneficial for children's skill development but also as a phenomenon that needs to be limited and controlled by parents and teachers. This contradiction was most notably evident during our 2016 scan that coincided with "back to school" for the Kindergarten to grade 12 school system. That negative portrayals of children's use of technology decreased over time might suggest that a more general societal acceptance of the role of digital tools in young peoples' lives is occurring.

It is noteworthy that in articles about digital technology and children that we analyzed, descriptions of "screen time" were negative. At the same time, articles described the importance of coding and encouraged the development of coding from the early years and beyond. However, an important caveat in the beneficial discourse is that this learning occurs in school settings. This rhetoric positions the authority of digital literacy development within the school and minimizes the role parents/caregivers may play in this development. In doing so, it devalues the digital activities children engage in while at home

or in the community. This contrasts the way print-based literacy development is positioned within news publications. In those stories and images, parents/caregivers are situated in this development as important partners in learning and as crucial to children's literacy learning. Indeed, parents (and especially mothers) of young children are sometimes cast as derelict if they do not read to their children daily (e.g., Reese, 2012; Smythe, 2006).

Competing narratives create confusion and tension for parents and educators attempting to raise children in digital societies. News and media outlets have reported research suggesting prolonged exposure to screens impedes young children's development (e.g., Madigan et al., 2019), but have also reported that there is not enough evidence that shows "screen time is in itself harmful to child health at any age" (Viner et al., 2019, n.p.). This establishes conflicting discourses about the role and value of digital technology in young children's lives and parents and caregivers must decide to either follow or reject published advice. It is important to recognize the agency of parents and caregivers who encounter these messages as they are not passive recipients in their relationship to texts (Kress, 1989). However, news media's publication of contradictory reports of empirical studies can cause parental anxiety and guilt (Livingstone & Blum-Ross, 2020). As well, negative depictions of children's digital engagement idealize a "normative vision of how (typically, middle-class) family life should look" (Livingstone & Blum-Ross, 2020, p. 55) while simultaneously ignoring "the realities of how or why digital technologies are being incorporated into family lives" (p. 55).

We did not find a marked change in how the role of digital technology was portrayed in the two years the data were collected. However, it may be that the Covid-19 pandemic may lead to a fundamental shift as families use Zoom and similar platforms to connect with relatives who cannot be physically present and schools in some jurisdictions provide online learning. Indeed, a documentary titled "Screen time can sometimes be good for kids, says new research" televised by the Canadian Broadcasting Corporation in 2020 reflected a balanced perspective, acknowledging the affordances that digital technology offers young children and the concerns that some people have identified (Canadian Broadcasting Corporation, 2020).

We recognize the limitations of our study in the small corpus of texts analyzed from a short period of time. It is possible that a longer period of time would have resulted in more articles focused on children's engagement in digital media. However, given the mixed messages reported here, it is unlikely the findings would have been dramatically different. Despite the small nature of our study, the implications of this work are the emphasis on the impact news media can have on social discourses, which can influence attitudes towards children's digital engagement. Questions remain about how parents and educators access sources of information and which of these are privileged, and whether parents, educators and early learning practitioners are accessing the same sources. Another interesting consideration is the shift of news media from traditional print media to digital platforms. The vanishing newspaper (Meyer, 2004) has increasingly been discussed as printed newspaper subscriptions continue to drop (Loskutova, 2020). A quick Google search of 'death of print media' returned half a million results, and while the Internet hosts plenty of news, a dwindling supply of printed newspapers in a community may have lasting implications. Small, local newspapers may not have a strong online presence and their demise means less reliable, local news in communities (Heberly, 2018). As well, online-

only news media often operate behind a paywall. Those with lower incomes may not be able to afford online subscriptions, not to mention the necessary hardware and reliable Internet connection, necessary to access news (Heberly, 2018). These questions highlight the need for more studies in this area.

As Przybylski and Weinstein (2019) argued, the "digital genie cannot be put back in the bottle" (p. 62). Rather than position children's uses of digital technology in contrasting frames-- to be limited and controlled or as positive and beneficial-- it is time to move away from 'screen time' and focus attention on quality uses of digital technology and the social nature of these practices. Indeed, Blum-Ross and Livingstone (2016) recommend moving away from the discourse of "screen time" as it is "neither a homogenous activity nor an inevitably problematic activity" (p. 27). We echo their statements and also suggest it is time to move away from clock-watching and counterproductive controlling of screen time. Instead, a more productive framing might emphasize the quality experiences and family bonding that may occur when families interact with screens together. Even Dr. Jenny Radesky, a key contributor to the American Academy of Pediatrics' (2016) policy statement, has pivoted from strict screen limits and now recommends co-use of digital technology between adults and children (e.g., Knappmeyer, 2020).

Changes in discourse shift slowly. For example, School Community Network, an organization devoted to enhancing communication between schools and families, and providing the latter with up to date knowledge, led off its January, 2021 email update with an item advertising a video called "Curriculum of the Home: Family Expectations and Supervision" (Personal Communication, School Community Network, January 13, 2021). The first of six points listed was, "Priority given to homework and reading over screen time and recreation", strongly implying that reading on screen is not valuable and that homework cannot involve digital devices. Continuing messages of risk and harm and the lack of acknowledgement of the possibilities offered by digital technology in conversations about young children are likely to remain in the foreseeable future.

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Exploring Literacy Coach Research in Canada: A Review

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Abstract

The purpose of this review is to understand literacy coach research in Canada in order to facilitate further research in this regard. Research about literacy coaches in Canada remains at an initial stage, and there is no universally accepted definition of a "literacy coach." Most literacy coach research in Canada has used a qualitative method. The research has shown that literacy coaches in Canada, who act as both guides and supporters in schools, also experience many challenges such as role confusion and inadequate time for carrying out their work. Scholars believe that setting up coaching models and collaboration may be ideal ways to deal with these problems. This review also found that the research has concentrated on literacy coaches in elementary and secondary schools in Ontario. This article concludes with implications and suggestions for future research about Canadian literacy coaches. More analysis about literacy coaches' identity, their relationships with other stakeholders in the education system, and the challenges they face is needed in the Canadian context.

Keywords
literacy coach, research, Canada, literature review

Introduction

A literacy coach is broadly defined as a teacher with literacy expertise who works collaboratively with classroom teachers, administrators, and their school board. Literacy coaching is not a new concept in education, but it has become more and more popular in North America since the implementation of the No Child Left Behind Act (Elish-Piper & L'Allier, 2010). Importantly, literacy coaches have become vital players in school management, particularly in the United States and Canada (Ferguson, 2013; Lockwood et al., 2010). Coaching is considered one effective way for schools to cope with challenges (Deussen et al., 2007). While coaching exists in many areas, it is most popular in literacy instruction (Deussen et al., 2007). Literacy coaches support classroom teachers' literacy instruction through coaching and leadership, so as to achieve better student learning outcomes (Bean & Isler, 2008; Eastern School District, 2009; International Reading Association, 2004; Malavasic, 2020; Robertson et al., 2020; Symonds, 2003; Walpole & McKenna, 2013). Researchers believe that literacy coaches have a positive influence on both school management and classroom instruction (Bean et al., 2007; Killion & Harrison,

2006; Lockwood et al., 2010; Rainville & Jones, 2008; Sandvold & Baxter, 2008; Walpole & McKenna, 2004). Literacy coaches, who are beneficial for ongoing teacher learning, may foster teacher collaboration, improve instructors' teaching strategies, and enhance interaction between teachers through modeling teaching practices and reflecting on students' learning experience (Bean et al., 2003; Elish-Piper & L'Allier, 2010; Ferguson, 2014a; Moore, 2010). In addition, literacy coaches are crucial to building teachers' self-confidence and positive collegial relationships (Toll, 2005). Moreover, literacy coaches may assist school leaders in making coaching plans for teacher development and conducting new initiatives, which may be helpful for enhancing school effectiveness (Neufeld & Roper, 2003; Shanklin, 2006). Studies about literacy coaches in Canada date back to the early 2000s, when the title of "lead literacy teachers" appeared in a report from the Ontario Ministry of Education called Early Reading Strategy: The Report of the Expert Panel on Early Reading in Ontario (Government of Ontario, 2003). According to Lynch and Ferguson (2010), studies about literacy coaches in Canada have been limited, although it is very important for school staff to understand the role of literacy coaches in Canada. In particular, there has been little holistic mapping of the development patterns of literacy coach research in Canada, which could facilitate further research in this regard. Therefore, it is essential to understand the current situation of the study of literacy coaches in Canada. This review investigated literacy coach research in Canada since 2000, based on the following research questions:

- How is the literature about literacy coaching distributed in terms of the kinds of articles that have been published in Canada (e.g., non-empirical, empirical, review) since 2000?
- What have been the topical foci of articles by scholars studying literacy coaching in Canada?
- What methodological preferences are evident in the scholarship on literacy coaching in Canada?
- What does the pattern of the citation impact of publications reveal about knowledge accumulation in Canada on literacy coaching?

This article will first describe the data sources included in the review. Then, the results of the analysis will be reported, starting with an explanation of the origin of literacy coaching in North America and alternative titles that have been used to refer to literacy coaches within the body of literature examined by this review. The names of the journals included in the review will be listed because their quality will be analyzed later. Then, the articles in the reviewed body of literature will be examined based on their publication year; their location; whether they are empirical, non-empirical, or a review; their focal topics; their research methodology; and their citation impact. This analysis will reveal patterns in the evolution of literacy coach scholarship in Canada. Finally, suggestions for future research about Canadian literacy coaches will be provided.

Data Sources and Analysis Method

To identify the literature to include in this review, a literature search was performed using all the terms that might refer to literacy coaches as key words combined with "Canada" and the name of each Canadian province and territory. This search located research articles, federal/provincial government documents, and program information

related to the topic of literacy coaching. The following terms have been used to refer to literacy coaches in the literature: literacy coach, literacy instruction coach, literacy lead teacher, lead reading teacher, reading coach, literacy specialist, literacy mentor, literacy leader, literacy facilitator, resource teacher, reading specialist, and literacy intervention/support teacher. After all the available sources about Canadian literacy coaches were collected, the final step was to delete articles describing studies that were not conducted in a Canadian context, since a few of the identified articles were written about literacy coaching in Australia and the United States rather than in Canada.

The literature analyzed in this article included all the available sources that were relevant to literacy coaching in Canadian contexts. The sources included peer-reviewed journal articles, book chapters, doctoral or master's theses, conference reports, program reports, online magazines, and information from non-government organizations. In total, 17 articles and 12 other sources related to literacy initiatives of various sorts were found.

In terms of empirical studies, 10 of the articles included in this study were published in various educational journals, including the Canadian Journal of Education, California Reading, Reading Horizons, the Alberta Journal of Educational Research, Antistasis, Teaching and Teacher Education, Orbit, the Journal of Research in Rural Education, Teaching Education, and the Canadian Journal of Educational Administration and Policy. Two sources describing empirical studies were chapters from two books: the 60th Yearbook of the Literacy Research Association and Literacy Teacher Educators: Preparing Teachers for a Changing World. One PhD thesis and two unpublished master's theses about Canadian literacy coaches were identified from the University of Toronto, the University of Windsor, and the University of Manitoba respectively. In addition, one article about studies conducted in New Brunswick in an online magazine published by the EdCan Network was identified, and a conference report about the family literacy program in Newfoundland and Labrador from October 2000 was found. Finally, alongside the above empirical literature, literature related to 12 literacy initiatives that were funded by either provincial governments or the federal government were included. Formal analysis was conducted based on the four research questions through constant comparative analysis. The coding was stated at the lower level. For instance, "Support educator" was initially coded as " C3," where the letter " C" represents the theme "Literacy coaches' roles and responsibilities" and the number "3" represents the specific "roles and responsibilities." This code was combined with other codes after comparison to form the theme called "roles and responsibilities." This was the coding process used in this review.

Findings

The Nature of the Studies on Literacy Coaching Reported in Articles Published in Canada

Informed by Hallinger and Chen's (2015) comparative analysis, articles identified in this review were classified as empirical research, non-empirical research, or reviews to scrutinize them more closely.

Empirical research has played a significant role in the Canadian literature pertaining to literacy coaches. Among the 17 identified articles, 14 articles were about empirical research; they all involved data collection and analysis, and interviews were the most

popular choice of data collection process. For example, Lynch and Ferguson (2010) interviewed a few literacy coaches working in Ontario elementary schools (at the primary, or K–3 level and the junior, or 4–6 level) and analyzed these literacy coaches' perceptions about their roles and accountability. This research was a typical empirical study. Moreover, Porter and AuCoin (2013) conducted a study in which resource teachers filled in a form concerning their daily activities such as working with instructors, making plans, classroom organization, and teacher conferences. One common feature of these studies was that their findings were connected with the results of surveys completed by participants.

Besides empirical research, reviews accounted for the rest of the literature. Three articles were identified as reviews. One was classified as a review because it offered five practical research-based tips for literacy coaches that were derived by synthesizing the published literature on literacy coaching in North America. However, this article summarized the findings of this literature generally and offered suggestions without referring specifically to the review data. One conference report and one program report were also classified as reviews. They both introduced how literacy coaches took on their roles in their respective programs. For example, the program report, which was about literacy coaches in Ontario, explored how teachers can assist students with learning difficulties and ways to motivate students in the classroom (Government of Ontario, 2003). This report presented a systematic review of literacy coaching for the early years. The review began with background information about reading development in Ontario, and then analyzed what an expert panel on early reading was able to do to improve instruction at school. This report is a classic document that many schools in Ontario use to guide their school organizations.

Given the fact that only 14 empirical research studies on literacy coaches were identified in the Canadian context since 2000, this small number of articles is not yet ready for comparative analysis. The fact that this review identified only one review-type article (plus two relevant reports), therefore, is understandable. Surprisingly, this review identified no non-empirical research articles on literacy coaches in Canada. This may be due to the fact that the position of literacy coach is rooted in the peer coaching model for professional development in North America instead of being studied using a theoretical framework.

Focal Topics of Research on Literacy Coaching in Canada

It is worthwhile examining literacy coaching as a research topic as this examination allows readers to see how this topic has evolved in Canada geographically and over time and what aspects of literacy coaching have attracted scholars' interest the most. Therefore, in addition to showing the general trend of focal topics, publication dates and locations were analyzed to understand more about the development of literacy coach scholarship in Canada.

Six focal topics were identified in the Canadian literature: literacy coaches' roles and responsibilities (36%), suggestions and tips for literacy coaches (21%), literacy coaches' education and training (15%), barriers and challenges that literacy coaches face (10%), literacy coaches' understanding and perceptions (10%), and literacy coaches' identity and relationships with other stakeholders (8%) (see Figure 3).

Literacy coaches' roles and responsibilities. Researchers have placed much of their attention on exploring literacy coaches' roles and responsibilities (Ferguson, 2013; Luu, 2020). All the Canadian literature has regarded literacy coaches as guides and supporters in the classroom. To be specific, scholars have agreed that taking on the literacy coach role means assisting teachers with instructional strategies, professional development, and resource management in order to improve students' literacy development (Ferguson, 2013). Literacy coaches undertake many activities to accomplish their tasks. As a guide, a literacy coach may offer directions for classroom instruction and lead the teaching community. As a supporter, a literacy coach is able to offer content knowledge and student information that may be beneficial for both school administrators and instructors. However, there are still some debates about literacy coaches' roles and responsibilities. Seven out of 17 articles mentioned that Canadian literacy coaches suffer from role confusion. In other words, literacy coaches are not aware of what they are expected to do to help teachers (Porter & AuCoin, 2013). In addition, three articles or program documents maintained that there should be goals and expectations for literacy coaches. The literacy coaches' roles and responsibilities should be connected with such expectations, but, in the Canadian school system, the expectations and goals are not very clear for literacy coaches. Luu (2020) claimed that instructional coaches are not fully prepared for their roles and responsibilities in their daily work, although literacy coaches support educators on many levels such as facilitating professional learning, providing resources, collaborating on school improvement planning, and giving training to other colleagues. In this line of research, it will be meaningful to further explore the antecedents of role ambiguity and its effects and also specify the leadership and coaching practices used by literacy coaches in the Canadian school context.

Barriers and challenges that literacy coaches face. The challenges and barriers facing literacy coaches in Canada have been another focus in the literature. These difficulties may be caused by poor management within a school system. In addition to literacy coaches' main outlined responsibilities, researchers have observed that literacy coaches may also have to perform organizational tasks at the school level (Ferguson, 2013) and other undefined duties (Manitoba Education and Advanced Learning, 2014). As a result, research interest has focused on the challenges and barriers that literacy coaches face, such as role ambiguity, teacher resistance, limited principal involvement (Lynch & Ferguson, 2010), communication issues (Luu, 2020), time allocation issues (Porter & AuCoin, 2013), and inadequate training (Society for the Advancement of Excellence in Education, 2009). Among these barriers and challenges, the time allocation issue may be the most obvious one. Eight articles and program documents argued that it is very time-consuming to be a literacy coach in Canada. Literacy coaches are expected to do a great number of tasks within a limited time. Some literacy coaches believe that they have too many schools to serve during a single time period, and that this has caused these literacy coaches to lack the preparation time necessary to support teachers. Furthermore, seven studies and program documents concluded that the changes that literacy coaches may face are likely to be challenging for them (Bartlett, 2017; Canadian Institute of Reading Recovery, 2018; Ferguson, 2013; Fougere, 2014; Hibbert et al., 2008; Jamieson, 2009; Kelly & Cherkowski, 2015). There were also some other

challenges and barriers for literacy coaches in Canada that were only mentioned by a single article, including low income, reduced achievement, limited resource materials, and principals' poor administrative ability. Future research might focus on the effects of these challenges and administrative strategies to cope with them in order to improve the effectiveness of literacy coaches.

Improvement of literacy coaches' performance. As for how to improve literacy coaches' performance, scholars have concentrated on the effectiveness of the coaching model and collaboration. About 70% of the Canadian literature about literacy coaches (19 articles and program documents) mentioned that a coaching model for both literacy coaches and instructors is essential to enhance the efficiency of coaching activities. In addition, 12 studies argued that literacy coaches should collaborate with their colleagues, such as school mentors and principals, and some of this literature also recommended student collaboration in the classroom (Bartlett, 2017; Canadian Institute of Reading Recovery, 2018; Ferguson, 2011; Ferguson, 2013; Ferguson, 2014a; Fougere, 2014; Hibbert et al., 2008; Kelly & Cherbowski, 2015; Lynch & Alsop, 2007; Lynch & Ferguson, 2010; Manitoba Education and Advanced Learning, 2014; Moar, 2000). Only through collaboration can literacy coaches work more effectively. The forms of collaboration varied from school to school. Examples included establishing professional learning communities and building up turnaround teams. A turnaround team may consist of the literacy coach, the principals, the instructors, and other school administrators, but a learning community may also include students, so that the literacy coach and students are able to learn from each other. Further research on the roles of literacy coaches in the school turnaround process and administrative strategies to improve effectiveness are required.

Literacy coaches' understanding and perceptions. Scholars have also explored literacy coaches' understanding and perceptions about the process of becoming a literacy coach. These perceptions are also related to the barriers and challenges literacy coaches face. Literacy coaches may feel uncomfortable about their power and their role as change agents, and they may experience teacher resistance. Five studies mentioned that a literacy coach may experience teacher resistance, and four out of these five articles argued that literacy coaches were very uncomfortable about the top-down structure in the school system (Ferguson, 2014b; Fougere, 2014; Hibbert et al., 2008; Kelly & Cherbowski, 2015). In other words, these literacy coaches felt that school administrators who wanted to control the literacy coaches in their schools instead of assisting them had too much power. The remaining article regarded the change that literacy coaches need to champion as the reason for teacher resistance. This line of research has lacked sufficient exploration of the effects of these perceptions through quantitative or qualitative research. Other topics such as the well-being of literacy coaches, who are affected by school conditions, need to be further explored.

Literacy coaches' relationship with other stakeholders. Literacy coaches' relationships with other stakeholders are connected with literacy coaches' roles and responsibilities. These relationships are of vital importance for school management, but

the literature has not described a specific, widely accepted type of relationship between the literacy coach and other school staff. The most commonly described relationship has been a collaborative relationship. This review identified seven studies that explored the relationship between literacy coaches and other school staff (Ferguson, 2011; Fougere, 2014; Hibbert et al., 2008; Kelly, 2015; Lynch & Alsop, 2007; Lynch & Ferguson, 2010; Manitoba Education and Advanced Learning, 2014). In all of these articles, literacy coaches were considered the colleagues of other teachers. In one article, Ferguson (2011) described the relationship between literacy coaches and teachers as very informal and personal (like friends); she also believed that literacy coaches and principals worked as a team, which meant that their relationship was reciprocal and based on trust. However, this article was the only one that argued that literacy coaches and school managers had a great relationship. The other six studies mentioned that the school manager, such as the principal, was a controller rather than a partner. In these schools, the problem of hierarchy was very serious, and the literacy coaches did not have faith in their principals (Hibbert et al., 2008; Kelly & Cherbowski, 2015; Lynch & Alsop, 2007; Lynch & Ferguson, 2010; Manitoba Education and Advanced Learning, 2014). These results show that many literacy coaches in Canada are not satisfied with their school management, and these literacy coaches may actually have terrible relationships with their school administrators. Further research on the relationship between coaches and teachers from leaders' and followers' perspectives would contribute to the understanding of this sophisticated relationship, and the effects and antecedents of this relationship need to be further explored.

There were some other notable characteristics featured in the literature. For example, the topic of the roles and responsibilities of literacy coaches appeared from 2000 to 2018, covering much of the time period that was examined in this review. This topic also attracted attention from the largest number of provinces and territories (Ontario, Newfoundland and Labrador, News Brunswick, Nuvanut, PEI, Alberta, Manitoba, Yukon, BC, and Nova Scotia), many of which did not explore other topics. In general, regardless of time and location, scholars in Canada showed the highest level of interest in the topic of literacy coaches' roles and responsibilities. Suggestions and tips for literacy coaches made up the second most popular topic over time and in various locations across Canada. Research interest in the topic of literacy coaches' identity and relationships has steadily grown since 2011, but these studies have been conducted only in Ontario. Another trend is that most topics studied in the Canadian literacy coach literature have been related to literacy coaches' ultimate objectives, one of which is to achieve better student learning outcomes. Overall, although the focal topics have been classified into six types in this article, the topics have been interrelated and have not reached a wide scope.

Research Methods Used in the Canadian Literature

Analyzing research methods is another way to examine how knowledge production has been constructed in the field of literacy coaching. In this review, methodologies within the empirical research studies were classified as quantitative, qualitative, or action research. The application of these research methodologies in the literature is further explored below.

Qualitative research methods have played a dominant role in the literature about literacy coaches in Canada. Scholars used a qualitative method in 10 out of the 14 (71%) empirical studies examined in this review, and interviews were the most popular way to collect data. For instance, Fougere's (2014) study analyzed the relationship between coaches and coachees using sociocultural theory as a theoretical framework, and so a qualitative research method was the most suitable for getting to know stories about literacy coaches' instructional lives. It is noteworthy that most researchers have preferred a qualitative research method while studying Canadian literacy coaches for similar reasons. Through interviews, scholars have been able to understand the current situation of literacy coaches in the Canadian context. In addition, qualitative methods are essential in the grounded theory analysis process after learning about literacy coaches' experiences at school. Another example of this research methodology is Lynch and Ferguson's (2010) study, which collected data from literacy coaches who worked in an urban school in Ontario through interviews. In addition, Rowsell et al. (2008) interviewed and observed literacy coaches for about two years. While most of these qualitative studies used semi-structured interviews, it is noteworthy that Fougere (2014) attempted to use a novel analytical method called Interpretative Phenomenological Analysis (IPA) to analyze data. This method aims to understand the psychological world via individual experience. Fougere (2014)'s study was the only one to use IPA to analyze data. Thus, in comparison with other studies regarding Canadian literacy coaches, Fougeres' (2014) findings are original.

Action research, a form of mixed method research, was used three times among the 14 articles (21%). By contrast, scholars expressed little interest in employing quantitative methodology while exploring the topic of literacy coaching in a Canadian context; it only appeared once in the literature (7%). Conversely, case study was popular as a qualitative methodology, making up 29% of all methodologies. The researchers enjoyed using interviews to collect data, and some researchers also used classroom observation. Based on this review, the qualitative research method has been the dominant one in Canadian literacy coach research. Quantitative research has the potential to deepen understanding of the effectiveness of literacy coaches. For instance, it could pinpoint the extent to which the leadership practices of literacy coaches can affect teachers' teaching practices and other variables relevant to teacher motivation and teacher emotions.

Citation Impact of Relevant Publications in Canada

Scholars have done a great deal of research about literacy coaches in Canada, but the influence of the various articles and research papers they have produced has been quite varied. This can be seen from the number of citations of each document. Some unpublished papers may have had limited influence due to the limited number of times these papers have been cited.

The impact factors of the journals included in this review could differ vastly as the articles in this review were not selected from predetermined journals at the outset of the study. Out of all the journals in which literature for this review was found, the Canadian Journal of Education and the Alberta Journal of Educational Research ranked fifth and ninth respectively among journals on education in Canada in 2018 (Scimago Institution Ranking, 2018). More findings associated with citation impact were obtained from the

software program Publish or Perish, which retrieves and analyzes academic citations using Google Scholar as a database for raw citations and presents metrics such as citations per year, h-index value for journals, and the total citation numbers for individual articles (Harzing, 2007). The number of citations per year for the 10 journals in this review ranged from 1.65 for California Reading to 6,620.53 for Teaching and Teacher Education. These journals represented vastly different academic impacts from the perspective of evaluating a journal's quality through the number of citations it receives. Another method of evaluating journals, the h-index, offers a combined evaluation of journal quantity and quality. Teaching and Teacher Education, with an h-index of 239, could be considered an exceptional journal and made up 41% of the total h-index value yielded by all 10 journals in this review. (See Figure 4.)

In total the articles in this review yielded 343 citation counts with a range from 0 to 96 citations per article and a mean of 20.1 citations per article. Four articles had not been cited, namely Moar's (2000) unpublished master's thesis, Drake and Anonsen's (2000) conference report, Bartlett's (2017) article, and Porter and AuCoin's (2013) article that was published online. Conversely, Rowsell et al.'s (2008) and Lynch and Ferguson's (2010) articles had been cited 96 times and 66 times respectively, making up approximately half of the total citations received. As reported in the previous section, researchers' favorite topics regarding literacy coaching in Canada were the roles and responsibilities of literacy coaches and suggestions for assisting literacy coaches in Canada. The two articles mentioned above that had obtained about half the total number of citations were about approaches to teacher education for literacy coaching and the roles of literacy coaches. Thus, their citation impact was positively related to their topics. Furthermore, these two articles utilized a qualitative research method involving interviews. Previous research showed that a qualitative research method was preferred by most of the researchers conducting studies about Canadian literacy coaches, so these articles' citation impacts may also have been influenced by their methodology. As a limited number of journals and articles accounted for a large proportion of the total h-index value and citation numbers in the literature on literacy coaching in Canada, it is safe to conclude that this literature, as a whole, has had a limited impact on scholarship.

Discussion and Conclusion

This analytical review strived to ascertain the developmental patterns in the literature on literacy coaching in Canada so as to develop a better understanding of how such knowledge production has been generated and how it has been distributed in terms of time and location across Canada. For the purpose of achieving this goal, 17 articles and documents related to 12 programs were identified and analyzed. In addition to offering a synthesis of the findings, in this section, the limitations of this study and its implications for future research will be discussed.

It can be concluded from the literature that research on literacy coaching in Canada has not yet reached a mature developmental stage; a limited number of related research topics have been investigated in Canada compared with the United States, and the overall research productivity has been relatively low. This assertion is also evidenced by the fact that the literature has developed a limited number of themes; only six topics have been consistently examined in the literature. Among these topics, the roles and missions of

Canadian literacy coaches as well as advice for helping literacy coaches were the focus of more than half of the identified literature, which indicates that the research area of literacy coaching in Canada remains very narrow. The Canadian literature has confirmed that role ambiguity is a common problem for literacy coaches across countries, but further research on the solutions to role ambiguity is in demand.

The Canadian literature also confirmed that lack of administrative support is a challenge faced by literacy coaches (Gross, 2012). Canadian research has expanded the understanding of the challenges literacy coaches face, which include time allocation, communication, limited resources, and principals' lack of ability. The challenge of time allocation means that Canadian literacy coaches lack sufficient time to conduct their work. Communication issues mainly refer to the clear passing of information to different stakeholders in the school organization. Clarity in communication will contribute to the effectiveness of literacy coaches' work. Furthermore, principals are some of the key people who can affect the work of literacy coaches because, as informal leaders, literacy coaches need support from principals to fulfil their responsibilities. Therefore, insufficient support and lack of ability on the part of school principals will affect the work of literacy coaches.

This study also identified that effective collaboration is vital for the success of literacy coaches. This is because literacy coaches need support from colleagues within their school community to provide effective coaching and leadership. This finding has been confirmed by international literature like Selvaggi (2016). Further research on how collaboration is structured and used in the work of literacy coaches needs further exploration.

Similar to the international literature, there has been no universal definition of a literacy coach in the Canadian literature. Researchers in Canada have often defined literacy coaches' roles from different perspectives, among which support for reading ability has been the most popular one. Literacy coaches also have gone by different titles in a number of Canadian articles and documents, which may cause confusion for future studies. Role ambiguity has been one focus in Canadian studies, which have aligned with international studies. Further research on the antecedent of role ambiguity and solutions to role ambiguity is highly needed for resolving practical problems in education.

The relationship between coaches and other stakeholders is an important issue in the Canadian context, as it is in the international literature. However, further exploration of how these relationships are built, developed, and used in educational practice will contribute the field, especially from comparative perspective across countries.

Knowledge production has been distributed unevenly: a majority of the articles and related programs examined in this study have been concentrated in Ontario, and no articles published before 2000 were identified. A reason for the lack of pre-2000 literature may be that literacy coaching is a new job in Canada, so it was not familiar to a wide range of Canadian researchers before 2000. The concentration of research in Ontario may be attributable to the fact that there are more students and post-secondary institutions in Ontario than in any other province in Canada, and therefore there is likely to be more researchers in Ontario. It is easier for these researchers to conduct research using face-to-face interactions and classroom observation in Ontario. Furthermore, many studies have centered on literacy coaches in elementary and secondary schools in Ontario, but very little research has been conducted in adult education or at the post-secondary level. Still, Weir,

and Goldblatt's (2007) introductory article about an adult literacy tutor in Alberta was one example of a study about literacy coaching in adult education. However, this article was just an introduction to a program rather than a research paper. Therefore, there has been a serious shortage of analysis about literacy coaching in the Canadian adult education context.

The uneven development of scholarship on Canadian literacy coaching has been manifested in the phenomenon of researchers showing a strong preference for both empirical studies over non-empirical or review studies and qualitative methodologies over quantitative or mixed-method methodologies. Empirical studies and qualitative research methods have dominated the literature about Canadian literacy coaching. This methodological preference can also be seen in the number of citations in the literature. Citation impact showed the uneven development of this body of literature; a few articles accounted for around half of the total citations, and the quality of the journals varied vastly. Moreover, citation impact was positively associated with the research methods used in the articles. Qualitative methodology dominated in the citation impact of the literature on literacy coaching in Canada.

Most of the research on Canadian literacy coaching has been based on data collected from practice in schools and classrooms. Certain scholars have studied the new topic of literacy coaches' identity and relationships using a theoretical framework. However, these theoretical studies remain in an immature phase. That being said, these studies that have explored literacy coaching in Canada using a theoretical approach have offered a new direction for literacy coach research.

The major limitations of this review arose from its incapacity to include literature written and disseminated in French. Given the fact that Canada is an officially bilingual country, the French literature has constituted an important part of its knowledge production on literacy coaching. In the province of Quebec, French is used more widely than English.

Suggestions for Future Research

It is obvious that the literature on literacy coaching in Canada displays an overall characteristic of sparse production. Firstly, the number of articles in this area has been low across Canada; only 17 articles and 12 program documents were identified in this review, which is low even if some articles may have been neglected due to this study's limitations. This review shows that there is an urgent need for conducting more studies related to literacy coaching in a Canadian context to obtain a richer understanding of this subject area. Furthermore, the focus of future studies on literacy coaching could move from the literacy coach's roles and duties to other topics so that a more comprehensive understanding of literacy coaching could be obtained. This would be beneficial not only for educators but also for students in Canada. Secondly, researchers have placed more emphasis on studies in the Ontario context, resulting in an uneven development pattern of knowledge production in Canada. This has especially been the case in Saskatchewan, where this review identified no studies. Therefore, there is an urgent need for more studies to be conducted in Canadian places other than Ontario. In addition, since the education system in Canada varies across different provinces and territories, a comparative study of literacy coaching in Ontario and in other parts of Canada might be helpful for those who do not understand literacy coaching in Canada. Moreover, adopting a quantitative

methodology would be beneficial for adding layers to the existing knowledge base. Previous studies have included a lot of classroom observation and interaction research, and a different method might find some hidden facts about Canadian literacy coaches.

Finally, there should be a universal standard for both the typology of literacy coaches and the instructional coaching model (i.e., a universal definition of the role of a literacy coach). This standard is of very great importance for future research. The definition of literacy coaching should not concentrate only on reading but also on other aspects of literacy coaches' work that could serve as research areas. Previous researchers have done a lot of analysis of the existing literature using the titles "reading coach" and "reading specialist." Other types of literacy coaches who go by other titles are also worth exploring. In terms of the coaching model, researchers have noticed the functions of the model, but analyzing the model using a standard definition of literacy coaching could yield a deeper analysis. Such a standard might point to a direction for how to design and use the instructional model in the classroom.

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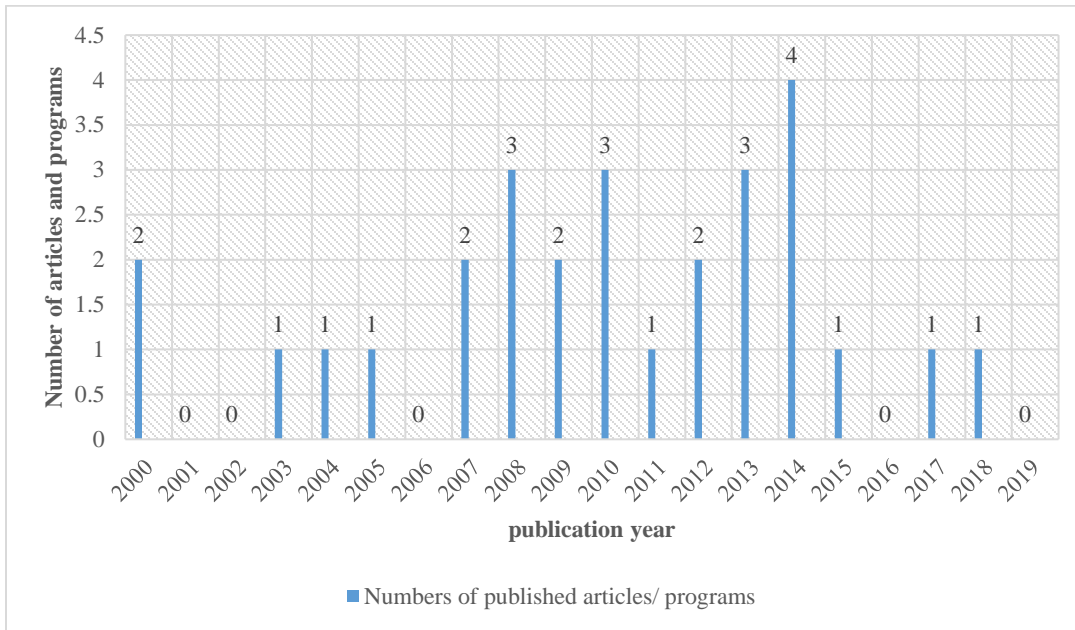
Figure 1. Number of Disseminated Articles and Program Documents on the Topic of Literacy Coaching since 2000 in Canada
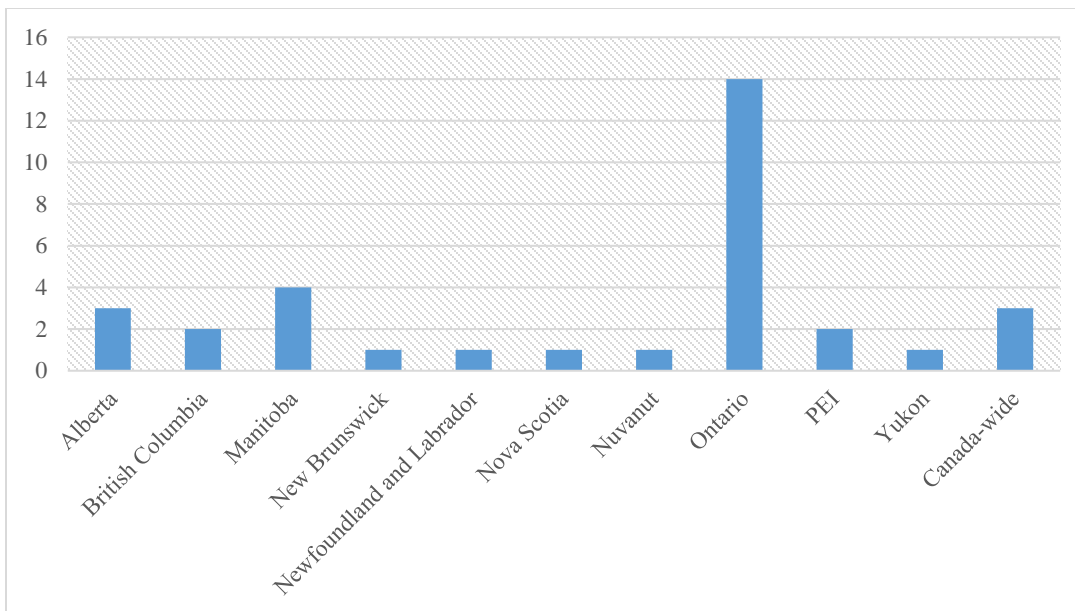

Figure 2. Number of Disseminated Articles and Program Documents on the Topic of Literacy Coaching by Province and Territory in Canada
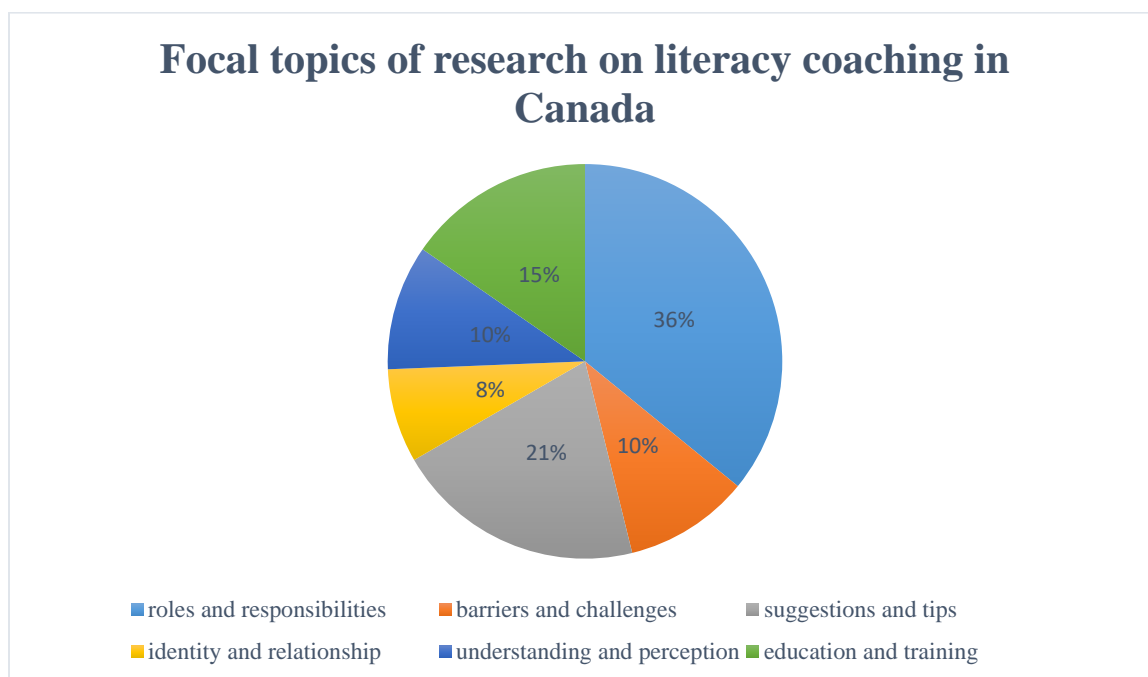
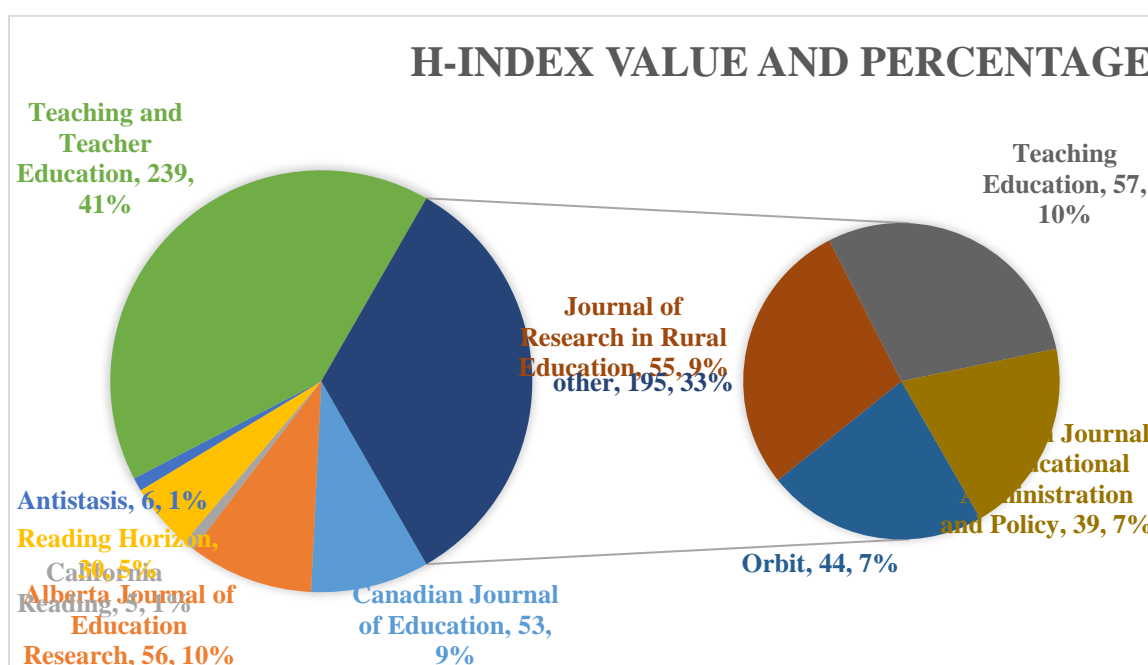**Figure 3.** Focal Topics of Research on Literacy Coaching in Canada

Figure 4. The Journals' H-index and Their Percentage of the Total H-index of All Journals

Silly Putty: Mobilization of the Known Across Technology-Enhanced Learning Spaces

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Abstract

In technology-enhanced classrooms, due to the affordances of technologies, English Language Learners (ELLs) are moving between learning spaces; boundaries are never clear. Questions arise with regards to how students' non-sanctioned experiences might mediate classroom learning. Using a multiliteracies (New London Group, 2000) and learning by design (Cope & Kalantzis, 2015) theoretical lens, this ethnographic case study explores the technology-enhanced learning experiences of Grade 6 ELLs. Data including field observations, artifacts, and interviews were analyzed using thematic analysis (Saldaña, 2016). Findings of this study indicate that ELL students were engaged in learning experiences that encouraged them to mobilize their *known* (knowledge) across learning spaces.

Introduction

Digital technologies are ubiquitous in contemporary times, particularly during a time of pandemic and post-pandemic realities. North Americans are bombarded by the constant flow of new technologies emerging on a regular basis. From smart phones to new internet applications, changes in computer operating systems. voice-controlled devices, social interaction and the ways of communication are changing. Scholars recognize and argue that technology continues to change over time and as result of these changes there are many affordances that become available for meaning making, both in the classroom and beyond (Abrams & Russo, 2015; Lotherington & Paige, 2017). Prior literature has noted how students (both English Language Learners (ELLs) and non-ELLs) have continued to use technology outside of the classroom (Abrams, 2016; Black, 2008; Ito et al, 2013; Jenkins et al, 2016; Lam, 2000; Lam, 2009; Lam & Warriner, 2012; Lange, 2014; Yi, 2009) for a variety of purposes (e.g., communicating with transnational peers, writing fan fiction, etc.). However, questions are still prevalent with regards to the implications of technology in a K-12 ELL classroom, more specifically an elementary context. Although technology has also become a part of the classroom context where students (ELL or not) are using SMART boards, iPads, computers and hand-held devices to engage in meaning making, there is still a research gap with regards to our understanding of the reality of technology usage in the classroom. In particular, there is a knowledge gap with regards to the learning experiences that occur in Kindergarten to Grade 12 (K-12) ELL technology-enhanced classroom environments.

Although digital technology is prominent in these technology-enhanced environments, traditional means of meaning making are still available (e.g., paper and pencil). In these environments, students are provided with more options to engage in their meaning making including both digital and non-digital tools. One of the affordances of digital technologies is that it enables students to move between a variety of learning spaces (digital or not); the boundaries between these learning spaces are never clearly defined. Therefore, students are not confined to the physical walls of a classroom but rather they can mobilize knowledge and themselves across learning spaces. This mobilization of knowledge and people across learning spaces means that informal learning experiences can potentially mediate school-sanctioned learning.

The following article examines the learning experiences of grade 6 ELL students in a technology-enhanced classroom and focuses on one illustrative example, Silly Putty, which is taken from a larger ethnographic case study. Silly Putty, used as the illustrative example here, is also a toy that has unique physical properties (e.g., it bounces, it can flow). In this illustrative example, I argue that the learning experiences and the affordances of this technology-enhanced classroom invited ELL students to mobilize their knowledge across learning spaces, their *known,* into the classroom. Their *known* includes their own knowledge and the knowledge of experts outside of the classroom (family members and online experts) as well as knowing when it is appropriate to use which communicative repertoires (Rymes, 2012) (e.g., what register to use in the classroom or emailing a friend).

This paper is organized as follows: 1) a detailed discussion of the literature will be presented in the following areas: learning spaces, multiliteracies, learning by design, and the *known*; 2) a description of the research question, research context, research data and data analysis; 3) the illustrative example, Silly Putty, a rich school-sanctioned learning experience is explored; 4) a discussion of the findings and implications for future research and instructional practice; 5) concluding remarks. In the next section, I will discuss the literature starting with conceptualizing a learning space.

Learning Spaces

The concept of learning spaces (Compton-Lilly, 2014; Gee, 2004; Erstad et al., 2016; Lemke, 2004; Sheehy & Leander, 2004) is not a new one. Prior literature has documented that scholars have explored the movement of people, notions, and practices between various learning spaces. Digital technologies have changed the concept of learning spaces. Learning spaces can occur virtually and within other physical spaces, therefore learning spaces can also be abstract and move. It is suggested that there are no clear boundaries as people, notions and practices move between a variety of informal learning spaces (Erstad et al., 2016). Although scholars have addressed learning spaces in a variety of ways (e.g., World of Warcraft, online chatrooms, etc.), many are unable to fully address the complexities of learning spaces and the implications that they might have in a classroom. In a technology-enhanced classroom, learning spaces are constantly changing and are not static; technology has provided additional affordances for this to happen. Students are not restricted to physical learning space but are able to move between the seemingly invisible borders to other learning spaces (both virtual and physical).

I make a distinction between school-sanctioned and interstitial learning spaces (Wong, 2019, 2020). Learning spaces that are institutionally bound are school-sanctioned

learning spaces. In these spaces, one would conventionally see "school-based activities" occurring, such as completing a science worksheet or creating a PowerPoint presentation to show one's understanding of a mathematical concept. However, traditional pencil and paper activities are not necessarily the activities that occur in digitally mediated learning spaces; rather these activities have evolved due to the affordances of various electronic technologies. Interstitial learning spaces are those spaces that include hallways, the back of the classroom, and outside of school spaces that are not necessarily institutionally bound. These are often where "unofficial" learning occurs. All of these spaces can be virtual or physical. The boundaries are often invisible or unclear between various learning spaces with movement that may occur seamlessly. I argue that both school-sanctioned and interstitial learning spaces help to enhance our understandings of the learning experiences that occur in technology-enhanced classrooms, particularly in how knowledge can be mobilized across learning spaces within and across the physical walls of a classroom.

Multiliteracies, Learning by Design and the Known

In the New London Group's (1996) seminal article, where they coined the term 'multiliteracies', the authors argued that in the contemporary context, in response to changing global and communicative landscapes, a new approach to literacy pedagogy was required. These landscapes are characterized by social, linguistic, and cultural (as well as sub-cultural) diversity and multimodal (e.g., visual and linguistic) communications associated with multimedia and information technologies. The latter, they argued, relates closely back to the former, as it supports and extends cultural and sub-cultural diversity. In this context, they stated that "the languages needed to make meaning are radically changing in three realms of our existence: working lives, public lives (citizenship) and private lives (lifeworld)" (p. 65). The New London Group defined lifeworld as "spaces for community life where local and specific meanings can be made" (p. 70). Increasingly included amongst these community lifeworlds (home, professional school, interest, affiliation) (Cope & Kalantziz, 2009), are the interstitial learning spaces where K-12 students engage in meaning making such as fan fiction websites (Black, 2008), Minecraft, (Abrams, 2016), online chatrooms (Lam, 2004) and World of Warcraft (Nardi, 2019). In lifeworlds such as these, students are producers, as well as consumers, of multimodal texts, using different digital tools and platforms. However, lifeworlds are not limited to digital spaces and include the many different interstitial learning spaces (e.g. within their home or religious community) where K-12 students engage in meaning making. Such lifeworld experiences are often rich and engaging for K-12 students.

In their discussion, the New London Group (1996) acknowledged the significance of lifeworld practices and addressed what schools can do. They argued that schools have always played a critical role in determining students' life opportunities. Therefore, they indicated that in order for learning to be relevant, the learning processes that are used need to "recruit" rather than erase or ignore the different subjectivities. The New London Group defined different subjectivities as interests, intentions, commitments and purposes that students bring to the classroom. Here, the New London Group also indicated that these different subjectivities needed to mesh with curriculum and with the "attendant languages, discourses and registers, and use these as resources for learning" (p. 72). It is further argued that this is necessary for a pedagogy that opens the potential for greater access. Hence,

schools need to incorporate opportunities for students to bring in [recruit and mobilize] their multiple lifeworld knowledge and experiences (practices), and their different subjectivities. Therefore, the *known* has the potential to impact the learning that occurs in another learning space, whether school-sanctioned or not. This *known* is unique to each child; it is individual and shaped by the multiple community lifeworld experiences an individual might have. Due to the affordances of digital technologies, entry to different cultures and sub-cultures is more accessible and the traditional *known* that teachers are familiar with is likely to have changed. Students are now bringing in *known* that could potentially include lifeworld experiences in digital learning spaces. For example, students are engaging in Minecraft in out-of-school contexts (Abrams, 2016) and as a result the skill of using pixelated blocks to construct buildings can be mobilized into a school-sanctioned learning space to complete assignments (Petrov, 2014).

The following study incorporates a Learning by Design (Cope & Kalantzis, 2015) theoretical lens to better understand the student learning experiences in this technology-enhanced classroom but more specifically how students potentially mobilize knowledge (part of their *known*) across learning spaces into a school-sanctioned one. Cope and Kalantzis (2009, 2015) extend on the work theorized by the New London Group (1996, 2000) by expanding and building on the "how" of multiliteracies. They emphasize that the multiliteracies approach is comprised of processes of teaching and learning that go back and forth, between and across, various knowledge processes and pedagogical moves. Building on the four components of the multiliteracies pedagogies as articulated by the New London Group (1996, 2000), Cope and Kalantzis (2009; 2015) have extended the notions of situated practice (*experiencing*), overt instruction (*conceptualizing)*, critical framing (*analyzing)*, and transformed practices *(applying)*. As they apply these notions to curriculum practices (the "how" of multiliteracies), they translate these notions into what they term knowledge processes. Knowledge processes are activities an individual does in order to know (Cope & Kalantzis, 2015; Kalantzis & Cope, 2020). However, they also argue that no matter what terms are used to categorize learning activity types, the crucial idea in a multiliteracies and learning by design approach is that learning involves this notion of "weaving" across different pedagogical moves.

Cope and Kalantzis (2015) argue that "pedagogy is the design of learning activity sequences. Two questions arise in the process of pedagogical design: which activities to use and in what order?" (p. 17). They add that the concept of learning by design is a classification of activity types. For the purposes of this study, such a classification is a very helpful conceptual framework, especially when examining and analyzing the learning experiences in a technology-enhanced classroom. I refer to these knowledge processes (*experiencing, applying, conceptualising,* and *analyzing)* to better understand the related activity types activated in my research site. Below is a table that summarizes the knowledge processes (Table 1).

Table 1

Knowledge Processes (Cope & Kalantzis, 2015)

Knowledge Processes	Definition
Experiencing the Known	Incorporating opportunities for students to draw on their previous experiences or the "familiar."
Experiencing the New	Introducing a learner to a topic that is less familiar. Learning occurs with these activity types when it is scaffolded.
Conceptualizing by Naming	Defining and learning to use abstract and generalized terms. This activity type also includes categorizing similar and differences and labeling a diagram.
Conceptualizing by Theory	Asking a learner to link the concept name into the language of generalization (e.g., concept maps, putting concepts together, drawing a diagram).
Analyzing Functionally	When a learner is reasoning, drawing inferential and deductive conclusions, establishing cause and effect.
Analyzing Critically	When a learner critically considers human interests and intentions- their own and other people's (e.g., identify the gaps).
Applying Appropriately	When a learner applies knowledge in the "usual" way to see whether it works in a predictable way in a conventional context. (e.g., solving a math problem)
Applying Creatively	Using knowledge you have learned and applying it into another context.

Exploring the knowledge processes activated by students will help to better understand how knowledge is mobilized across learning spaces in this classroom. In the remaining sections of this article, I will be discussing the illustrative example, Silly Putty, illuminating the knowledge processes activated by students.

Research Method

Research Questions

The following research question will be addressed in this article:

1.   In what ways do learners mobilize knowledge (a part of their *known*) across learning spaces?

I will elaborate on the answers to this research question for the remainder of this article.

Context

The following illustrative example, Silly Putty, has been chosen to provide the reader with a better understanding of the learning experiences that occurred in this technology-enhanced classroom. Duff (2012) argues that the real business of case study

research is the notion of "particularization" and not generalization. It is about choosing a particular phenomenon or case and getting to know it well (Stake, 1995).

This illustrative example, Silly Putty, was taken from a larger ethnographic case study (Duff, 2008; Heath & Street, 2008) which investigated the learning experiences of grade six ELL students in a technology-enhanced classroom. The study was conducted in a Western Canadian middle school which had a linguistically and ethnically diverse population. For the majority of the students in this school, English was not their first language. The ELL students in this classroom had intermediate to advance English language proficiencies according to school district and provincial assessments. At Cypress Hills (pseudonym) school, I recruited five teachers and twenty-five students in one classroom. All of the names used in this paper are pseudonyms selected by the participants which reflect their identities/interests. In this paper, I focus on three students, Eddy Teddy, rainbow unicorn, and Starfire (pseudonyms) and one teacher, Miss Green (pseudonym).

Cypress Hills school was a technology-rich environment. The school and school district invested in multiple digital technologies including, but not limited to, SMART boards (interactive white boards), iPads, and Apple computers. In this technology-enhanced classroom students incorporated digital and non-digital tools as part of their daily meaning making processes (e.g., using iMovie to create videos to demonstrate their understanding of local government, using Scratch to program and show their understanding of geometrical shapes, etc.).

Data

Data collection occurred between January 2015 to June 2015. In this paper, I will only elaborate on the data that was used for this illustrative example. However, the larger study included a number of data collection strategies. Decisions with regards to data collected were made based on the age of the participants. My data for this article consisted of field observation, artifact collection (visual artifacts, email exchanges) and informal and formal interviews (which were transcribed and analyzed). Analytic memos were kept during the entire process. Saldaña (2016) described these memos as "potential sites in which rich analysis may occur" (p. 45).

Data Analysis

Once data reduction had been completed, data (including transcribed interview transcripts, visual artifacts and textual artifacts) was analyzed using thematic analytic techniques (Saldaña, 2016). I used deductive analysis and coded the data using the "knowledge processes" (Cope & Kalantzis, 2015). I also used inductive analysis and coded the data to identify salient themes.

Introducing Silly Putty

The following sections contains excerpts from my researcher journal and field notes. The intent is to provide the reader with a better understanding of the social context as well as the illustrative example, Silly Putty.

On an early February afternoon, February 10th to be exact, the students were gathered in Miss Green's room for their business elective class. Although this was in the initial stages of my data collection period, I was already familiar with many of the routines

in this class. The grade 6 students from all of the classes had daily option blocks. There were many option choices including Foods, Construction, Photography, Robotics, Pottery, and Digital Literacy. All students were required to take one Physical Education class yearly. The school ran in a semester system with regards to the options. During my time at the school, the students changed their options once and this occurred in early March.

Today when I entered the classroom after visiting the Pottery option class, I found the groups hard at work on their business project. Each group of students were required to create a product, advertise it and sell it. As I entered the classroom, Eddy Teddy, rainbow unicorn and Starfire eagerly invited me to join their group. It was during this conversation that I was introduced to Silly Putty.

To better understand the project the students were working on in this business class, I had a conversation with Miss Green (the teacher). During this conversation she presented me with the assignment directions (see Figure 1 for a sample page from the multiple page assignment directions). I learned that Miss Green expected her students to come up with a product, market it, and then sell it. She provided the students with clear guidelines about the assignment expectations, including instructions to create a logo, have a name for your business, and create an information poster and website. She also wanted the students to reflect on how they were working together as a group and how they were performing as a business (e.g., How can we increase sales?). Miss Green provided students with opportunities to apply curricular concepts to a specific context (*applying creatively)*. However, Miss Green also provided opportunities for *experiencing* by targeting such knowledge processes as *experiencing the new*. Creating a business product and selling it was not a foreign concept to these students; however, many of them had never done it before. Therefore, before this assignment, Miss Green explained the concept of creating a business product through a variety of mini-lessons and pre-assignments. Miss Green encouraged her students to engage in *conceptualizing by naming*. She scaffolded the learning by teaching the students vocabulary such as 'product', 'selling', 'marketing', and 'mark up.' As I have already mentioned, ELL students in this class were at intermediate and advance language proficiency levels. According to school assessments, these students were working on building their academic language and subject-specific vocabulary (e.g., such as business vocabulary). It is suggested that when Miss Green had her students' engaging in *conceptualizing by naming,* she was addressing their English language proficiency levels. Miss Green also provided clear guiding questions in her assignment, such as—What does your business sell or do? What prices will you charge? These questions appeared to help to scaffold and support students' learning and also kept students on track as they figured out their business products and plans. By scaffolding the language and providing guiding questions, Miss Green encouraged her learners to gain explicit information and also engage in guided practice (The New London Group, 2000).

Gr. 6 Entrepreneurship – Our Business Plan

Group members (3 – 5 students): _____

1. Business name: _____

2. Business logo (make sure it "shows" what kind of business it is):

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3. What does our business **sell** or **do**?

4. Who will our customers be?

5. How much will we need for **start-up costs**? What **materials** do you need to start your business? Where should Ms. Green buy these materials?

Figure 1. Miss Green's Assignment Directions (page 1)

In the entrepreneurship assignment, Miss Green targeted the activity type *analyzing critically,* so that the students doing this project were required to critically evaluate other people's perspectives to create a product and market it. Students also activated the activity type *applying creatively,* using their understanding of a business to create a product and market it to a particular audience. By targeting these knowledge processes, Miss Green was also inviting students to engage in reflexive pedagogy (Cope & Kalantzis, 2015) as these students were engaged in hands-on activities, analyzing the interests of people and transferring their business knowledge into an appropriate context.

Cope and Kalantzis (2015) also discuss how "one key pedagogical weaving is between school learning and the practical out-of-school experiences of learners . . . cultural weavings" (p. 4). Miss Green's assignment was "open-ended"—the business product could be whatever the students wanted to create—with many opportunities for students to activate *experiencing the known*. In this classroom, as I discuss below, students engaged in this activity type as they brought in their experiences from outside of the classroom to support the development of this business product.

I was introduced to the origins of Silly Putty through a discussion during that early February visit described earlier. Eddy Teddy, rainbow unicorn and Starfire were all in the same group. When I entered the classroom, they were situated at a dark grey cloud shaped table close to the door on the left-hand side of the classroom. Eddy Teddy invited me to join them. The table was filled with containers and materials to create their product, Silly Putty. When I joined them, the girls were hard at work making Silly Putty (see Figure 2 below). I decided to seek some clarification regarding the origins of their business venture.

Eddy Teddy, always keen to answer, explained, ". . . cuz one night I was on this on a like YouTube and it was like when (Miss Green) told us about business and I was on this channel thing and it was it was like talking about how you can make your own silly putty so I got an idea right there and I was like okay let's make silly putty because it's like five dollars in stores and for only a little bit so like why can't we get so much for only like cheap." In her explanation, Eddy Teddy used YouTube-specific vocabulary like "channel," demonstrating her familiarity with this particular learning space and the register used to communicate (navigating YouTube was part of her communicative repertoire [Rymes, 2012]). Here, this salient theme of seeking information using internet sources is illuminated. I then asked if Eddy Teddy could send me the YouTube channel where she found this Silly Putty idea. Starfire agreed to do this, but indicated that "there is like so many." Eddy Teddy then explained, "it's called a Howcast." But again I insisted, "okay can you send me the howcast that you found." Starfire responded by providing me with the search terms to find it on YouTube, "how to how to make silly putty." I again asked if it was possible for the girls to share this YouTube video with me since it would not be the ". . . same one that gave you this inspiration" otherwise. Finally, Eddy Teddy wrote the search terms for the Howcast on a piece of paper for me (see Figure 3). When Eddy Teddy gave me the exact search terms to type to find the "Howcast," I learned that these "search terms" were a part of Eddy Teddy's (and Starfire's) technological knowledge, her (their) *known*. She was familiar with how to navigate the search functions in YouTube to obtain the information she needed and the YouTube channels she wanted to access. The significance of this instance is that students like Eddy Teddy mobilized her *known* (effectively seeking information using internet sources, in this case, YouTube) from one learning space to another. After Miss Green assigned the learning task of creating a product and selling it, Eddy Teddy activated the activity types *experiencing the known* and *applying appropriately* and used YouTube to find a business product idea for her group. She drew on technological knowledge acquired in her interstitial learning spaces to support a learning task in a school-sanctioned learning space. Another salient theme is highlighted here, where students in this classroom were accessing expert informants on the internet outside of the classroom. What is important about this practice is that experts are not always in school-sanctioned learning spaces but can be found in a variety of other learning spaces, including YouTube, and that students are accessing these interstitial experts to support the learning in the classroom. Essentially, the teachers have given the students the option to deploy the technology expertise they have developed outside of the classroom to complete their school-sanctioned tasks.
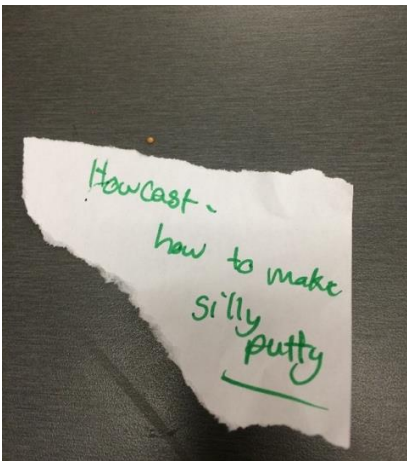
Figure 2. Making Silly Putty

Figure 3. Howcast Search Terms

Figure 4. Gooey Nerds Advertisement

Figure 4 shows a business advertisement that the girls created; one of the assignment requirements Miss Green gave her students was to create an information poster. This image is significant because of how the girls used a register appropriate for the purpose. Phrases such as "limited offers for $2 for any size," "it comes in a variety of colours and you can have a different coloured glitter for free, "and "receive a coupon for 50% off on a regular price for next purchase" demonstrate how the girls were familiar with the register appropriate in sales; this was part of the girls' *known*. The girls also created a business slogan, "silly putty [none sticky slime]" and a company name "Gooey Nerds."

When considering the image from the standpoint of its site of production (Rose, 2016), it was created digitally and used a combination of both text and images (found by using Google and searching for the coloured images of Silly Putty). The multi-coloured pictures of Silly Putty at the bottom draw the viewer's gaze downwards. As Kress & van Leeuwen (2006) note, "The [producer] uses the image to do something to the viewer. It . . . 'demands': the participant's gaze . . . demands something from the viewer . . ." p. 120). The "demand" from the viewer is to look at those coloured images of Silly Putty that they could purchase. In this example of visual data, I learned that a variety of digital modes (Kress, 2011) were used, both text and images, in this classroom to engage in meaning-making.

In a follow up conversation about the Silly Putty project, I asked the girls (Eddy Teddy, Starfire, and rainbow unicorn) to join me for a focus group interview in the conference room. On my laptop, I showed the girls some of the data I had collected. I asked if the girls could elaborate more on the process through which they created the

advertisement (Figure 4). Starfire explained that she had to redo her peer's work since it was not accurate, "not the actual prices." She also indicated how she felt it was important to include pictures of "slime" (or Silly Putty) since it resembled what the product was actually going to look like. We also discussed the creation of the logo: the girls used Google Drawing to create this image, and the idea originated from Eddy Teddy who "started drawing it." We talked about who apprenticed the girls, in particular Starfire, to write in the business register previously noted in the advertisement (Figure 4). Starfire indicated it was her dad. She further reflected on the role her father played in this process by saying that "he's good with ideas so I asked him." Her father's advice was to "be professional," and "before people ask a question it should be answered already." In this interstitial learning experience (at home), the activity type, *experiencing the new,* was activated. As the expert, Starfire's father helped her to be consciously aware of what was important in business, but he also acted as a guide by explicitly teaching her what was important: for example, before people ask a question it should be answered already. In this way, Starfire was apprenticed into the business register that was crucial for her to know as a member of her business class. She activated the knowledge processes of *experiencing the known* and *applying appropri*ately by taking knowledge (from home) and bringing it into a classroom to complete her business assignment. Here, the salient theme of accessing family experts outside of the classroom is illuminated.

By contrast, a different register is used in a follow-up email exchange between the girls and me (Figure 5):

Silly Putty?

Melanie Wong   Fri, Mar 13, 2015 at 3:10 PM
To: rainbow unicorn
Cc: Starfire, Eddy Teddy

Wow! Sounds like an amazing time! :) Hope you are having a good weekend so far. Enjoy the beautiful weather!

On Thu, Mar 12, 2015 at 7:47 PM,   rainbow unicorn   wrote:
   we watched iceage: dawn of the dinosaurs, got 2 have 3 cookies, a slice of cheese pizza and a pop it was from
   pizza 73
   it was awesome

   On Thu, Mar 12, 2015 at 6:58 PM, Melanie Wong   wrote:
    :) That is so awesome! Wow! How was the pizza party? It must have been fun.

      On Wed, Mar 11, 2015 at 9:03 PM,   rainbow unicorn   wrote:
         well 2 b more accurate we made 13**6** dollars:)

         On Wed, Mar 11, 2015 at 3:22 PM, Melanie Wong   wrote:
            Sorry! I didn't reply all in my last email. :)
            ---------- Forwarded message ----------
            From: **Melanie Wong**
            Date: Wed, Mar 11, 2015 at 3:22 PM
            Subject: Re: Silly Putty?
            To:

            wow! That is a lot of money. People are still ordering? Or are you accepting more offers now?

            On Wed, Mar 11, 2015 at 3:13 PM,   Starfire   wrote:
               135 or 100 I forgot wee still selling

               On Wednesday, March 11, 2015, Melanie Wong   wrote:
                  Hi all of you!

                  So I didn't get a chance to talk to you more about Silly Putty. Congratulations on making such a huge
                  profit. How much did you make in total?

                  Melanie :)

Figure 5. Email Exchange (March 13th)

        My initial email to the girls, captured at the bottom of this image/email thread, asks how much money they made selling Silly Putty. This initial exchange shows formality; I include a salutation and sign my name at the end. In response to my email, Starfire replied with no salutation and very informally, with incomplete sentences and spelling errors (e.g., "wee"). Following Starfire's email, rainbow unicorn replied to the thread. Note the "Netlish" (Crystal, 2006) usage of "2" "b" and how rainbow unicorn bolded the number 6 to correct Starfire's initial response about the amount of money they had made. Also note the emoticon usage, a smile created using a colon and bracket. The register in this exchange is very different than the more formal one of the business advertisement (Figure 4). The different registers these girls were familiar with demonstrate their various communicative repertoires built from interactions with others (Rymes, 2016), which it is suggested are linked very much to the *known* that individuals carry from one learning space into another. As these students participated in many interstitial learning spaces, they often used "Netlish"

(Crystal, 2006) or emoticons and a variety of communicative repertoires that were not necessarily those they used in school-sanctioned spaces.

Reflecting on this informal register indicates many affordances (Kress, 2011) when using both textual (Netlish) and visual (emoticons) modes. For example, messages are faster to type using the number 2 rather than typing the entire word "two"; emoticons can express a greater range of emotions than just text. These affordances have many potential implications for classroom practice, especially if teachers recognize that their students come with a variety of communicative repertoires. In the multiliteracies literature, the New London Group (2000) speaks about the concept of *available design*, which are the resources for design, and explain how schools are crucial sites in which discourses relate to each other: "Available designs also include another element: the linguistic and discoursal experience of those involved in Designing, in which one moment of Designing is continuous with and a continuation of particular histories. We can refer to this as intertextual context (Fairclough, 1989), which links the text being designed to one or more series ('chain') of past text" (p. 21).

In the informal email exchange above, my participants knew it was appropriate to use an informal register, such as Netlish and emotions, when communicating with me (see Figure 5). This informal register, used in interstitial learning spaces outside of school, contrasts significantly from that of the advertisement (Figure 4), which used a more formal register appropriate for a school-sanctioned business class. This use of a formal business register, it is suggested, can be attributed to the knowledge processes Miss Green targeted. In our initial discussion (I mentioned above) and the original assignment instructions (see Figure 1 for a sample page), Miss Green suggested that students "check out some websites of businesses you know," thus encouraging them to activate the activity types of *experiencing the known* and *applying appropriately*. She was therefore inviting the students to look at a familiar business website and apply what they saw to their own business website. She also explicitly taught the necessary business vocabulary (see Figure 1 for where she bolded key vocabulary words) because she wanted her students to apply this language to their assignment. In so doing, Miss Green was encouraging her students to use the appropriate business register. Here, the salient theme of applying a range of multimodal communicative repertoires is illustrated. However, this illustrative example also shows that Starfire's father supported Starfire's learning where Starfire accessed a family expert outside of the classroom. Starfire's father encouraged the knowledge process of *experiencing the new* when he, as the business expert, explicitly taught Starfire what a business register was ("be professional" and "before people ask a question it should be answered already").

Discussion and Implications

In this illustrative example, Silly Putty, I have discussed the various knowledge processes that were activated by the elementary ELL students due to their teacher's task design. It is noted that these ELL students used a range of knowledge processes. However, to answer my research question, I have also discussed the mobilization of knowledge (part of the *known*) from one learning space to another (school-sanctioned or interstitial). Due to the affordances of digital technologies and their teacher's task design, ELL students, Eddy Teddy and Starfire, activated the knowledge processes, *experiencing the known* and

applying appropriately, where they took their *known* they had learned in other learning spaces, such as finding information on YouTube Howcasts (seeking information using internet sources), and applied this *known* to the school-sanctioned task of creating a business project. This movement of knowledge across learning spaces is crucial to supporting these ELL students as it provides an entry point for these learners and I will elaborate on this further below. Scholars (Erstad et al., 2016) have addressed the movement of people and ideas in the context of learning; specifically addressing how learning happens when people move in and out of sites of learning. As Erstad et al. (2016) argue, "connecting learning across school and out-of-school contexts is a growing concern in education research and practice" (p. 27). Like the participants in Dyson's (2013) study, my participants have "recontextualized or borrowed voices, images, themes and intentions initially [associated] with other [practices] . . . The children found resources in varied aspects of local (if globally influenced) child cultures" (p. 164). Therefore, an implication of this illustrative example calls on educators to address multiple literacies, such as digital, and not focus solely on traditional print-based literacies (Dyson, 2004, 2013), since students are already carrying these multiple literacies in their *known*. This expanded focus starts with teachers getting to know their students (ELL or not) better (e.g., such as their experiences in interstitial learning spaces) and then encouraging opportunities to bring in their prior experiences (their *known).* In this illustrative example, ELL students such as Eddy Teddy and Starfire, drew on their *known* and used it to support their learning; this opportunity to draw on their *know*n was a key pedagogical move made by their teacher to support her ELL students. This type of pedagogical move has been documented in the literature as being helpful to ELL students (Gibbons, 2015) because it provides an entry point for these students that might not necessarily have the same experiences (*known)* as their native speaker peers. This has also been emphasized in the literature where the "skills" and lifeworld experiences students possess can be used as strengths that can be expanded in the classroom context and used to connect with different academic skills (Cummins & Early, 2011; Cummins, et al., 2015; García-Sánchez & Orellana, 2019). As this study is one that focuses on the learning experiences in a technology-enhanced classroom, it is argued that digital technologies may provide the affordances for students to bring their *known* into the classroom. For example, by using the digital technologies available, students such as Eddy Teddy were able to search for ideas on YouTube, accessing external experts, to support a school-sanctioned project which would not have occurred if digital technologies had not been utilized. This is significant in a pandemic and post-pandemic world where digital technologies have become ubiquitous in many K-12 settings. School districts around the world have had to move between in-person, hybrid and remote learning spaces due to fluctuating COVID-19 infections. Therefore, it becomes increasingly important for educators to consider making intentional pedagogical moves to support their ELL students by purposefully using the affordances of digital technologies but also providing opportunities for these students to bring in their *known* (such as their technological skills to search for information on YouTube).

A significant implication from this study is the influence of outside individuals on the school-sanctioned learning spaces. From a father teaching his daughter the appropriate register to sell a product to an internet "unknown" YouTube expert providing a business product idea, the *known* played a crucial role in the classroom: in particular, the completion

of school-sanctioned assignments. As previously mentioned, these "experts" were not always in the classroom but rather were invited into a school-sanctioned learning space. Scholarship (García-Sánchez & Orellana, 2019; Hyvärinen et al., 2016; Marshall & Toohey, 2010) also reflects the need for teachers to embrace their students' prior experiences and invite family members (parents, grandparents, etc.) to play a more active role within the classroom. On a practical level, this might involve teachers cultivating opportunities to create Identity Texts (Cummins & Early, 2011) and inviting parents or grandparents to be a part of this process. As explained by Cummins and Early, Identity Texts are "described [as] the products of students' creative work or performances carried out within the pedagogical space orchestrated by the classroom teacher." Students invest their identities in the creation of texts- which can be written, spoke, signed, visual, musical, dramatic, or combinations in multimodal form" (p. 3). These Identity Texts can reflect students' identities in a positive light and is one way for teachers to intentionally invite students to bring in their known.

However, I also want to acknowledge that these new digital resources for learning, such as using YouTube to find information, also have pitfalls. For examples, when students are searching online for information there is the potential to encounter misinformation such as Deepfakes (Yadlin-Segal & Oppenheim, 2020). With Deepfakes, audiovisual manipulating artificial intelligence (AI) applications synthesize multiple audiovisual products into one manipulated media, which is usually in the form of a video (Yadlin-Segal & Oppenheim, 2020, p. 2). These "fake videos" show a person doing/saying something they have never said or done. Deepfakes pose great issues in terms of ethics and the spreading of misinformation. They are also a potential concern when it comes to K-12 students searching for information using online sources such as YouTube. Teachers need to be aware of this and engage in regular digital citizenship lessons (Ribble, 2011) with their students on how to appropriately search for information online to alleviate potential issues. In a pandemic and post-pandemic world, there is an increasing need for educators to address how to use digital technologies appropriately as many schools are being utilizing a range of technologies to support learning.

Conclusion

The following article has highlighted how elementary ELL students in technology-enhanced classrooms are tapping into their interstitial lifeworld experiences to complete their school-sanctioned assignments; mobilizing this *known* to support school-sanctioned activities. Their *known* includes their digital lifeworld experiences in interstitial learning spaces that teachers may not be familiar. There is an urgent need, especially as a result of the COVID-19 pandemic, to better understand the learning experiences that occur in technology-enhanced environments since many of our K-12 students are now shifting to learning in remote or blended situations.

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K-12 ESL Writing Instruction: A Review of Research on Pedagogical Challenges and Strategies

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Abstract

Writing is an important early literacy skill for English as a Second Language (ESL) students' academic success, underlining the importance of effective ESL writing instruction at the K-12 level. However, there is little empirical research on ESL writing instruction in school settings. The goal of this systematic literature review is to examine the extant empirical evidence of the challenges teachers encounter in teaching ESL writing and the strategies that can be adopted to help teachers overcome the challenges. Our search yielded 49 peer-reviewed journal articles and book chapters published between 2010-2019. A content analysis (Stan, 2009) of these materials indicated that teachers encounter the following challenges in teaching K-12 ESL writing: (a) lack of pre-service training in ESL writing, (b) lack of writing pedagogy skills, (c) lack of time, (d) lack of professional development opportunities, (e) standardized tests, and (f) unique L1 influences on L2 students' text production. The content analysis also revealed the following strategies that can be recommended for addressing these challenges: (a) incorporating an ESL writing course into teacher education programs, (b) creating opportunities for writing pedagogy support by mentor teachers and researchers, (c) incorporating integrated skills development in the writing classroom, (d) providing students with opportunities to write more, (e) adopting explicit writing instruction, and (f) creating professional development opportunities for teachers. Based on our findings, we discuss implications and recommendations for ESL writing instruction in K-12 schools.

Keywords
ESL writing, K-12 education, literacy, teacher education, writing instruction

Introduction

Scholars have noted that ESL writing in K-12 contexts has generally been an understudied area (e.g., Hirvela & Belcher, 2007; Matsuda & De Pew, 2002; Ortmeier-Hooper & Enright, 2011). As a result, there has been little empirical research on how ESL writing is taught, what challenges teachers encounter, and what strategies can be adopted to overcome these challenges. Hirvela and Belcher (2007), for example, note that "we have tended to focus more of our attention on the needs of those learning to write [in a second language (L2)] rather than of those learning to teach writing" (p. 128). This underscores the importance of an investigation of ESL writing instruction in K-12 settings at a time when the ESL student population is increasing "in English-dominant educational contexts"

(Ortmeier-Hooper & Enright, 2011, p. 167). A case in point is the Canadian K-12 classroom, where ESL learners constitute a high percentage of the student population today. Roessingh (2018) notes that in 2017, the Vancouver School Board in British Columbia recorded 60% of its students as English Language Learners (ELLs). In Alberta, there were 110,000 ELLs in late 2017 (CBC News, 2018). In the Calgary Board of Education there were more than 26,000 ESL students, and in the Calgary Catholic School District there were nearly 15,000 ESL students (Calgary Board of Education, 2017). In Ontario, the Durham District School Board reported that the number of ELLs doubled between Fall 2014 and Fall 2018 (Follert, 2019).

Different jurisdictions within Canada use different terminologies (e.g., ESL, EAL learners or ELLs) to describe K-12 students whose first language is not English. In British Columbia, ELL stands for English Language Learning, and immigrant and refugee students whose first language is not English are referred to as English as an Additional Language (EAL) learners (The Government of British Columbia, 2020). In Alberta, on the other hand, both ESL and ELL are used interchangeably to describe these students (Calgary Board of Education, 2017). In Ontario, these students are referred to as English Language Learners (ELLs) who might have been born in or outside Canada but use a language other than English as their first language (Ontario Education, 2007). In this paper, we have used ELL and ESL synonymously.

In spite of the variation of terminologies used to describe this K-12 student population, a common reference point is that these students' first language is not English, and they need English language support to be successful in school. Unfortunately, research shows that they are falling behind in provincial achievement tests when compared to their native-English-speaking counterparts (e.g., Pavlov, 2015; Roessingh & Douglas, 2012; Roessingh & Elgie, 2009). High school drop-out rates and academic failure of these students are also among the highest (e.g., Roessingh, 2004; Sweet et al., 2019; Toohey & Derwing, 2008).

In light of the above, effective early literacy education is an area that deserves special attention for inquiry, since early literacy development is a prerequisite for students' academic success. Roessingh and Elgie (2009), for example, found that the literacy gaps between native-English-speaking students and ELLs widen in middle school, resulting in their less precise and nuanced communication abilities (e.g., story retelling). The researchers noted that effective literacy instruction was connected to ELLs' vocabulary development, a pre-requisite for their successful academic writing abilities. But literacy instruction for ELLs is a complex undertaking because of these students' unique needs (Roessingh, 2004, 2008). Most of these children arrive in English-dominant countries such as Canada from different parts of the world at various ages or are born to immigrant parents. In addition to adjusting to a foreign country, they have to contend with disparate language and cultural experiences, both inside and outside of the classroom (Roessingh, 2008; Roessingh & Elgie, 2009). Guo et al.'s (2019) research indicates that students with a limited first language (L1) literacy background tend to struggle when studying in an L2 setting. As well, scholars have underlined the significant impact of culture on literacy learning in an L2 context. Many of these children receive little academic support at home as their parents have limited English language proficiency and familiarity with literacy practices in schools and the L2 culture (e.g., Roessingh & Kover, 2002). As a result,

teachers encounter various challenges when teaching these children. Sound pedagogical practices that are informed by research and sensitive to the needs of ELLs are essential for making education both effective and meaningful.

This underlines the importance of an examination of the current literacy education practices of ESL teachers. Of particular significance is ESL writing instruction because writing generally receives the least attention of the four language skills (i.e., reading, listening and speaking being the other skills) (Larsen, 2013, 2016). Although it is widely acknowledged that writing is an important skill that ELLs need for academic success (Huie & Yahya, 2003; Schulz, 2009), there is little or no systematic research on ESL writing instruction that could inform K-12 ESL writing pedagogy in the classroom. The current paper is an attempt to address this gap in the way of reviewing the extant empirical research on this topic and gaining an understanding about the challenges teachers encounter in teaching ESL writing and the strategies to overcome these challenges.

Thus, this review is guided by the following research questions (RQs):

RQ1: What challenges do teachers encounter in teaching ESL writing in K-12 contexts?

RQ2: What strategies can be adopted to help teachers overcome these challenges?

Methods

In our review, we adapted the method used by Williams and Lowrance-Faulhaber (2018). We chose this method because Williams and Lowrance-Faulhaber's study was: (a) a systematic literature review similar to ours, (b) on L2 writing of young bilingual children, (c) a very recent work, and (d) published in the flagship journal of L2 writing, i.e., the *Journal of Second Language Writing*. As part of our research process, we searched different databases through our university library system. Most notable of these databases were: ERIC (EBSCOhost), Research Starters-Education, Academic Search Complete (EBSCO), Education Research Complete, Linguistics and Language Behavior Abstracts and JSTOR. As well, we employed various combinations of keyword searches for our topic. The key words we used are as follows: *writing in ESL, bilingual ESL writing, ESL writing, K-12 writing, biliteracy in ESL writing, K-12 multilingual[1] writing, ELL writing instruction, multilingual writing, K-12 ESL writing, ESL writing literacy, multilingual writing instruction, ELL writing, ESL literacy development, teaching ESL writing, teaching ELL writing, ELL student writing, ESL children writing and ELL writing literacy.* Once relevant articles or book chapters were identified, we also searched their references to find additional sources.

Inclusion criteria

At the beginning of our research, we set clear inclusion criteria for our review (Petticrew & Roberts, 2006). We determined the following inclusion criteria for each study: (a) that it was an empirical study; (b) that it was published in a peer reviewed journal or book between 2010-2019; and (c) that the findings had implications for some aspect of writing instruction in K-12 settings, involving students and/or teachers studying and/or teaching in an ESL and/or ESL-bilingual setting. The rationale behind using these inclusion

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[1] In L2 writing literature, the term "multilingual writing" is often used synonymously with "L2 writing."

criteria was that we wanted to limit the scope of our literature search such that the inclusion criteria would enable us to answer our research questions. We also wanted to ensure that our research was replicable. Following these inclusion criteria, we excluded studies that involved ESL students in pre-kindergarten and transitioning from high school to college/university. We reviewed the abstract of each study before applying the inclusion criteria to determine whether to include or exclude it. We read the full article as needed. The search yielded 49 sources, all of which were published in English, and had a North American setting.

Considering the large corpus of sources used in our research, we found that a variety of terminologies were used to describe ESL students, such as English learners, English language learners, multilingual students, and English as an additional language learner, to mention a few. Before including a study in our review, we ensured that it took place in an ESL context, defined as an English learning context in which English is the dominant language outside of the classroom (Coelho, 2016). Also, in some studies, students were identified as bilingual or biliterate (e.g., Abraham, 2017; Midgette & Philippakos, 2016). They were included in our review since the students were English language learners and were studying in an ESL context (i.e., inclusion criteria [c] above).

Analysis procedures

A total of 49 studies (see the Appendix) met our inclusion criteria. Of them 43 were qualitative, two were quantitative, and four used both qualitative and quantitative methods. Major theoretical approaches used in these studies were Systemic Functional Linguistics (SFL), genre pedagogy, sociocultural theories, biliteracy, multiliteracy, bilingualism and multilingualism. The main data sources used were interviews, observations, student writing samples, questionnaire surveys, and tests. The duration of studies ranged from four weeks (shortest) to eight years (longest), and the number of participants ranged from one (lowest) to 130 randomly selected students and five teachers (highest). The predominant first languages of participants were Spanish, Korean, Chinese (Mandarin), Vietnamese, Indonesian, Hindi, Finnish, Russian, Gokana, Dutch, and English (some studies had teacher participants whose first language was English).

At the beginning of our analysis process, both of us read all the studies we had retrieved. We prepared a table in a Google document in which we annotated each study we had finished reading. In our annotations, we included information about the focus of the study, context, participants, key findings, and implications. Reading and annotating the studies provided us with a comprehensive understanding about the topic of this review. In particular, the annotations helped us locate the key information to answer the research questions, and revisit the original studies, when necessary.

At the end of the process described above, we established a coding protocol to analyze the data. We adopted an inductive content analysis approach (Stan, 2009). Since the goal of our study was to identify the "challenges" of and "strategies" for ESL writing instruction, we used "challenges of ESL writing instruction" and "strategies for ESL writing instruction" as two broad categories of codes so they aligned with our two research questions. An inductive content analysis approach was deemed suitable as it enabled us to open-code the relevant "concepts" related to "challenges of ESL writing instruction" and "strategies for ESL writing instruction." Once these two broad categories were identified,

similar concepts were grouped together as sub-categories under them. Initially, each of us worked independently to answer the research questions, followed by a collective discussion for collation of and agreement on the findings. We resolved any disagreements by undertaking additional rounds of reading of the studies and discussion. This iterative process ensured that we completed the analysis systematically and the information gleaned from the analysis was reliable. To further consolidate the reliability of our findings, the coding and categorization done independently were compared and we found a 96% agreement between the two of us. The emergent coded data were divided into smaller but self-explanatory sub-categories for ease of presentation and discussion of findings (Miles & Huberman, 1994).

Results

In the section below we discuss the findings of our review. We have organized the findings in the same order as the research questions stated above.

RQ1: What challenges do teachers encounter in teaching ESL writing in K-12 contexts?

Our research suggests that teachers encounter a variety of challenges. We have divided these challenges into six sub-categories as follows: (a) lack of pre-service training in ESL writing, (b) lack of writing pedagogy skills, (c) lack of time, (d) lack of professional development opportunities, (e) standardized tests, and (f) unique L1 influences on L2 students' text production. We discuss each of them in the section below.

Lack of pre-service training in ESL writing. Research has highlighted that teachers encounter challenges in various aspects of ESL writing instruction due to a lack of knowledge of the functional aspects of language, engagement with institutional mandates, knowledge of L2 writing theory and pedagogy, fully dedicated courses in L2 writing, practicum and opportunities to observe mentor teachers teach ESL writing, and best practices of feedback, error correction, and assessment (Brisk, 2012; Gebhard et al., 2010; Gilliland, 2015; Larsen, 2013, 2016; Lee, 2016; Yi, 2013). Our analysis suggests that these challenges are attributable to academic training in ESL. Gebhard et al. (2010) found that pre- and in-service teachers may encounter challenges in ESL writing instruction due to a lack of understanding about the functional aspects of language (e.g., how participants construct meaning differently for different purposes using different modes of communication such as written, online or face-to-face) and utilization of the scholarship gleaned from SFL—a theory that recognizes language as "a dynamic system of linguistic choices" that its users make to accomplish various social and academic functions (New London Group, 1996, p. 93). They noted that teachers' lack of critical engagement with various state and federal curricular mandates and collaborative and sustained engagement with different kinds of classroom data through video clips, curricular materials, transcripts, and student texts can also create pedagogical challenges. For example, teachers' lack of knowledge about SFL can constrain their ability to use video clips or student texts as examples of meaning-making resources in their teaching. Similar findings in other studies (Brisk, 2012; Gilliland, 2015) indicated that pre-service teachers may encounter challenges when teaching writing by focusing only on the factual knowledge of language and texts (i.e., knowledge about structural aspects of language) rather than functional knowledge

(i.e., knowledge about how language is used to produce disciplinary texts) (Bunch, 2013; Fleming et al., 2011, as cited in Gilliland, 2015). Research suggests that academic training should prepare pre-service teachers such that they are ready to work with young L2 writers and deal with various challenges related to the unique characteristics and linguistic needs of these students, offering culturally responsive teaching, acquiring in-depth knowledge about L2 writing pedagogy and theory, and being familiar with best practices in error correction, feedback, and assessment (Larsen, 2013, 2016; Lee, 2016). Another challenge relates to incorporating and sequencing practicum courses in teacher training programs (Lee, 2016; Yi, 2013). Often, these courses are not sequenced in a way so that pre-service teachers have the opportunity to learn L2 writing theories before applying them in the classroom. A related concern is the unavailability of a stand-alone literacy course that trains pre-service teachers with an in-depth orientation about L2 writing and pedagogy (Lee, 2016).

Lack of writing pedagogy skills. A lack of writing pedagogy skills revolves around issues related to stating the expectations of writing tasks explicitly, aligning teachers' understanding and expectations of writing with those of students, good practices in error correction, feedback, and assessment, providing responsive assessment and strategic scaffolding, addressing individual student needs and skills development, use of metalanguage, skills and knowledge to recognize different identities of L2 writers and their specific strengths and weaknesses, and the ability to scrutinize ESL writers' work (Enright & Gilliland, 2011; Kibler, 2011b; Kibler et al., 2016; Larsen, 2013, 2016; Ortmeier-Hooper, 2013; Shin, 2016; Wong, 2016). Kibler (2011b) found that tenth grade teachers' expectations about writing tasks were at best implicit, and they shared their expectations with students only through feedback as opposed to explicit "lessons focused on writing" (p. 223). Students' understanding of genre varied and overlapped with that of teachers only partially, and students' and teachers' understanding of what constituted content writing varied from each other. All these factors had a negative impact on writing pedagogy. Kibler (2011b) noted that content area teachers often did not consider themselves as experts in writing. This resulted in students not being taught explicitly about how to write effectively in the content area. Consequently, students' skills for content area writing were underdeveloped. Other studies underlined the importance of teachers' in-depth knowledge of L2 writing pedagogy and assessment practices (Kibler et al., 2016; Larsen, 2016; Wong, 2016) as well as a need for "responsive assessment, instruction, and strategic scaffolding" (Wong, 2016, p. 64). Enright and Gilliland (2011) found that ESL writing teachers did not focus on addressing students' individual needs or skill development. Findings based on a questionnaire survey suggest that ESL writing teachers often feel that they do not have the skills to deal with L2 writing issues in the classroom as writing pedagogy was covered only on the surface in teacher education programs (e.g., Larsen, 2013), or they do not have the metalanguage of writing instruction as part of their pedagogical repertoire required for robust scaffolding for disciplinary language that would involve varying group work and interactions, visuals, sense making materials, and collective and meaningful conversations (Shin, 2016, p. 123). Ortmeier-Hooper's (2013) study highlights the lack of writing pedagogy skills that involve teachers' inability to recognize adolescent L2 writers' identity that profoundly impacts their writing.

Lack of time. Studies have found that a lack of time can present itself as a potential challenge in ESL writing instruction. For example, Gebhard et al.'s (2010) findings indicate that the teacher had little time and was frustrated that she could not "move them [her students] along as writers" (p. 101). In this context, the teacher did not know how to support her students with explicit writing instruction that would prepare them for the mandated materials. Gebhard et al. (2010) report that it was challenging for the teacher to implement a writing curriculum for which she had little pedagogical support and preparation due to time constraints. In another study, Accurso et al. (2016) found that a lack of preparation time resulted in less collaboration among colleagues and adherence to the district mandated writing curriculum. Consequently, the teacher had to invest a great deal of extra time preparing for tests and designing teaching materials all on her own.

Lack of professional development opportunities. Research suggests that a lack of professional development opportunities may constrain ESL writing instruction. Kibler's (2011b) findings imply that there were no opportunities among content area and language arts teachers to share expertise with each other, which would have contributed to helping improve adolescent L2 writers' content-area writing. Another challenge is teachers were often forced to prepare themselves for teaching mainly through self-study, e.g., by reading books and articles, talking to colleagues, and experimenting due to a lack of professional development opportunities (Larsen, 2013). Soltero-Gonzalez et al.'s (2012) and Yaden and Tsai's (2012) findings underline the concern that without appropriate training and professional development opportunities, teachers will be unable to evaluate the emerging writing of ELL students and know the similarities and differences of the languages students bring into their bilingual classrooms. To illustrate, without appropriate training in or professional development opportunities about the characteristics of ESL texts and writers, teachers may find it challenging to track students' progress in writing.

Standardized tests. A number of studies have noted the constraining effects of standardized tests on ESL writing instruction. It was found that high-stakes tests forced teachers to follow state- or jurisdiction-mandated curriculum for writing instruction (Enright, 2013; Enright & Gilliland, 2011; Gebhard et al., 2010; Kibler et al., 2016). Following these curriculum mandates resulted in no flexibility in planning and executing creative ways to teach ESL writing. For example, Enright (2013) found that a one-size-fits-all curriculum was not able to address students' individual English language and writing needs, whereas Gilliland (2015) found that teaching writing was constrained by high-stakes writing exams, as teachers were mandated to focus on preparing students for those exams. Kibler et al. (2016) noted that due to high-stakes tests, teachers felt pressured about getting their ELLs to achieve the same standards in writing as non-ELL students. Enright and Gilliland's (2011) findings suggest that broad contextual factors such as district mandates (e.g., No Child Left Behind or NCLB) impacted ESL student writers' writing experiences in significant ways. Multilingual writers were constrained by a number of contingencies because of the NCLB mandate: teachers implemented pedagogical practices to prepare students' writing in different subject matter classes to the district standards and accountability. Any supplementary instructional practice was also planned keeping the goal of preparing students for standardized tests in mind. Consequently, the benchmark

assessments and state-level assessments were the standards that students were expected to prepare for without any exception. This resulted in students' writing practices being less flexible and creative. Findings showed that ESL student writing was negatively affected as students were required to write according to the district standards regardless of their background preparation in English and interest in writing. Additionally, compliance with district standards trumped all other communicative goals in student writing. Teachers, who had more freedom to encourage ESL students for more authentic communication in courses free from high-stakes assessments, e.g., health class, were able to encourage students to express their perspectives freely. This indicates that accountability is not necessarily a bad thing, but the inflexibility and prescriptive approaches to accountability are. In Accurso et al. (2016), Cecily, the teacher, felt that school reforms were forcing teachers to focus on "writing as a product of testing" (p. 147).

Unique L1 influences on L2 students' text production. Research has shown that students' L1s were responsible for context-specific challenges for ESL writing instruction. Examples include the role of the first language text production in English and textual characteristics of ESL students in K-2 (Abraham, 2017; Gort, 2012a, 2012b; Kibler, 2011a; Mohr, 2017; Raynolds & Uhry, 2010). Kibler (2011a) explored teacher-student interactions during a writing task and found that it was challenging for the teacher to recognize and address the unique needs of the Spanish-speaking ESL student whose level of English proficiency was extremely low. As a teacher-researcher, Abraham (2017) found that she had to go through the arduous process of actively engaging in identifying the linguistic funds of knowledge specific to her Spanish-English bilingual students in a monolingual classroom. Abraham recognized that teachers in similar contexts should be prepared to do the same. Mohr's (2017) findings suggest that although Grade 2 English learners (EL) demonstrated basic writing skills such as spacing, spelling, capitalization, and punctuation they struggled with descriptive words, closing sentences, transition words, and lead sentences. As well, their writing productivity based on "writing output" and "complexity in expository compositions" (p. 623), was weak, i.e., a score of 3.84 compared with their English-speaking counterparts' 6.18. Raynolds and Uhry (2010) found that Spanish-English bilingual kindergarteners had difficulties spelling stop consonants in English. Other research has investigated textual features of ESL writing. In a bilingual setting, Gort (2012a) investigated challenges children encounter in text production and found that English played a large role in the production of Spanish text, but Spanish did not play a significant role in the production of English text. In a separate study, Gort (2012b) found that emergent Grade 1 Spanish-English bilingual students had the ability to engage in revising texts, and they could do so in both languages. In brief, students' L1s seem to influence their writing in English and consequently, teachers need to be prepared to address this particular challenge in ESL writing instruction.

To summarize, our findings suggest that teachers encounter different challenges in teaching ESL writing in K-12 settings. The main challenge relates to a lack of training in ESL writing in teacher education programs, resulting in their lack of both knowledge and pedagogical skills to teach ESL writing. It also appears that teachers feel pressured due to a lack of time and the requirements for standardized tests, which negatively affect their ESL writing instruction. Finally, a lack of professional development opportunities and

unique L1 influences on ESL student writers' text production are other challenges that teachers seem to encounter.

RQ2: What strategies can be adopted to help teachers overcome these challenges?

We have divided our findings on strategies to help teachers overcome the challenges they encounter in ESL writing instruction into six sub-categories as follows: (a) incorporating an ESL writing course into teacher education programs, (b) creating opportunities for writing pedagogy support by mentor teachers and researchers, (c) incorporating integrated skills development in the writing classroom, (d) providing students with opportunities to write more, (e) adopting explicit writing instruction, and (f) creating professional development opportunities for teachers. The findings indicate that these strategies are to be adopted not only by pre- or in-service teachers themselves but also by other stakeholders such as program administrators, teacher education programs, school boards and school principals. In the section below, we discuss each of these sub-categories.

Incorporating an ESL writing course into teacher education programs. Empirical findings have unequivocally supported inclusion of an ESL writing course in teacher education programs. Such a course should include recent L2 writing theories, characteristics of K-12 ESL student writers and the texts they produce, and strategies for teaching ESL writing. Studies have identified many benefits of a dedicated course on ESL writing methodology in teacher education programs. These benefits include pre-service teachers becoming familiar with ESL writers' unique needs, providing them with an orientation of various cross-cultural aspects of L2 writing, training them in recent L2 writing theories and pedagogies and how to utilize ESL student data in ESL writing instruction. A course on ESL writing methodology in teacher education programs allows pre-service teachers to become familiar with the unique needs and characteristics of ESL writers (Athanases et al., 2013; Lee, 2016). As well, such a course prepares pre-service teachers with effective strategies for ESL writing instruction (Athanases et al., 2013; Brisk, 2012; Lee, 2016; Seloni, 2013; Shin, 2016). Shin (2016) argues that an ESL writing course will help introduce cross-cultural theories of ESL writing and train pre-service teachers on how to use metalanguage as part of their pedagogy. Use of metalanguage enables children to avoid merely reproducing model texts by promoting critical reflection on language use as opposed to rote learning.

One of the implications of Seloni's (2013) findings is that pre-service teachers should be trained to create their own teaching theories based on the local exigencies in which they operate. They should be trained to act like ethnographers and move away from an essentialist approach to language teaching—i.e., an approach to language teaching that is focused exclusively on language forms and structures. Instead, as teachers, they should be cognizant about ESL students' writing based on students' educational backgrounds and sociocultural contexts, and the genre characteristics of the texts students produce. Hodgson-Drysdale's (2016) findings confirm that when teachers are provided with training and support, they can implement SFL-informed writing pedagogy for ELL students, bolstering teacher confidence and efficacy in teaching ESL writing. For example, teachers in Hodgson-Drysdale's study were offered an ongoing PD on the Teaching and Learning

Cycle (TLC) so they could implement an SFL-informed writing pedagogy and the use of language for meaning-making purposes. Brisk's (2012) findings also suggest that teachers need training in teaching "language in context" (p. 465) in the ESL writing classroom. Athanases et al.'s (2013) findings provide specific guidelines regarding what a teacher education program can do as part of including an ESL writing course. For example, since pre-service teachers must be familiar with their students' writing needs, teacher education programs can train them on how to use students' nested demographic data (e.g., students' cultural backgrounds, first languages, countries of origin, English language levels, socioeconomic backgrounds, and so on), research questions that target the needs of particular students, and collect and analyze a wide range of data such as the ones noted above about students' writing development.

Creating opportunities for writing pedagogy support by mentor teachers and researchers. In addition to including ESL writing courses in teacher education programs, several studies have underlined the importance of pre-service teachers having the opportunities to work closely with mentor teachers and researchers. Using a case study that used researcher journals, written artifacts, non-participant observations and interviews as data sources, Lee's (2016) findings highlight the importance of close working relationships between the teacher education programs and K-12 practicum sites. Lee notes that her study participant, Elaine, could not avail the support of the mentor teacher for her growth as an ESL teacher. In another study, while enrolled in an English Education and Teaching English to Speakers of Other Languages (TESOL) undergraduate program, pre-service teachers made sense of various issues related to L2 writing such as process writing, genre-based teaching, a focus on form versus meaning by reflecting on their observations of senior teachers, ethnographic papers they wrote, and their blog posts (Seloni, 2013). Study findings confirm that pre-service teachers' perspectives about language, culture, and text evolved as they completed their coursework, classroom observations and ethnographic written assignments. Yi (2013) found that pre-service teacher participants wished that they had opportunities for observing their mentor teacher teach writing. In a separate study, Hodgson-Drysdale (2016) found that teachers' level of comfort of adopting the new pedagogy (i.e., SFL-informed writing pedagogy) was dependent upon a number of variables, including support received from the researcher, school principal, and colleagues as well as school-university partnerships. Even though the two teacher participants in Hodgson-Drysdale's research had been teaching for over twenty years they were not familiar with the most recent writing pedagogy such as an SFL-informed view of language use in writing. A collaboration among different stakeholders such as these teachers, researchers, and school principals as well as the school-university partnership made it possible for the teachers to take advantage of an ongoing PD throughout the school year. The PD afforded the teachers to learn about and hone their skills of implementing an SFL-informed writing pedagogy. Finally, research suggests that in secondary school contexts a close working relationship with content-area and writing teachers is a good way to enhance each other's teaching expertise (Kibler, 2011b).

Incorporating integrated skills development in the writing classroom. Several studies have found that a focus on integrated skills development is a useful strategy in ESL

writing instruction. In particular, findings have shown a strong correlation among expanded and targeted vocabulary development, reading, and writing (e.g., Al-Alawi & Kohls, 2012; Harman, 2013). For instance, ESL learners' expanded vocabulary helps them process academic texts more easily when they read. Successful comprehension of texts when reading, in turn, helps make their writing fluid (Al-Alawi & Kohls, 2012). Harman's (2013) study suggests that integrating reading and writing helps literacy development. The teacher's "permeable curricular approach" (p. 137)—i.e., a flexible curriculum that allows for an integration of reading and writing activities—helped the writers view writing as a dialogic activity between literary texts and scaffolding activities in the classroom that enabled students to accomplish their writing resourcefully. For instance, textual scaffolding enabled students to see the specific linguistic forms that are often used in certain kinds of genres (i.e., narrative texts). Additionally, because reading and writing were integrated, students were able to utilize the meaning-making process of various linguistic forms to expand their ideas in writing. As a result, the texts they produced were resourceful in terms of both content and meaning.

In addition to vocabulary, reading, and writing, research has shown that a few other ways that could also contribute positively to students' writing development are: use of communication and mobile technologies, content-area knowledge, a cognitive strategies approach, and multiple literacies. Chen et al.'s (2017) study showed that two ELL students' use of an iPad and digital handwriting app (Penultimate) motivated them to write more. Chen et al.'s findings suggest since these students were motivated to write more, it resulted in enhancement of the quality of their narrative writing. The innovative use of technology in schools improves students' literacy development as well (Gebhard et al., 2011). For example, the teacher used blog-mediated TLC to teach writing to Grade 2 students. These students used blogging to expand their project audiences which contributed to their emerging writing literacy practices. In another study, Shin (2014) identified the important role that blogging played in a Grade 2 ELL student's learning academic writing genres at school. Findings of Shin's (2014) study suggest that the participant, Jose, used blogging (i.e., writing) to increase his social status among his peers. As well, he used blogging to solve his peers' problems.

Olson et al. (2012) found that integrating critical reading and writing skills by adopting innovative means can help enhance students' written literacy. In this study, participating teachers received training in "a cognitive strategies approach to teaching interpretive reading and analytical writing" (p. 323). A cognitive strategies approach utilizes strategies of experienced readers and writers to derive meaning and improve their interpretive reading and analytical writing skills. Later, it was found that students at six secondary schools taught by these teachers achieved higher marks on the California high school exit examination. Analysis of content-area texts (e.g., analyzing texts using SFL-based activities for language forms and meanings), as suggested by Kibler (2011b), can be used in these interpretive reading and analytical writing exercises. Other studies have identified the efficacy of biliteracy in bilingual settings. Findings of Raynolds et al. (2013) and Raynolds and Uhry (2010) indicated a link between L2 vocabulary knowledge and L2 spelling ability of Spanish-English bilingual kindergarten children as they learned new phonemes.

Providing students with opportunities to write more. Several studies (e.g., Al-Alawi & Kohls, 2012; Bunch & Willet, 2013; Gebhard et al., 2011; Yi, 2010; Zapata & Laman, 2016) have concluded that providing ESL students with opportunities to write more has a positive impact on their writing development. Al-Alawi and Kohls' (2012) participant, Shona, remarked that continual practice or "writing more" (p. 78) helped her to advance her writing skills. Another participant of Al-Alawi and Kohls' (2012), Hassan, opined that extensive writing helped to increase the quality of his writing, sensing that the more he wrote, the more "intelligent" and "knowledgeable" he sounded. Adolescent multilingual writers' in- and out-of-school writing is influenced by each other, so exposure to writing opportunities is the key (Yi, 2010). Bunch and Willet (2013) found that the writing assignment used in their study created opportunities for students to "work with and through language" (p. 157). As part of this writing assignment, students engaged in group activities to persuade their family members to join or oppose Martin Luther in his campaign against the church. Subsequently, students were asked to write a persuasive essay by synthesizing what they had learned in their group activities. Using the persuasive essay prompt enabled students to write for two different audiences: the teacher and their imagined family members. As a result, students were trained in utilizing language creatively and purposefully.

In addition to the above, researchers have identified how exposure to writing transforms ESL writers in various ways. Brown (2016) found that a digital approach to writing enhanced social interactions among student writers with different skills and abilities, which contributed to their success. The digital approach to writing entailed ELL students' use of Barnes & Nobles' e-reader called the Nook that enabled them to read children's literature and other texts, and respond to what they read in writing using an e-journal App. As well, these young writers relied on each other and positioned themselves as experts. Kibler (2010) found that classroom interactions during an extended writing activity in which secondary ESL students used their native languages to discuss ideas for writing helped develop their English writing skills. Zapata and Laman (2016) found that creating opportunities for students to write more contributes to translingual practices—"a pedagogic theory that involves students' learning of two languages through *a process* of deep cognitive bilingual engagement" (Garcia & Wei, 2014, p. 64, italics original) —in writing in the multilingual classroom, which helps students' identity development, innovative language use as well as their development as bilingual writers. For specific examples of translingual practices among students, please see Zapata and Laman (2016), p. 366.

A number of studies have looked into the impact of different contexts on student writing. For instance, Gebhard et al. (2011) found that their study participant, Diany, used blogging to apologize, praise, joke, thank, and provide and accept feedback. As part of the blog-mediated TLC, the students utilized blogging to expand their writing skills in combination with classroom-based face-to-face instruction. Through the functions of apologizing, praising, joking, and exchanging feedback, Diany used blogging, sometimes subtly and at other times overtly, to experiment with the functional aspects of language. Snow et al. (2016) focused on kindergarten students (three children in a mixed group with two ESL and one American) engaging in literacy-enriched play, whereby children were provided opportunities for literacy development through play, and how it affected the

children's emerging writing development and their writing behaviors. Using blocks during literacy-enriched play, the researchers found that the children drew pictures of different characters to use in their block games. The process demonstrated children's ability of meaning-making to encode stories they wanted to tell. The findings indicated that teachers may want to encourage students of different cultural and language backgrounds to play together for effective writing development. Hong (2015) studied 19 kindergarten ELL children's becoming a writer by using writing workshops consisting of "mini lesson [on a non-fiction writing unit], independent writing/conferring, sharing, and publication" (p. 306). Hong noted that by the end of the workshops the ELL students evolved from "others as authors" to "self as an author" to "self as a reflective writer" (p. 301).

Research has focused on strategies to create an optimal impact of exposure to writing opportunities on student writers. Bauer et al. (2017) employed "buddy pairs" in the classroom, which was found to foster translingual practices. The teacher chose students to form a "buddy pair" with consideration of their demographic backgrounds, academic experiences, and strengths. The findings showed that students who were grouped in a "buddy pair" demonstrated more willingness to interact with each other, which ultimately shaped their writing. Shin (2014) noted the importance of valuing ELLs' social, linguistic, and personal lives outside school for effective (writing) literacy development. For instance, her findings suggest that writing practice through blogging as a way of socialization played an important role in the student's awareness of the interpersonal functions of text, how different ideas are embedded into texts and academic genres. A common theme that emerges from these studies is that for ELL students to flourish in literacy development, instructors must tap into students' current social and cultural resources by bridging the gap between students' life in and outside of school. Midgette and Philippakos (2016) found that having students write interactive journals to teachers as audience can maximize the impact of writing exposure.

Adopting explicit writing instruction. Much research indicates that explicit writing instruction helps improve young ESL students' writing skills. One of the most common instructional approaches that a number of studies (e.g., De Oliveira & Lan, 2014; Harman, 2013; Hodgson-Drysdale, 2016; O'Hallaron, 2014; Shin, 2016) have explored is genre- and SFL-based pedagogy. Kibler's (2011b) findings indicated that genre-based teaching, whereby teachers identify a specific genre (e.g., business report) and its structures, give examples, and provide students with specific writing goals so they can produce texts that align with the target genre, might be relevant to adolescent ESL instruction. In another study, it was found that genre-based instruction on writing argumentative essays helped students produce better quality texts (O'Hallaron, 2014). The opportunity for an engagement with the source text, genre-based instruction, and teacher's scaffolding helped improve student writing. O'Hallaron (2014) also highlighted the importance of targeted ESL writing instruction, e.g., teaching argumentative writing. Harman (2013) noted the efficacy of adopting both an SFL and genre approach to ESL writing instruction. The researcher found that a genre-based pedagogy afforded student writers different resources to draw on to accomplish their writing as they learned to view language as a "pliable" resource. Through explicit instruction, the teacher was able to help students recognize language as a tool for meaning making and the intertextual nature of writing. An SFL

perspective helped teachers "analyze with students how academic and literary texts linguistically construe knowledge" (Harman, 2013, p. 137). De Oliveira and Lan (2014) offered concrete evidence of a positive impact of a genre-based approach to teaching science writing to a fourth grade ELL student, demonstrating that the explicitness and precision of the procedural recount writing of the ELL student improved after genre-based instruction. It was found that the student used more field-specific vocabulary and technical terms, and the text had an enhanced quality of cohesion and coherence due to the use of temporal connectors (e.g., first, then, finally). An SFL-informed pedagogy was also reported to improve teachers' writing instruction and help improve the quality of student texts (Hodgson-Drysdale, 2016). Shin's (2016) findings show that when ELL students wrote science reports using science-related discourses, the scaffolding the teacher used (e.g., graphic organizers, scientific language and vocabulary, and metalanguage about scientific genres) made it easier for students to write those reports. Because of SFL-informed pedagogy, the first-grade ELL was able to produce a topic-centered, coherent report with a domain-specific linguistic repertoire, and was able to use metalanguage in eliciting the meaning of science reports. Findings of a different study by Brisk (2012) showed how a focus on "genre (purpose), mode (spoken or written), and tenor (audience and voice)" (p. 466) can help teachers teaching ESL writing. A genre approach to writing instruction, whereby teachers focus on the use of language in context, allows them to teach students the functional aspects of language when producing academic texts. This results in students making choices about their language use in writing with an awareness of the audience rather than following a set of fixed rules in text production.

Besides SFL and genre-based pedagogy, research has identified other instructional strategies that had a positive impact on ESL student writing. Brisk et al.'s (2016) findings indicated that writing instruction that was intentional and focused on character development helped four fourth grade bilingual writers' fictional narratives, and that the features of the characters in the narratives helped move the plot. The teachers used a number of instructional strategies: using mentor texts and explicitly exploring characters in these texts; explicitly demonstrating how characters are developed, and guiding the students to develop their own characters by various activities such as drawings, using graphic organizers, and conferencing with students. Students were trained on how to use images such as graphic organizers and other language resources to "enhance their narratives and reveal features of their characters" (p. 103). The study showed that young L2 writers can excel in a second language and a difficult genre (i.e., fictional narrative) if they receive targeted instruction. Mohr's (2017) findings indicated that a Modeled Writing (MW) approach, whereby the teacher used a text to model the genre and the act of writing itself to model writing, was effective for writing instruction for Grade 2 students. In another study by Accurso et al. (2016), Cecily, the teacher, made the following pedagogical choices: she valued the knowledge and linguistic resources that ELLs brought to the classroom; strategically selected grade-level model texts for students so they had opportunities to try out new language practices both in small groups and individually; highlighted the social function of linguistic choices, so students could critically examine their language in writing to communicate ideas meaningfully; and dedicated much time to students' drafting and revising phases. These pedagogical choices by the teacher helped the student, Ana Sofia, draw on a variety of linguistic resources to accomplish her science

writing. Studying a Korean middle school ESL student, Pandey (2012) stressed the need for a hybrid methodology for writing instruction, incorporating inductive instruction for morphology, grammar, paragraph, and discourse structures as well as thesis statement construction. The author noted the efficacy of individual student-centered writing classrooms that offered one-on-one workshop-style, individualized teaching. Finally, Yi (2010) found that the teacher's positive comments helped improve student writing.

Creating professional development opportunities for teachers. While a lack of professional development opportunities for teachers has been identified as one of the challenges in ESL writing instruction, several studies (Babinski et al., 2018; Brisk, 2012; Brisk & Zisselsberger, 2010; Olson et al., 2012) have found positive impacts of professional development opportunities for teachers on ESL writing instruction. Babinski et al. (2018) investigated a professional development intervention program called Developing Collaboration and Consultation Skills (DCCS) (p.118), which included ongoing collaboration between ESL and classroom teachers. The ESL and classroom teachers collaborated on implementation strategies of evidence-based teaching practices. This collaboration also included incorporating ESL learners' and their families' "cultural wealth" (Yosso, 2005, p. 119) into language and literacy pedagogy. The authors found that ESL students were likely to benefit from their teachers' professional development as they achieved higher scores in the Woodcock Munoz Language Survey (WMLS). Brisk and Zisselsberger's (2010) findings suggest that professional development in SFL had a positive impact on writing instruction, as students' writing improved when they had been "let in on the secret of how, in the context of American culture, text is created" (p. 118). Because of professional development opportunities, teachers felt more confident about their teaching of writing. Brisk's (2012) findings pointed out that the professional development programs the teachers were part of yielded benefits to ESL writing instruction. Olson et al. (2012) reported that after 72 teachers were assigned to participate in the Pathway Project, "a cognitive strategies approach to teaching interpretive reading and analytical writing" (p. 323), as part of a professional development program, the intervention resulted in students achieving higher scores on examinations. Athanases et al. (2013) found that through professional development programs, pre-service teachers can be prepared early in their careers for collecting and analyzing student-based data to inform their classroom practices.

In sum, findings point to several strategies that can be adopted to overcome the challenges teachers encounter in K-12 ESL writing instruction. First, training pre-service teachers in ESL writing should be a priority for teacher education programs. Next, it is a good idea to create a support network for teachers by enlisting the help of mentor teachers and researchers from local post-secondary institutions. For teachers themselves, a few helpful strategies may include incorporating integrated skills development in the writing classroom, creating opportunities for students to write more both inside and outside of the classroom, and adopting explicit writing instruction for student learning. Finally, a helpful strategy is to create professional development opportunities for teachers' ongoing learning.

Discussion

This systematic literature review provides an overview of the state of affairs of K-12 ESL writing instruction with regard to the challenges teachers encounter and what can be done to help them overcome these challenges. In short, it appears that ESL writing instruction at the K-12 level is an area that does not receive much attention in teacher education programs, and teachers, when teaching ESL writing, tend to encounter a variety of challenges because of this. That said, research has shed light on strategies that can be adopted to help teachers overcome the challenges.

Although teachers may encounter a variety of challenges when teaching in the classroom a closer look at the nature and type of the challenges they encounter in ESL writing instruction can provide critical insights into the limitations of teacher education programs. The findings show that ESL writing instruction is an area that requires both specialized knowledge and skills (Kibler et al., 2016). For example, without a working knowledge about writing as a complex literacy skill and the unique characteristics of ESL student writers, their writing processes, the errors they typically make, and the characteristics of the texts they produce, teachers would likely struggle in their teaching. Teachers cannot make informed decisions about the kind of pedagogical interventions necessary in a particular teaching context without being able to make sense of the types of errors in student writing. Similarly, without knowledge about writing and the functional aspects of language, it is difficult to plan and implement effective classroom pedagogy. Consequently, it is imperative that these concerns are appropriately addressed in teacher education programs.

In addition to the above, there appear to be challenges that teachers may encounter due to various external factors such as the pressures of standardized tests, a lack of prep time, and a lack of opportunities for professional development (Kibler, 2011b; Lee, 2016). Although high-stakes tests such as the ones related to No Child Left Behind (NCLB) in the U.S. provide a measure of students' academic achievement, concerted efforts are necessary among the state/provincial, district, and school stakeholders to help ELLs develop basic literacy skills, including those in writing, at an early age so they are primed for academic success. This follows that the stakeholders need to review and set academic priorities for ELLs. Findings suggest that ELLs can engage in highly effective literacy practices in the classroom, even with their developing English language proficiency. Consequently, it rests upon the teachers, administrators, and policy makers to make the best of ESL students' abilities. Various stakeholders need to work collaboratively to address the challenge of a lack of prep time and professional development opportunities for teachers. To illustrate, in-service teachers, especially those who have no background in teaching ESL writing or those who have just started their teaching career, can be considered for release from some teaching time. This is possible only when stakeholders are intentional, and resources are available for school principals. Similarly, although professional development interventions (Athanases, et al., 2013; Brisk, 2012; Kibler, 2011b; Lee, 2016) can help teachers compensate for a lack of academic training in ESL writing, opportunities for professional development have to be created at the school by various parties working collaboratively. What this means is that the school principal and school board must recognize the importance of professional development for ESL teachers and consider giving release time from their day-to-day teaching schedules. To illustrate, if teachers are encouraged to

organize and participate in professional development, their release time will translate into creating effective learning opportunities for them. Opportunities for learning for ESL teachers can also be created by collaborating with local post-secondary institutions and inviting researchers to schools. The researchers can observe teachers teach and provide them with constructive feedback based on the latest empirical evidence and teaching-learning theories. Collaboration between content area and ESL teachers can enhance teaching effectiveness for both.

In spite of various challenges in ESL writing instruction, research has shed light on a number of useful strategies, ranging from explicit instruction to incorporating integrated skills development (Al-Alawi & Kohls, 2012; Harman, 2013) and using SFL and genre pedagogy (Accurso et al., 2016; Brisk & Zisselsberger, 2010; O'Hallaron, 2014); from partnerships with mentor teachers (Lee, 2016; Yi, 2013) to giving students opportunities to write more (Bauer et al., 2017; Midgette & Philippakos, 2016; Shin, 2014). It is important to note that teachers alone cannot implement these strategies, as research suggests that different stakeholders need to work together to make classroom ESL writing instruction effective. For example, schools and teacher education programs need to work together to provide pre-service teachers optimal opportunities for class observations, reflection, and ultimately, building robust teaching partnerships with mentor teachers (Lee, 2016; Yi, 2013). Findings suggest that these strategies have a positive impact on the quality of student learning.

Our findings suggest that teachers' thinking that K-12 students' English writing development can only be achieved in a monolingual classroom setting needs to change. Empirical evidence indicates that biliteracy development occurs even when students have developing language skills in either of the languages, and that students are adept at transferring literacy skills from one language to another (Kibler, 2010, 2011a). This suggests that there is no need for an exclusive use of English in the ESL writing classroom. In fact, students should be encouraged to use their native languages when engaging in ESL writing activities. Also important is to reject the flawed belief that writing is not important for elementary students' second language development (Larsen, 2016). Considering that K-12 classrooms are replete with diverse students with myriad linguistic and cultural backgrounds, an effective strategy for teachers is to utilize students' diverse backgrounds as resources to strengthen student learning. This strategy works well in classroom settings that are varied with bilingual, ESL, refugee, and emergent bilingual students (Accurso et al., 2016; Bunch & Willet, 2013; Ortmeier-Hooper, 2013; Wong, 2016).

Conclusion

This systematic literature review provides insights into the extant empirical evidence on challenges teachers encounter in teaching ESL writing and strategies to overcome them. Thus, the paper provides useful insights for teachers, teacher education program administrators, and policy makers. This review also illuminates the work K-12 ESL teachers and researchers are doing to help ESL children develop their writing skills. It is encouraging to see that new research on K-12 ESL writing is emerging, enriching the field of L2 writing in general.

This review has important implications for research on K-12 ESL writing instruction, in particular, as they relate to Canadian schools. As is evident from the review,

research on K-12 ESL writing instruction in Canadian contexts is almost non-existent (only one out of 49 studies reviewed in this paper took place in Canada). Consequently, there is very little empirical evidence on the challenges teachers in Canadian schools encounter while teaching writing to ESL students. Similarly, we know little about the effective strategies teachers are already using and the support they need. It is imperative to gather empirical evidence on these important issues to enhance the overall quality of K-12 literacy education. Considering the high percentage of ESL students in Canadian schools today, as discussed in the introduction of this paper, there is no alternative to gathering empirical evidence on the current state of affairs of ESL writing instruction. To begin with, this can be done by posing such research questions as: How is ESL writing taught in Canadian K-12 schools? How prepared do teachers feel about teaching ESL writing? What challenges do teachers face in teaching ESL writing? What support do they need? and so on. While the insights from this paper can provide starting points for teachers, researchers, teacher education programs and school boards to plan for enhancing K-12 ESL writing education, more empirical research is necessary to gain a more nuanced, context-specific understanding about the issue.

Finally, a limitation of this work is that all studies reviewed in this paper were published in English. Another limitation is that the studies reviewed took place in North America. Consequently, this review does not include research in other K-12 ESL contexts such as the UK, Australia or New Zealand as well as English as a Foreign Language (EFL) contexts. To gain a more comprehensive understanding about K-12 L2 writing, accounting for these contexts is important.

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Appendix

Study	Purpose or Focus	Theoretical Framework	Participant Number, Age and/or Grade	Participants' Dominant Language	Duration of the Study	Research Method and/or Data Sources
Abraham (2017)	A teacher's examination of a question about teaching writing	Funds of knowledge; teacher research	Grade 5 bilingual Spanish-English students	Spanish	One school year	Interviews, observations
Accurso, Gebhard & Selden (2016)	Development and implementation of science writing	Systemic Functional Linguistics and functional perspective of grammar, genre pedagogy	An ELL teacher called Cecily; a fourth-grade bilingual student called Ana Sofia	Student - Spanish	2013-2014	Writing samples
Al-Alawi & Kohls (2012)	Students' writing practices, achievements, difficulties, and the quality of texts they produced		18 students		Four years	Longitudinal, comparative, collaborative, standardized tests, interviews, surveys, microgenetic case studies of tutoring and learning
Athanases, Bennett & Wahleithner (2013)	Pre-service teachers and adolescent ELLs' writing development	Teacher inquiry guided by intentional, systematic work (Cochran-Smith & Lytle, 2009)	96 secondary pre-service teachers		10 months	collected information about students; mentoring conferences; field notes

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Babinski, Amendum, Knotek, Sanchez & Malone (2018)	Professional development intervention program for teachers		45 teachers, 105 students in 12 elementary schools	Students were Spanish speakers		School based teams randomly assigned to the intervention; pre- and post test data; observation tool; Woodcock Munoz Language Survey-Revised Normative Update (WMLS-R; Schrank, McGrew, & Dailey, 2010)
Bauer, Presiado & Colomer (2017)	The use of "buddy pairs" with emergent bilingual students	Translanguaging	Two emergent bilingual kindergarteners; teacher became a participant-observer	Spanish, English; teacher-Spanish-English bilingual	2013-2014	Case study; writing samples, field notes, daily writing journal,
Brisk (2012)	Students' understanding of genre and audience	Systemic Functional Linguistics	Grades 3 to 5 ESL writers--eight boys and five girls	Spanish and Vietnamese	One school year; PDs	112 written texts; field notes
Brisk, Nelson & O'Connor (2016)	Bilingual students' development of characters in fictional writing	Teaching and Learning Cycle (TLC) (Rothery, 1996)	Four Grade 4 bilingual students and authors Cheryl and Deb	Cape Verdean, Spanish, Indonesian and Vietnamese		Field notes, narratives, drawings, graphic organizers

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Brisk & Zisselsberger (2010)	The impact of professional development program on an SFL-based approach to teaching writing	SFL theory	11 teachers		Seven two-hour sessions	PD materials, observations, discussions with teachers, student writing
Brown (2016)	Multimedia digital writing tools for children's literacy development	multimodal literacies	Six third grade ELLs		One school year	Qualitative study; videotaped events; field notes; screen shots of students' writing
Bunch & Willet (2013)	Middle school ESL students' essay assignments in social studies	Writing as meaning-making	40 students with varying English proficiency levels	Spanish	One school year	41 essays
Chen, Carger & Smith (2017)	Narrative writing practice of young ELLs who used iPads	Funds of knowledge approach	Grade 7 Chinese girl and 13-year-old Mexican-American boy called Larry	Mandarin and Spanish	Four weeks	Instrumental case study; home-visits, interviews, questionnaires, pre- and post-essays, informal observations, and field notes
De Oliveira & Lan (2014)	Genre-based approach to teaching science writing to a fourth grade ELL student	Systemic Functional Linguistics (SFL); Teaching and Learning Cycle by Rothery (1994)	An ELL from Korea	Korean	Second phase (January to March 2011) of a four-year project	Case study; meetings with teacher, observations, pre- and post-genre student writing, notes from meetings, field notes, and transcripts

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Enright (2013)	Two ELL students and how context impacted their writing experiences	Language socialization	Two 9th grade L2 writers	Spanish	Researchers followed a particular class schedule three days a week	Audio-recorded classroom, small group discussions classroom artifacts, copies of curriculum materials, student work, interviews
Enright & Gilliland (2011)	The influence of accountability efforts on writing practices of multilingual student writers	Academic socialization and academic literacies	130 randomly selected students and 5 teachers		2007-2008 school year	Classroom artifacts, field notes, meetings with the school leadership team, school staff, faculty; school documents
Gebhard, Shin & Seger (2011)	A teacher's use of SFL to design a blog-mediated writing curriculum for an ELL's literacy development	Martin's SFL-based genre theory; Vygotskian concepts of appropriation and mediation	A student named Diany from Puerto Rico; a teacher named Mrs. Seger	Spanish; teacher is conversationally fluent in Spanish	22 months	Classroom ethnography and genre analysis using the tools of SFL; curricular materials; and ELL produced texts
Gebhard, Willet, Jiménez Caicedo & Piedra (2010)	District-university partnership, supporting teachers to use content-based language approach	Systemic Functional Linguistics and academic literacy development	One teacher named Amy Piedra; an ELL student named Eloy	Spanish	August 2004 - May 2005	Ethnographic case study
Gilliland (2015)	Teachers' understanding of	Academic literacy (Street, 2012)	Two high school teachers	English	One year	Ethnography; interview and audio recordings of class sessions

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	second language learning and their practices					
Gort (2012a)	The role of code switching in writing development	Code-switching; the role of talk and social interaction	6 emergent Spanish-English bilingual grade one children	Spanish	Six months	Audio recordings, field notes, writing artifacts
Gort (2012b)	Writing and revising practices of bilingual students	Revising process; metalinguistic awareness; biliteracy; bilingualism	Three English dominant and three Spanish dominant students	English and Spanish	Six months	Observations; writing samples, audio tapes, field notes; interviews
Harman (2013)	A teacher's genre-based pedagogy of using expanded linguistic choices in genre writing of literary narratives	Systemic Functional Linguistics	Two grade 5 Spanish-English bilingual students; their teacher		September 2004 - April 2005	Audio and video recordings of interviews and interactions in the classroom, student writing, field notes, teaching materials, children's literature, course assignment, documents
Hodgson-Drysdale (2016)	Systemic Functional Linguistics and teachers teaching of writing	Systemic Functional Linguistics	Two teachers called Eva and Myrna		Eva - One school year; Myrna - 10 months	Modified form of action research; observations and field notes

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Hong (2015)	Understanding how ELLs become writers over time	Bakhtinian dialogism and interactional sociolinguistics	19 children and one teacher called Ms. Young	Hindi, Spanish, Finnish and Russsian	One year	Ethnography; discourse analysis on videos of three literacy events chosen from writing units
Kibler (2010)	Oral interactions of ESL writers during writing activity	Interactional sociolinguistics	Teacher and four focal students	Spanish		Ethnographic, field notes and audio recordings, and student writing
Kibler (2011a)	The challenges of teacher-student interactions in a writing class	Interactional histories analysis and multimodal analysis	One Grade 10 student and his teacher	Spanish; English		Case study; ethnographic observations, interviews; student writing; transcription
Kibler (2011b)	Teachers' and students' perspectives on the expectations about writing tasks		Four 10th grade ESL writers and two of their teachers	Spanish	Two years	Ethnographic study; fieldnotes, interviews, and student writing samples, informal observations
Kibler, Heny & Andrei (2016)	Teachers' perspectives on adolescent ELL writing instruction	Ecological language learning theories and situated teacher learning theory	10 secondary teachers	English		Exploratory study; focus group and follow up interviews

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Larsen (2013)	Teachers' preparedness of teachers dealing with ESL student writing		54 secondary ESL teachers			Questionnaire survey
Larsen (2016)	Elementary ESL teachers' work with student writing; requirements for ESL teacher education programs		51 elementary ESL teachers			Questionnaire survey
Lee (2016)	An in-service teacher's journey in a TESOL graduate education program	Bi/multi-literacy and postmethod pedagogy	A grade 5 teacher, Elaine	English		Case study; researcher journal, written artifacts, non-participant observations, end of program interview
Midgette & Philippakos (2016)	A biliterate kindergarten student learning English spelling	Gentry's (1982) principles of correctness of English orthography	One female kindergarten learner named Vikka	Russian	Seven months	Case study; student's responses to in-class writing tasks
Mohr (2017)	Writing of English language learning and native English speaking students before and after a	Sociocognitive theory of language development; informational writing instruction	N=105; 70 English learners (ELs) and native English speaking second graders; 8 teachers	Spanish; English	One year	Formative design experiment

Study	Purpose or Focus	Theoretical Framework	Participant Number, Age and/or Grade	Participants' Dominant Language	Duration of the Study	Research Method and/or Data Sources
	year-long writing program					
O'Hallaron (2014)	Instruction supporting argumentative writing of fifth-grade ELLs	Functional grammar which draws on Systemic Functional Linguistics	Two teachers from grade 2 to 5	One of the teachers was bilingual English and Arabic	One school year	Students' final drafts, graphic organizers, classroom video and audio data, texts
Olson, Kim, Scarcella, Kramer, Pearson, van Dyk, Collins & Land (2012)	Teachers and the Pathway Project, a cognitive strategies approach to teaching.	Students were taught cognitive strategies	72 secondary teachers; 9 middle schools and 6 high schools		2007-2008 2008-2009	Multi-site cluster randomized field trial
Ortmeier-Hooper (2013)	A refugee student's conflict of identity with his teacher's perception of him	Multilingual writers' identity within the framework of teacher perception (Chiang & Schmida, 1999); Teacher-student relationships (Blanton, 2002 2005);	A 14-year old refugee from student Nigeria, Wisdom; an English language teacher of 15 years, Mrs. Jennens	Gokana	15 months	Case study; field observations and notes, interviews and transcripts, informal interviews with Wisdom's peers, writing samples

Study	Purpose or Focus	Theoretical Framework	Participant Number, Age and/or Grade	Participants' Dominant Language	Duration of the Study	Research Method and/or Data Sources
Pandey (2012)	Examining the efficacy of a process approach to teaching ESL writing	Contrastive rhetoric; MAP (meaningful, authentic, purposeful) model	A Korean grade eight student	Korean		Detailed, longitudinal case study
Raynolds & Uhry (2010)	A comparison of the spelling of Spanish-English bilingual kindergarteners with their English-speaking monolingual counterparts	Lexical restructuring model	38 kindergarten students	Spanish and English	April and May	Literacy screening, spelling assessment and vocabulary test
Raynolds, Uhry & Brunner (2013)	Phonic instruction and its impact on the invented spellings of the second language vowel phonemes		19 ELL kindergarteners and 19 monolingual	Spanish and English	Two months	Assessment tests (PPVT-III, PALS)
Seloni (2013)	Pre-service teachers' real life experiences with language, culture, and text and their mediation	Post-method pedagogy and sociocultural perspectives of teacher education	Four pre-service teachers		One semester	Participants' blog posts, interviews, and ethnographic papers

Study	Purpose or Focus	Theoretical Framework	Participant Number, Age and/or Grade	Participants' Dominant Language	Duration of the Study	Research Method and/or Data Sources
	process between their learning from coursework and from their observations of senior teachers					
Shin (2014)	A grade 2 ELL student's use of blogging for social and academic purposes, in learning academic writing genres at school	Sociocultural theories; learning as appropriation	An ELL student called Jose	Spanish	One academic year	Ethnography; written texts, blog postings, videotaped classroom interactions, informal conversations, interviews, instructional materials, and school documents
Shin (2016)	An ELL teacher's metalanguage of genre and register shaping the curriculum and teaching of writing science reports	Systemic Functional Linguistics-informed genre pedagogy	Grade 1 teacher called Ms. Hall; a bilingual student called Sara	Student - Vietnamese; Teacher- English		Field notes, curricular materials, Glogster postings, informal interviews/conversations, student texts
Snow, Eslami & Park (2016)	Kindergarten students' literacy-enriched play and their writing	Literacy-enriched play	Three students and one teacher	Student- Indonesian, English and Dutch;		Exploratory pilot study; observations, photographs of students' block structures and writing samples, field

Study	Purpose or Focus	Theoretical Framework	Participant Number, Age and/or Grade	Participants' Dominant Language	Duration of the Study	Research Method and/or Data Sources
	development and writing behaviors			Teacher-English		notes, recorded participant actions
Soltero-Gonzalez, Escamilla & Hopewell (2012)	The study applied a holistic bilingual approach to assess emerging Spanish-English bilingual students' writing	Holistic bilingualism	36 bilingual teachers	Spanish and English	Five-year longitudinal	216 writing samples by students
Sparrow, Butvilofsky & Escamilla (2012)	Behaviors of bilingual children in a paired (English and Spanish) literacy program	Biliteracy	25 students; grade one to grade three emerging bilingual children	Spanish and English	Three years	Longitudinal; quantitative and qualitative; 25 student writing samples
Wong (2016)	The writing experiences and expectations of a bilingual student	Sociocultural theories; language and literacy socialization theories	A fourth-grade Spanish-English bilingual student, Lizette	Spanish	One year	Case study; field notes, audio recordings, student work, instructional artifacts
Yaden & Tsai (2012)	Bilingual English and Chinese kindergarteners "figuring out" the	Socio-psychogenetic and microgenetic approaches (e.g.,	11 Chinese American children	English and Chinese	Three months	Interviews; observations, trial analysis; video; 11 tasks each in English and Chinese

Study	Purpose or Focus	Theoretical Framework	Participant Number, Age and/or Grade	Participants' Dominant Language	Duration of the Study	Research Method and/or Data Sources
	differences between English and Chinese writing systems	Granott, 2002; Siegler & Crowley, 1991)				
Yi (2010)	Writing engagement and writing development through in- and out-of-school writing		A Korean immigrant high school student	Korean	Two years	Ethnographic case study; observation, field notes, interviews, literacy checklist, scribbles, notes, autobiography, poems, personal diary entry, online chatting, samples of academic writing
Yi (2013)	Pre-service teachers' sense of preparedness, challenges and negotiation of teacher identity in teaching L2 writing		Two pre-service ESOL teachers			Reflective exploration; interviews, observations, artifacts, assignments completed for internship course, exit portfolios
Zapata & Laman (2016)	The characteristics of classroom cultures that support translingual writing	Translingual literacies	One each of a second, third, and fourth grade classrooms and three of the	One teacher identified Spanish and English	90 hours of observable data and two-three days/week classroom visits	Ethnography; observations, artifacts, interviews, video and audio, writing samples

Study	Purpose or Focus	Theoretical Framework	Participant Number, Age and/or Grade	Participants' Dominant Language	Duration of the Study	Research Method and/or Data Sources
			teachers of these classes			