New Approaches to Literacy Problems: Multiliteracies and Inclusive Pedagogies

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Abstract: This paper is based on a qualitative study examining multiliteracies (New London Group, 1996, 2000) and inclusivity. Underpinned by a socio-cultural approach, the study examined ways to facilitate meaningful literacy learning for students experiencing challenges in print-based, classroom activities. Key to this research was an analysis of how scaffolding was used to bridge home and school communities. This paper focuses on one of the study's students, Hannah, who exhibited extensive engagement with multiliteracies at home - driven through the Arts (e.g. graphic design, singing and music). In contrast, Hannah's literacy experiences in the classroom were, at times, challenging and considerably different to those with which she engaged at home. Featuring iMovies and audiobooks, a multimodal literacy program connected the home and classroom, facilitating Hannah's exploration of multimodality. Findings call for open-ended, flexible approaches to literacy education and a reinvigoration of initial teacher programs, to support diversity and inclusion in literacy education.

Introduction

Over the past two decades, many researchers have contributed to a reconceptualisation of literacy by challenging traditional models and theorising literacy as a social and cultural practice (Bull & Anstey, 2010; Gee, 1992; Kress, 2000, 2010; New London Group, 1996; Vasquez, Janks, & Comber, 2019). A sociocultural view regards literacy practices as everyday social activities that take place in homes, schools or communities. Being literate involves understanding not only how to decode; it also involves being aware of the social and cultural contexts that surround various texts (Davies, 2012). A move toward a broader definition of literacy, away from a definition that focuses solely on skills and knowledge, has been fundamental in the shift towards multiliteracies. Adopting a sociocultural approach, this study aimed to generate new understandings about the learning of students experiencing literacy challenges in the classroom.

Reminding educators to adopt a balanced approach to literacy learning and to engage with literacy on a multitude of levels, it is the contention of this article that a pedagogy of multiliteracies framework (New London Group, 1996, 2000) represents a complimentary structure upon which to facilitate inclusive pedagogical practice (Florian, 2014a, 2015a). Concerns about inclusion, diversity and the celebration of difference are central to a pedagogy of multiliteracies. Notwithstanding some key studies (Cumming-Potvin, 2007; Flewitt, Kucirkova, & Messer, 2014; Flewitt, Nind, & Payler, 2009; Lawson, Layton, Goldbart, Lacey, & Miller, 2012), students who experience literacy learning challenges have

rarely been explicitly considered in the multiliteracies literature. This paper argues that a reconceptualisation of literacy learning, central to a pedagogy of multiliteracies, has the potential to facilitate inclusion (Florian, 2014a, 2014b). This approach seeks to curb the narrowing of curriculum options such as 'high-stakes' testing and 'back-to-basics' approaches in which traditional print-based forms of literacy learning tends to dominate in classrooms (Cumming-Potvin, 2007; Cumming-Potvin & Sanford, 2015; Unsworth, Cope, & Nicholls, 2019). In addressing the needs of all students, educators must understand the impact narrowing the curriculum has on students and the consequences of devaluing one set of literacies at the expense of another.

Focusing on the experiences of Year 6 student, Hannah (pseudonym), the study analysed how scaffolding (Bruner, 1983; Cumming-Potvin, Renshaw, & Van Kraayenoord, 2003; Rogoff, 1990; Vygotsky ca., 1930-34/1978) was used to bridge the gap between home and school literacy experiences. Scaffolding in this study refers to the assistance provided by peers or the teacher to support Hannah's learning. Interestingly this scaffolding often took place with a community of practice (Lave & Wenger, 1991) which promoted shared meanings and assisted Hannah with her literacy understandings. The case study approach privileged a deep understanding of Hannah's home and school literacy experiences. The initial motivation to build this case study was a desire to understand how students, who experienced challenges in print dominated environments, engaged with various literacy experiences. The case of Hannah is compelling because her story provides insights into literacy and inclusion issues arising in many classrooms and how such challenges may be addressed.

Multiliteracies and Multimodal Learning

The pedagogy of multiliteracies proposed by the New London Group (1996, 2000) marked a significant addition to the global body of literacy knowledge. Representing diverse fields such as literary analysis, linguistics, education and cultural studies, ten academics developed the theoretical framework and pedagogical practices of multiliteracies, thereby creating a vision of teaching and learning for the 21st Century. The four components of the pedagogy of multiliteracies are briefly defined in Table 1.

Component	Definition
Situated Practice	Immersion in experience and the utilization of available discourses, including those from the students' lifeworlds and simulations of the relationships to be found in workplaces and public spaces.
Overt Instruction	Systematic, analytic, and conscious understanding. In the case of multiliteracies, this requires the introduction of explicit metalanguages, which describe and interpret the Design elements of different modes of meaning.
Critical Framing	Interpreting the social and cultural context of particular Designs of meaning. This involves the students' standing back from what they are studying and viewing it critically in relation to its context.
Transformed Practice	Transfer in meaning-making practice, which puts the transformed meaning to work in other contexts or cultural sites.

Table 1: A Pedagogy of Multiliteracies (New London Group, 1996, p. 88)

The use of digital technologies at home and in schools is now commonplace for many Australian students (DeBortoli, Buckley, Underwood, O'Grady, & Gebhardt, 2014; Moyle, 2010). Research in the area of literacy and multimodality indicates that students are more often engaging in digital culture in the home context (Cole & Pullen, 2010; Honan, 2012;

Lynch & Redpath, 2014; Vasquez, Janks, & Comber, 2019). This engagement with multimodal literacies equips many students with new ways to create and share meaning as written-linguistic modes are often transposed with oral, visual, tactile, gestural and/or audio patterns of meaning (Kalantzis & Cope, 2011; Kress, 2000, 2010). While many of these forms of meaning making are often limited in the classroom context, an increased research interest into the crossover between school and home literacy practices points to the complexities and challenges facing educators and curriculum design (Chamberlain, 2015, 2016; Cumming-Potvin, 2007; Krause, 2014; Rowsell & Kendrick, 2013).

Students of the 21st Century need to become competent users of both print and other forms of multimodal meaning making (Cloonan, 2012; Pantaleo, 2019; Vasquez, Janks, & Comber, 2019; Walsh, 2007, 2010). In the school context, policy documents such as the Melbourne Declaration on Educational Goals for Young Australians (MCEETYA, 2008) endorsed by the Australian Education Ministers in 2008 (ACARA, 2018), have played a fundamental role in directing educational policy and curriculum directions. It remains a concern however, that while educators in countries such as Australia are often faced with a curriculum requirement to teach in a multimodal way (ACARA, 2018), implementation of practices to facilitate multimodal learning are not always clearly outlined in such texts (Gardiner, Cumming-Potvin, & Hesterman, 2013; Lynch & Redpath, 2014; Murphy, 2011).

Examining teachers' use of design and multimodality in literacy education, McLean and Rowsell (2013) contended that literacy teaching and learning should be more flexible and open to alternative types of meaning making utilised in classrooms. A multimodal approach to teaching and learning should encourage the use of and access to a variety of literacies and modes of meaning making to support reading and writing comprehension, critical thinking, and expression both at school and home (Kress, 2000; McLean & Rowsell, 2013). McLean and Rowsell (2015) asserted that educators "need to break and blend binaries of old literacy and new literacy models" (p. 104) and seek to "broaden the compositional landscape in which we teach" (p. 104). Examining one teacher's pedagogical decisions when working with touch technology, Simpson and Walsh (2014) found that where teachers have incorporated flexible pedagogies, students were supported in their literacy learning.

Inclusive Pedagogical Approach

The inclusive pedagogical approach has arisen from the work of a number of researchers, including Black-Hawkins, Florian, and Rouse (2007), Black-Hawkins (2014), Florian and Black-Hawkins (2011), Florian and Spratt (2013), Florian (2014a, 2015a, 2015b) and Florian and Beaton (2017). With an aim to enhance educational opportunities for all students, this pedagogical approach seeks not to exclude or label individuals and presents learning as a shared activity between learners. In many educational settings, decisions about teaching and learning still tend to be rooted in bell-curve thinking and ability-level developmental norms (Florian, 2014a; Florian & Black-Hawkins, 2011). These measures of ability impose labels on students resulting in limits being placed on their learning and marginalisation in the classroom context (Florian & Black-Hawkins, 2011). Often, the solution is to exclude these students by providing them with something different or additional to the mainstream. In many cases, a specialist teacher provides that which is different or additional.

For Florian (2010), embracing diversity and facilitating equity requires extending what is usually available to all students. With a background in specialist education, Florian and Black-Hawkins (2011) critiqued the widely held assumption that only specialist trained educators can teach students with diverse needs. These researchers asserted that by expanding

the pedagogical repertoire and providing for all students, teachers can be inclusive without having an expert knowledge of disability. While not diminishing the role of specialists, Rouse and Florian (2012) argued that support should be available to the classroom teacher rather than removing the student to meet with a specialist.

The inclusive pedagogical approach places importance on understanding teachers' craft knowledge of inclusive practice (Black-Hawkins & Florian, 2012; Florian & Black-Hawkins, 2011; Grimmett & MacKinnon, 1992). Craft knowledge refers to a teacher's accumulated wisdom and practical and pedagogical understandings developed through years of practice in complex classroom environments. Seeking to extend what is ordinarily available to all, the approach advocates "responsiveness to individual need," (Florian, 2014a, p. 17). Inclusion, from this perspective, is a dynamic enterprise that actively involves students in their learning. The teacher's role is to provide options for all, within the "community of the classroom" (Florian, 2015a, p. 11) rather than differentiating for some (Goddard & Evans, 2018; Klibthong & Agbenyega, 2018).

Research Context and Design

The context for Hannah's case study is a Year six Western Australian primary classroom. The school's Index of Community Socio-Educational Advantage (ICSEA) is approximately 1040 (MySchool, 2019), referring to a low- middle socio-economic urban area. Over one school term, the classroom teacher (Beth – pseudonym) implemented a multimodal literacy program, which required the class to:
1. Audioread[1] and discuss each chapter of *The Bad Beginning* (Snicket, 1999).
2. Utilise the iPad application (app) *Kid's Book Report* to build a storyboard plan for an *iMovie* book review;
3. Utilise the *iMovie* iPad app to create a book review of *The Bad Beginning*.

While the whole class undertook these activities, Hannah's experiences became a focus of this study. Hannah experienced varying degrees of difficulty with traditional print-based literacy learning, which were identified using a combination of: Neale Analysis of Reading Ability (NARA) assessments, teachers' summative and formative assessments, and student histories.

Using a qualitative approach, which is deemed suitable for gaining an in-depth knowledge regarding participants' perceptions (Patton, 2002), research tools including semi-structured interviews, classroom observations and work samples, were used to construct a case study of Hannah's literacy experiences. To focus the data-gathering process, the following research questions were investigated:
*   How did Hannah experience literacy activities when traditional print-based tasks were prevalent in the classroom?
*   How did Hannah engage with the multimodal literacy program?

Drawing on Gee (2010, 2013), an analysis of how Hannah experienced school and home literacy practices allowed for examination of the research questions. Hannah's case offers insights into how a pedagogy of multiliteracies and an inclusive pedagogical approach may facilitate access to literature, encourage exploration and response to texts.

Prior to commencement of data collection all appropriate ethical approvals were sought and granted. The research was conducted in line with guidelines laid down by the

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[1] The term audioreading is used in this study to describe the process of reading an audiobook. It is argued that audioreading constitutes more than passive listening. Rather, audioreading is an activity as active as regular reading and involves meaning making, imagination and the development of critical understandings (Alcantud-Diaz & Gregori-Signes, 2014; Argyropoulos, Pavell & Nikolaraizi, 2018).

National Health and Medical Research Council (NHMRC, 2007), the Australian Association for Research in Education *Code of Ethics* (AARE, 2016) and the Murdoch University Human Research Ethics Committee. Through a process of written, informed consent, research participants were free to participate in the study or to withdraw any time. Data gathered were confidential, while the identity of the research participants and the setting were concealed. Anonymity was also assured through the use of pseudonyms. Table 2 provides a summary of the data collected as the study progressed.

Stage	Data Collection
Stage 1	• Neale Analysis of Reading Ability • Interview One: Exploring student interests, likes and dislikes, perceptions about literacy. • Interview Two: Exploring student perceptions about in-school literacy and using technology in-school. • Researcher Observations/Notes
Stage 2	• Audioreading *The Bad Beginning* and discussion in-class: Observations and recorded class and group discussions. • Interview Three: post audioreading *The Bad Beginning*. • *Kid's Book Report* data collection and work samples. • *iMovie* book review: Student work samples. • Interview Four: Student perceptions on multimodal literacy program. • Researcher Observations/Notes
Stage 3	• Interview Five: Student final perceptions

Table 2: Summary of data

Findings

The Case of Hannah: Socio-cultural Background and Literacy Practices

When the first author initially met her, Hannah had attended Grove Primary School (pseudonym), for seven years. Hannah and Catherine (her best friend), were inseparable. Often in each other's company, the two girls shared common interests and were regularly seen working and laughing together. During classroom activities, Hannah was frequently observed to be on task and working diligently.

While Beth, Hannah's teacher, was not aware of a formal diagnosis, she explained that Mrs Wright, Hannah's mother, had reported that Hannah experienced a "mild intellectual disability" and had always worked at a level "at least two years below her peers". Hannah also explained that she experienced challenges, particularly with regard to her schoolwork. Hannah commented that she had "trouble with reading, spelling and writing". She stated:

> *I'm the one who always asks for help. [My friends] help with questions when I don't get what the question is trying to say. They explain it. Catherine really helps me.* (Hannah, Interview 1)

Results of the NARA reading assessment indicated that Hannah's reading rate was below her chronological age by seven months; the scores for comprehension and accuracy were more than two years below Hannah's chronological age. This standardised measure provided *only* a glimpse of Hannah's experiences with reading in the school context. The following excerpts from interviews with Hannah also offer deeper insights into her reading experiences, both the enjoyment and frustrations. During the first interview with Hannah, she responded positively when asked how she felt about reading:

> *It's good to tell stories. I like to read stories that are not real or some that can be real… I don't like when you have to say words that you don't understand. It's like you have to say things and you don't know what you're saying. It's hard when you don't know what the word means.* (Hannah, Interview 1)

Several months later, during Interview Five, Hannah described her challenges when faced with reading unknown words:

> *Sometimes because in big books they have a lot of words … It's annoying to stop and figure out what a word means. Sometimes I have to look it up [Google] so I know. Sometimes that word that you don't get means everything. Like it will ruin the whole book if you don't know it. It's so annoying.* (Hannah, Interview 5)

Throughout the study, it was interesting to note how Hannah used *Google* to facilitate her comprehension when navigating difficult texts. This was a good example of home literacy practices overlapping with literacy learning in the school domain - where Hannah often used the Internet for research and assistance.

When asked about writing at school, Hannah's response was not enthusiastic. For example, Hannah reported that writing was difficult and uncomfortable.

> *Sometimes it hurts my hand when I have to write with a pencil in a book. I don't like writing. I'm really slow at writing.* (Hannah, Interview 2)

Beth was aware that Hannah liked to use technology to write and encouraged her to use a laptop computer or iPad when possible. Hannah occasionally used an iPad at school for writing, primarily using writing apps such as *Pages* and *Keynote*.

In contrast to the school context, Hannah reported that she used her iPad regularly at home. She explained that she loved using the art app, *Paper by WeTransfer,* for drawing in her iPad. While she did not utilise this app in class, Hannah used it to extend her love of art to her home environment. Upon opening the app, the user is presented with a simple blank page; however, the page can be transformed using artistic tools in the App. Pencils, paintbrushes, watercolours and an array of shades allow for artworks to be created by users. Hannah kept a portfolio of drawings in her iPad. She shared some watercolour paintings - landscapes, flower arrangements and people in her life with the first author.

Hannah also enjoyed playing games on her iPad. She engaged most often with *High School Story* and *Minecraft*, which were linked to an online community. Hannah explained that *High School Story* was a choose-your-own adventure story and a significant amount of reading was necessary. It was important to read the story so that players could progress through the quests and decide on a response to different scenarios. Hannah also played *Minecraft*. She had become adept at creating and building her own worlds. If she was unsure about how to do anything within *Minecraft*, she would ask Catherine or they would look on YouTube for tutorials. Hannah's interactions during these games were complex. She read widely, conducted research and engaged with an online community for support, ideas and friendship. Her strategy of collaboration, evident in the school setting, was also apparent online. These activities all demanded an understanding of literacy that moved beyond traditional classroom based text forms.

Hannah's interaction with these digital literacies was engaged and interested. Examining literacy from this perspective sheds light on how social and cultural practices contribute to different types of literacy development. As Marcon (2013) noted, digital online games act as social tools for communication and are integral to new literacies. Indeed, social interactions online appeared to provide a place where Hannah could extend her zone of proximal development (Vygotsky ca., 1930-34/1978) by engaging in collaborative discussions with friends and online members. Gee (2013) suggested that learning in this way is primarily achieved via shared experiences. He argued that learners who have gained knowledge through gaming simulations can eventually generalise what they have learned in

other contexts and in more abstract ways. Accessing these literacies and harnessing them in the school context has the potential to enrich students' learning.

At home, Hannah also pursued her love for music. Her ambition was to learn to play the violin and write songs. During Interview Five, Hannah explained that she had begun to write her own songs about friends, life and school. Writing these songs longhand in a "special book", Hannah expressed a desire to keep these for when she was "grown-up". This was surprising to hear, particularly given that Hannah had expressed a dislike for handwriting in the school context. Hannah's love for music and singing appeared to be the impetus behind the desire to write songs; the motivation to write was authentic and embedded in social and cultural context.

Hannah explained that her online literacy experiences also extended to reading and writing activities on an iPad app called *WattPad*. This is a social platform where online community members can read others' stories and publish their own. Hannah especially liked to read the romance books published on *WattPad*. She explained:

> *I like reading. There's this app where you can make your own books and you can write your own books and publish them ... I'll show you, WattPad. You can make a book and it's cool ... I'm making one. It's good on the iPad because you can publish it and people can comment on it.* (Hannah, Interview 5)

Being engaged with a community of practice (Lave & Wenger, 1991), to share meanings and develop understandings, appeared to positively influence Hannah's desire to read and write. Hannah's interactions with an online community of writers on *WattPad* were a source of great enjoyment with online romance stories providing a source of rich, literacy encounters. As Curwood (2013) asserted, in online collaborative spaces, such as *WattPad* and fandom sites, members are flexible in their degree of involvement and have an authentic audience that reads and responds to their work.

Hannah also reported that she preferred to use an iPad to write because she felt that it was easier and neater than writing by hand. She commented:

> *You get to imagine what you want to do. You can get pictures and music and stuff. We can share ideas with friends ... Using the iPad for writing is good ... I can type fast and it's neater... Spellcheck is good.* (Hannah, Interview 5)

This love of writing online was surprising given Hannah's reluctance to write in the classroom context. Although she was still writing her first story, *Friends Don't Come Like That,* at the time of Interview Five, Hannah was planning to write more under her pseudonym. She explained that she loved writing this way and that she could add pictures, use different fonts and incorporate other creative elements into her text. Hannah especially liked that she was able to share her stories online.

Hannah's Engagement: Analysis of the Multimodal Literacy Program

In collaboration with Beth, the classroom teacher, the principal researcher developed the multi-modal literacy program. Beth implemented the program in the primary classroom, while the principal researcher engaged with data collection, interviewing and observations. Hannah was excited to be part of the study. She liked being interviewed and sharing her perceptions about literacy. During interviews, Hannah stated that she was familiar with audiobooks and she enjoyed being read to. Experiencing situated practice (New London Group, 1996, 2000) in this way appeared to facilitate Hannah's understanding of *The Bad Beginning* audiobook. Researcher notes indicated that Hannah appeared to be listening actively during the audioreading. She was able to reflect on the experience of reading via the audiobook, and more specifically on events in the novel. Because Hannah had also viewed

the movie, *A Series of Unfortunate Events,* at home, her knowledge of the movie supported her interest and engagement with the multimodal literacy program.

When the multimodal literacy program progressed to using the *Kid's Book Report* App, Hannah was excited to use the iPad, but found the task challenging. At times, when Hannah was less engaged, she required extensive scaffolding to complete the task, which was essentially, a worksheet on the iPad. Students were asked to break the novel into elements of its narrative structure. Despite, Beth's overt instruction, prior to beginning the *Kid's Book Report* task, Hannah remained unclear about what to do. While she was able to verbally express the information under each section dictated by the *Kid's Book Report*, Hannah struggled to encode extensive information on the iPad. Figure One below, Hannah's *Kid's Book Report* work sample, illustrates how extensive scaffolding in the first section led to a more complete answer to the questions posed. In the subsequent sections, however, although Hannah was able to verbally express her thoughts, encoding these proved challenging and the responses were much shorter and less detailed. Utilising the First Steps Writing Map of Development (EDWA, 2013a), it can be argued that Hannah's book report displayed aspects of experimental and conventional writing. But in terms of commenting orally on her own writing, Hannah was able to verbally express a writing plan and make relevant distinctions between different parts of the narrative (EDWA, 2013a). She also displayed an ability to listen to a spoken text to obtain specific information (EDWA, 2013b).

Figure 1: Hannah's *Kid's Book Report* Work Sample

When Hannah moved onto using the *iMovie* App, she appeared more at ease. While iPad technology was not new to Hannah, she had only used *iMovie* in limited ways prior to the multimodal literacy program and was enthusiastic to learn more. During this task, Hannah learned new *iMovie* skills in collaboration with peers. Researcher notes from the time recorded that by working with Catherine and another classmate (Amanda), Hannah learned how to import images and add music to her project.

As she engaged with the multimodal literacy program, Hannah was scaffolded in diverse ways, which was important to meaning making. Teacher scaffolding often took the form of overt instruction (New London Group, 1996, 2000) directed to the class or specifically to Hannah. Hannah's friend, Catherine, was also a key individual who scaffolded Hannah's learning. On occasion, Catherine provided explicit information and at other times she guided Hannah by answering her questions and supporting her understandings, thus aiding both students in their growing comprehension of *The Bad Beginning*. While both students experienced literacy challenges, with Hannah, Catherine tended to adopt an expert role in an expert–to–novice relationship (Rogoff, 1990).

As Hannah progressed through the multimodal literacy program, she began to display an interpretation of the text that moved beyond a surface reading towards some degree of critical framing (New London Group, 1996, 2000). A term that stood out in interviews and informal discussions with Hannah was "problems". Hannah often commented that she liked the novel, *The Bad Beginning*, because it "had problems in it". This idea of a "problem" central to the storyline emerged after Hannah completed the *Kid's Book Report* - one element of the narrative structure was a consideration of the main problem in the text. From the perspective of critical framing, this early stage analysis is represented by a denaturalising of the text, which allowed for some personal distance and constructive critiques (New London Group, 1996). An example was evident when Hannah began to question some events in the novel. On one occasion, after a class discussion about how the students felt about the novel, Hannah stated:

> *It was weird at the beginning because the parents died at the start.* (Hannah, Researcher notes)

A few minutes later, upon reflection, she declared:

> *The parents aren't dead!* (Hannah, Researcher notes)

In isolation, these statements may appear unremarkable; however, the plot of the novel clearly stated that the parents had perished in a fire, leaving a fortune in inheritance. While this situation was set up as a mystery, it was fascinating to hear Hannah question that the parents had died at all. It appeared that Hannah was searching beyond a surface reading of the text. She began to recognise that her interpretation differed to that of others and began to interrogate the truth as presented in the novel.

During Interview Four, the principal investigator sought to extend some of Hannah's perceptions about the text and engage her more deeply in critical framing. Hannah's responses speak to a level of thought about the novel that was not apparent in her *iMovie* or during class discussions. When asked about Count Olaf's plans to marry Violet, Hannah responded:

> *That was a shock. He is older than her [Violet] and when he said that, I knew he just wanted the money. In real life, he would go to jail*. (Hannah, Interview 4)

Later, in this same interview, Hannah was asked who she thought held the most power in the story. She replied:

> *The kids because normally adults sometimes don't believe their kids coz they're kids. Coz they kept on saying and telling people that Olaf was bad and no one would listen but they kept trying. They ended up alive in the end ... They just kept trying. Like Violet wants to be an inventor. She invented things and they kept*

trying to get help ... They were smart and figured out stuff. (Hannah, Interview 4)

By linking events in the novel with her own understandings about children and their relationships with adults, Hannah interrogated the text and was able to add meaning based on her own perspective (Kalantzis & Cope, 2005; New London Group, 1996, 2000).

Hannah enjoyed many aspects of the multimodal literacy program. Overwhelmingly, she appeared most engaged when making her *iMovie* review. Hannah stated:

It's more fun with iMovie. You can do theme music and pictures. It's not distracting - it's entertaining. It's more interesting. It's better with the iMovie coz it's better with your own voice instead of writing. People can hear your voice and your opinion of the book. You can show yourself too - a picture or video of you. (Hannah, Interview 4)

Hannah's enthusiasm for the multimodal literacy program points to the value of using multimodal tools to express meaning. Hannah's comments about being able to "show yourself" were particularly insightful and stood in contrast to that which may be achieved in traditional print-based formats. While having the option to present in any format, in her final *iMovie* work sample, Hannah chose to follow the structure laid out in *Kid's Book Report*. Perhaps in order to "show herself", most of Hannah's review was completed by speaking to the camera. Although there was limited use of written text in Hannah's *iMovie*, in other sections she experimented by using images and incorporating music into her *iMovie*. After viewing her friend's *iMovie*s, for example, Hannah commented in Interview Four that there were a number of special effects which her peers had used which she was not aware of and intended to try in the future. In this case, transformed practice (New London Group, 1996, 2000) was represented as Hannah began to exhibit a growing mastery of technical skills.

As Oakley (2017) argued, creating and using multimodal texts with digital technologies has the potential to motivate and support literacy learners with diverse needs. She contended that digital technologies can fundamentally change literacy learning environments and provide an important means to enhancing inclusivity. In Hannah's context, creating digital multimodal texts offered learners with diverse needs a variety of options, which are essential to differentiated teaching.

Discussion

Hannah appeared to participate in literacy learning in meaningful and engaged ways by:

1. Activating prior knowledge and immersing in meaningful learning via situated practice.
2. Experiencing opportunities to create meaning in multiple ways.
3. Developing shared meanings, which were scaffolded within a community of practice.

These literacy practices appeared to be displayed more readily in the home context. However, they also became increasingly apparent during the multimodal literacy program. The latter sought to offer choice for students to utilise various modes of meaning making to suit their personal strengths and interests. During the multimodal literacy program, it became evident that engagement was linked to four pedagogical strategies that were key to scaffolding literacy learning and facilitating engagement. These strategies are discussed in the following section.

Strategy One: Engaging in Situated Practice

Seeking to engage Hannah in situated practice (Kalantzis & Cope, 2005; New London Group, 1996, 2000), the principal researcher encouraged the use of iPad technology because Hannah stated that she preferred working in ways that allowed for the integration of multimodal elements. The classroom teacher and principal researcher also facilitated situated practice by highlighting certain narrative elements of *The Bad Beginning* so that the students were familiar with the plot or could, at least, empathise with the characters. Finding a common interest in the adventures and humour portrayed in the novel, Hannah expressed a combination of amusement and distaste for Count Olaf and sympathy for the Baudelaire orphans. The case study data illustrated that Hannah held strong views surrounding moral and ethical norms about marriage and how parents and carers should treat children. Observations and discussions with Hannah about these moral and ethical norms indicated she was engaged by the ideas and could draw on known experiences to inform her discussions (EDWA, 2013c; SCSA, 2016).

Strategy Two: Scaffolding

As an enthusiastic verbal contributor, Hannah enjoyed social interactions in the primary classroom. Excelling in classroom discussions, Hannah often learned in collaboration with her peers and her teacher. This strength in oral language is an indicator of literacy development (Fellowes & Oakley, 2010; Purcell-Gates, Duke, & Martineau, 2007). Although she was challenged when asked to write, Hannah's discussions about literary texts displayed emergent literacy understandings (Purcell-Gates, Duke, & Martineau, 2007).

Hannah's understandings of *The Bad Beginning* developed as the multimodal literacy program progressed. The class and group discussions about the novel appeared instrumental in scaffolding Hannah's comprehension of the story. Social interactions between students, or the students and the teacher, were at the centre of the zone of proximal development (Vygotsky ca., 1930-34/1978) as less experienced learners interacted with those more experienced. Hannah relied on peers - in particular Catherine - to scaffold her understandings. Catherine did not display an ability to orient Hannah's thinking in the way that Beth, as a teacher, had done. However, Catherine was able to answer Hannah's questions, and Hannah confirmed her understandings during this peer interaction.

When it came to reading, Hannah found greatest success when she could choose her own reading material and when she was read to. Audioreading, during the multimodal literacy program, facilitated a deep reading of a complex text that Hannah would not have been able to access if she had to decode every word independently. Hannah explained that reading an audiobook allowed her to conjure images in her mind of the novel's events.

> *[I like the] audiobook because you can create your own pictures and not just use someone else's ... I actually liked it [the audiobook] because you heard it in your mind and you could think about it and see what you think in your mind.* (Hannah, Interview 3)

Research examining the potential of audiobooks to scaffold struggling readers towards independence supported the decision to audioread *The Bad Beginning* (Alcantud-Diaz & Gregori-Signes, 2014; Argyropoulos, Paveli, & Nikolaraizi, 2018; Grover & Hannegan, 2012). Audioreading scaffolded Hannah to read above her actual reading level and experience a plot structure, theme and vocabulary of a complex text. The audiobook removed the requirement to decode and provided additional cues and clues for comprehension, including music, sound effects and intonations in actors' voices.

Strategy Three: Developing Critical Understandings

Beth's expert use of guided and overt instruction scaffolded the process of developing critical understandings and meaning making of the audiobook. This scaffolding facilitated Hannah's critical awareness as well as her understanding of narrative construction. As noted above, Hannah displayed an ability to critically analyse the text. When discussing *The Bad Beginning* text, she interrogated elements of the plot and questioned these in relation to her own norms and values.

Beth's guiding questions were also important in facilitating Hannah's consideration of multimodal as well as literary concerns. A key example was when Beth explicitly discussed the differences between audiobooks and printed books. The multimodal elements contained within an audiobook, such as *The Bad Beginning,* include sound effects, music and actors' voices to represent different characters. These affordances set the mood of the novel and provided an added dimension, not accessible in the printed format. After explicitly discussing the multimodal dimension of the narrative, utilising the metalanguage required to frame these ideas, Hannah came to understand and discuss the differences between the printed and digital texts.

Strategy four: Collaboration within a community of practice

Garcia and Freidman (2011), Keane, Lang, and Pilgrim (2012), Rowsell, Saudelli, McQuirter-Scott, and Bishop (2013) and Simpson, Walsh, and Rowsell (2013) supported the notion that iPads, or touch technologies, increase collaboration among students using iPads for literacy learning. Hannah engaged in collaboration with peers, and to a lesser extent with her teacher, during the design and production of her *iMovie* review. During this task, Hannah learned new skills as she worked with Catherine to learn how to import images and add music to her project. Keen to be extended further, after viewing friends' *iMovies*, Hannah expressed a desire to create more *iMovies* and utilise more multimodal features.

Rowsell et al. (2013) supported the idea that iPads facilitate increased collaboration in the classroom. These authors also suggested that there is often augmented collaboration between students of different ability levels. They noted how struggling learners listened to the metacognitive problem solving of other students as they brainstormed issues that arose when using touch technologies. This type of collaboration appeared evident during the multimodal literacy program as Hannah actively sought scaffolding through peer – peer and teacher – student interactions.

Conclusions

Data from the in-depth case study illustrated that while Hannah exhibited strong engagement with literacies in the home environment, her experiences in a print-dominated classroom were often challenging. Data analysis unveiled that Hannah appeared to participate in literacy learning in active and engaged ways when she could:
1.   Activate prior knowledge and immerse in meaningful learning via situated practice.
2.   Experience opportunities to create meaning in multiple ways.
3.   Develop shared meanings - scaffolded within a community of practice.
Drawing on a pedagogy of multiliteracies (New London Group, 1996, 2000) and a framework for inclusive pedagogy (Florian, 2014a, 2015a), this study sought to develop opportunities to facilitate meaningful literacy learning for students challenged in a print

dominated primary classroom. Designed for this study, the multimodal literacy program sought to limit the emphasis on print-based modes of meaning so that case study students, such as Hannah, could explore a multimodal way of presenting their thoughts and ideas.

Hannah's case study explored ways to engage and scaffold primary school students who experienced literacy learning challenges in a print-dominated environment. Researcher bias is acknowledged as an inevitable part of case study research (Yin, 2011); in this instance, the first author primarily executed the means of data collection. Nonetheless, frequent consultation with the co-authors as well as critical friends was vital for limiting bias and seeking alternate viewpoints (Kuh, 2016; Yin, 2011). In addition, institutional ethical clearance, member checking and multiple interviews were employed as crosschecking strategies (Yin, 2011).

Further, it is important to signal that a salient dimension of the multimodal literacy study was its focus on technology, in particular, the iPad. This research has attempted to keep up to date with technological shifts as well as amendments to iPad applications. The rate at which technologies are updated and superseded, however, may alter some findings, particularly over time. Such technologies tend to become more accessible as universal design processes are incorporated into devices (Maor, Currie, & Drewry, 2011). Notwithstanding, this paper contends that in a primary classroom context, to appropriately scaffold all students, in particular those who experience literacy learning challenges, it is necessary to plan for open-ended and flexible teaching and learning, which offers diverse modes and strategies for meaning making. Literacy educators are thus urged to consider addressing teaching dilemmas, which span home and school practices, rather than viewing literacy problems as internal to students. Training teachers in the use of current technologies is important to ensure educators have a comprehensive repertoire upon which to draw. Implications for these results point to the importance of reinvigorating initial teacher programs, to support diversity, equity and inclusion in literacy education.

References

Alcantud-Diaz, M. & Gregori-Signes, C. (2014). Audiobooks: Improving fluency and instilling literacy skills and education for development. *Tejuelo*, *20*, 111-125.

Argyropoulos, V., Paveli, A., & Nikolaraizi, M. (2018). The role of DAISY digital talking books in the education of individuals with blindness: A pilot study. *Education and Information Technologies*, 1-17. https://doi.org/10.1007/s10639-018-9795-2

Australian Association for Research in Education. (AARE) (2016). *Code of ethics.* Retrieved from http://www.aare.edu.au/pages/aare-code-of-ethics.html

Australian Curriculum, Assessment and Reporting Authority (ACARA). (2018). *The Australian curriculum*. Retrieved from http://www.australiancurriculum.edu.au

Black-Hawkins, K. (2014). Researching inclusive classroom practices: The framework for participation. In L. Florian (Ed.), *The SAGE handbook of special education* (2nd ed.) (pp. 389-403). London, UK: SAGE Publications. https://doi.org/10.4135/9781446282236.n25

Black-Hawkins, K. & Florian, L. (2012). Classroom teachers' craft knowledge of their inclusive practice. *Teachers and Teaching*, *18*(5), 567-584. https://doi.org/10.1080/13540602.2012.709732

Black-Hawkins, K., Florian, L. & Rouse, M. (2007). *Achievement and inclusion in schools.* London, UK: Routledge.

Bruner, J. (1983). *Child's talk: Learning to use language.* Oxford, UK: Oxford University Press.

Bull, G. & Anstey, M. (2010). *Evolving pedagogies: Reading and writing in a multimodal world*. Carlton South, Australia: Education Services Australia.

Chamberlain, L. (2015). *Exploring the out-of-school writing practices of three children aged 9-10 years old and how these practices travel across and within the domains of home and school*. Ed.D. Thesis, Milton Keynes, UK: The Open University. Retrieved from https://oro.open.ac.uk/46792/1/Final%20thesis%202015.pdf

Chamberlain, L. (2016). *Inspiring writing in primary schools* (with contributions from Emma Kerrigan-Draper). London, UK: Learning Matters, SAGE Publications.

Cloonan, A. (2012). Multimodal literacies: New approaches and traditional concerns in the suburban classroom. In R. Henderson (Ed.). *Teaching literacies in the middle years: Pedagogies and diversity.* (pp. 166-189). Melbourne, Australia: Oxford University Press.

Cole, D. & Pullen, D. (2010). Introduction to multiliteracies in motion: Current theory and practice. In D. Cole & D. Pullen (Eds.), *Multiliteracies in motion: Current theory and practice* (pp.1-14). New York, USA: Routledge. https://doi.org/10.4324/9780203864036

Cumming-Potvin, W. (2007). Scaffolding, multiliteracies, and reading circles. *Canadian Journal of Education*, *30*(2), 484-507. https://doi.org/10.2307/20466647

Cumming-Potvin, W., & Sanford, K. (2015). Countering a 'Back-to-Basics' approach to teacher education: Multiliteracies and on-line discussions in a community of practice. *Language and Literacy*, *17*(1), 21-41. https://doi.org/10.20360/G29W20

Cumming-Potvin, W., Renshaw, P., & Kraayenoord, C. van. (2003). Scaffolding and bilingual shared reading experiences: Promoting primary school students learning and development. *Australian Journal of Language and Literacy*, *26*(2), 54–68.

Curwood, J. (2013). The Hunger Games: Literature, literacy, and online affinity spaces. *Language Arts*, *90*(6), 417-427.

Davies, J. (2012). Facework on Facebook as a new literacy practice. *Computers & Education, 59*(1), 19-29. https://doi.org/10.20360/G29W20

DeBortoli, L., Buckley, S., Underwood, C., O'Grady, E., & Gebhardt, E. (2014). *ICILS at a glance: Highlights from the full Australian report – Australian students' readiness for study, work and life in the digital age.* Retrieved from ACER website: https://research.acer.edu.au/ict_literacy/7

Education Department of Western Australia. (EDWA)(2013a). First steps: Addressing current literary challenges. *Writing map of development.* Creative Commons Attribution- 4.0 International (CC BY 4.0). Retrieved from http://det.wa.edu.au/stepsresources/detcms/education/stepsresources/first-steps-literacy/writing-map-of-development.en?cat-id=13601995.

Education Department of Western Australia. (EDWA)(2013b). First steps: Addressing current literary challenges. *Speaking and listening map of development*. Creative Commons Attribution- 4.0 International (CC BY 4.0). Retrieved from http://det.wa.edu.au/stepsresources/detcms/education/stepsresources/first-steps-literacy/speaking-and-listening-map-of-development.en?cat-id=13601995.

Education Department of Western Australia. (EDWA)(2013c). First steps: Addressing current literary challenges. *Reading map of development.* Creative Commons Attribution- 4.0 International (CC BY 4.0). Retrieved from http://det.wa.edu.au/stepsresources/detcms/education/stepsresources/first-steps-literacy/reading-map-of-development.en?cat-id=13601995

Fellowes, J. & Oakley, G. (2010). *Language, literacy and early childhood education*. Victoria, Australia: Oxford University Press.

Flewitt, R., Kucirkova, N. & Messer, D. (2014). Touching the virtual, touching the real: iPads and enabling literacy for students with learning disabilities. *Australian Journal of Language and Literacy*, *37*(2), 107–116.

Flewitt, R., Nind, M. & Payler, J. (2009). "If she's left with books she'll just eat them": Considering inclusive multimodal literacy practices. *Journal of Early Childhood Literacy*, *9*(2), 211-233. https://doi.org/10.1177/1468798409105587

Florian, L. (2010) The concept of inclusive pedagogy. In G. Hallett & F. Hallett (Eds.), *Transforming the role of the SENCO* (pp 61-72), Buckingham, UK: Open University Press.

Florian, L. (Ed.). (2014a). *The SAGE handbook of special education (*2nd ed.). London, UK: SAGE Publications. https://doi.org/10.4135/9781446282236

Florian, L. (2014b). What counts as evidence of inclusive education? *European Journal of Special Needs Education*, *29*(3), 286-294. https://doi.org/10.1080/08856257.2014.933551

Florian, L. (2015a). Inclusive pedagogy: A transformative approach to individual differences but can it help reduce educational inequalities? *Scottish Educational Review*, *47*(1), 5-14.

Florian, L. (2015b). Conceptualising inclusive pedagogy: The inclusive pedagogical approach in action. In J.M. Deppeler, T. Loreman, R. Smith & L. Florian (Eds.), *Inclusive pedagogy across the curriculum: International perspectives on inclusive education*, (Vol. 7, pp. 11-24). Bingley, UK: Emerald Group Publishing Limited. https://doi.org/10.1108/S1479-363620150000007001

Florian, L. & Beaton, M. (2017) Inclusive pedagogy in action: Getting it right for every child. *International Journal of Inclusive Education*, *22*(8), 870-884. https://doi.org/10.1080/13603116.2017.1412513

Florian, L. & Black-Hawkins, K. (2011). Exploring inclusive pedagogy. *British Educational Research Journal, 37*(5), 813-828. https://doi.org/10.1080/01411926.2010.501096

Florian, L. & Spratt, J. (2013). Enacting inclusion: A framework for interrogating inclusive practice. *European Journal of Special Needs Education*, *28*(2), 119-135. https://doi.org/10.1080/08856257.2013.778111

Garcia, E.R. & Friedman, A. (2011). "There's an app for that": A study using Apple iPads in a United States history classroom*.* In L.P. McCoy (Ed.), *Studies in teaching – 2011 research digest* (pp. 31-36). Winston-Salem, USA: Wake Forest University. Retrieved from http://files.eric.ed.gov/fulltext/ED521732.pdf

Gardiner, V., Cumming-Potvin, W. & Hesterman, S. (2013). Professional learning in a scaffolded "multiliteracies book club": Transforming primary teacher participation. *Issues in Educational Research, 23*(3), 357-374.

Gee, J. P. (1992). *The social mind: Language, ideology, and social practice*. New York, USA: Bergin & Garvey.

Gee, J. P. (2010). *Video games: What they can teach us about audience engagement.* Nieman Reports: The Nieman Foundation for Journalism. Cambridge, USA: Harvard University.

Gee, J. P. (2013). *The anti-education era: Creating smarter students through digital learning.* New York, USA: Palgrave Macmillan.

Goddard, C., & Evans, D. (2018). Primary pre-service teachers' attitudes towards inclusion across the training years. *Australian Journal of Teacher Education*, *43*(6). https://doi.org/10.14221/ajte.2018v43n6.8

Grimmett, P.P. & MacKinnon, A.M. (1992). Craft knowledge and the education of teachers. *Review of Research in Education*, *18*(1), 385–456. https://doi.org/10.3102/0091732X018001385

Grover, S. & Hannegan, L. (2012). *Listening to learn: Audiobooks supporting literacy*. Chicago, USA: American Library Association.

Honan, E.M. (2012). Using digital texts to engage students. In R. Henderson (Ed.), *Teaching literacies in the middle years: Pedagogies and diversity.* (pp. 58-80). Melbourne, Australia: Oxford University Press.

Kalantzis, M. & Cope, B. (2005) *Learning by design.* Melbourne, Australia: Common Ground Publishing.

Kalantzis, M. & Cope, B. (2011). The teacher as designer: Pedagogy in the new media age. *E–Learning and Digital Media,7*(3), 200-222. Retrieved from http://newlearningonline.com/_uploads/3_Kalantzis_ELEA_7_3_web.pdf https://doi.org/10.2304/elea.2010.7.3.200

Keane, T., Lang, C. & Pilgrim, C. (2012). Pedagogy! iPadology! Netbookology! Learning with mobile devices. *Australian Educational Computing, 27*(2), 29-33. Retrieved from http://acce.edu.au/journal/27/2/pedagogy-ipadology-netbookology-learning-mobile-devices

Klibthong, S. & Agbenyega, J. (2018). Exploring professional knowing, being and becoming through Inclusive Pedagogical Approach in Action (IPAA) framework. *Australian Journal of Teacher Education*, *43*(3), 109-123. https://doi.org/10.14221/ajte.2018v43n3.7

Krause, M.B. (2014). "A Series of Unfortunate Events": The repercussions of print-literacy as the only literacy for talented boys. *Gifted Child Today*, *36*(4), 237-245. https://doi.org/10.1177/1076217513501805

Kuh, L.P. (2016). Teachers talking about teaching and school: collaboration and reflective practice via critical friends' groups. *Teachers and Teaching*, *22*(3), 293-314. https://doi.org/10.1080/13540602.2015.1058589

Kress, G. (2000). Multimodality. In B. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design of social futures*. (pp. 182-202). London, UK: Routledge.

Kress, G. (2010). *Multimodality*: *A social semiotic approach to contemporary communication*. London, UK: Routledge. https://doi.org/10.4324/9780203970034

Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, USA: Cambridge University Press. https://doi.org/10.1017/CBO9780511815355

Lawson, H., Layton, L., Goldbart, J., Lacey, P. & Miller, C. (2012) Conceptualisations of literacy and literacy practices for children with severe learning difficulties. *Literacy*, *46*(2), 101-108. https://doi.org/10.1111/j.1741-4369.2011.00603.x

Lynch, J. & Redpath, T. (2014). Smart technologies in early years literacy education: A meta-narrative of paradigmatic tensions in iPad use in an Australian preparatory classroom. *Journal of Early Childhood Literacy*, *14*, 147-174. https://doi.org/10.1177/1468798412453150

Maor, D, Currie, J. & Drewry, R. (2011). The effectiveness of assistive technologies for children with special needs: A review of research-based studies. *European Journal of Special Needs Education, 26*(3), pp. 283-298. https://doi.org/10.1080/08856257.2011.593821

Marcon, N. (2013). 'Minecraft' as a powerful literacy prompt in the secondary English classroom. *Idiom*, *49*(2), 35-37.

McLean, C.A. & Rowsell, J. (2013). (Re)designing literacy teacher education: A call for change. *Teaching Education*, *24*(1), 1-26. https://doi.org/10.1080/10476210.2012.721127

McLean, C.A. & Rowsell, J. (2015) Imagining writing futures: Photography, writing, and technology. *Reading & Writing Quarterly*, *31*(2), 102-118. https://doi.org/10.1080/10573569.2014.962201

The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) (2008). *Melbourne Declaration on Educational Goals for Young Australians*. Retrieved from http://www.curriculum.edu.au/verve/_resources/National_Declaration_on_the_Educational_Goals_for_Young_Australians.pdf

Moyle K. (2010). *Building innovation: Learning with technologies, Australian Council for Educational Research*, Retrieved from http://research.acer.edu.au/cgi/viewcontent.cgi?article=1009&context=aer

Murphy, I. (2011). Educational reform and the enacted curriculum in English - A narrative from the field of the digital education revolution. *English in Australia*, *46*(1), 62-72.

MySchool. (2019). *Index of community socio-educational advantage (ICSEA).* Retrieved from http://www.myschool.edu.au/AboutUs/Glossary

National Health and Medical Research Council (NHMRC) (2007). *National statement on ethical conduct in research involving humans.* (Updated December 2015) Canberra: NHMRC. Retrieved from https://www.nhmrc.gov.au/guidelines-publications/e72

New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, *66*(1), 60-92. https://doi.org/10.17763/haer.66.1.17370n67v22j160u

New London Group. (2000). A pedagogy of multiliteracies designing social futures. In B. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design of social futures*. (pp. 9-38). London, UK: Routledge.

Oakley, G. (2017). Engaging students in inclusive literacy learning with technology. In M. Milton (Ed.), *Inclusive principles and practices in literacy education* (Vol. 11, pp. 159-176). Bingley, UK: Emerald Group Publishing https://doi.org/10.1108/S1479-363620170000011011

Pantaleo, S. (2019) Creativity and elementary students' multimodal narrative representations. *The Australian Journal of Language and Literacy, 42*(1),17-27.

Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Newbury Park, USA: Sage Publications.

Purcell-Gates, V., Duke, N.K. & Martineau, J. (2007). Learning to read and write genre-specific text: Roles of authentic experience and explicit teaching. *Reading Research Quarterly, 42*(1), 8-45. https://doi.org/10.1598/RRQ.42.1.1

Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context.* New York, USA: Oxford University Press.

Rouse, M. & Florian, L. (2012) *Inclusive practice project: Final report.* Aberdeen, UK: University of Aberdeen.

Rowsell, J. & Kendrick, M. (2013). Boys' hidden literacies: The critical need for the visual. *Journal of Adolescent & Adult Literacy, 56*(7), 587-599. https://doi.org/10.1002/JAAL.184

Rowsell, J., Saudelli, M.G., McQuirter-Scott, R.M. & Bishop, A. (2013). iPads as placed resources: Forging community in online and offline spaces. *Language Arts*, *90*(5), 351-360.

School Curriculum Standards Authority (SCSA) (2016). *Western Australian curriculum & assessment outline.* Retrieved from http://k10outline.scsa.wa.edu.au/home

Simpson, A. & Walsh, M. (2014). Pedagogic conceptualisations for touch pad technologies. *Australian Journal of Language and Literacy*, *37*(2), 128–138.

Simpson, A., Walsh, M. & Rowsell, J. (2013). The digital reading path: researching modes and multidirectionality with iPads. *Literacy*, *47*(3), 123-130. Retrieved from https://doi.org/10.1111/lit.12009

Snicket, L. (1999). *The Bad Beginning.* New York, USA: Harper Collins.

Unsworth, L., Cope, J. & Nicholls, L. (2019) Multimodal literacy and large-scale literacy tests: Curriculum relevance and responsibility. *The Australian Journal of Language and Literacy, 42*(2),128-139.

Vasquez, V., Janks, H. & Comber, B. (2019). Critical literacy as a way of being and doing. *Language Arts*, *96*(5), 300-311.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* In M. Cole, V. John-Steiner, S. Scribner & E. Souberman (Eds.), (A. R. Luria, M. Lopez-Morillas & M. Cole [with J. V. Wertsch], Trans.). Cambridge, Mass. Harvard University Press. (Original manuscripts [ca. 1930-1934]).

Walsh, M. (2007). *Literacy for e-learning and multimodal classroom contexts 2006*. Sydney, Australia: School of Education, Australian Catholic University.

Walsh, M. (2010). Multimodal literacy: What does it mean for classroom practice? *Australian Journal of Language and Literacy*, *33*(3), 211-239. Retrieved from https://www.alea.edu.au/documents/item/63

Yin, R. K. (2011). *Applications of case study research* (3rd ed.). Washington, USA: SAGE Publications.