Literacy and Inclusion in Times of Change

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The European Conference on Education 2018
Official Conference Proceedings

Abstract
Many students have complex learning needs, including learning disabilities or special educational needs. This paper presents findings from international research published in a recent academic book which brought together two fields, Literacy Education and Inclusive Education. Issues faced by teachers in a changing environment, and strategies to assist students develop literacy are discussed. Change factors of a civil rights agenda, social justice and special education queries, lead to changes in education laws, such that there is an expectation that the majority of children will be taught in regular classes alongside same age peers. However, well-intentioned or aspirational policies are difficult to enact on the ground in classrooms due to a range of reasons, including lack of resources, support, teacher transience, training or quality. As literacy is arguably the most important skill students learn at school, teaching literacy inclusively is paramount. Literacy itself has changed to be multimodal, integrating reading, writing, viewing and analysing. Current literacy teaching uses digital technologies and requires a learning environment that is collaborative and participatory. For literacy teaching to be inclusive, however, it must be targeted to address the differentiated needs of each student, not only by creating interest and motivation, and using language that is inclusive, but also providing specific, structured and sequential instruction in the sub-skills that underpin literacy development for those students.

Keywords: Literacy, Inclusion, Differentiated teaching, Educational changes, Literacy difficulties

Introduction

The title of this paper indicates that we are in changing times. Some may claim that education is constantly evolving and changing, as educators and researchers seek to improve methods and increase student learning. Arguably, greater change has occurred in the last decade due to technology and higher expectations of teachers and for students. In this paper I explore what has changed and what we can do about it.

The two major areas of change that are considered are:

- the push for inclusion with same age peers
- increasingly complex literacy demands

Classrooms today contain a wider range of student ability than previously, including students with learning difficulties and disabilities. What it means to be literate has also changed, with the increasing pervasiveness of technology. These areas of change are reflected in two fields of study: Inclusive Education and Literacy Education. Research and scholarship that brings the two fields together is presented in the recent academic book *Inclusive Principles and Practices in Literacy Education* (Milton, 2017). In this paper I consider some of that discussion and ask: How can teachers bring the two streams together to benefit all students?

Inclusion

The education world has witnessed a change in perspective regarding the education of students with disabilities and difficulties. This has been evolving over many years due to a civil rights agenda, issues of social justice and the questioning of some special education research methods (Danforth & Jones, 2015). The impact of laws such as the 1975 Education for Handicapped Children Act, Public Law 94-142 (U.S.), the 1978 Warnock Report and the Education Act of 1981 (UK.), and the U.N. conventions on the *Rights of the Child* and a second convention on the *Rights of Disabled People*, led to laws related to racism, equality and educational provision for students with special needs, including those with physical, emotional and cognitive disabilities (Savage, 2015).

There have also been questions raised regarding the effectiveness of separate or special education for students with disabilities. These factors lead to changes in education laws. Nowadays, in many countries, there is an expectation that the majority of children will be taught in regular classes alongside same age peers. Education systems developed 'Inclusion' policies which devolve to the school level where regional, divisional, and or local policies are adopted. Often, however, well-intentioned or aspirational policies are difficult to enact on the ground due to a range of reasons, including lack of resources and support, and teacher transience, training or quality. A longitudinal study of inclusion in Ireland found that Principal leadership and support was a major factor in the success of inclusion in schools and classrooms (Shevlin & Rose 2017).

A form of inclusion that has been accepted as inclusive education was co-location of a special facility on the same grounds as a regular school. In such cases, there may have been some mixing of students on the playground, or during special events such as visiting performances and other incursions. While this minimal form of inclusion may

suit some students, many parents have pushed for greater inclusion. Scholars have also argued for the benefits of greater inclusion for both the students with special learning needs and regular students, indicating that the former learn more and become more socially adept, and that it can make regular students more tolerant and more accepting of difference (Danforth & Jones, 2015). An index of inclusion developed by Booth and Ainscow (2011) is widely used internationally to assist schools to gauge their inclusivity at all levels.

The definition of inclusion used in this paper is:

> 'Inclusive education is one that provides high quality, age-appropriate education either wholly or partially in a supportive regular class environment, in which each student's learning needs are recognized and can be met through acceptance, high expectation, differentiation and explicit, personalised learning' (Milton, 2017, p7).

In today's classrooms there are many students with a range of abilities, there is also a packed curriculum. It is no longer sufficient to teach the three 'R's. Teachers need to develop and embrace technology as it pervades virtually all subjects and there is both a school administration and parental expectation that students will have the benefit of the most up to date schooling. There are higher expectations on teachers to deliver and for every child to learn. However, many teachers lack specific training in how to teach students with learning difficulties/disabilities and how to differentiate lessons such that each child can progress at an acceptable rate.

Within my professional role as an independent school reviewer I visit many schools and classrooms and have been able to observe practices which have a positive impact on inclusion in classrooms. Some actions that teachers made to help with inclusive teaching were:

- Using teacher moderation, worked examples and teacher collaboration to decide what it means for students with special needs to progress across different levels of the curriculum.
- Working from assessments so that teaching is at the point of need and progress is monitored
- Having high expectations of all students
- Watching for inadvertent exclusion, especially cultural capital that can compound learning needs.
- Monitoring own teacher language: avoid idioms, colloquialisms, give one direction at a time, check understanding by asking task-related questions.

Those observations are in accord with ideas presented by several scholars (Danforth & Jones, 2015; Forlin, 2010; Savage, 2015)

Literacy

The understanding of what it means to be literate in today's society has changed. An old definition was 'the ability to read and write' sometimes adding – a simple sentence'. The definition used in this paper is that of the International Literacy Association:

> "the ability to identify, understand, interpret, create, compute, and communicate using visual, audible, and digital materials across disciplines and in any context"
>
> (International Literacy Association, 2015).

Literacy is arguably the most important skill students learn at school, and as indicated by the ILA definition above, literacy itself has changed to be multimodal, integrating reading, writing, viewing and analysing. A background ministerial paper from the Organisation for Economic, Co-operation and Development titled *Skills for a Digital World* stated "the pervasiveness of digital technologies in daily life is fundamentally changing the way individuals access and elaborate knowledge" (OECD 2106, p4) so we have to process complex information and think systematically. We can no longer think of reading and writing as separate entities, as in a digital world they form a symbiotic relationship, so becoming a literate person is now more complex than in the past.

Many students across the world struggle to become literate. A UNESCO global monitoring report (2014) conducted a survey of 41 countries which found that it took 4 years schooling to become literate and that 75% of children with less than 4 years school could not read a sentence. The report indicated that poverty, health, low parent education and poor teaching were important contributing factors. Having a learning disability is also an important determinant of reading difficulties. Once a student falls behind the rest of the class in reading and literacy, it becomes increasingly difficult to catch up due to Matthew effects. Taken from a passage in the bible, which states the 'rich get richer and the poor get poorer' and used to explain how good readers quickly outstrip poor readers because increases in reading ability increases vocabulary, general and specific content knowledge, text structure and grammatical knowledge (Stanovich, 1986).

Current literacy teaching, in many countries, uses digital technologies which has the potential to motivate and include all students as it often requires a learning environment that is collaborative and participatory. Teachers can use "technology as a deliverer of literacy", "technology as a medium for meaning making" and "technology as a site for interaction around texts" (Burnett, 2010, p. 254). We are only now beginning to understand how the changes in literacy due to technology is changing the way our brains deal with complex information. Walsh indicates that traditional reading practices are vastly different to reading online. She states:

> "On screen reading incorporates multisensory activities such as searching, viewing, browsing, scrolling, hyperlinking and navigating, together with the clicking and scrolling of a mouse or touching and tapping activities…the online activity often includes images, sound, movement and gesture" (Walsh, 2017, p24).

Walsh further indicated that when we are discussing reading and writing in a digital context we can no longer consider them as separate skills, as they are intricately entwined. Oakley (2017, p161) suggests we consider reading and writing multimodal texts as two sides of a permeable membrane, such that each can flow through and

influence the other. While there are many digital programs aimed at assisting to develop the literacy skills of students with literacy difficulties, these are of variable quality, which some students may find boring and may be ineffective. Further, student use of the programs may not be monitored sufficiently well by teachers, so that the student does not gain the most benefit. Students who are developing literacy skills more slowly than their classmates need multiple opportunities to read and write the same words for them to become familiar and automatic. An examination of recent brain-based research into early literacy by Mclachlan, Nicholson, Fielding-Barnsley, Mercer & Ohri (2013) concluded that a number of children require more explicit and intensive instruction in early literacy than their classmates, and that the type of teaching and learning opportunities provided is a determining factor in literacy development. The Rose Report from the U.K. (2006) that analysed different methods of teaching phonics found that a synthetic approach, in which students are initially taught a limited number of letters and immediately taught to blend them into words that can be decoded and encoded in writing, was the most efficient way to teach the letter sound correspondences and decoding skills that are critical to reading. This system of teaching phonics has been adopted for teaching literacy in several English-speaking countries. While the initial research behind the adoption of synthetic phonics was conducted with regular class children, more recent research on using the method with disabled and disadvantaged children is emerging and one example will be discussed later. Children with literacy difficulties will generally progress more slowly and need more opportunities for practice at each level. The pre-requisites and subskills of literacy need to be taught explicitly to all, but within a wider literacy environment.

For effective inclusive literacy teaching teachers still need to be aware of four principles identified by Shanker and Ekwall (2003, p 4). These are: (1) that students require systematic sequential skill instruction to learn how to decode and pronounce words; (2) nearly all require some form of direct instruction of information in small increments in which the pace of learning and introduction of new material is carefully monitored; (3) the reading level needs to be right; and (4) students need time to practise reading. Further, the amount of time spent actually reading can be critical to developing reading skills. An examination of effective and less effective teachers of literacy found that while teachers spent similar amounts of time overall on literacy, in the classrooms of less effective teachers, students spent little time, sometimes as little as ten minutes of an hour's instruction, in reading. The rest of the time was spent undertaking activities related to the content. In the classrooms of effective literacy teachers, students spent at least half of the allotted time for literacy in reading (Shanker & Ekwall, 2003).

The implementation of numerous early intervention initiatives and programs have resulted in varying degrees of success. Reviews of policies and programs such as *Head Start* introduced in 1975 and the *No Child Left Behind* Act from 2001 in the United States of America; the *Literacy Hour* in Britain; *Close the Gap* initiatives in Australia; and the *Reading Recovery* program from New Zealand indicated that these either they have not achieved anticipated outcomes or have only experienced partial success (Milton, 2017). If some programs aimed at early intervention for vulnerable students have limited success, then the task of assisting those students improve their literacy usually falls to regular classroom teachers.

In order for teachers to cater for the whole class, literacy teaching to be inclusive, however, it must be targeted to address the differentiated needs of each student, not only by creating interest and motivation, and using language that is inclusive, but also providing specific, structured and sequential instruction in the sub-skills that underpin literacy development for those students who may still need it, even if the rest of the class has progressed beyond that point. Students with greater learning needs require more tuition in literacy, such that they take part in whole class literacy lessons, and during work station rotations and extra time they have activities and instruction in the basic skills. A National Early Literacy Panel report (NELP, 2009) indicated the following six variables are critical to developing literacy: phonological awareness, alphabet knowledge, rapid automatic naming (RAN) of letters or numbers, RAN of objects or colours, writing letters and phonological memory.

In today's classrooms, literacy and digital literacy are embedded across the curriculum and frequently students work in small groups with problem-based learning looking for real life solutions. Teachers often use an expanded Blooms taxonomy: Remembering, understanding, applying, analyzing, evaluating and creating (Frey, Fisher & Gonzalez, 2010) to develop student thinking and understanding at increasingly complex levels. This taxonomy can also be used to differentiate instruction so that all children can be successful. Teacher skills for differentiation are paramount. It is therefore necessary for teachers to self-monitor and to assess teacher effectiveness.

Research and Strategies

Teacher effectiveness is often noted as important in ensuring students are included and taught well. A number of studies have investigated the factors that have an impact on student learning outcomes. Hattie conducted a meta-analysis of that research to find out which factors, outside of student ability and home background, have the most impact. He indicated that schools account for 20% of student learning. The schooling factor to have most impact is teacher effectiveness. Hattie then developed a formula to determine the amount of impact on learning. He describes it as *visible learning*, and notes it is 0.4% per annum. (Hattie, 2015). In order to measure the magnitude of any effect, student learning is assessed at the beginning and end of the year. Hattie indicated that less than 0.4% increase in scores could be due to natural maturation, when scores are adjusted for age. In many education systems there is an increased emphasis on assessment and demonstrating improvements in learning for all cohorts of students (Milton, 2017). There is often a substantial difference between the learning outcomes of students in classes with effective teachers and those with less effective teachers. Variability between schools is 36 per cent, while the variance within schools is 64 per cent (OECD 2016). Teacher effectiveness is key to within-schools variability. One aspect of teacher effectiveness is the use of strategies that have been demonstrated through research to be successful with students with literacy difficulties.

With all types of strategies, even those which have been demonstrated to be effective through quality research, the effective implementation in schools can be less effective due to a range of reasons. Further research has shown that to be effective the strategies must have the Principal's support, there must be whole school commitment to the strategies and the teachers need to have thorough professional learning on the

use of the strategies and monitoring student outcomes to ascertain learning growth. For example, a study, in a disadvantaged secondary school, of the implementation of Reciprocal Teaching (a well-researched and effective strategy to improve comprehension) found that it was less effective than expected as many teachers were unsure about it and did not think it was worth the effort (Doveston & Lodge, 2017). While the strategy works as a method for providing inclusive comprehension practice, in this instance it was not taught effectively by all teachers. Other traditional methods used in teaching literacy have been shown to be effective and useful for including the whole class.

Working with traditional types of texts, Rasinski's research over a number of years has demonstrated the benefits of the use of poetry, songs and readers' theatre, as such activities require multiple readings and rehearsals for performance. Further, they provide all students with real purposes for reading and writing, and an audience for performance, even if it is only other group or class members. All students are able to take part at their own ability level and those with literacy difficulties get the extra practice that they need to progress. His research has demonstrated the use of such activities also develop rhyme and understanding of rimes which are necessary for phonological coding and recoding, prosody, fluency and comprehension (Rasinski & Young, 2017).

In a study in remote and regional schools in Western Australia, with high proportions of Aboriginal children, Maine & Konza (2017) found that 'explicit instruction in phonological awareness, alphabetic knowledge and blending leads to improved early-reading skills for all children' (p191). They indicated that in order to be inclusive teachers had to ensure the success of all students and in early reading this meant explicit instruction in the components of reading, alongside a more general literacy and learning area curriculum.

Research into creative ways to use technology and digital programs to develop literacy alongside other curriculum was conducted with elementary school children who had poor reading fluency and comprehension. The research entailed students working in pairs or small groups to create their own multimodal texts using mobile devices, augmented reality and the World Wide Web. Students were engaged, supported and included. In order to create the multimodal text, complex digital literacy practices were developed as they read, wrote their own texts, drew or selected images to accompany the text, and recorded themselves reading the text multiple times until it sounded fluent. They incorporated many of the skills and processes needed for reading and writing traditional print-based texts; such as word identification, understanding grammar, comprehension, spelling, sentence and paragraph writing, as well as understandings about how texts can be structured for different purposes and audiences. The findings indicated that creation of such texts can assist learners attain reading comprehension, fluency and motivation (Oakley 2017, p160).

Conclusion

In regular classes today, there is more to do and more to learn, with expanded curricula, technology embedded across the curriculum, and hence more complex literacy demands in every subject. At the same time there has been a push for

inclusive education so that most students are educated in regular classes alongside their same-age peers, which has meant that there is a greater student ability/knowledge range in each class. There has been a concomitant demand for higher quality teaching, with a focus on assessment, teaching from assessments and demonstrating that all students have made appropriate progress.

This paper presented those issues and some research-based strategies that teachers may use in order to assist all students in their classes develop literacy skills to enable them to take an active part in the learning journeys in their classrooms and to develop the literacy skills needed for modern society.

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