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The Impact of Phonics on Reading Ability - A Social Justice Perspective: Implementation of a Phonics Approach to Teaching Reading in a Remote District of Nepal

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Abstract

Literacy is key to enabling everyone to participate in, and contribute to, society. Education is considered a human right and reading ability an issue of social justice, linked negatively with lifelong disadvantage. Recognising the scarcity of research into the practice of teaching reading in schools in Nepal, this study aims to provide evidence to show that learning to read in English is facilitated by knowledge of phonic sounds, blending and decoding. Through a participatory action research design, the impact of phonics instruction on the reading ability of students in rural schools in Lamjung district of Nepal is tracked. Comparisons between progress of students taught by different teaching methods suggest support for the premise that phonics instruction is an effective method of raising reading attainment, enabling all students to read. Factors affecting reading progress are considered through analysis of the data. Perceived barriers to reading proficiency such as negative home situation, low socio-economic status and gender are shown to be mitigated by effective phonics instruction. Teacher motivation and expertise alongside student attendance are found to be the main determinants of success.

Keywords: *phonics, reading ability, social justice, ELT in Nepal*

Introduction

Social justice is a term subjected to considerable debate. First coined in 1840 to describe a social system working for the good of all, it has evolved over time. (Novak 2000, Simon 2019). It embraces concepts of universality, fairness and equality and has implications for practical as well as theoretical issues of government. It involves ensuring that all individuals can participate in society in a fair and just manner (Pijanowski& Brady 2020; Zajda, Majhanovich, Rust, & Sabina 2006). Commonly used in relation to questions of access to employment, health care, food security, voting and housing, it is increasingly recognised that the right to education is a social justice issue (United Nations Universal Declaration of Human Rights 1949 Art. 26) The ability to read is considered foremost in enabling all to participate equally in society as stated by Kofi Annan, former general secretary of the UN:

> ―Literacy unlocks the door to learning throughout life, is essential to development and health and opens the way for democratic participation and active citizenship‖. (UN press release 5th September 2003).

Poor reading skills increase the likelihood of school dropout, grade repetition, anxiety, depression, low self-esteem and even suicide among students (Zijlstra, Van Bergen, Regtvoort, De Jong & Van Der Leij 2021). Adults who lack basic literacy skills are more likely to be unemployed, underemployed, and incarcerated. A Scottish survey revealed that of those with lowest reading ability in society, 32% were unemployed and 29% not earning an income. (Scottish Government, 2009). This means they are far less likely to be able to provide for their families, support the economy, and pay taxes. A fair and equal society where everyone has access to opportunities and resources depends on all members having basic literacy skills (Burk & Hasbrouck, 2023). Ensuring all children learn to read is not only an issue of social justice but also of economics.

Rationale and Significance

How children learn to read has been extensively debated and researched over recent history. Although a broad consensus has been reached that a phonic based approach is the most effective method to teach reading, there is little evidence to ascertain whether this would benefit students in the Global South, particularly in the unique multilingual and multi-ethnic context of Nepal. While several studies have evidenced the need for decoding skills to improve reading fluency among older students, (Dhakal, 2024; Shrestha, 2015) so far, only one study has considered phonics instruction in Nepal. The 2015 study in Makwanpur district (VSO), provides promising evidence that phonics can be effective in teaching English but admits limitations in terms of length of study and contextualisation of materials. Aiming to address the evidence gap with empirical data assessing the effectiveness of a phonics-based teaching approach in rural schools in Nepal, this small-scale research study was conducted in Lamjung from 2021 to 2023.

Students must first learn to read before they can read to learn. Without a secure foundation in basic literacy skills, further education and life choices will be limited. As demand for and necessity of learning English increases, (Ojha, 2019) the results of this research could contribute to discussion on the future teaching of English in primary classes across Nepal, be a reference for policy and curriculum creators as well as teachers and a guide for authors of textbooks.

Aims of the Study

- to contribute to the educational knowledge base in Nepal, providing evidence to determine whether the phonics approach improves reading in English for all students, thus advancing social justice in Nepal.

- to empower teachers with expertise to improve the English reading ability of all students.

Research Questions

1. Compared to traditional teaching methods, does the phonics approach improve reading in English?
2. Can students learn to read without phonic knowledge?
3. Does teacher motivation and expertise affect reading ability?
4. Does the phonics approach promote social justice by overcoming barriers enabling all to read?

Literature Review

Research suggests that children who don't learn to read by the end of third grade are likely to remain poor readers for the rest of their lives and are four times more likely to drop out of high school than proficient readers. (Hernandez, 2011). Literature outlines the extent of the current global reading crisis. In US, 67% of third graders are not able to read proficiently (Hwang, 2020). In South Asia, after the pandemic, it was estimated that 78% of children aged 10 years lack minimum literacy proficiency. (World Bank. 2022). In Nepal the situation appears to be similar. The National Assessment of Reading and Numeracy of grade 3 students in Nepal, (MoEST, 2020) reported that more than 10% of students in grade 3 were unable to read a single word. A study of functional literacy among 11- to 13-year-olds in four districts of Nepal found that only 46% of students could read and understand a short text, concluding that children are not acquiring basic skills in reading Nepali. (Ghimire, 2014).

Learning English is now compulsory in all schools in Nepal. Additionally, in response to a growing demand for English medium instruction, the National Education Policy (Curriculum Development Centre, 2018) allows schools to teach in mother tongue and Nepali or Nepali and English in Grades 1–3, and in Nepali and English for Grades 4–12. However, the limited preparedness and skill of teachers does not ensure good quality English teaching (Ojha, 2018: P. N. Shrestha & Gautam 2022). Dhakal's study (2024) based on teachers' perspectives of secondary students' reading ability reported varying levels of proficiency in English. Lack of confidence and fluency when reading English was found to impact comprehension among graduate students at university level (K.N. Shrestha, 2015) This suggests that basic competencies in reading English are not being mastered at primary level, limiting further learning.

The global decline in reading standards has resulted in a large body of research seeking to ascertain the best way to teach reading. This led to heated debate commonly referred to as the _reading wars.' (Goldenberg, 2020). Some educationalists contend that students learn best using the whole word method in which students guess words from context and picture cues (Clay, 2006; Goodman, 1967). By memorising words, visualising word shapes and focussing on meaning, it is suggested, students learn to read naturally (Nation, 2008). Phonics, it is argued, distracts readers from understanding.

In contrast, Castles, Rastle and Nation, (2018) argue that if instruction is based on associating printed words solely with their meaning, learning to read requires memorization of tens of thousands of words. Reading proficiency is most easily acquired, it is contended, when students are explicitly taught how to connect sounds with letters and spoken words— the phonics approach. This aligns with previous research indicating that phonics, while initially requiring more time to learn, reduces the cognitive burden of memorisation, providing skills to read and understand increasingly complex texts (Johns, 2023). The rationale behind systematic phonics instruction is that a basic understanding of how graphemes relate to phonemes provides students with the ability to decode most words in their language (Solity&Vousden, 2009).

Critics point to the number of words which do not follow a regular phonetic pattern in English such as ‗my' and ‗come' compared to more phonetic languages, such as Nepali. Solity and Vousden (2009), however, found that recognising the 64 most common lettersound phonemes, and learning the most frequently used irregular words in English, enables students to read independently. A further criticism contends that focussing on phonics limits reading comprehension. This is not borne out in research as a meta-analysis of 110 studies by Garcia and Cain (2014) showed a positive correlation between decoding skills and reading comprehension. Additionally, Carlson's study (2013) found that students with good decoding skills at the age of 6 years developed good comprehension skills. Hattie (2009) concludes, ―Phonics instruction is powerful in the process of learning to read, both for reading skills and for reading comprehension‖ (page 134).

While phonics instruction is considered of benefit to all emerging readers, research also suggests that it provides an effective intervention for poor readers (Galuschka, Ise, Krick& Schulte-Korne, 2014). Students of English as an additional language also benefit from explicit phonics instruction alongside developing comprehension skills and vocabulary (Gregory, 2008; Proctor Daley, Louick, Leider C, Gardner, 2012).

The extent of evidence demonstrating the positive effects of learning to read through phonics has led to national directives, in several countries, advocating the use of systematic phonics in the early stages of teaching reading (National Reading Panel 2000; Rose Report 2006). The National Curriculum Framework of Nepal (Curriculum Development Centre 2018) includes outcomes related to phonics, decoding and blending and outlines the sounds to be taught at each grade. However, in most schools in Nepal, traditional teaching by rote and repetition of alphabet and words remains the norm, resulting in memorization rather than actual reading (Shrestha & Gautam, 2022). This corroborates previous research suggesting that even where there is strong national guidance around reading instruction, implementation often depends on local support, teacher motivation and variations in teacher training (Seidenberg, 2017).

When students don't learn to read, it is commonly assumed to be due to lack of home support, low-income status or lack of discipline. This is validated by studies finding that low family socio-economic status alongside parents' educational level is a strong predictor of reading progress of children (Georgiou & Zhang, 2024; Jabbar, Mahmood &Warraich, 2021). The NARN report (MoEST, 2020) concluded that home support, books and activities enhanced students' reading

ability which was supported by secondary teachers in Dhakal's study (2024). A study by Ha (2023) found parental involvement in children's reading could mitigate the effects of poor home circumstances. Gender is also considered to be a factor in reading inequality. Results from the 2022 Programme for International Student Assessment (PISA) confirm the persistence of gender disparities with girls outperforming boys in reading at age 15 by approximately one year (OECD, 2023). In contrast, male literacy rates in Nepal continue to be higher than females: 85.8%, compared to 70.1%, showing a 15.7% difference (UNICEF, 2022). While gender imbalance is not typically noticeable in lower grade classrooms in Nepal, discrepancies in higher education and beyond remain.

To ensure equitable access not only to school enrolment but also to learning so that all acquire basic skills for higher learning, effective, evidence-based instructional practices must be implemented. If reading ability is an issue of social justice, any negative impact of a child's home background must be mitigated by effective teaching in school, ensuring all can learn to read.

In summary, the literature review highlights key issues to be further explored in this study regarding the effectiveness of phonics for teaching reading in the specific context of rural schools in Nepal:

1. Proficiency in reading is vital for future learning, and the phonics approach offers the most effective method for developing students' reading ability.

2. While some students learn through rote or sight words, phonics benefits nearly all learners, including second-language readers.

3. Teacher engagement and effective training are crucial for successful phonics instruction.

4. Students' adverse home and economic circumstances, gender and poor school attendance are frequently cited as barriers to learning to read which need to be overcome.

Research Methodology

This research grew out of an ongoing training, monitoring and evaluation programme for grade 1, 2 and 3 teachers, and so a participatory action research (PAR) methodology was implemented. PAR requires participation and ultimate empowering of all those involved in the research as their lived experiences are central to the research process (Kemmis& McTaggart, 2000). This study involved active participation of seven teachers and three school principals, in addition to the researcher acting in the role of trainer, mentor and assessor. Action research seeks tformative change through a cycle of evaluating existing action, planning and enacting change, observing the consequences, reflection, replanning and further action. It is known as a cycle of action or inquiry (George, 2023; Meyer 2006) and is frequently used in education and other social sciences.

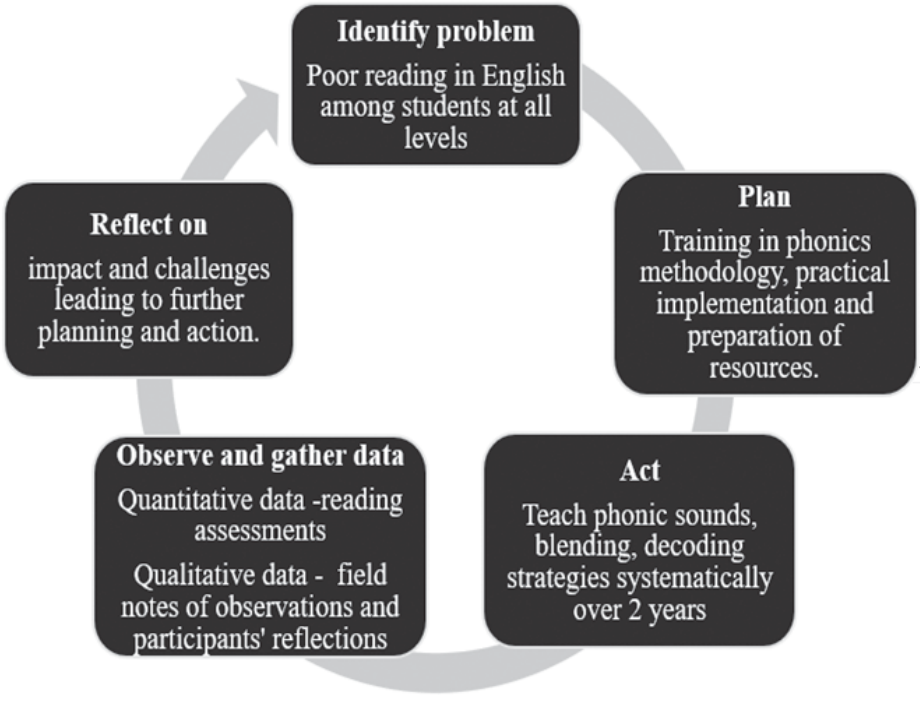


Figure 1. The cyclical nature of the current research.

Action research is formative rather than summative and has the potential to inform social change, enabling participants to make immediate, practical changes to practice. One aim of the current research process is to empower teachers of grade 1 to 3 students with expertise to improve the English reading ability of all students.

Limitations of Methodology

It is accepted that action research studies are difficult to replicate due to their context-specific design and action (George, 2023). However, disparity in students' reading abilities is a widespread concern in Nepal and it is anticipated that comparable educational institutions will find the results of this study and their implications pertinent.

Action research may present ethical issues such as power inequalities and pressure felt by participants to act in a certain manner (Locke, Alcorn & O'Neill, 2013). In this study, efforts were made to address these challenges by fostering effective communication and trust among participants, ensuring a common understanding of the issues and research objectives, and involving colleagues to offer critical accountability. Research bias has the potential to reduce the validity of action research findings (Brady, 2024). The researcher acknowledges potential bias due to previous experience of the effectiveness of the phonics methodology. A robust and consistent data collection process was therefore followed, providing objective information

from quantitative as well as qualitative data. Schools were selected based on willingness to participate and reading age data was collected from all attending students in each class thus limiting selection bias. The relatively large sample size and length of the study reduces bias and reflection of findings with participants and colleagues ensures objectivity. Acknowledging the potential weaknesses of the methodology and aiming to empower the participants leading to long term change, participatory action research was selected for this two-year study.

Data Collection Process

Three schools agreed to take part in the research and to implement the phonics approach. Following the training however, school A continued to teach reading by traditional methods reporting challenges to adopting the phonics approach. These included trained teachers being moved to another stage, lack of parental and colleague understanding and pressure to complete the textbooks before the exams. In each school two classes of students were assessed namely those starting in grade 1 and grade 2. As neither had previous experience of phonics, the degree of impact was not expected to differ greatly. Phonics instruction was continued with the same students the following year. Reading assessments from school A provided comparable data. Data from students who did not participate in all three data collection assessments was excluded. In total, reading age data of 63 students was collected and analysed.

Quantitative data was collected annually and took the form of reading age assessments of students over two years. The need for a baseline assessment of schools and students was realised and achieved in all three schools at the start of the academic session 2021/2022 before phonics teaching began. Assessments were repeated after one year and again after two years. Qualitative data comprised teachers‘ reflective feedback of training and teaching, information from teachers and head teachers and observation notes recorded by the researcher. During the study, teachers were asked to identify students expected to show little progress in reading. Reasons were recorded and used to consider individual students‘ progress. Teacher judgement is deemed valid due to their knowledge of the community, students and families. Collecting both quantitative and qualitative data provided robust and comprehensive evidence. Data was analysed and compared, to identify themes, trends and anomalies.

Data Analysis

An assessment was created based on the sounds listed in the national curriculum outcomes for each grade (CDC, 2018) and words from the Burt diagnostic test adapted to the Nepali context (appendix 1). Sentences and questions were added to assess comprehension. Individual students were asked to read letter names, sounds, cvc words (3 letter words – consonant-vowel-consonant), digraph sounds, digraph words, multisyllabic words and sentences. A total of 40 sounds, 60 words and 10 sentences comprise the assessment which is progressive but not restrictive. Students are encouraged to continue with the test until 10 sounds or words are read incorrectly. Single sounds and cvc words form part of the first year of the phonics teaching programme. Digraph sounds and

word blends are expected to be learnt by the end of the second year. The multisyllabic words and sentences are progressively more complex.

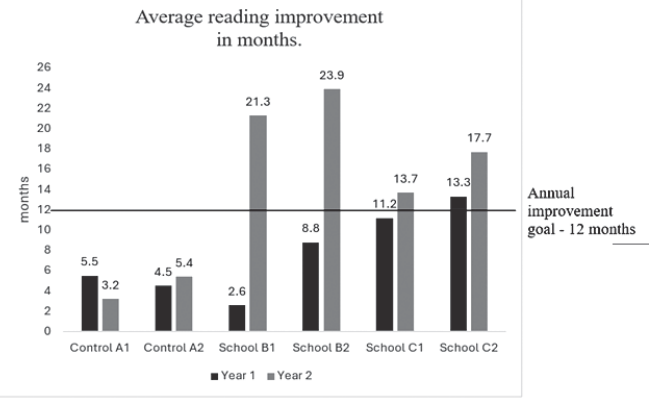
Assessments were analysed according to the Burt diagnostic test which uses the number of words read tto calculate a reading age (RA - appendix 2) While not necessarily reflecting the actual age of students in Nepal, the increase or decrease of the RA score in months is deemed valid to evidence progress made. An average student would be expected to make reading progress equivalent to 12 months each year. Although the Burt test does not consider knowledge of sounds, the aim of learning phonics is to be able to read words and so it is considered an appropriate measure of the effectiveness of phonics teaching.

Average improvements can show the performance of a particular class compared to another. However, one low achieving student in a class will reduce the overall attainment masking the true achievement of individuals. Reflecting on the social justice issue of ensuring every child learns to read, individual attainment needs to be considered. In analysing the data, both averages and individual scores are considered.

Results and Discussion

Question 1. Compared to traditional teaching methods,does the phonics approach improve

From the data gathered, the average annual reading improvement for students in each school was calculated (Figure 2). The data, considered alongside the goal of reading improvement of 12 months each year, shows that students in school A and in the first year of school B made significantly less than hoped for improvement. In the first year the biggest difference in reading improvement was between students of classes B1 and C2 - 10.7 months. The discrepancy was even more marked in the second year of the study showing that the average student in class B2 improved 21.7 months more than the average student in class A1. Reading ability was notably higher in school C and the second year of school B.



In most classes, students demonstrated greater reading progress during the second year compared to the first year (Figure 2). The notable exception is class A1 where reading improvement decreased in the second year. Students in school B showed significantly lower improvement in the first year but demonstrated the highest improvement in reading after two years.

The quantitative data above is supported by notes recorded during assessments.

School	Researcher comments
School A	Students can read familiar memorised words, such as _at‘ and _big‘. When attempting unfamiliar words such as _up‘, they use letter names resulting in the word read as _youpee‘.‖
School B	Students use learned strategies such as making actions to recall sounds, sliding sounds down the arm to blend words and stretching out words to hear each sound and decode.
School C	Good pronunciation of sounds. Most students attempt to read unfamiliar words with confidence.

Table 1. Observations during assessments.

The limited reading improvement in School A which did not adopt the phonics approach, suggests that the traditional methods of teaching reading using letter names and rote learning are not effective. Students in schools B and C made significantly greater progress than those in the control school, implying that phonics knowledge provides students with the skills and confidence needed to read unfamiliar words and continue to develop their reading ability. Greater improvement in the second year of students in schools B and C infers that developing skills of blending, decoding and chunking as well as consolidating and extending sounds in year 2 enables more words to be read accurately.

The declining or limited reading improvement in school A in the second year suggests that students do not have a foundation of basic literacy skills to progress with their learning. Relying on sight words and memory may enable students to start reading sooner but does not provide students with skills and strategies to tackle unfamiliar words. For many students, memorising an increasing number of words can become overwhelming as found in previous research studies (Castles, Rastle& Nation, 2018).

It may be concluded that the strategies and skills learnt through the phonics approach enable students to make significantly greater progress in reading than those taught using traditional methods. Greater improvement in the second year of phonics instructions implies that phonics should be taught consistently in all primary grades to develop reading competence.

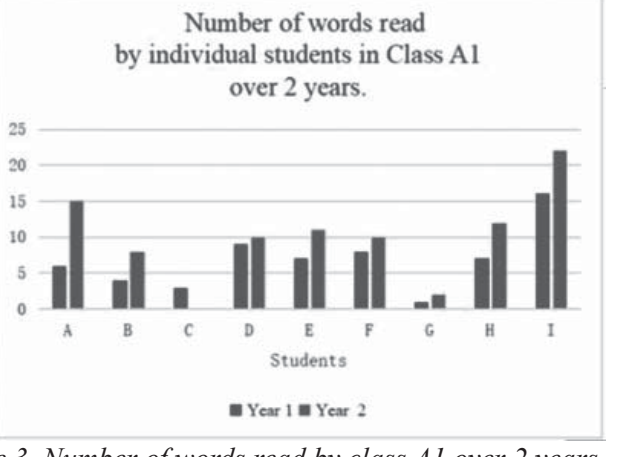
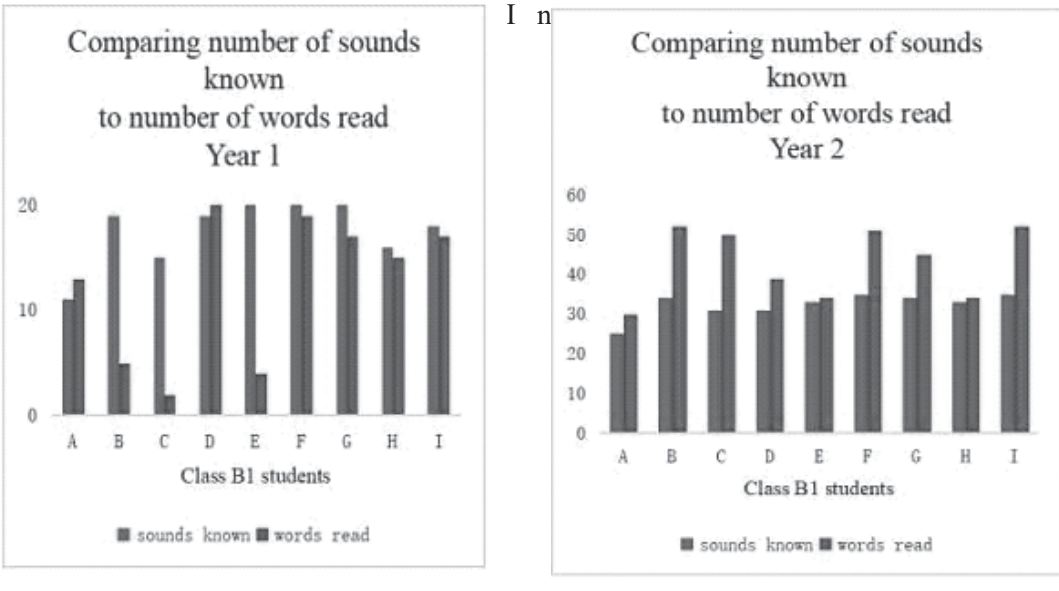


Figure 3. Number of words read by class A1 over 2 years.

Question 2. Can students learn to read without phonics knowledge?

While almost every student in this study improved in reading, some made significantly less progress than others. It is therefore necessary to understand the factors affecting individual achievements.

Individual data from the School A where students were taught English by traditional methods show that some students made progress in reading. While less than the ideal of 12 months progress, student I could read 16 words. With no phonological knowledge this student made 11 months reading progress in year 1. This is exceptional compared to the class average of 5.5 months. At the end of year 2 however, the same student could read only 22 words, a gain of only 4 months. Only 3 students could read more than 10 words of the assessment after 2 years of learning to read.



In year 1 of the phonics approach typically 26 single sounds are taught. In year 2, digraphs

Figure 4. Comparing the number of sounds known to words read in year 1 and 2

Individual student data from class B1show that when less than 20 sounds are recognised between 2 and 20 words could be read, less than one third of the assessment. When over 30 sounds are known, this increases to between 30 and 52 words out of a total of 60 words in the assessment. The students recognising most sounds, such as student F, could also read the most words. Exceptions are students B, C, and E. Although familiar with most or all sounds taught in year one, they could read few words.

From the low scores of most students in class A1, shown in figure 3, it may be ascertained that traditional methods of teaching reading are only effective for some students. If reading ability is to reduce social injustice every child must be enabled to learn to read. The data from school B (figure 4) which adopted the phonics approach shows that by the second year every child could read 30 words or more, i.e. 50% of the words in the assessment and the most able could read 87% of words in the test. As the number of words read correctly rises exponentially with the increase in sounds known, it is suggested that phonics knowledge improves reading proficiency. Although the Burt reading assessment does not account for the number of sounds learned, the link between phonics sounds recognised and words read is clear, validating its use.

Despite knowing many phonics sounds, the poor word reading of several students (B, C and E, figure 4) in year one implies an inability at this stage to blend sounds into words. At the end of the second year, students B and C could read more than 50 words, higher than the average and student E was able to read a passable 34 words, suggesting that blending skills had been mastered. It may be deduced that learning sounds alone does not lead to improved reading proficiency but must go alongside developing skills in blending and decoding.

In conclusion, it appears that traditional methods of teaching reading may allow able students to read but are not effective for all learners thus contributing to social injustice in education. Phonetic knowledge enables students to read more words independently developing confidence and ability by the second year of instruction.

Question 3. Does teacher motivation and expertise affect reading ability?

Although limited improvement in reading during the first year of phonics instruction may be explained by the need to build foundational skills of sound recognition and blending, the low scores of classes B1 and B2 in year one compared to year two warrant attention.

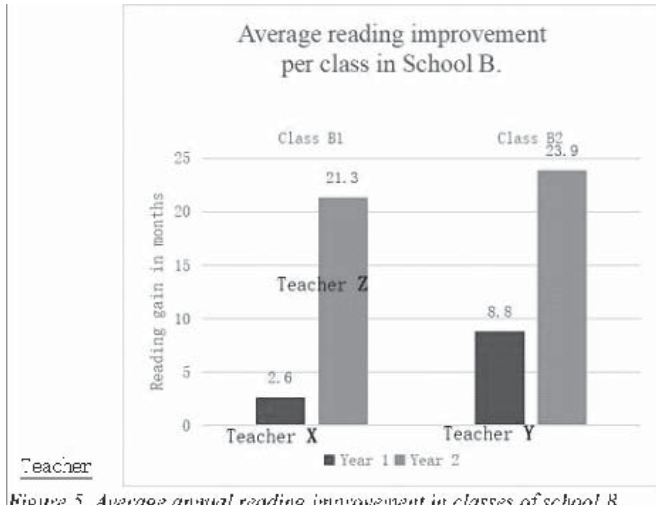


Figure 5. Average annual reading improvement in classes of school B.

The collected data on reading improvement in each class (Figure 5) may be examined alongside evidence obtained from classroom observations and discussions with teachers at this school halfway through each year of implementing the phonics approach (Table 2).

Teacher	Sound pronunciation	Phonics Teaching. Resources/ activities used.	Comment	Average Reading Gain (end of year)
X B1 year 1	Poor	Phonics not evident. Teacher admitted had not taught phonics since training. No lesson plan. Phonics charts, books, flash cards available but not used.	Teacher does not believe phonics will improve students' reading.	2.6 months
Y B2 year 1	Quite good. Remember to make sounds short.	Reinforced learning sounds with actions. Ensured understanding with questioning and pictures. Actions and white board used. Could use chart and flash cards more. Only 4 sounds taught in 5 months.	Teacher with long experience. Willing to try the new approach. Nervous but quite capable.	8.8 months
Z B1 and B2 year 2	Excellent. Students copied teacher and selfcorrected.	Great lesson on long vowel sounds, reinforcing previous learning and extending. Students actively thinking about sounds. Some noticed patterns in words. Phonics book, actions, pictures, student's own experience used effectively.	Really excited about phonics and inspires students. Keen to improve all students reading.	B1 -21.3 months B2 -23.9 months

Table 2 Class observation records, School B.

A consideration of the data and observation records suggests that the provision of training and resources does not guarantee effective teaching of phonics. Teachers, such as teacher X, despite receiving phonics training and having access to resources, may struggle to adopt new methodologies due to lack of motivation or confidence. After one year of learning English, none of the students in class B1 could read more than 4 words. Recognising the challenges associated with changing preferred and well-established teaching methods, especially among experienced educators, (Shrestha & Gautam, 2022) the willingness of teacher Y to adopt a new approach is to be applauded. Although lacking in consistency and expertise, instruction given by teacher Y led to an average improvement of 8.8 months, providing a solid basis for exceptional gains in the second year. The impact of teachers demonstrating enthusiasm and belief in the phonics approach is evidenced by Teacher Z. Showing a thorough understanding of the principles and practice of the phonics approach, this teacher is committed to ensuring students become proficient readers. With the support of school leadership, phonics is taught systematically 4 times a week. Despite their poor start to learning to read, by the end of the year students of class B1 had improved

their reading ability by 21.3 months, reading between 27 and 50 words correctly. Students in B2 improved even more, scoring an average of 23.9. Teacher motivation and competence, it may be concluded, significantly influence reading achievement pointing to the importance of appropriate training and ongoing support, alongside encouragement from school leadership, to implement phonics instruction consistently and effectively.

Question 4. Does the phonics approach promote social justice by removing barriers, enabling all to read?

Factors commonly thought to affect reading progress include school attendance, home circumstances, disability and gender. Before the second and third assessments were undertaken, teachers and principals were asked to highlight individual students they expected to show little progress in reading over the year. Teacher judgement is considered valid because they are familiar with the community and, specifically, the child or family. Reasons were given and recorded (Table 3).

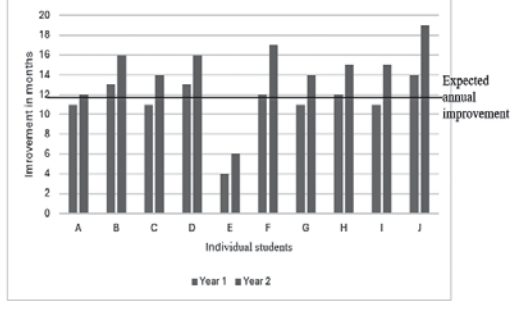
School A	School B	School C
Irregular attendance	Irregular attendance	Irregular attendance
Poverty	Scholarship recipient	Scholarship recipient
Live with grandparents	Parents abroad	Ethnic minority
No school uniform	Parent unemployed	Single parent family
Parents don‘t attend meetings	Low socio-economic situation	No school bag or homework
Uneducated parents	Not Nepali speaker	Come to school hungry

Table 3. Given reasons for expected underperformance of students.

Following assessments, trends were analysed to identify possible reasons for lower attainment.

A. Attendance

In class C1, the student making the lowest improvement in both year 1 and year 2 is student E. (Figure 6.) After one year of phonics-based teaching, the student made only 4 months progress in reading compared to a class average of 11.2 months. In the second year, progress improved slightly to 6 months although the class average was 13.7 months, and several classmates show an improvement well above the expected 12 months in one year. On all assessments, the note beside this student‘s record reads _irregular attendance‘ which suggests the reason for lack of improvement.



F*igure 6. Tracking individual students of class C1 over 2 years.*

B. Home Circumstance

Two students in Class C1 (Figure 6), A and G, receive a scholarship suggesting the low socio-economic situation of the family. Both students attend school regularly and achieved at or above the expected annual improvement in reading with student G making higher than the class average of 13.7 with a 14 month gain in the second year. This school also has a significant number of students from an ethnic minority community but none of these stand out as making lower overall gains in reading.

In class B1 student C was highlighted as not expected to make progress.

—I'd give up with him. Poor family, father out of work.‖

—He never brings his school bag or does his homework. I don't think he'll pass‖.

The first assessments seem to confirm the teachers' opinion of student C. Letter names and sounds were not recalled and only 2 words were read correctly, well below the average of the class.

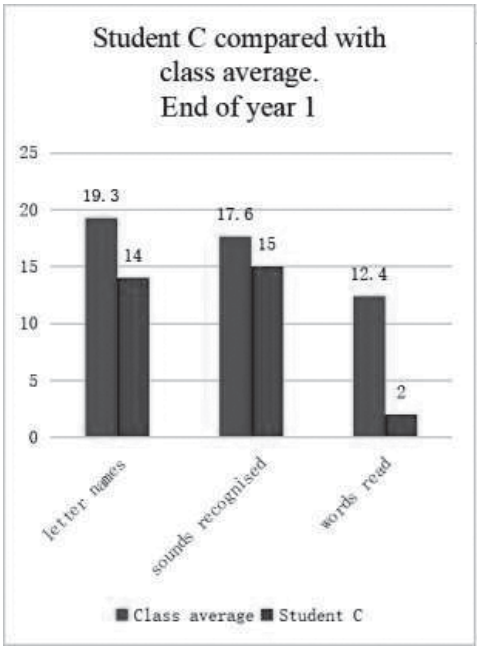


Figure 7. Tracking reading progress of student C year 1.

Reading improvement shows minimal difference between boys and girls. In schools A and B, the boys lagged slightly behind while in school C, improvement among boys was greater. The control school

By the end of the second year, student C outformed the average in word and sentence reading showed good comprehension and made close to avarage score in other areas. The researcher's note on his final reading assessment reads.

—Read slowly and hesitantly at first but gained confidence. He sounded out and blended correctly to make words. ‖

Dispite a known unsatisfactory home backgroun with little parental support, student C could read.

C. Gender

The reading improvement data generated by this study enables the impact of gender on reading ablity to be considered.

A exhibited the biggest disparity of 1.85 months which is not particularly significant. However, with improvements averaging only 5.4 months in this school, a 1.85month difference equates to 35%, suggesting traditional methods of teaching reading may exacerbate reading inequality.

Tracking individual students progress over the two years of the study suggests that almost all students can make significant progress in reading when taught using the phonics approach. Only irregular attendance has any impact on reading progress. Economic status, ethnic origin, home support and gender do not affect student reading progress.

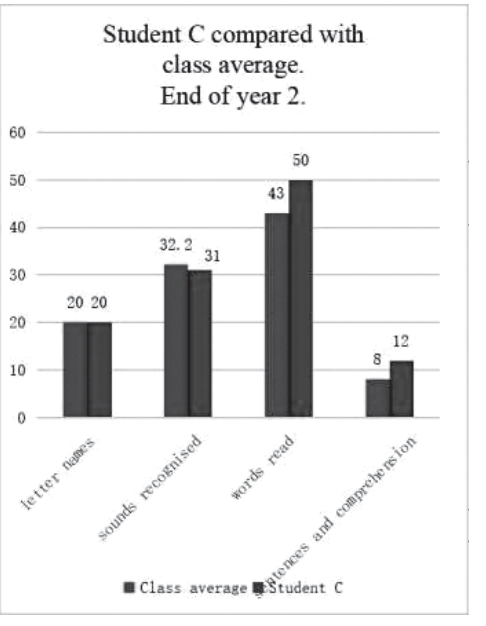


Figure 8 Tracking reading progess of student C, year2

In conclusion, data analysis suggests that a phonics approach enables the majority of students to read and mitigates against the perceived negative influence of poor home background and low socio-economic status. Gender inequalities in reading were not greatly significant at this stage although possibly suggesting traditional methods favour girls over boys. With no clear consistency in reading discrepancy between gender, it is suggested that all can develop a sound foundation of reading skills to reduce the likelihood of future reading inequality. Consideration of the impact of disability was not possible in this study due to lack of data and identification of needs in the participating schools. Only students with irregular or nonattendance at school were unable to make progress with reading. The evidence suggests that teaching reading through phonics removes barriers to learning to read and contributes towards combatting the reading injustice of illiteracy.

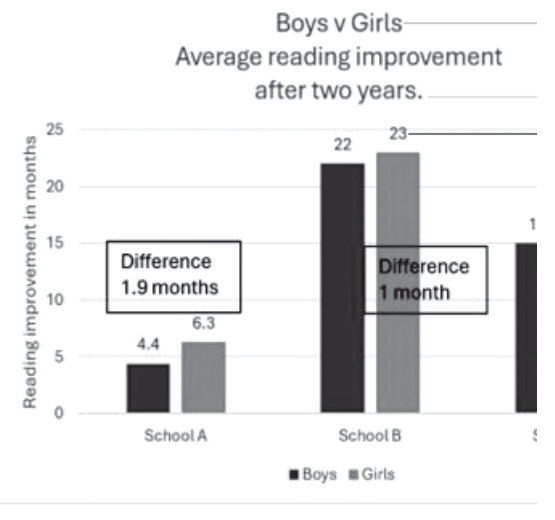


Figure 9. Average reading improvement by gender in 3 schools.

Conclusions and Implications

The evidence depicted in this study advances the notion that effective phonics instruction facilitates reading proficiency, thus promoting social justice for all. Comparing the reading ability of students receiving phonics instruction and those who did not, it can be concluded that the phonics approach greatly improves reading ability in English. Although whole language instruction and sight word memorisation enables some to read, more children become better readers through explicit and systematic phonics instruction.

The enthusiasm, belief and resourcefulness of teachers were the main determinants of the success of the programme in individual schools, with support of colleagues and school leadership. Initial and ongoing teacher training in the theory and practice of the phonics approach enabled successful implementation of the phonics approach in two schools and further mentoring support allowed challenges to be overcome. Factors stemming from students‘ home situation, socio economic status, ethnic origin and gender, which potentially contribute to under performance in reading, appear to be largely mitigated by phonics instruction. It may be asserted that, despite perceived circumstances beyond our control, the majority of students can learn to read.

Following the end of the research study, sustainability was a concern. However further visits to the participating schools reveal encouraging signs that phonics instruction is continuing. Teachers are gaining confidence both in their teaching ability and in the phonics approach and are developing it appropriately within their context. Parent seminars and whole school awareness workshops have increased the understanding and credibility of phonics instruction and teachers see improved reading ability among the students who received phonics instruction. Hearing of the success of the phonics approach, nearby schools, including the control school, have implemented the approach. Further longitudinal studies would provide evidence of the long-lasting effectiveness of the phonics approach.

While the results of the study are limited to the particular context of three schools in Nepal and replication cannot be assumed, the potential benefits to the future student population of Nepal suggest that adoption of the phonics approach warrants serious consideration. The results of this study therefore have significant implications for those involved in writing policies, curriculum, teacher training materials and textbooks. Widespread implementation is dependent on availability of quality phonics training for all stakeholders, particularly teachers, and on the provision of well-structured, easily implemented, contextually appropriate resources. The motivation of all involved in education to envision and pursue the implementation of phonics instruction will however be the main determinant in effectively raising reading standards.

It is anticipated that a nationwide implementation of phonics instruction has the power to tform education in Nepal, giving opportunities for all to enjoy the privilege of further education and fulfilling employment. Phonics is an expected teaching and learning component of the curriculum of Nepal. Its effectiveness is evident. Educators have the opportunity to put research into practice and impact the reading potential of all students in Nepal.

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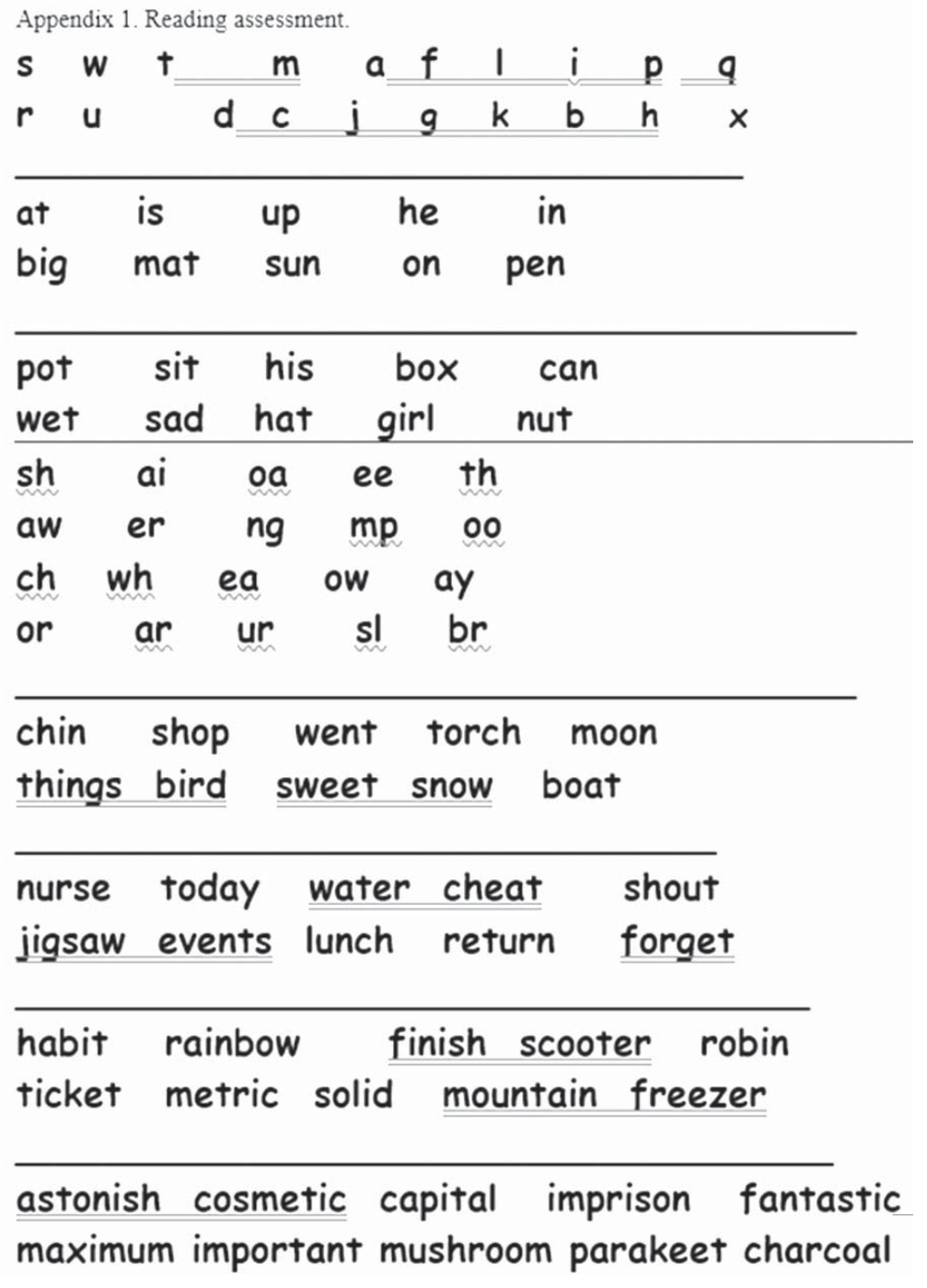
Appendices.

Appendix 1. Reading assessment.



Sentences to read and comprehension questions. Read and understood

1. **A dog has a pot.**

What does the dog have? _____ _____

2. **The cat is on a mat.**

Where is the cat? _____ _____

3. **I go to bed at six o'clock.**

When do I go to bed? _____ _____

4. **Sam has a cup of hot milk at bedtime.**

What does Sam have at bedtime? _____ _____

5. **We are going to the shop to get sweets.**

Where will we get sweets? _____ _____

6. **My aunt gave me a toy for my birthday.**

Who gave me a toy? _____ _____

7. **The children had crisps and cake at the party. What did the children eat?** _____ _____

8. **Every car needs petrol, oil, water, air and a good engine.**

What do cars need to work? _____ _____

9. **The puppy escaped through a hole in the fence, and it was difficult to catch him.**

How did the puppy escape? _____ _____

10. **The teacher looked angry and so the boy did not argue.**

Did the boy argue with the teacher? Why? _____ _____

/10 /10

Appendix 2. Burt reading age diagnostic assessment. Reading age calculated in years and months.

REVISED NORMS FOR BURT (RE-ARRANGED)

WORD READING TEST

Score		2	3	4	5	6	7	8	9	10
Reading Age		5.3	5.3	5.4	5.5	5.5	5.6	5.6	5.7	5.7
Score	11	12	13	14	15	16	17	18	19	20
Reading Age	5.8	5.9	5.9	5.10	5.11	5.11	6.0	6.1	6.1	6.2
Score	21	22	23	24	25	26	27	28	29	30
Reading Age	6.2	6.3	6.4	6.5	6.5	6.6	6.7	6.8	6.8	6.9
Score	31	32	33	34	35	36	37	38	39	40
Reading Age	6.9	6.10	6.11	7.0	7.1	7.2	7.3	7.4	7.5	7.5
Score	41	42	43	44	45	46	47	48	49	50
Reading Age	7.6	7.7	7.8	7.9	7.10	7.11	8.0	8.1	8.2	8.3
Score	51	52	53	54	55	56	57	58	59	60
Reading Age	8.4	8.5	8.6	8.7	8.8	8.9	8.10	9.0	9.1	9.2
Score	61	62	63	64	65	66	67	68	69	70
Reading Age	9.3	9.4	9.6	9.7	9.8	9.9	9.10	10.0	10.1	10.2
Score	71	72	73	74	75	76	77	78	79	80
Reading Age	10.3	10.4	10.6	10.7	10.9	10.10	10.11	11.0	11.1	11.3
Score	81	82	83	84	85	86	87	88	89	90
Reading Age	11.4	11.5	11.6	11.7	11.9	11.10	11.11	12.0	12.1	12.3
Score	91	92	93	94	95	96	97	98	99	100
Reading Age	12.4	12.5	12.6	12.7	12.9	12.10	12.11	13.0	13.1	13.3
Score	101	102	103	104	105	106	107	108	109	110
Reading Age	13.4	13.6	13.6	13.7	13.9	13.10	13.11	14.0	14.1	14.3