# The Impact of Reading Instructional Time in the Classroom: Early Grade Reading Time Policy Initiative in Pakistan 

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ABSTRACT
Reading is without doubt a highly complex cognitive process and hence it is a difficult task to formulate policies for its' improvement. An effective reading time allocation is particularly important for the improvement of early grade reading. DeStefano (2012) illustrated that with all things being equal, students who spend more class time on a learning task perform better than students who spend less time.

It has been seen that children come to school with little to no reading skills in the language of instruction, which puts them at a further disadvantage. Students who do not achieve a certain level of reading by the end of grade 1 tend to fall behind in all other areas of cognitive development (Stanovich, 1986).

This study would explore the reading instruction time policy initiative and discuss how it developed and ensured in the early grades classes in Pakistan. This is a mixed-methods approach study that combines both qualitative and quantitative data. The study showed elements that contributed to improve early grades reading skills, especially help the number of students' zero scores decreased in reading tasks and support the education departments to achieve the performance standards.

# O Impacto do Tempo de Ensino da Leitura na Sala de Aula: A Iniciativa Política do Tempo de Leitura nos Primeiros Anos do Ensino no Paquistão 

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## RESUMO

A leitura é, sem dúvida, um processo cognitivo altamente complexo. Por conseguinte, elaborar políticas para a sua melhoria é uma tarefa difícil. A atribuição eficaz de tempo para a leitura é especialmente importante para a melhoria da leitura nos primeiros anos de ensino. DeStefano (2012) ilustrou que, em condições iguais, os alunos que passam mais tempo de aula numa tarefa de aprendizagem têm melhor desempenho do que os alunos que passam menos tempo.

Já se verificou que as crianças chegam à escola com poucas ou nenhumas competências de leitura na língua de instrução, o que as coloca em ainda maior desvantagem. Os alunos que não conseguem atingir um determinado nível de leitura até ao final do 10 ano tendem a ficar para trás em todas as outras áreas de desenvolvimento cognitivo (Stanovich, 1986)

Este estudo explora a iniciativa política do tempo de leitura e analisa o seu desenvolvimento e implementação nas aulas nos primeiros anos de ensino no Paquistão. É um estudo com uma abordagem de métodos mistos, que combina dados tanto qualitativos como quantitativos. O estudo revelou elementos que contribuem para melhorar as competências de leitura nos primeiros anos de ensino, e em particular ajudam a diminuir o número de pontuações nulas nos alunos e apoiam os departamentos de educação para que alcancem os padrões de desempenho.

## KEY WORDS

tempo de ensino da leitura; iniciativa política nos primeiros anos de ensino; fluência de leitura oral (ORF).

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# El Impacto del Tiempo de Instrucción de Lectura en el Aula: Iniciativa de Política de Tiempo de Lectura Temprana en <br> PAKISTÁN 

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## RESUMEN

La lectura es sin duda un proceso cognitivo muy complejo y, por tanto, formular políticas para su mejora es una tarea difícil. Una asignación eficaz del tiempo de lectura es particularmente importante para mejorar la lectura de los primeros grados. DeStefano (2012), ilustró que, en igualdad de condiciones, los estudiantes que dedican más tiempo de clase a una tarea de aprendizaje se desempeñan mejor que los estudiantes que dedican menos tiempo.

Se ha visto que los niños llegan a la escuela con poca o ninguna habilidad de lectura en el idioma de instrucción, lo que los coloca en una mayor desventaja. Los estudiantes que no alcanzan un cierto nivel de lectura al final del primer grado tienden a quedarse atrás en todas las demás áreas del desarrollo cognitivo (Stanovich, 1986).

Este estudio exploraría la iniciativa de política de tiempo de instrucción de lectura y discutiría cómo se desarrolló y aseguró en las clases de los primeros grados en Pakistán. Este es un estudio de enfoque de métodos mixtos que combina datos tanto cualitativos como cuantitativos. El estudio mostró elementos que contribuyeron a mejorar las habilidades lectoras de los primeros grados, especialmente ayudaron a disminuir la cantidad de puntajes cero de los estudiantes en las tareas de lectura y apoyaron a los departamentos de educación para lograr los estándares de desempeño.

## PALABRAS CLAVE

tiempo de instrucción de lectura; iniciativa de política de grados tempranos; fluidez de lectura oral (ORF).

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# The Impact of Reading Instructional Time in the Classroom: Early Grade Reading Time Policy Initiative in Pakistan <br> Atique ur Rehman ${ }^{1}$ 

## INTRODUCTION

This study seeks to explore reading at an early age lays a necessary foundation for subsequent skill development. Children who are unable to acquire basic reading skills have little chance of benefiting from higher primary school grades, and those who struggle to read in the first grade soon decide that they neither like nor want to read (Juel, 1988). Reading is a lifelong skill that is a cornerstone for a student's success in school and through life. Children who develop reading skills at an early age are more likely to succeed and ultimately stay in schools.

Research shows that adequate time to practice reading is crucial in learning how to read. The data available from Uganda, Tanzania, Ethiopia, and Rwanda indicates when more time is spent on language lessons per week, children read better. Most successful reading programs allocate 60 minutes to daily reading lessons. However, even when the adequate time for reading lessons is provided on the official timetable, actual reading learning time can be lost because of teacher and/or pupil absenteeism and poor use of classroom time. Specific time allocation for reading instruction for reading had been suggested by a variety of studies. Fielding and Pearson (1994) suggest that children learn more effectively if they could read effectively and this comes by allocating a specific time for reading instruction. Similarly, Patrinos (Patrinos \& Velez, 2009) suggests that children who are being taught in a bilingual context need to be given more time specified for reading. Moreover, time allocation for reading is essential to bridge the learning gap between fluent readers and struggling readers. According to other research findings, a child weak in reading in grade I continue to remain poor till grade 4 unless reading instruction time is improved through an effectively designed reading intervention (Jeul, 1988). Research also illustrated that with all things being equal, students who spend more class time on a learning task perform better than students who spend less time (DeStefano, 2012). In addition, children who arrive at school less prepared to learn require more time to reach the desired achievement level.

This is the case with many Pakistani children regarding learning to read, as they come from non-literate backgrounds and enter grade 1 without any pre-school education experience. It has also been seen that children come to school with little to no reading skills in the language of instruction, which puts them at a further disadvantage. Therefore, there is a need to be concerned about the time pupils spend actively engaged in learning how to read. Time spent on class management issues, and other non-learning activities reduce time, for children actively learning how to read.

Since 2011, USAID has funded several early grades reading programs in 45 countries across the globe. These programs, in combination with other USAID education

[^0]interventions, have reached more than 109 million children and youth. The Pakistan Reading Project (PRP) is particularly notable among such early grade reading programs because it is not only on track to improve the reading outcomes of 1.3 million Pakistani children by 2020 but has also developed a successful framework for engaging local and provincial governments and supporting them in adopting reading improvement strategies (RIS) into their education policies. RIS formulated to strengthen reading reforms in the provinces and regions. The project supported provincial/regional education departments to develop and implement their respective RIS. These strategies served as overall roadmaps for each province/region to achieve their self-identified goals for reading improvement. The strategies cover reading instruction time, revision of language curriculum, integration of reading skills in primary class textbooks and material, teacher professional development, reading assessment, and the promotion of a reading culture. This study will explore the reading instruction time policy initiative and discuss how it developed and ensured in the early grades classes in Pakistan.

## THEORETICAL FRAMEWORK LITERATURE REVIEW

Specific time allocation for reading instruction for reading had been suggested by a variety of studies. Fielding and Pearson (1994) suggest that children learn more effectively if they could read effectively and this comes by allocating a specific time for reading instruction. Moreover, time allocation for reading is essential to bridge the learning gap between fluent readers and struggling readers. The gap between the academic achievements of students who do not learn to read by grade 1 and those who do grows exponentially every year. If a student is not a good reader at the end of grade 1 , there is a probability (.88) that he/she will remain a poor reader at the end of grade 4 (Juel, 1988). This gap in early-grade reading skills often contributes toward high dropout rates in the school system. According to Education for All report, children who fail to learn to read in the first few years of schooling are handicapped in later grades (Gove \& Cvelich, 2011, p. 5).

Studies show that there is a strong correlation between students' ability to identify individual letter sounds in words (i.e., their level of phonemic awareness) and their ability to read texts. Measures of phonemic awareness are among the best, if not the best, predictors of success in learning to read (Adams, 1990; Learning First Alliance, 1998; National Reading Panel, 2000; National Research Council, 1998).

Children who can identify and isolate the individual sounds in spoken words are much better able to use their knowledge of the letter-sound relationship to sound out or read new words. For that reason, teachers need to spend time in the early grades developing students' phonological awareness skills, and in particular their phonemic awareness skills. Phonological awareness is considered to be one of the building blocks of reading and hence needs to be developed by the end of Grade 2.

The project target was to promote integration and implementation of policies that promote quality teaching, materials, and reading assessment, as well as to promote the sustainability of project initiatives through public policy changes in the public education system. As a result, a collaborative approach was used and worked with the assistance of provincial/regional education departments and approved a reading reform framework (RIS) conducive to reading improvement at early grades level.

The government adopted a student-centered model to intervene and sustain across six crucial areas of reading reforms that contributed to children's reading success: standards, instruction time, language curriculum, reading materials, in-service teachers training, and reading assessment. The policy approach targeted the following key drivers of change under the provincial education department affecting intended outcomes and addressed the following changes that pose as a barrier to reading success.


Figure 1. The graph is drived from USAID funded Pakistan Reading Project intervention framework.

This framework provides a research-based comprehensive approach for reading reforms which aims to (i) adopt a reading skills-based approach within the lower primary school reading curriculum to help pupils develop basic reading skills (ii) maximize time during which lower primary pupils are actively engaged in reading (iii) introduce children to reading in the language they are most familiar with on arrival in school (iv) provide inservice training and continuing professional support for teachers in the components of literacy acquisition, pedagogical skills, and the appropriate use of teaching-learning materials (v) promote pupils' use of textbooks with adequate and appropriately graded reading texts and supplementary readers and (vi) conduct learning assessments using tools that focus on essential, teachable reading skills: alphabetic awareness, phonological awareness, concepts of print, decoding words/non words, familiar and/or high frequency words, reading fluency, Oral Reading Fluency (ORF) and comprehension. This paper only focuses on one RIS strategy "reading instruction time" and discusses how it developed, implemented, and ensured in the early grades/classes in public schools in Pakistan.

## METHOD

The Reading Instruction Time (RIT) policy implementation in schools observed for inclusion of reading time in class timetable, periodic occurrence, and average time spent on reading-based activities in classrooms. Policy level implementation examined for issuance of official notification from the education department to schools for allocating time for reading activities. At the school level, headteachers were asked about receiving RIT notification and whether they have taken any steps to ensure its implementation in their schools. The impacts were observed through asking simple reading-related questions from students to observe key daily lesson plan steps used in Reading Instruction Time by the Teacher.

The survey was conducted in a sample of schools drawn from the population including all project intervention schools in both Cohort 1 and Cohort 2. School information acquired from M\&E-IS (Monitoring and Evaluation Information System). The sample for the survey was 370 schools calculated at $95 \%$ Confidence level \& 5\% Confidence Interval from the list of a total of 8136 project intervention schools. The sample is proportionally distributed among the provinces/regions to their share in total population and then further distributed among the districts proportionate to their population in that region. District-wise distribution of sampled schools was listed. A simple random sampling technique was used to select schools in each district after sorting data as per 1) School Location i.e., rural/urban 2) School Gender. To compare the effect on students reading skills in the absence of reading time, the study included nonintervention schools where reading time is not implemented in the classroom timetable. The student's learning performance data were used to compare parameters. The sample size was calculated using a convenient sampling method based on time and resources.

The study used a mixed-methods approach which combines both qualitative and quantitative data for acquiring in-depth information to answer proposed research questions. The data was collected through questionnaires comprised of both open-ended and close-ended questions and administered to collect data from project trained school teachers, headteachers, and education officials to collect relevant data. Policy teams supported in collecting data from the sampled schools in their respective regions and also supported in analyzing the data.

The project used systematic monitoring mechanism (M\&E IS) where it collects, record, verify and upload the means of verification for further use. This study used M\&E IS system and extracted 12496 teachers ( 7812 male \& 4698 female), Azad Jammu \& Kashmir 1757 ( 884 male \& 873 female), Balochistan 2136 ( 1255 male \& 881 female), FATA 533 ( 356 male \& 177 female), ICT 154 ( 30 male \& 124 female), GB 489 ( 287 male \& 202 female), KP 3209 ( 1629 male \& 1580 female), and Sindh 4232 ( 3371 male \& 861 female) data from October 2017 to September 2018. Excel pivot sheets were used to extract the data and then further the data were analyzed. Additionally, $5 \%$ of the project field team observed the duration in which the reading is being practiced. These observations were was also analyzed and reported in the findings.

The project engaged government education departments through Provincial Steering Committees (PSCs) which hold dialogues with stakeholders and make the policy decisions. The PSCs were led by the Education Secretaries and other education institutes were the members of the PSCs. Furthermore, Provincial Advisory Committees were also formed to carry out technical aspects of the reforms. PACs present their technical issues to PSCs, discuss and make the decisions to move forward.

## RESULTS

Pakistan is a multilingual and multi-ethnic country divided into four provinces (Punjab, Balochistan, Sindh, and Khyber Pakhtunkhwa) and three special areas (Gilgit-Baltistan, Azad Jammu and Kashmir, and Islamabad Capital Territory). Each province and areas have its own set of sub-cultures and languages/dialects. The major languages spoken in Pakistan are stated in below table:

Table 1
Major Languages Spoken in Pakistan

| Language | Speaker Percentage |
| :---: | :---: |
| Punjabi | 44.15 |
| Sindhi | 10.53 |
| Pashto | 14.1 |
| Seraiki | 7.57 |
| Balochi | 4.66 |
| Urdu | 7.57 |
| Others | 4.66 |

Source: Zubeida, 2015, p. 27 [Original Source: National Population Census 1998].

In Pakistan, the lower primary (grades 1 to 2) curriculum consists of four core subjects, with varying numbers of 35 -to-40-minute lessons a week per subject. Urdu and English language classes each have seven 35 -to- 40 -minute lessons per week. The Urdu language curriculum previously not specifically focusing the reading as a skill. The primary school curriculum was not mandate reading skills and treats language as a subject. Reading component skills such as phonics and decoding were not focused; therefore, students were expected to move from learning letter names in Kachhi (nursery) to reading text by grade 1. However, the curriculum takes a language skills integrated approach, with reading being one of the components (the others are listening, speaking, and writing) with language development as the ultimate aim. Without attention to fundamental component skills, children are unable to develop robust reading skills that should serve as the foundation for their cognitive development, learning, and future academic and professional success.

Reading is, without doubt, a highly complex cognitive process and hence it is a difficult task to formulate policies for its' improvement. This study explores one of the RIS components "reading time allocation". An effective reading time allocation is particularly important for the improvement of reading. In Carroll's conceptual model of school learning, time plays a central role. One of the assumptions of Carroll's model is that if a motivated learner is allowed sufficient time for learning, he/she would achieve learning. According to Carroll's model, true learning depends on the amount of time a student spends actively engaged in the learning process compared to the amount of time the student needs to learn (Carroll, 1963).

Based on the classroom observation data of the teaching of different reading skills, the following process was made to reflect reading instruction time into the scheme of
studies outlining with the reading instruction skills such as concepts of print, phonological awareness, phonic, vocabulary, fluency, and comprehension, which were practiced at classroom instructional level of the public education system.

## MODALITY FOR POLICY ENGAGEMENT

The PRP (project) initiatives improving policies and systems at the provincial/regional levels to better enable teachers and students to succeed are critical to reading achievement outcomes, the policy framework has two broad areas - what to teach and by whom it is taught - the project guided provinces/regions through the planning of reading policy reform in a manner that addresses both the content and the delivery mechanism. When these sides converge, student learning outcomes are likely to improve; but without policy support on both sides, reform efforts are likely to stall.

The project used the Provincial Steering Committees (PSCs) and Provincial Advisory Committees (PACs) platform to engage government officials and other stakeholders in dialogue and decision making around key reading policy challenges and reforms within the RIS framework. Each PSC was chaired by the education secretary and is comprised of members from a variety of government departments, including Planning and Development, Finance, Law, and other professional bodies of the Education Department (e.g., the Bureau of Curriculum (BOC), apex institution, education assessment centers, and education faculty of education).

In addition to the PSCs, each province had PAC, the technical arm of the PSC, which was convened around specific thematic areas as a task force for input into policy discussions/decisions. These PACs (and any task forces arising from them) are comprised of government technical staff, as well as technical experts from the private sector or academia. Any policy decisions pertaining to the RIS framework were addressed through these bodies; technical inputs from individual task forces were passed to the advisory committee for review, and upon its approval, a draft policy was submitted to the PSC for final authorization. The project was already actively engaged at the provincial and national levels to facilitate this process and offer its technical assistance in reading policy formulation and implementation at all stages.

In public primary schools in Pakistan, there was no specific time allocated for the reading, and its components are not specifically included in the Curriculum and Textbooks. Furthermore, teachers are given a scheme of studies (teaching periods) which is divided into subjects to be taught, number of periods/time in a week, and assessment marks. Therefore, in the classroom, teachers do not follow the reading skills/sub skills instead follow the traditional translation method and do tasks like response/wait time, classroom management etc. Therefore, the allocated time for reading becomes unproductive. Thus, a gap arises between the scheme of work and the textbook, and teachers end up using the textbook. It appears that teachers need comprehensive teacher training and learning.

With the inception of project implementation, the provincial and regional education departments were requested to allocate specific time for reading instruction in early grades. Realizing the importance of reading, respective departments notified specific times ranging from 35 to 40 minutes daily for classroom instructions in reading for project interventions schools. Subsequently, a notification has been issued to all the project
intervention school districts to practice one class period (35-40 minutes) per day for reading in Grade 1 to 2 based on the materials provided by PRP as per the table below:

Table 2
Provincial/Regional wise Reading Instruction Time allocation

| AJK | Balochistan | FATA | GB | ICT | KP | Sindh |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Daily 40 minutes allocated for reading skills | Daily 35 minutes allocated for reading skills | Daily 35 <br> minutes <br> allocated <br> for <br> reading <br> skills | Daily 35 minutes allocated for reading skills | Daily 35 minutes allocated for reading skills | Daily 35 minutes allocated for reading skills | Daily 35 minutes allocated for reading skills |

Keeping in view the request of the provincial and regional government education departments for specific reading time for all the public primary schools, PRP facilitated the relevant departments to revisit the scheme of studies for specific time allocation needed for the instruction of reading skills in the Urdu/Sindhi language class of Grade 1 and 2. A thorough process has been followed by each provincial/regional government to amend the scheme of studies and incorporate the sufficient time for Urdu reading for all public primary schools in Pakistan (excluding Punjab). The same has been notified by each province/regional government to implement the revised scheme of studies for all public primary classes by the academic year 2019. The amended scheme of studies reflects the reading instruction time as per the below table:

Table 3
Provincial/Regional wise revised scheme of studies

| AJK | Balochistan | FATA | GB | ICT | KP | Sindh |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2.5 periods | 2.5 periods per | 2 periods | 5 periods | 2.5 | 2 periods | 4 periods |
| per week is | week is | per week | per week | periods | per week | per week |
| allocated | allocated for | is | is | per week | is | is |
| for Urdu | Urdu reading | allocated <br> reading |  | for Urdu <br> reading | allated <br> for Urdu <br> reading | is <br> allocated <br> for Urdu <br> reading |
|  |  |  |  | allocated <br> for Urdu <br> reading | allocated <br> for Urdu <br> reading |  |
|  |  |  |  |  |  |  |

Weekly time table to focus on reading instructions covering reading sub-skills that reading instruction time has to cater to are:

- Phonemic awareness refers to focusing on, manipulating, breaking apart, and putting together sounds orally;
- Phonics, or linking written letters to their sounds and forming spelling patterns;
- Vocabulary refers to knowing words and their meaning;
- Fluency refers to achieving speed, accuracy, and expression in reading; and
- Comprehension or understanding what one reads or hears.

The below-given data illustrate that schools have a specific time for reading in their timetable. The below data shows, all cohorts (1,2 \& 3) districts teachers allocated 73\% to $89 \%$ time for reading in their weekly timetable that is encouraging. The maximum $89 \%$ time is allocated in Cohort 1 and while Cohort 3 is showing the minimum time allocation that is $73 \%$. The Cohort 3 data coverage is only for 8 months (February to September 2018).

Table 4
Cohort wise weekly allocated time for reading

| Cohorts | \% Weekly timetable allocation |
| :--- | :---: |
| Cohort 1 | $89 \%$ |
| Cohort 2 | $83 \%$ |
| Cohort 3 | $73 \%$ |
| Grand Total | $75 \%$ |

However, this data need not be compared among the provinces/regions because of certain education governance and working environment, project interventions mode, and educational circumstances reasons. This data shows a pattern indicate reading time allocated in PRP-focused schools.

How do teachers utilize the allocated reading instruction time in the classroom

This study also collected the data of teachers who spend time on reading skills during the classroom. The below table provides an insight that in provinces and regions what percentage of teachers give time to reading on daily basis.

Table 5
How much time does the teacher give to reading on daily basis?

| Provinces/regions | 21-30 minutes | 31-45 minutes | 46-60 minutes | Less than 20 <br> minutes |
| :--- | :---: | :---: | :---: | :---: |
| Azad Jammu \& Kashmir | $49 \%$ | $18 \%$ | $2 \%$ | $30 \%$ |
| Balochistan | $28 \%$ | $59 \%$ | $7 \%$ | $6 \%$ |
| FATA | $11 \%$ | $89 \%$ | $0 \%$ | $0 \%$ |
| Federal Capital Territory | $43 \%$ | $45 \%$ | $2 \%$ | $9 \%$ |
| Gilgit Baltistan | $24 \%$ | $69 \%$ | $1 \%$ | $6 \%$ |
| Khyber Pakhtunkhwa | $26 \%$ | $64 \%$ | $4 \%$ | $6 \%$ |
| Sindh | $15 \%$ | $68 \%$ | $13 \%$ | $5 \%$ |
| Grand Total | $\mathbf{2 3 \%}$ | $\mathbf{6 3 \%}$ | $\mathbf{7 \%}$ | $\mathbf{7 \%}$ |

As the above table described that most of the teachers in provinces and regions have followed the notified and allocated time ( $35-45$ minutes). In FATA, $89 \%$ of teachers are giving 31 to 45 minutes to reading daily which is considered high. Whereas, in Azad Jammu \& Kashmir 18\% of teachers are giving daily basis 31-45 minutes to lowest reading. The data also reveal that majority of the teachers are using 21 to 45 minutes per day on reading in school to improve students reading skills.

Though school timetables reflect time allocation in schools in developed and developing countries alike what brings the difference in results is the effective utilization of the prescribed time, for any specific academic function. "Time allocation for reading instruction" is also subject to the same variation in developing and developed countries (Gove \& Cvelich, 2011). In project's supported schools allocated reading specific time in the classroom for Urdu language Grade $1 \& 2$. The survey results showed $82 \%$ of the schools received a circular from the education office, allocated periods in the timetable, and displayed in classrooms. It is observed that $78 \%$ of the total time allocated for URDU reading is being used purposefully.

The study explored that 77 \% of teachers were using the Reading Learning Materials (RLM) that were provided by the project. The RLMs are considered important to ensure children have hands-on practice with the foundational skills of reading, comprehend what they are reading, and improve fluency. The project developed a comprehensive research-based package of RLMs in Urdu, Sindhi, and Pashto languages for grade one and two students that consider student age and language structure. The RLMs focus on the essential skills of reading and include high-impact teaching strategies that engage pupils. RLM packages include scripted lesson plans for teachers; student workbooks; Big Books for shared reading activities; flashcards for sight word practice; vowel buddy or syllable charts for practicing syllable sounds and leveled readers that help students in independent reading as per their reading level. RLMs include decodable text/stories in both grades. The RLM package provides a systematic and scientific way of learning reading. In grade one, students practice identifying and decoding syllables, making words, and reading simple sentences. In grade two, leveled readers allow students to read stories at their developmental reading level thus increasing students' comprehension, fluency, and reading confidence.

Resultantly, it is observed that $68 \%$ of teachers helped students in completing workbooks, $77 \%$ of teachers used scripted lesson plans, and $45 \%$ of teachers either used their developed lesson plans or did not have any prepared plans for their classes. Study shows that have a high impact on students learning and improved students' reading abilities and teachers' instructional strategies for reading. It is observed that the number of grade two students that met or exceeded performance standards in oral reading fluency (ORF) increased from the baseline to midline assessments in all regions. The project team observed classroom teaching and found that $60 \%$ of teachers are using the phonemic awareness method to teach different activities such as "I Say, You Say" - (i.e., Teacher: "I say 'fat,' you say..." Student: "cat"), "Rhyming Word Sit Down" - Students walk in a circle, taking one step for every rhyming word the teacher says. When a teacher says a word that does not rhyme, students sit down, and "Sound Count", "Say a word" etc. Team also observed that $78 \%$ of the teachers are teaching to learn "reading fluency tasks" such as "Choral Reading" - All the students, led by the teacher, read aloud together, "Speedy Alphabet Strip" - Students match as many letters of the alphabet (mixed up) as they can to a given alphabet strip in one minute, and "Speedy Word Soup" - Have several ones and two-syllable words and a bowl or container. Students pick out the words
from the bowl and read them as quickly as they can. See how many words they can read in one minute.

The effective utilization of time on reading skills positively affects students' reading skills and demonstrates the cumulative effects on students' reading abilities. Students in first grade who spent one year in a project classroom showed small reading gains, but second graders who spent two years in a project classroom showed significant medium to large gains. Moreover, students whose teachers received additional support after completing the two-year intervention continued to make reading gains. It is also observed that Teachers have increased their ability to effectively implement reading instructional strategies, and like students, they also benefit from more time with project training and support.

Does the allocated instructional time for reading have an effect
on the improvement of children's basic reading skills?

The time allocation for various components of reading varies substantially from school to school because of the factors surrounding the school and the nature of diverse students within a class. Even if a specific time is allocated in the classroom for reading instruction, research suggests that in the majority of primary schools, real-time spent on reading instruction is hardly around $10 \%$ (Anderson, Hiebert, Scott, \& Wilkinson, 1985). Some careful studies suggest that $70 \%$ of time allocated for reading instruction in the classroom is spent between various intermediary tasks like response time, wait time, classroom management matters, writing tasks, etc. (McNinch, Shaffer, Campbell, \& Rakes, 1998). Each component of the reading itself needs a specific length of time and consistent follow-up, to develop a specific reading-based skill. For instance, the initial two years of reading instruction are essential for phonics and phonemic awareness. Whereas the time needed for fluency may extend up to three years. Unlike phonics, the children have to learn to break the codes and to attach the letters and later to make them into words initially and this may take a longer time. So, time allocation for phonemics, fluency, reading comprehension, and vocabulary will also vary (Ambruster, 2000) from school to school and will be affected by the level of skill and training of the teacher and by the aptitude of students. There is no consensus on one standard time allocation for reading in early grades. Nevertheless, it is proved that the most effective reading interventions are ones that suggest specific instruction time, in the small group often lead by the one-to-one or pair or in small supervised groups.

The study shows that the allocated time for the Urdu language subject was range from 40 minutes to 60 minutes a day throughout the week. ( 2 periods of 30 minutes each or 1 period of 40/45 minutes) making an average time of quarter to five to five and a half hours for Urdu a week. It is observed that most teachers have allocated the time for the specific reading skills in their weekly timetable. A headteacher said "we put the notification in the notice board, asked the grade $1 \& 2$ teachers to allocate the time for reading in their weekly timetable and also used to observe the class to see how the time is being utilized by the teachers". Another headteacher replied that "Teachers' skills are developed on specific reading components that teachers are now using in the classroom level". A grade 1 teacher said, "we have allocated reading in our
weekly timetable and every day I am using the time for reading activities so that students reading gets improved".

Another grade 2 teacher responded that after receiving training from the project on reading skills, we used time more efficiently to improve the students' reading skills. A grade 1 teacher said that "I am using new reading skills approaches in Urdu language subject, such as, read aloud, flashcard, scripted lesson plans, workbook, big book for shared reading activities, sight word practice, practicing syllable sounds, etc. I can see reading abilities of my students are improving day by day and it also gives me pleasure and a sense of achievement too". The project team also observed classrooms and revealed that in cohort 1 schools, $79 \%$ and in cohort 2 schools $65 \%$ of the students' reading comprehension increases.

According to project midline Early Grade Reading Assessment (EGRA) result, it showed that students who use reading workbooks at school one to two times per week had a higher mean Oral Reading Fluency (ORF) score than those who used them daily, and both students who used workbooks daily and those who used them one to two times per week had higher mean ORF scores than students who reported never using workbooks.

The EGRA results also indicate that nearly all students ( 98.5 percent) were in schools where the headteacher reported that teachers have scripted lessons, and nearly half ( 44.5 percent) were in schools where teachers used the scripted lessons daily. Students in schools that used scripted lessons had a significantly higher mean ORF score (54.7) than students in schools without scripted lessons (42.9). Moreover, students in schools that employed daily scripted lessons had the highest mean ORF score (59.6), while students in schools that used scripted lessons one to two times per week had the second-lowest mean ORF score (49.3). The difference between using scripted lessons daily and using them one to two times per week was statistically significant. The use of scripted lessons daily was associated with higher mean ORF than the use of scripted lessons one to two times a week. Access to a school library was also associated with higher student ORF.

The study also observed that those schools which have allocated two periods for Urdu subjects per day have learned some new pedagogical content and skills. In some schools, teachers use aloud reading techniques in Islamic studies, social studies, apart from Urdu which gives additional reading time for students in schools. More time in a classroom positively effects students' reading skills and demonstrates the cumulative effects on students' reading abilities.

The below graph demonstrates that project interventions effects on second grader's reading skills after ( 2 years interventions) and treatment years (one year interventions). The graph illustrates that students who spent two years of the project interventions showed small reading gains, but second graders who spent one additional years showed significant medium to large gains.

# Effects on second graders' reading skills after (20152017) and (2017-2018) treatment years 



Figure 2. Effects on Reading Skills.
*Effect sizes of 0.2 are considered Small; 0.5 are considered medium; and 0.08 are considered large.

Moreover, students whose teachers received additional support after completing the two-year intervention continued to make reading gains. The number of grade two students that met or exceeded performance standards in oral reading fluency (ORF) increased from the baseline to midline assessments in all regions, and the number of students' zero scores decreased from baseline to midline assessments in all regions. More time in a PRP classroom positively effects students' reading skills and demonstrates the cumulative effects of PRP on students' reading abilities. Students in first grade who spent one year in a PRP classroom showed small reading gains, but second graders who spent two years in a PRP classroom showed significant medium to large gains.

Are there differences in learning achievement among the children where teachers spend full allocated instructional time for reading and teachers who spend less or no instruction time for reading?

The study findings show those teachers who used time efficiently received a significant improvement in students reading skills and those teachers who spent time teaching reading without specific targets would not improve their students' reading skills highly. The midline results show that students who reported that they never read aloud to their teacher or other students had a mean ORF that was 19.9, which was significantly less than students who read aloud to their teacher or classmates sometimes (43.2) or always (47.8). This finding illustrates those engaging students or using specific time for a reading skill such as read-aloud (reading skills sub-task) that is directly proportioned to ORF improvement results in improving ORF. Resultantly that indicates a strong correlation between students' performance on decoding and familiar word reading and their ability to read fluently (i.e., their ORF score). The study findings explore that phonological awareness is an entry-level reading skill that needs to be mastered early in the primary cycle, delegates laid out a series
of performance standards that would indicate to teachers and parents the timelines for mastering key sub-skills. They then established standards for accuracy (students' ability to accurately identify or manipulate sounds) and for fluency (the rate at which students can correctly identify or manipulate sounds). Both are critical skills for beginning readers.

The project developed a comprehensive research-based package of Reading Learning Materials (RLMs) provides the opportunity for a child to connect what is read with real-life experiences and to learn their practical role as contributing citizens for the betterment of their area, village, and city. Therefore, early grade reading skills must be developed at the foundational level that is to be mastered and built upon before students can progress from grades 1 to 2 ; which means students must be able to learn grades 1 and 2 reading material sequentially, and not concurrently.

The research finding reported that a region nine-tenths ( 90 percent) of students having a computer, tablet, or mobile phone at home. The students with the technology had a mean ORF of 45.6 , which was significant and on average 8.5 Correct Word Per Minute (CWPM) greater than students without technology at home. Furthermore, research also shows that technology is changing the nature of children's learning and cognitive processes, and also the best practice studies indicate that young learners (especially in wealthier communities with strong broadband access) often engage actively with websites, message boards, social media, and so on. World Bank (2012) claimed that "ICTs can empower the lives of Africans and are driving entrepreneurship, innovation, and income growth". The study also reported that those students who are engaged in various reading activities and their associated mean ORF score shows significant reading skills improvement. It is also reported that more than half of students (56 percent) that someone at home reads stories aloud to them and they practice reading stories aloud at home (54 percent).

In some schools, it was also observed that teachers are not using allocated time efficiently, in few schools it was witnessed that teachers are not well conversant with different reading skills. It is also observed that spending time efficiently means that teachers and students are focusing each sub-task of the reading skill on the given period that ultimately results to improve students' reading skills. In below graph, it demonstrates that students in first grade who spent one year in a project classroom showed small reading gains, but second graders who spent two years in a project classroom showed significant medium to large gains.


Figure 3 Effect of the project on Students' Reading Skills
*Effect sizes of 0.2 are considered small; 0.5 are considered medium; and, 0.08 are considered large.

The statical data (Figure 2) shows significant improvement in reading sub skills of second grade students. Effect of PRP on letter identification are considerd near to large. The effect size has a difference of 0.27 , which improves letter identification of second graders. Moreover, phonemic awareness shows considerable achievement which moves from 0.05 to 0.49 effect size.

The project team classroom observations explored that those teachers who are using the reading time in the classroom their children performed better in reading skills i.e., comprehension, phonics, and phonemic awareness) then those who are not using the reading time at the classroom level. The midline result also indicates that those students who used time efficiently in Grade 3, mean scores improved significantly in three subtasks: letter name recognition, non-word reading, and passage reading. It is also indicated that those students who have not spent their time effectively their mean score for listening comprehension in Grade 3 decreased. Similarly, in Grade 5, those students who used time efficiently performance improved in letter-name recognition, and those students who have not used time effectively their mean score for listening comprehension in Grade 5 decreased.

## DISCUSSION

The study explores the impact of reading instructional time in the classroom in Pakistan. Research indicates that many factors influence students' performance, but allocating reading time in the classroom creates impacts on students learning. The study only focuses on the impact of the reading instructional time.

The baseline Study (USAID funded Pakistan Reading Project - unpublished report, 2014) results show that too many students were not learning to read in primary school. For example, $49 \%$ of grade three students could not read sentences in their language of instruction (Urdu, Pashto, and Sindhi); and 45\% of grade five students could not read a grade two-story in their language of instruction (Annual Status of Education Report (ASER), 2013).

The findings of the baseline also showed that out of 40 minutes in grades $1 \& 2$, only $31 \%$ time is used for reading-related tasks and $69 \%$ time is used for other activities. After two years of project intervention, the provincial and regional departments of education adopted the RIS framework and implemented it. Whereas after RIT allocation in schools out of 40 minutes in grades $1 \& 2$, a significant increase in RIT observed that $78 \%$ time is being used in the classroom for reading-related tasks $22 \%$ time is used for other activities.

Existing research suggests reading at an early age lays a necessary foundation for subsequent skill development (Scarborough, 2001). If children are unable to learn to read at an early age, they are unable to comprehend and develop understand and absorb other skills such as communicating well in writing or following written information. Thus, a large number of children's educational careers are imperiled because they are unable to read fluently and unable to meet the demands of the increasingly competitive economy. The study evidenced that the reading project in Pakistan achieved remarkable achievement working with the government and other stakeholders. Stakeholder engagement in project sustainability represents a powerful driver of change that enhance working relationship and accelerate the decision-making
process. The study evidenced stakeholder engagement through Provincial Steering Committees (PSCs) to engage government officials and other stakeholders in dialogue and decision making around key reading policy challenges and reforms. Each PSC is chaired by the education secretary and is comprised of members from a variety of government departments, including Planning and Development, Finance, Law, and other professional bodies of the Education Department (e.g., the BOC, apex institution, education assessment centers, and education faculty of education). In addition to the PSCs, each province has advisory committees, the technical arm of the PSC that convened around specific thematic areas as a task force for input into policy discussions/decisions.

The province and regions technically discussed the RIT in their Advisory committees and endorsed the RIT allocation. The draft for RIT was presented in the PSC and after due deliberation, the chair of the PSC approved the RIT notification for implementation. The district education officials of each province and region further urged the schools' heads to implement the RIT in their respective schools. The district officials along with the project team ensured RIT implementation at the classroom level.

The research shows that instructional time has a larger impact on students' reading skills achievements. It is evidence that time allocation for reading is essential to bridge the learning gap between fluent readers and struggling readers. According to other research findings, a child weak in reading in grade-1 continues to remain poor till grade-4, unless reading instruction time is improved through an effectively designed reading intervention (Jeul, 1988). It is envisaged that in the early grades there should be from one hour to 45 minutes for reading (Goodlad, 1983). However, the majority of research has acknowledged that throughout the world, reading skills around 35-40 minutes are optimal for daily reading lessons. Various countries have introduced the reading allocation time and observed favorable outcomes. According to EFA Global monitoring report 2013-14, those students who attain the basic foundation skills of reading in early grades ensure success at school but the students struggling with reading remained behind in the educational achievements (UNESCO, 2014). The available instructional time is primarily focused on language teaching instead of five basic skills of reading (Phonemic Awareness, Phonics, print concepts, Fluency, Vocabulary, and comprehension), which is treated as only one component of language teaching. Moreover, in the limited instructional time, the wastage of time is very high due to teacher absenteeism as well as students including other reasons. Therefore, primary school teachers need to become experts in the allocated reading time instruction and use it efficiently. For the reading instruction time to be effective, it must cater to the five basic sub-sets of reading.

Overall, the study results showed a positive picture and established that reading time allocation is a viable policy for improving students' skills. It is also evidenced that only allocating reading time is not enough to improve students reading skills, it needs to ensure that teachers should utilize the reading time effectively and efficiently. Teachers need continues hands-on support to targets the reading skills sub-sets and practice assessment regularly to learn to read. Moreover, students whose teachers received additional support after completing the two-year intervention continued to make reading gains.

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