

# The Impact of the Immediacy of Rewarding in the Performance on Reading of Grade 8 Students in English

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## ABSTRACT

The study sought to determine whether the immediacy of the reward influences the reading performance of the students. This study may be considered as a basis in setting up a scheme in teaching reading and if possible, be applied to the improvement of Phil – IRI in terms of its implementation. Hence, the targeted output of this is study to make a guideline in awarding those want-to-learn-how-to-better-read aspirants. This study made use of quasi-experimental approach and Phil – IRI assessment system was used in gauging students' reading performance. Since Phil – IRI does not have materials for Grade 8, the researcher made use of the texts that are read in Grade 8 while using the Phil – IRI assessment. It was found that the reading speed of the students has a relationship to the length of the reading text hence students tend to slow down when they want to understand the text well. However, students' words-per-minute is below the 250-words-per-minute prescription. Results show that among the three groups, experimental, comparison, and controlled group, the experimental (whom immediate rewarding scheme was applied) got the highest score, but it is not significant from those groups who were delayed and not rewarded at all. It is concluded that the students' perception to score and to do better were their primary motivation more than the material rewards. Certificates were proven impactful to students than material rewards.

**Keywords:** Rewarding Scheme, Reading, Immediate Rewarding, Delayed Rewarding

## 1. INTRODUCTION

The term reinforcement has been used so many times in the field of education and has played a vital role in teaching learners, and motivating them to participate in classroom tasks, responsibilities [1]. Reinforcement is a term used in psychology that refers to the increase in likelihood of a behavior to occur [2], which can

be in the form of praises or giving tangible things, which, actually has been a practice of ancient people and old cultures such as Jewish [3].

There are two major categories of reinforcement: Primary and Secondary reinforcement. Primary reinforcement refers to aids that may help someone for his/ her basic

needs such as food, air, water, sleep, and the likes; it occurs naturally and does not require learning to work [4]. Secondary reinforcement, on the other hand, involves stimuli paired with another reinforcing stimulus.

But, some studies stated that reinforcement, will be considered as a reinforce – the one that helps the desired behavior to occur more – if it really works [3].

In humans, immediate rewarding can be alluring unlike delayed rewarding in which, if applied to the case of the rat inside the Skinner box, could had done other things during the span of time – delay.

Woolley, *et al.* (2018), found that the immediacy of the reward increases intrinsic motivation – feeling good in the process of what is being done [5]. The immediacy of the reward is linked to intrinsic motivation than extrinsic motivation: perceiving the outcome importance than the positive experience of an activity.

Several studies, however, did not necessarily focus on the reading skills of the students making this research realize that it should be focused upon since reading does not only develop make students perform well in tests but also develop broader vocabulary, and increase general knowledge [6].

Literacy is one of the most fundamental skills an individual can learn [7]. It is noticed that school, going students are still having a difficulty in reading. Though most of the students are instructional readers, they, if do not decline, remain stagnant with their reading

level specifically in understanding the texts that they are reading.

A junior high school reader should at least have a reading speed of 250-words-per-minute because it is expected at their age that they have surpassed the critical stage of language development [8].

In the Philippine setting, teachers measure their students' reading skills using the Philippine Reading Inventory or Phil-IRI published in 2018, in which two factors are to be considered in determining a student's reading level: his/ her word reading and comprehension scores [9].

A student may be categorized in three levels in reading: independent, instructional and frustrated reader. Independent reader can read without any assistance; a student should have registered 97 to 100 % in reading performance and 80% to 100% in comprehension. Instructional reader is a student who can read with the support of a teacher; they are the students who make most progress in reading; for one to be considered in this level, s/ he should have 90% to 96% in his/ her word reading and 59% to 79% in comprehension. Frustrated readers, the lowest among the three levels, are readers who can no longer read or understand his own. The reading score in this level for one to be considered such is 89% below in word reading and 58% below in comprehension [4].

In some cases school students are having a difficulty in getting a high grade in comprehension which supposedly grade 8 students should have already developed

According to a study, individuals whose age are ranging from 9 – 15 years old should be in the fluent or comprehending level where the individual should use reading as a tool in gaining new knowledge, experiencing new feelings, learning new attitudes, and exploring one or more perspectives [10]. But a learner may be barred from reaching this stage if in the prior stage. It is not developed due to some reasons such as poor environment, poor vocabulary and instructions which are not matched to their needs [10].

Comprehension is deeper than what one understands in reading the text. Wolf states that comprehension is the event when one can learn to connect prior knowledge, predict dire or good consequences, interpret how each new clue, revelation, or added piece of knowledge changes what they know [4]. This is achieved and developed when students are aided with explicit instruction by teachers and the child's desire to read [11] which can be strengthened through reinforcement [5].

Therefore this study unfolds the psychological technique as an intervention in improving the reading ability of the students; proving that reward immediacy really has an effect to the improvement of one's behavior.

The study aims to determine the behaviour of learner when reward is given and its influence on the reading performance. The research is only limited in identifying the oral reading score, reading speed and comprehension test scores of the student participants. Also, to determine if there is a significant difference on the comprehension test scores.

## **2. METHOD AND MATERIAL**

### *2.1. Research Design*

The research was conducted at Magpapalayok National High School located at Barangay Magpapalayoc, San Leonardo, Nueva Ecija. It has 672 learners based on the data of the Learning Information System of DepEd. The research data were gathered from June 2019 – December 2019. The research made use of quasi – experimental design, which according to Cook & Campbell (1979) [12]. The respondent students were grouped into three distinct groups namely experimental group, comparison group and controlled group. All the three groups were tested for 3 phase are observed. The 1<sup>st</sup> Phase was for “Reading, Pretesting and Rewarding (IR)”, the 2<sup>nd</sup> Phase was ‘Reading, Testing and Rewarding (IR)’ and final phase (3<sup>rd</sup>) ‘testing’. The observation was made and recorded. The instruments of this research were used to measure learners’ reading performance cover the following competencies in the DepEd Curriculum Guide – English 8:

- React to what is asserted or expressed in a text (EN8RC – IIIe – 2.1.7)
- Evaluate the details that support assertions in a text (EN8RC – IIIf – 2.1.7.1)
- Evaluate the accuracy of the a given information (EN8RC – IVg – 15.1)
- Draw conclusions from a set of details (EN8RC – IVh – 2.12)

### *2.2. Research instrument*

The student participants were given a time limit in reading and answering the research instruments and applied for all tests.

In this research, various independent variables were applied: the reward and the time when the reward was given. After applying the independent variables to different groups, the researcher evaluated if the independent variables affected the reading performance of the participants.

The researcher conducted an 1st phase of the reading test to grade 8 learners for him to determine the participants of the study.

In processing the necessary data for this research, following statistical treatments were used:

Phil – IRI Assessment Tool

In interpreting the data in the reading level of the learners, the researcher adapted the assessment procedure of Phil – IRI 2018. Below are the procedures and their respective statistical tools:

$$\text{Oral Reading Score} = \frac{\text{the number of words} - \text{number of miscues} \times 100}{\text{Number of words}}$$

Reading speed =

$$\frac{\text{No. of words read} \times 60}{\text{Reading time in seconds}}$$

$$\% \text{ Comprehension} = \frac{\text{No. of correct answers} \times 100}{\text{No. of questions}}$$

It determines the reading performance of the participants thus, the data needed for research questions 1 – 9 is provided.

### 2.3. Data analysis

To determine the significant differences among the results of the three groups, the Analysis of Variance (ANOVA). Additionally, this will lead the researcher in answering the hypothesis of the research and research question number 10.

## 3. RESULTS AND DISCUSSION

This part of the research presents participants' oral reading score, reading speed, and comprehension test scores.

The participants of the study were grade 8 learners of Magpapalayok National High School (S. Y. 2019 – 2020). Aside from being under the tutelage of the researcher, the age of the participants indicates that they have already surpassed if not in the critical stage of language development as hypothesized by Lenneberg in his Critical Theory of Language Acquisition. Moreover, as stated by Wolf (2008), their age, 13 – 14, should be in the level of comprehension [10]. The participants were determined based on their score in the test phase I provided by the researcher.

The proponent of this research posits that the time a reward is given influences the

Oral Reading Level	Word Reading Score (in %)	Comprehension Score (in %)
Independent	97 – 100%	80 – 100%
Instructional	90 – 96%	59 – 79%
Frustration	89% and below	58% and below



the progress of the students' ability.

In the oral reading performance of the comparison group, there is a bit progression on their performance but it is progressive also.

This shows that there is an improvement in the oral reading performance of the comparison group. However, the improvement cannot be deemed as significant and is not a clear indicator of the effectiveness of the variable since it is more of an articulation of the student respondents and not of understanding. The study theorizes that the time when a reward is given, affects the performance of the child – which, in this study, in reading. According to the research conducted by Woolley (2018), immediately awarding someone increases his/her intrinsic motivation [5].

Moreover, the delay of the reward did not decrease the performance level of the student

participants of the comparison group but improved instead.

Regarding the oral reading performance of the controlled group, it can be seen in the table that as the test phase progresses, improvement happens.

Results show that performance of the student participants of the control group improve despite of the absence of the rewarding scheme during the process (table 3). During the testing, since they see the result – which in this case, is the number of miscues – they read the succeeding texts more carefully (in terms of their way of reading such as enunciation of words).

Regarding the reading speed of the experimental group, it can be noted in the results that their reading speed decreases as the test phases go on. The number of words-per-minute of the experimental group is lower than the suggested

**Table 3. Reading Speed of Student Participants**

TEST PHASE I		TEST PHASE II		TEST PHASE III	
Reading Speed (In seconds)	Number of Words per Minute	Reading Speed (In seconds)	Number of Words per Minute	Reading Speed (In seconds)	Number of Words per Minute
<u>Experimental Group</u>					
139.42	96.14	355.83	76.46	440.42	120.75
Percentage	43.11%	17.49%		13.62%	
<u>Comparison Group</u>					
140.08	95.69	345.33	78.15	433.33	122.79
Percentage	42.91%	17.88%		13.85%	
<u>Controlled Group</u>					
139.08	96.30	42.83	80.12	433.58	122.72
Percentage	43.18%	18.33%		13.85%	

**Table 4.** Correlation of reading speed and length of text

	Reading Speed	Length of Text
Reading Speed	Pearson Correlation	1
	Sig. (2-tailed)	0.006
	Sum of Squares and Cross-products	0.151
	Covariance	0.019
	N	9

\*\* Correlation is significant at the 0.01 level (2-tailed)

average of words-per-minute, which is 250-words-per-minute for junior and senior high school students [13]. According to Rayner, *et al.* (2016), if one's goal in reading is not thorough understanding of the text, one can read faster [14]. This is also agreed by other studies that readers pace themselves according to their purpose [13].

In connection with the results, it can be interpreted that the student respondents on the experimental group have perceived the first phase of the test as "just a test"(table 4). After knowing that there is a reward for that, they tried to understand and take note of the details thus making them slow in reading.

For the reading speed of the student respondents in the comparison group, it can be seen that there is a significant decrease in the reading speed of the student respondents in test phase II and but increased in phase III.

It shows that when the student participants realized that a reward is given to them, regardless of the time when it is given, their pace in reading changes because of their intention to understand the text more has been their focus.

For the controlled group, it can be noted in the table of results that there is a decrease in their reading speed as the testing phases go on.

Unlike the other groups which have rewards after each phase (given that they had a passing or high score), the controlled group has no reward after each phase until the final phase of all the tests. Based on an informal interview conducted by the researcher, student participants on the controlled group perceived test results as their motivation. When they get low scores, they strive more.

It can be observed on the results that the all of the groups' reading speed on the second phase decreased. This is because they increased their focus on the reading texts thus lowering the speed might make them understand the text more. This is in accord with the study of Dyson (2001) that an overall comprehension decreases when the reading time decreases [15]. This is because they pace themselves based on their purpose to analyze the text.

It was observed that, longer the text, lesser the reading speed. It can be interpreted that the length of the text given has a relationship to the reading speed of the student participants. The table shows the significant relationship of the two. This verifies that respondents do not "just

**Table 5.** Comprehension Test Scores of Student Participants

TEST PHASE I		TEST PHASE II		TEST PHASE III	
No. of Correct answers	Final Score	No. of Correct Answers	Final Score	No. of Correct Answers	Final Score
Experimental Group					
8.58	53.65	6.75	51.92	4.58	57.29
Comparison Group					
8.58	53.65	6.5	50	3.83	47.91
Controlled Group					
8.58	53.65	6.58	50.64	3.66	45.83

read” but also try to understand and analyze the reading texts.

The table 5 shows the results of the comprehension tests of the participants. Among the three groups, the experimental group got the highest score. It can be observed on the table that during the 2<sup>nd</sup> phase of the testing, all groups’ score decreased but the experimental group was able to get a higher score in the 3<sup>rd</sup> phase of the test unlike the two other groups whose scores decreased.

With these, the rewarding scheme has an effect to the comprehension of the students. The experimental group gave more focus on the test since their reward is given immediately [evident to their reading speed – slowest thus leading them to higher scores in the comprehension test [1]. Moreover, this result can be linked to the reading speed of the group which increased (table 4). Despite of the reading speed’s increase, it did not compromise the experimental group’s comprehension skill.

On the other hand, the delayed rewarding scheme has an effect to the comparison group

because it is evident that their reading speed increased (table 4), a sign of change of focus in reading, but their comprehension test scores got lower; opposite to what happened to the experimental group.

Table 6 shows that the comprehension test results of the participants have no significant difference since the p value is 1, greater than the confidence level of 0.05. This means that all the groups have the same skills of comprehension (p value = 1.00) during the first phase of testing in which no variable is yet applied to the experimental and comparison group. This is congruent with the quasi experimental design’s purpose – to ensure internal validity [16]. This was done by applying the matching – only approach wherein participants are matched (e.g. participant B in group B and C should have the same characteristics as participant A in group A).

Table 7 shows that the comprehension test results of the participants have no significant difference since the p value = 0.951, greater than the confidence level of 0.05. This means that



**Table 6.** Analysis of Variance on the Performance of the Participants in Test Phase I

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.000	2	0.000	0.000	1.000
Within Groups	2685.547	33	81.380		
Total	2685.547	35			

**Table 7.** Analysis of Variance on the Performance of the Participants in Test Phase II

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	23.011	2	11.506	0.050	0.951
Within Groups	7583.826	33	229.813		
Total	7606.838	35			

**Table 8.** Analysis of Variance on the Performance of the Participants in Test Phase III

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	894.097	2	447.049	1.013	0.374
Within Groups	14570.313	33	441.525		
Total	15464.410	35			

despite of the various rewarding scheme done to the participants, it did not bring significant difference to their performance.

Table 8 shows that the comprehension test results of the participants have no significant difference since the p value = 0.374, higher than the confidence level of 0.05.

This means despite of the repetition of the application of variable to the experimental and comparison group, the rewarding scheme did not bring significant difference to their performance compared to the other groups. However, the p value of the 3rd phase of testing is lower as compared to the 2nd phase of testing. Meaning, despite of the length of the text (longest among the three reading texts given), student respondents were able to lower down

the p value due to the higher scores obtained. Moreover, results can be related to the decrease on the time spent of the student participants in reading thus it may mean that the participants have given more focus on the text which Dyson (2001) claim that the slower the reading time the more focus is given to the text thus an indicator of the participants' focus [15].

The table 9 shows the reading profile of the student participants as they undergo different testing. It can be observed that there is change on the number of instructional readers on all groups. The experimental and comparison got the highest and same scores among the group. This means that student participants are not after for the time "when a reward is given" but in "if the reward will be given."

**Table 9.** Verbal Interpretation as Per Status of Students

TEST PHASE I				TEST PHASE II				TEST PHASE III			
FR	InstR	IndR	U	FR	InstR	IndR	U	FR	InstR	IndR	U
Experimental											
-	4	-	8	-	7	-	5	-	6	-	6
Comparison											
-	2	-	10	-	5	-	7	-	6	-	6
Controlled											
-	3	-	9	-	4	-	8	-	5	-	7
Legends: FR=Frustrated Reader                      IndR=Independent Reader                      InstR=Instructional Reader                      U=Undetermined											

However, it can also be interpreted that student participants may also have a different motivation. Meaning, it is possible that they are not after for the reward but for higher scores. This is evident with the controlled group, their scores improved and in terms of their reading profile, unlike the other groups, it gradually increased.

It was also discovered in the study that there was no available interpretation on the case of a student who is frustrated in comprehension but independent in oral reading. With this also, it can be inferred that some students focus on forms not on understanding.

#### 4. CONCLUSION

The student participants have almost the same score in the oral reading. This indicates that student participants are good in reading and can be ranked as independent readers based on the interpretation of word reading

The length of the reading text has a relationship to the reading speed of the student respondents. This is verification that students read the text

with understanding. Student participant's words-per-minute is far lower than the supposed average words-per-minute by junior high school students.

Despite of the effort exerted by the two other groups (comparison and controlled group) – which is evident to their reading speed, their comprehension test score got lower and lower as they proceed to different test phases. It may be concluded that students are having problems with their comprehension skills.

The comprehension test scores of the experimental group increases as they undergo different testing phases. They got the highest score among the groups, an indicator that the immediacy of the rewarding scheme has an effect to the reading performance of the students. However, this result is not significant, not significantly different to the scores gotten by the comparison and controlled group.

#### 5. RECOMMENDATION

Armed with the findings of this research, the following recommendations were drawn:

The proponent of the Phil – IRI should take into consideration revising the profiling of the readers. During the conduct of the study, the researcher was not able to determine the profile of the reader in case that s/ he is considered as “independent” in the oral reading test but “frustrated” in the comprehension test.

The Department of Education may focus on the comprehension skills of the students. Results show that students can read but hardly understand the text despite of the effort (i.e. giving more time to the text) given by the students.

Immediate rewarding and feedbacking are encouraged to be done in classrooms. It may give better performances in reading. This can be done by recognition, immediate feedbacking of results and tangible rewards that students can appreciate.

A more effective way of teaching reading should be considered because students reading capacity is not honed in rewarding per se but also in series of activities. Results have shown that despite of the no-reward-scheme (in the controlled group) and the delayed-reward-scheme (in the comparison group), it did not affect their interest to get a higher score (evident in their reading speed). But despite of this, the two latter groups’ score got lower and lower.

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## **7. CONFLICT OF INTEREST**

The authors have declared that there is no conflict of interest.

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