The effect of Backward Design on Intermediate EFL Learners’ L2 Reading Comprehension: Focusing on Learners’ Attitudes

Maryam Hodaeian *
Sobh-e Sadegh Institute of Higher Education, Isfahan, Iran

Reza Biria
Assistant Professor at English School of post-graduate studies, Department of Foreign Languages, Isfahan (Khorasgan) branch, Islamic Azad University, Isfahan, Iran

Abstract
The purpose of this study was threefold. First, it aimed to determine whether the application of backward design model has any significant effect on reading comprehension of intermediate EFL learners. Second, the study sought to evaluate the merits of backward design, if any, over forward design in teaching reading comprehension. Finally, it tried to identify learners’ attitudes toward teaching L2 reading comprehension through the backward design. As such, a mixed method research design with several stages was utilized. A Quick Placement Test (QPT) was administered to the population of 150 female students studying English as a foreign language at a private institute. Based on the results of the test, 60 intermediate students were chosen and randomly assigned to two samples (30 each); namely, control and experimental groups. During the treatment, the control group received the reading instruction through a conventional method of forward design, while the participants in the experimental group were taught by the backward design. Both control and experimental samples were homogenized based on learners' responses to a needs analysis questionnaire as well as a reading comprehension pre-test. At the end of the treatment, a reading comprehension post-test was administered. The results suggested that backward design had significantly impacted learners' reading comprehension skill. Accordingly, it was concluded that backward design can enhance reading comprehension of Iranian EFL learners remarkably. Notably, the respondents' answers to the attitude questionnaire also substantiated the superiority of backward design over conventional forward designs used for teaching reading comprehension.

Keywords: reading comprehension, backward design, forward design, learners' attitude, Intermediate EFL students

INTRODUCTION

Reading comprehension is important, not just for understanding a text, but for broader learning, success in education, and employment. It is even important for our social lives, because of social networking sites such as e-mail, viber, etc. Reading comprehension is,
however, a complex task, which requires various cognitive skills and abilities (Oakhill, Cain & Carsten, 2015). It is interesting to note that much of the basic reading research done during the past fifty years has focused primarily on language and cognitive processes and no single method or specialized technique of reading instruction has emerged (Farstrup & Samuels, 2002).

Essentially, education has traditionally been associated with Forward Design beginning with syllabus planning, methodology, and finally ending with the assessment of learning outcomes. It is evident that resolving the issues of syllabus content and sequencing is considered as crucial starting points with Forward design, which has been the major tradition in language curriculum development. In this approach, understanding does not play a pivotal role. Based on an appropriate curriculum design, the teacher can help students to understand. However, if the curriculum is not appropriately designed, the instruction would be ineffective for developing learners’ understanding (Childre, Sands, & Tanner Pope, 2009). The reason is that many students fail to develop understanding of key concepts because the instruction focus is on textbooks, lectures, and worksheets to make learning relevant (Scruggs, Mastropier, & McDuffie, 2007).

Consequently, the idea of backward design was introduced into curriculum design under the aegis of “Understanding by Design” by McTighe and Wiggins (1998) who claim that the learning process should be planned with the final assessment in mind. In the past years, the backward design has turned into a well-established tradition in curriculum design particularly in general education, and now, it has re-emerged as a prominent curriculum approach in language teaching (Richard, 2013). Interestingly, backward design starts with the end task (assessment) and objectives in mind. In fact, it suggests that teachers should start with what the students are supposed to get out of instruction, that is, the skills and core objectives they need to fulfill, and as a result, the teachers have to figure out how they are going to actualize such instructional purposes to the best of their abilities.

Therefore, the main focus of interest in backward design is centered upon understanding, by which learners are prompted and encouraged much more for learning. This model makes the learners understand the goal of the process of learning better and causes them to reach those goals faster.

Since reading comprehension plays a vital role in language learning process, it is often stated that the skill is closely associated with affective factors (Dehbozorgi, 2012). Among different variables that affect reading comprehension, affective factors such as attitudes, motivation, and anxiety are quite important (Zainol Abidin, et al., 2012; Noels, Pelletier, & Vallerand, 2000). Among these various factors, learners’ attitude towards learning reading comprehension is considered as one of the key factors in motivating the learners to learn the skills of a language (Zainol Abidin, et al., 2012).

Reading comprehension is defined as the level of understanding of a text, and it involves word recognition, comprehension, fluency and motivation. Readers use their background knowledge, vocabulary, grammatical knowledge, experience with text and
other strategies to help them understand written texts (Miller, 2006). Reading fluently increases learners’ understanding of the text.

Miller, (2006) argues that to build a foundation for college and career readiness, learners must read widely and deeply from various high qualities, increasingly challenging literary and informational texts. Through extensive reading of stories, dramas, poems, and myths from diverse cultures and different time periods, students gain literary and cultural knowledge as well as familiarity with various text structures and elements. Students also acquire the habits of reading independently and closely, which are essential to their future success (Miller, 2006).

Language curriculum development is one aspect of curriculum studies. It focuses on knowledge, skills, management, administration of education programs and values that students learn. It identifies learners’ needs, creating goals, selecting the content, designing an appropriate learning planning, implementing appropriate materials and tasks, and then specifying evaluation tools. It began in the 1960s with the idea of syllabus design. A syllabus is a specification of the content of a course of instruction and identifies what will be taught and tested, and it is the process of developing a syllabus (Richards, 2013). Nunan (1988) claims that there is disagreement about the nature of the syllabus and it is hard to distinguish syllabus design from curriculum development.

On the other hand, curriculum development is a more comprehensive process than syllabus design. It determines students’ needs, develops aims or objectives for a program, specifies an appropriate syllabus, teaching method and materials and applies an evaluation of the program. Curriculum development began in the 1960s though syllabus design emerged much earlier (Richards, 2001).

Forward design occurs in a linear fashion which constitutes a sequence of stages of planning, teaching and assessment. This method was used by the Council of Europe in the 1970s. With this design, after specifying the content, decisions about teaching processes or methodology occur. The planner starts with a theory of language and a book is chosen in order to teach language based on it. This design is a coverage-oriented, which is an essential to teach all the pages of the book. Then, looks for a teaching process that could be used as the basis for an appropriate pedagogy. However, a syllabus does not imply a specific methodology. The point is that with forward design, the teacher decides about the content of a course, how to teach and then output and learning outcomes (Richards, 2013).

Backward design has been useful for retraining teachers to design curriculum for scaffolding learning. The teachers cannot plan how they are going to teach until they know exactly what they want their students to learn. The focus of backward design is on learning outcomes and assessment. And it begins with a specification of learning outputs and the desired results. After clarifying the results of learning, appropriate content and teaching activities will be chosen and methodology is designed in accordance with the objectives. This model has re-emerged as a prominent education
development approach in language teaching. It was also described as ‘ends-means’ approach (Wiggins & McTighe, 2006).

In the point of view of backward design, teachers are designers. They should craft the curriculum and learning experiences to meet specified purposes. Teachers are also designers of assessments to recognize student needs to guide their teaching and to enable themselves and their students to determine whether they have achieved their goals. (See e.g., Wiggins & McTighe, 2006, p.13). In designing the course, they should be mindful of their student interests, developmental levels, large classes, and previous achievements in order to shape their thinking about the learning activities, assignments, and assessments. (Wiggnis & McTighe, 2006)

They argue that in backward design, there are three stages:

a) Identify desired results of instruction.

b) Determine acceptable evidence, whether the results were achieved.

c) Plan learning experiences and instructions.

Kara (2009) expressed that attitudes towards learning besides beliefs have an obvious influence on students' behaviors and consequently on their performance. It is argued that those students who possess positive beliefs about reading comprehension have a tendency to increase more positive attitudes towards reading comprehension. Conversely, negative beliefs may lead to class anxiety, low cognitive achievement, and negative attitudes (Victori & Lockhart, 1995).

Secondary teachers and administrators have come to realize that improving students' attitudes toward reading is every bit as important as improving their reading comprehension, word recognition and word analysis skills (Teale & Lewis, 1981). Fader (1968, 1976) has stated how a focus on attitudinal factors is a necessary part of helping many students to read better. There are also indications that attitude toward reading is linked to achievement in reading (Groff, 1962; Healey, 1965).

Yet, with respect to the construct attitude toward reading, this crucial step is often glossed over and frequently ignored altogether. Thus, teachers, curriculum evaluators, and reading specialists should find it helpful to keep in mind certain notions about attitude toward reading when employing techniques or instruments for measuring reading attitude. Identification and definition of the quality to be measured should be given first priority (Teale & Lewis, 1981).

The review of the related literature is replete with various studies investigating different factors influencing reading comprehension; however, none have focused on the issue of backward design. On this basis, the present study aimed to examine the extent to which a backward design of reading comprehension can help intermediate EFL learners as well as the way they perceive the utility of the new model compared with the conventional forward models of teaching reading comprehension.
RESEARCH QUESTIONS

1. Does backward design teaching approach improve the reading comprehension of Iranian EFL learners with an intermediate proficiency level?

2. Is backward design teaching approach pedagogically superior to forward design approaches in teaching reading comprehension to Iranian EFL learners with Intermediate proficiency level?

3. What are learners’ attitudes toward teaching reading comprehension through backward design model?

METHOD

One hundred fifty students were chosen randomly at Sokhansara institute employing a Quick Placement Test (QPT) which has been developed by Oxford University Press and Cambridge ESOL. Based on the test scores, sixty intermediate students were selected and randomly assigned into two subgroups, 30 each. While one of the groups was taught their reading comprehension through backward design, the other one received the instruction by traditional method; namely, forward design.

To determine the entry behavior of the individuals in the control and experimental groups, a reading comprehension test was administered as a pretest. The pretest contained five reading comprehension passages extracted from Longman (2001), each followed by ten questions. The validity of the test was specified based on specialist opinions and the reliability was measured by piloting the test on thirty students identical to target samples.

The participants were taught in a full term. In the experimental group, each session took ninety minutes and in every four session one of the five pre specified topics was used as the reading material. Since learners’ needs and interests are essential, a questionnaire was employed. A needs analysis questionnaire also was designed by the researcher and edited. In the first session, the questionnaire was distributed among the experimental group. The prompts on the questions were explained in Persian to eliminate any misunderstanding. The respondents were supposed to answer in twenty minutes.

Since the initial important information was attained, three stages of backward design were set up. In the first stage, the desired results expected to be gained as the outcome of the lesson unit should be specified. In this stage, the teacher should predict major ideas, specific understandings at the metacognitive level. These metacognitive strategies are instantiated in the class by teachers’ posing of provocative questions to foster inquiry, and to help students to understand and transfer their previous learning. In this stage the teacher should also specify key knowledge areas and the skills that students should acquire at the end of each lesson unit.

The main objective in the present study is to replace the traditional approaches to language teaching with something that defies the common processes of language
teaching. In fact, the caption ‘Backward design’ is a movement in the opposite direction of the designs formulated for language teaching. The design has also been implemented by NGA center and CCSSO Common Core which envisaged certain specific objectives for the teaching of language skills. These objectives for the reading comprehension skill are listed as follows:

- Students will read fluently different texts in different real world contexts.
- Students will learn to read with different strategies.
- Students will cope with difficult words and phrases in texts in order to fathom out complex texts.

Then it will be explained that where each lesson unit is headed. In this so called revolutionary design, the main focus is to foster the learners’ understanding of the learning situation such as:

- Successful readers use appropriate techniques to make logical inferences from texts.
- Effective readers recognize a text’s genre and structure to understand the text.
- Readers consider author’s points of view and his intended meaning.
- Effective readers evaluate what they read in a personal way.

Next, essential questions will be asked in order to draw students’ attention to the main ideas and key terms. These questions can be:

1. How do readers comprehend meaning from text?
2. How do you figure out a word you do not know?
3. What do readers do when they do not understand everything in a text?
4. Why do readers need to pay attention to a writer’s choice of words?
5. How does reading influence readers?
6. Why do readers need to evaluate what they read?

In the second stage, teachers should plan performance tasks along with the desired criteria for judging learners’ understanding of the outcome. This encourages the teachers to “think like an assessor” since they want to find out if the students have achieved the desired understanding. Consequently, classroom evidence such as observations, visual representation, self-assessment, and quizzes can pedagogically be very useful. Through observation and via visual representation, learners’ progress, their understanding of a text, and its main components were checked. In this case, sometimes a graphic organizer was given to students in order to present their understanding and details of reading texts. Every four sessions, self-assessment was distributed among learners. In backward model, it is essential that students be able to evaluate themselves.
and find out their progress. In eleventh session, students had a formative test containing three reading comprehension passages that each was followed by ten items.

In the experimental group, learners’ progress was tangible. Based on the results of the test, it was recognized that some students in experimental group had still certain problems concerning guessing new words. Then, in other sessions, remedial work, in line with the specified problems were used to improve them.

For both groups "Read This one" was taught. Four readings of the book were taught and the rest was selected from students' most needed materials. In experimental group, these materials are: newspaper, fiction, school book, computer, and storybook. Before teaching and implementing these materials in the classroom, their level of difficulty was measured by Fog Index Formula to make sure that the texts are suitable for students with different proficiency levels. Clearly, since deep understanding in backward design model is important, it was essential to teach reading comprehension in a way that improves their understanding and attains the desired outcomes.

Finally in the last stage, the lesson was designed based on Wiggins and McTighe’s (2006) seven steps acronomized as WHEREITO. Every letter in this acronym stands for an objective criterion which are:

W represents Where the instruction is headed and what is expected from the learners with regard to their prior knowledge and interest.

H stands for Hooking students and holding their interest.

E indicates Equipping the students with key concepts to enable them to experience the crucial ideas and to explore the issues.

R denotes Rethinking and Revising techniques which help students to modify their understanding and work, if necessary.

E implies that the students should be assisted to Evaluate their work and its subsequent implications.

T stands for Tailoring. The teachers should Tailor their teaching to learners' abilities, needs, and interests.

O shows Organization. The teachers should organize their work to maximize students’ engagement and effective learning.

Finally, the learning plan will be designed according to Wiggins & McTighe (2006) WHEREITO steps. In the process of teaching reading comprehension, NGA center and CCSSO Common Core’s techniques will be applied. These strategies are as follows:

**The learning plan for the learners with intermediate proficiency level**

1. Refer to details and examples in a text when explaining what the text says explicitly and the points when drawing inferences from the text is essential.
2. Determine the main idea of a text and explain how it is supported by key details; asking the learners to summarize the text can be helpful.

3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

4. Determine the meaning of general academic and domain-specific words or phrases in a text relevant to the subject area.

5. Describe the overall structure (e.g., chronology, comparison, cause/effect, and problem/solution) of events, ideas, concepts, or information in a text or part of a text.

6. Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.

7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations or interactive elements on Web Pages) and explain how the information contributes to the understanding of the text.

8. Explain how an author uses reasons and evidence to support particular points in a text as an illustration.

9. Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

At the end of the treatment, a reading comprehension post-test was given to identify students’ gain in terms of the type of the design employed. The validity of the test was specified based on specialist opinion and the reliability was measured by piloting the test on thirty students identical to target samples.

In order to recognize students’ attitudes toward teaching reading comprehension through backward design, the researcher designed an attitude questionnaire with 26 items. The items were put in a 5-point Likert scale. It is ranging from ‘Strongly Agree’ to ‘Strongly Disagree’. Since the participants were all students of English as a Foreign Language, the questionnaire was administered in English. The students were asked to complete the questionnaire in the class during the last session. They were also asked to check the questions carefully, read them thoroughly and if there were some questions regarding the comprehension of the questions, they were allowed to ask them either in native language (NL) or target language (TL). Respondents had enough time to complete the task and all the questionnaires were collected at the end of the session. There was no missed or distorted questionnaire. Respondents were informed that the information they gave would be kept confidential and used only for research purposes.

**Data Analysis**

In order to investigate the significance of the results of the study, the data obtained were fed into the SPSS software program. To determine whether there were any overall differences in the experimental group at intermediate proficiency level, a paired-
samples t-test was conducted. Moreover, paired-samples t-test was also implemented to compare post-tests of forward and backward designs at intermediate level. The last question aimed to find students' attitude toward backward design.

RESULTS

The collected data are analyzed through statistical tests, and then represented in tables. The main purpose was to see if backward design model can differently affect learners in comparison with the traditional model in teaching reading comprehension of intermediate level. Moreover, to identify whether experimental group had positive attitude toward the design. At first, the result obtained from the analysis of the participants' scores in needs analysis questionnaire will be indicated in frequency. Then, the formative assessment, which was implemented to figure out learner's progress and problems in reading, will be showed in a descriptive table. In addition, performance of intermediate groups' pre-test and post-test will be analyzed. And post-tests of backward and forward groups in the levels of intermediate will be compared. Finally the answers to the research questions will be discussed.

In order to answer the first question, the test data were collected and analyzed by appropriate statistical procedures. First the descriptive statistics such as mean and standard deviation were calculated in order to compare intermediate participants' pre-test and post-test with backward design model. Then, t-test was run to determine the relation between scores.

Table 1. Descriptive Statistics for Backward Design in Intermediate Level

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>31.1333</td>
<td>30</td>
<td>4.19140</td>
<td>.76524</td>
</tr>
<tr>
<td>Post-test</td>
<td>42.5000</td>
<td>30</td>
<td>3.32960</td>
<td>.60790</td>
</tr>
</tbody>
</table>

Table 2. Paired-Samples T-test in Pre and Post-Test of Backward with Intermediate level

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>ddf</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Lowr</td>
<td>Upper</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair1 pretest</td>
<td>11.3667</td>
<td>2.1412</td>
<td>-</td>
<td>-</td>
<td>.3904</td>
<td>12.16623</td>
<td>10.56710</td>
</tr>
</tbody>
</table>

A paired-samples t-test was conducted to evaluate the impact of backward design on teaching reading comprehension to intermediate EFL learners. There was a significant difference in reading test from pre-test ($M=31.13$, $SD=4.19$) to post-test ($M=42.50$, $SD=3.32$), $t(29)=-29.07$, $p<.001$ (two-tailed). The eta squared statistic (0.96) indicated a large effect size. Since the value is .00 and it is less than the specified alpha value of .05, it is concluded that there is a significant difference in pre-test and post-test. Accordingly, the mean score at pre-test was 31.13 and the mean score at post-test was
42.50. Based on these scores, it indicates that there was a significant increase from pre-test to post-test too. This reveals that intermediate EFL learners were successful in learning reading comprehension through backward design. Finally, the null hypothesis H01 “Backward design has no impact on learning reading comprehension in intermediate level” with 95% confidence is rejected.

To test the second null hypothesis of the study and see which design, i.e., backward or forward, can better improve the reading comprehension of Iranian EFL, a Paired-Sample T-test was run. The first two tables analyze intermediate proficiency level with both designs, forward and backward.

**Table 3.** Descriptive Statistics for Backward and Forward Design in Intermediate Level

<table>
<thead>
<tr>
<th>Pair</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Forward</td>
<td>32.7667</td>
<td>30</td>
<td>3.39049</td>
</tr>
<tr>
<td></td>
<td>backward</td>
<td>42.5000</td>
<td>30</td>
<td>3.32960</td>
</tr>
</tbody>
</table>

Table 3 shows descriptive statistics about the mean and standard deviation for each group. As it is seen, there was a significant increase from forward (M= 32.76) to backward (M=42.50) with 95% confidence interval.

**Table 4.** Paired-Samples T-test of Comparison Backward and Forward design with Intermediate level

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
</table>

In Table 4, the Sig. (two-tailed) equals .000. And it was mentioned before, if the probability value is less than .05, there is a significant difference. The eta squared statistic (0.84) indicated a large effect size. Therefore, based on these results, it is concluded that there was a significant difference between forward and backward. Generally, the third null hypothesis about intermediate level was rejected by the conclusion of teaching reading comprehension in intermediate level through backward was much more successful than forward.

To recognize learners’ attitude toward backward design, all scores were analyzed by appropriate statistical procedures. According to the frequency, intermediate learners’ attitudes were positive.
Table 5. Frequency Statistics for Intermediate Sample and their attitudes toward teaching reading through backward design

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learning reading comprehension through Backward design is fun.</td>
<td>23.3%</td>
<td>50%</td>
<td>6.7%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Backward design helps us understand reading texts on our own ways.</td>
<td>6.7%</td>
<td>46.7%</td>
<td>33.3%</td>
<td>10%</td>
<td>3.3%</td>
</tr>
<tr>
<td>3. Backward design believes that each person has a different understanding from the same texts.</td>
<td>76.7%</td>
<td>23.3%</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Backward design helps us self-assess our understanding during the process of reading.</td>
<td>63.3%</td>
<td>23.3%</td>
<td>13.3%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Backward design helps to reach to the core of texts.</td>
<td>0</td>
<td>29.3%</td>
<td>50%</td>
<td>20.7%</td>
<td>0</td>
</tr>
<tr>
<td>6. Backward design teaches how to read texts through different strategies.</td>
<td>0</td>
<td>63.3%</td>
<td>23.3%</td>
<td>13.3%</td>
<td>0</td>
</tr>
<tr>
<td>7. Reading texts through Backward design is interesting for me.</td>
<td>13.3%</td>
<td>50%</td>
<td>16.7%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8. I like to read texts from various materials.</td>
<td>20%</td>
<td>60%</td>
<td>20%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9. I dislike reading all the texts of the same material.</td>
<td>20%</td>
<td>40%</td>
<td>20%</td>
<td>20%</td>
<td>0</td>
</tr>
<tr>
<td>10. I would prefer to understand texts myself than to understand them from my teacher.</td>
<td>0</td>
<td>13.3%</td>
<td>53.3%</td>
<td>33.3%</td>
<td>0</td>
</tr>
<tr>
<td>11. The other skills should be taught by Backward design.</td>
<td>23.3%</td>
<td>53.3%</td>
<td>16.7%</td>
<td>6.7%</td>
<td>0</td>
</tr>
<tr>
<td>12. Backward design wastes my time.</td>
<td>0</td>
<td>0</td>
<td>16.7%</td>
<td>46.7%</td>
<td>36.7%</td>
</tr>
<tr>
<td>13. Now I can understand better reading texts in different materials.</td>
<td>0</td>
<td>33.3%</td>
<td>60%</td>
<td>6.7%</td>
<td>0</td>
</tr>
<tr>
<td>14. By reading through Backward design, I could understand author's point of view and text's purpose.</td>
<td>40%</td>
<td>53.3%</td>
<td>6.7%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>15. After working on texts by Backward design for a while, I felt pretty competent.</td>
<td>20%</td>
<td>30%</td>
<td>43.3%</td>
<td>6.75%</td>
<td>0</td>
</tr>
<tr>
<td>16. Now, I am satisfied with my performance at reading texts.</td>
<td>26.7%</td>
<td>43.3%</td>
<td>26.7%</td>
<td>3.3%</td>
<td>0</td>
</tr>
<tr>
<td>17. I enjoyed reading texts through Backward design.</td>
<td>26.7%</td>
<td>43.3%</td>
<td>30%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18. I thought learning reading texts through Backward design was boring.</td>
<td>0</td>
<td>10%</td>
<td>20%</td>
<td>43.3%</td>
<td>26.7%</td>
</tr>
<tr>
<td>19. Before, I could not do very well in reading comprehension.</td>
<td>50%</td>
<td>43.3%</td>
<td>6.7%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20. I think I did pretty well on understanding texts, compared to my previous class.</td>
<td>23.3%</td>
<td>53.3%</td>
<td>16.7%</td>
<td>6.7%</td>
<td>0</td>
</tr>
<tr>
<td>21. I am able to achieve to deep understanding of texts.</td>
<td>20%</td>
<td>30%</td>
<td>36.7%</td>
<td>13.3%</td>
<td>0</td>
</tr>
<tr>
<td>22. I am able to guess the meaning of unknown words in texts.</td>
<td>0</td>
<td>53.3%</td>
<td>36.7%</td>
<td>10%</td>
<td>0</td>
</tr>
<tr>
<td>23. I am able to use various strategies to understand texts.</td>
<td>16.7%</td>
<td>40%</td>
<td>30%</td>
<td>13.3%</td>
<td>0</td>
</tr>
<tr>
<td>24. I really enjoy reading texts.</td>
<td>30%</td>
<td>60%</td>
<td>0</td>
<td>10%</td>
<td>0</td>
</tr>
<tr>
<td>25. I am satisfied with my performance in answering reading comprehension questions.</td>
<td>23.3%</td>
<td>53.3%</td>
<td>13.3%</td>
<td>10%</td>
<td>0</td>
</tr>
<tr>
<td>26. I can find text's main points and supporting ideas.</td>
<td>23.3%</td>
<td>60%</td>
<td>16.7%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
It is clearly observing table 5 that the overwhelming majority of participants confirm the effectiveness of BWD. Clearly those in favor are indicated by the frequency of 27 and the percentage value of 90%. By contrast, those opposed are represented by a frequency of 3 and the percentage value of 10%.

DISCUSSION AND CONCLUSION

The main objective of this study was to see the efficacy of backward design model compared to traditional design model in developing students’ performance and deep understanding of reading comprehension at intermediate proficiency level. In fact, the central purpose was to prove that backward design model could practically be more effective than forward design models. Moreover, it considered students’ attitude toward teaching reading comprehension via backward design.

As defined by Wiggins and McTighe, Understanding by Design is a "framework for designing curriculum units, performance assessments, and instruction that lead students to deep understanding of the content teachers teach," UbD expands on "six facets of understanding", which include students being able to explain, interpret, apply, have perspective, empathize, and have self-knowledge about a given topic.

The research was conducted with participation of sixty students in two control and experimental groups; backward and forward designs. Backward design model was the base of the study, in which the process of a term was designed based on three stages. The process starts with desired outcome, assessment, and then planning the method of teaching. The model was instructed to the students of the experimental group. The control group was taught through the traditional method, which is called forward design.

The findings are in agreement with the study conducted by McTighe and Wiggins (1998) that reading was better taught employing backward model. Accordingly, McTighe and Wiggins (1998) indicate that backward design is pedagogically superior to forward design.

A reading comprehension test for formative assessment, pre- and post-test, needs analysis questionnaire for identifying learners’ needs and interests, self-assessment in order to teach students to evaluate themselves and check their progress, and at the end visual graphs and Boyles questionnaire to practice comprehending reading by discussion and writing in different categories, all were the instruments of the study.

The building stones of the research were questions that investigated the effects of backward model on the experimental group of reading comprehension. One of the questions also was to check which model was superior in teaching reading comprehension. The last one considered students’ attitude toward backward design.

To consider the effects of backward design on the students reading comprehension, the level of reading of the experimental group students’ before and after training was compared. Then, after the program on the post-test, the means of scores were not the
same and differed significantly. The mean of the scores of the experimental group in intermediate (M= 42.50) was higher and incomparable with the control group (M= 32.76). As a result, backward design was superior to forward design.

In other words, backward design provided the opportunity for learners to achieve deep understanding of texts and desired outcome in real contexts and enjoyed the process of teaching, topics and materials implemented in the class. It also provided the opportunity for teacher to find her way in the process of teaching and design an appropriate method of teaching in accordance with learners’ needs and interests.

**SUGGESTIONS FOR FURTHER RESEARCH**

This study attempted to elucidate the development of students’ deep understanding and performance in reading comprehension. This research can be an inception for the analysis and study of the related issues. Interpretation of the findings of this study also leads to several recommendations for further research.

The results of the study revealed that backward design has increased intermediate learners’ English reading skills and understanding. Therefore, a replication of the study could be conducted with other groups in other skills such as writing, speaking and listening. It would be worthwhile to investigate how effective is backward design on other skills so that instructors can use findings for improving and developing their teaching process.

**REFERENCES**


