Experiential Learning: Critical Reading through Learning by Doing Method in the Context of Teaching EFL among Engineering Students

Yeddu Vijaya Babu,

Abstract: In this research paper, the author explores the task on critical reading through ‘learning by doing method’ to bring out the ensuing perceptions of the learners in the perspective of teaching of EFL. This research probes mainly on how reading could enable individual interest in critical appreciation of the novel and how experiential learning through ‘learning by doing method’ develops the learners’ skills. Theoretical groundwork for task assignment on the model learning has been demonstrated for the respondents. As this task emphasizes mainly on self learning through learning by doing method, resembles close with the experiential learning technique. This research asserts to be pragmatic, implementing a task based experiential learning English through learning by doing methodology. This task is confined to the critical appreciation of the contemporary novel for the undergraduate engineering students from one of the reputed national institutes of technology in India.

Keywords: Experiential Learning (EL), learning by doing, critical reading, EFL context, advantages

I. INTRODUCTION

Mezirow (1991) defined experiential learning as “the exploitation and processing of experience, aiming not only at acquiring knowledge, but also at transforming the way of thinking and changing attitudes”. Experiential learning is the process of learning through experience, and is more specifically defined as “learning through reflection on doing”. Hands-on learning is a form of experiential learning but does not necessarily involve students reflecting on their product. This present research was based on the experiment conducted among sixty (60) participants pursuing undergraduate engineering from one of the reputed National Institute of Technologies, India. The present paper assess the students’ needs taking into account the specific purposes for which students will use the reading skills, the kind of language required in their field, career and employment oriented skills adequate related to reading. The current research presents the advantages of critical scope of research provides the researcher to go further to suggest enhancing reading skills with learning by doing method as an experiential learning and the participants need more practice to obtain efficiency levels in the EFL (English as a Foreign Language).

II. NEED OF THE RESEARCH

The inclusion of critical reading of a contemporary novel for engineering students’ is significant and gainful in improving English as a second and foreign language reading activity requires, “the ability to draw meaning from the printed page and interpret this information appropriately” (Grabe & Stoller, 2002, p.9). Reading comprehension is specifically the basic goal for ESL/EFL students to gain an understanding of the world and of themselves, enabling them to think about and react to what they read (Tierney, 2005). In Intensive reading, has a relationship with background knowledge in reading comprehension.

Anderson (1977) asserted, “every act of comprehension involves one’s knowledge as well.” This transfers the message from encoder (writer) to decoder (reader). By this it’s obvious that the background knowledge of the relevant content is known as schema.

III. GOALS AND OBJECTIVES

This research has specific goals:
1. A primary goal is to execute a task on experiential critical reading of a contemporary novel through ‘learning by doing method’ prescribed for the engineering students.
2. The major objective of this goal is to investigate to know how reading could enhance individual interest in critical appreciation of the novel and how do the learners’ imbibe essential relevant communication skills from critical reading.
3. To investigate the consequent results whether the students will be able to imbibe expected skills, a well-structured, focused, organized questionnaire has been prepared to examine the results for further suggestion and scope of the study.

Another goal of this research is to consider the various perceptions on reading skills through learning by doing method of reading novel to get acquainted with use of resources and develop practical application of knowledge through experiential reading. To suggest the students regarding various methods and approaches of better reading skills how this enable them to acquire skills through reading.

IV. METHODOLOGY

The researcher has opted Likert scale. A Likert Scale is a psychometric scale normally used in questionnaires and is the most widely used scale in survey research.
When responding to a Likert questionnaire item, respondents specify their level of agreement to a statement. Consisting of twenty items, the questionnaire was assembled in the form of a 5-Point Likert scale (where 1 indicates strongly disagree and 5 strongly agree):

**From 1-10:** Item 1 relates to the question on the participants like reading English novels; Item 2 asked on whether the participants interested in reading novels as a hobby. Item 3 on reading novels based on English curriculum; Item 4 related to know whether the reading of novels is enough to build vocabulary and word power; Item 5 explores whether the participants interested in listening, speaking, reading and writing exercises given in their textbook: Item 6 elicits whether reading is a very important skill in English language. Item 7 brings out whether they read whatever they want to read in English. Item 8 is to find out the need to improve their reading skills. Item 9 asked to find out whether the students get suggestion, guidance and opinion and help to improve their reading skills. Item 10 analyzes how use of illustrations, pictures, charts, cartoons and other teaching aids are helpful in reading skills.

**From 11-20:** Item 11 relates to the question to know if the students reading skills will help them to pass academic exams with good marks; Item 12 asked on weather reading skills will also help them to better writing skills. Item 13 on weather teacher assigns them to read a contemporary English novel: Item 14 related to know if teacher helps and corrects while reading english novel; Item 15 explores whether the participants skip difficult words and phrases without knowing their meaning while reading novel. Item 16 elicits whether the participants acquire the knowledge of grammar and vocabulary from reading novels. Item 17 brings out whether the participants get ideas from many different available sources for reading. Item 18 is on the need to have more classes for developing reading skills. Item 19 asks on how their language class will help become a good reader. Item 20 analyzes how more practice in reading skills will help develop their communication skills.

Effective reading skill as one of the essential components has been included at various level in engineering curriculum. Firstly, the participants were explained the gradations of 5 point Likert scale assessment on writing skills based on learners’ experiences: the groundwork, the procedure etc. They were provided a mock practice session based on which they were prompted to assess their weak points. Individualized feedback was given to each of the participant.

This research was based on the experiment conducted among sixty (60) respondents pursuing undergraduate engineering from the Electronics and Telecommunication Engineering branch from one of the reputed National Institute of Technologies, India as part of the research exploration. To assess the students’ needs taking into account the specific purposes for which students will use the reading skills, the kind of language required in their field, career and employment oriented skills adequate related to reading. The scope of research provides the researcher to go further to suggest enhancing reading skills with learning by doing method as an experiential learning in order to develop communication skills as an activity which would enhance students’ competence level.

### Research Tools
- Researcher’s observation
- Questionnaire
- Interviews

The questionnaire consists of twenty questions which are based on the Likert type scale. The questionnaire is constructed in a systematic manner.

### V. ANALYSIS AND FINDINGS

The questionnaire was constructed and administered to sixty (60) respondents as part of the research exploration. The researcher has taken keen steps to collect the samples from the participants. The test questionnaire comprises of twenty (20) questions. The analysis of questionnaire was presented through Likert data analysis which was examined the questionnaire administered with the participants’ data and presented analysis of data as shown in the graphs.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1.S.D | 2         | 3.88    | 3.88          | 3.88               |
| 2. D  | 4         | 6.66    | 6.66          | 10                 |
| 3.U.D | 12        | 20      | 20            | 30                 |
| 4.A   | 52        | 88.88   | 88.88         | 88.88              |
| 5.S.A | 10        | 16.66   | 16.66         | 100                |
| Total | 60        | 100     | 100           |                    |
Q.2. I am interested in reading novels as a hobby.

| Valid | Frequency | Percent | Valid | Cumulative Percent |
|-------|-----------|---------|-------|--------------------|
| 1.S.D | 8         | 5       | 5     | 5                  |
| 2. D  | 11        | 18.33   | 18.33 | 28.83              |
| S.U.D | 19        | 31.66   | 31.66 | 55                 |
| 4. A  | 21        | 35      | 35    | 90                 |
| S.S.A | 5         | 10      | 10    | 100                |
| Total | 60        | 100     | 100   |                     |

Q.3. I read novels based on English curriculum.

| Valid | Frequency | Percent | Valid | Cumulative Percent |
|-------|-----------|---------|-------|--------------------|
| 1.S.D | 8         | 5       | 5     | 5                  |
| 2. D  | 16        | 26.66   | 26.66 | 53                 |
| S.U.D | 15        | 25      | 25    | 56.66              |
| 4. A  | 25        | 41.66   | 41.66 | 98.33              |
| S.S.A | 1         | 1.66    | 1.66  | 100                |
| Total | 60        | 100     | 100   |                     |

Q.4. My reading of novels is enough to build my vocabulary and word power.

| Valid | Frequency | Percent | Valid | Cumulative Percent |
|-------|-----------|---------|-------|--------------------|
| 1.S.D | 8         | 5       | 5     | 5                  |
| 2. D  | 7         | 11.66   | 11.66 | 16.66              |
| S.U.D | 10        | 16.66   | 16.66 | 33.33              |
| 4. A  | 20        | 33.33   | 33.33 | 66.66              |
| S.S.A | 10        | 16.66   | 16.66 | 83.33              |
| Total | 60        | 100     | 100   |                     |

Q.6. Reading is a very important skill in English language.

| Valid | Frequency | Percent | Valid | Cumulative Percent |
|-------|-----------|---------|-------|--------------------|
| 1.S.D | 1         | 1.66    | 1.66  | 1.66               |
| 2. D  | 1         | 1.66    | 1.66  | 3.33               |
| S.U.D | 2         | 3.33    | 3.33  | 6.66               |
| 4. A  | 18        | 30      | 30    | 86.66              |
| S.S.A | 28        | 68.88   | 68.88 | 100                |
| Total | 60        | 100     | 100   |                     |
Q. 7. I read whatever I want to read in English.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1.S.D | 1         | 1.66   | 1.66          | 1.66               |
| 2.D   | 8         | 13.33  | 13.33         | 15                 |
| 3.U.D | 9         | 15.00  | 15.00         | 30                 |
| 4.A   | 21        | 35.00  | 35.00         | 65                 |
| 5.S.A | 21        | 35.00  | 35.00         | 100                |
| Total | 60        | 100.00 | 100.00        |                    |

Q. 8. I need to improve my reading skills.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1.S.D | 3         | 5       | 5             | 5                  |
| 2.D   | 1         | 1.66    | 1.66          | 6.66               |
| 3.U.D | 4         | 6.66    | 6.66          | 13.33              |
| 4.A   | 23        | 38.33   | 38.33         | 51.66              |
| 5.S.A | 29        | 48.33   | 48.33         | 100                |
| Total | 60        | 100.00  | 100.00        |                    |

Q. 10. The use of illustrations, pictures, charts, cartoons and other teaching aids are helpful in reading skills.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1.S.D | 1         | 1.66    | 1.66          | 1.66               |
| 2.D   | 3         | 5       | 5             | 6.66               |
| 3.U.D | 5         | 8.33    | 8.33          | 15                 |
| 4.A   | 22        | 36.66   | 36.66         | 51.66              |
| 5.S.A | 29        | 48.33   | 48.33         | 100                |
| Total | 60        | 100.00  | 100.00        |                    |

Q. 11. My reading skills will help me pass my academic exams with good marks.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1.S.D | 1         | 1.66    | 1.66          | 1.66               |
| 2.D   | 4         | 6.66    | 6.66          | 3.33               |
| 3.U.D | 11        | 18.33   | 18.33         | 25.66              |
| 4.A   | 20        | 33.33   | 33.33         | 58.66              |
| 5.S.A | 14        | 23.33   | 23.33         | 82.00              |
| Total | 60        | 100.00  | 100.00        |                    |
Q. 12. My reading skills will also help me to better writing skills.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1. S.D | 2         | 8.88    | 8.88          | 8.88               |
| 2. D  | 4         | 16.66   | 16.66         | 25.56              |
| 3. U.D | 6         | 25.00   | 25.00         | 50.56              |
| 4. A  | 8         | 33.33   | 33.33         | 83.88              |
| 5. S.A | 21        | 77.78   | 77.78         | 100.00             |
| Total | 60        | 100     | 100           | 100.00             |

Q. 13. My teacher assigns me to read a contemporary English novel

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1. S.D | 2         | 8.88    | 8.88          | 8.88               |
| 2. D  | 5         | 16.66   | 16.66         | 25.56              |
| 3. U.D | 10        | 33.33   | 33.33         | 58.88              |
| 4. A  | 11        | 36.67   | 36.67         | 95.54              |
| 5. S.A | 12        | 40.00   | 40.00         | 100.00             |
| Total | 60        | 100     | 100           | 100.00             |

Q. 14. My teacher helps and corrects me while reading English novel.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1. S.D | 8         | 5.33    | 5.33          | 5.33               |
| 2. D  | 7         | 4.58    | 4.58          | 9.90               |
| 3. U.D | 18        | 11.25   | 11.25         | 21.15              |
| 4. A  | 14        | 8.75    | 8.75          | 29.90              |
| 5. S.A | 9         | 5.63    | 5.63          | 35.53              |
| Total | 60        | 100     | 100           | 100.00             |

Q. 15. I skip difficult words and phrases without knowing their meaning while reading novel.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1. S.D | 6         | 10.00   | 10.00         | 10.00              |
| 2. D  | 15        | 25.00   | 25.00         | 35.00              |
| 3. U.D | 19        | 31.66   | 31.66         | 66.66              |
| 4. A  | 11        | 18.33   | 18.33         | 84.93              |
| 5. S.A | 9         | 15.00   | 15.00         | 100.00             |
| Total | 60        | 100     | 100           | 100.00             |
Q. 16. I acquire the knowledge of grammar and vocabulary from reading novels.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1. S.D | 0         | 0       | 0             | 0                  |
| 2. D   | 8         | 5       | 5             | 5                  |
| 3. U.D | 7         | 11.66   | 11.66         | 16.66              |
| 4. A   | 27        | 61.66   | 61.66         | 78.88              |
| 5. S.A | 13        | 21.66   | 21.66         | 100                |
| Total  | 60        | 100     | 100           |                    |

Q. 17. I get ideas from many different available sources for reading.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1. S.D | 0         | 0       | 0             | 0                  |
| 2. D   | 8         | 5       | 5             | 5                  |
| 3. U.D | 6         | 10      | 10            | 15                 |
| 4. A   | 41        | 68.88   | 68.88         | 83.88              |
| 5. S.A | 10        | 16.66   | 16.66         | 100                |
| Total  | 60        | 100     | 100           |                    |

Q. 18. I need to have more classes for developing reading skills.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1. S.D | 8         | 5       | 5             | 5                  |
| 2. D   | 4         | 66.66   | 66.66         | 11.66              |
| 3. U.D | 11        | 18.33   | 18.33         | 30                 |
| 4. A   | 26        | 43.33   | 43.33         | 73.33              |
| 5. S.A | 16        | 26.66   | 26.66         | 100                |
| Total  | 60        | 100     | 100           |                    |

Q. 19. My language class will help me become a good reader.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1. S.D | 0         | 0       | 0             | 0                  |
| 2. D   | 8         | 5       | 5             | 5                  |
| 3. U.D | 8         | 16.66   | 16.66         | 18.88              |
| 4. A   | 30        | 50      | 50            | 68.88              |
| 5. S.A | 19        | 31.66   | 31.66         | 100                |
| Total  | 60        | 100     | 100           |                    |
Q. 20. More practice in reading skills will help me develop my communication skills.

| Valid | Frequency | Percent | Valid percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1.S.D | 2         | 8.88    | 8.88          | 8.88               |
| 2.D   | 2         | 8.88    | 8.88          | 17.76              |
| 3.U.D | 6         | 10      | 10            | 27.76              |
| 4.A   | 16        | 25.66   | 25.66         | 53.42              |
| 5.S.A | 84        | 56.66   | 56.66         | 100                |
| Total | 60        | 100     | 100           |                    |

The data analysis infers that 53.4% of the students agreed that they do like reading English novels (Graph 1). Related to interest in reading novels as hobby, it reveals that 35% of the students agreed the same (Graph 2). It is quite evident that 41.7% of the respondents agreed that they read novels based on English curriculum (Graph 3). In terms of the students’ reading of novels is enough to build their vocabulary and word power, 50% of the students agreed this (Graph 4). 53.4% of the students agreed that they are interested in listening, speaking and reading and writing exercises given in their textbooks (Graph 5). The analysis infers that 63.4% of students strongly agreed that reading is a very important skill in English language (Graph 6). 35% of the participants agreed and strongly agreed that they read whatever they wanted to read in English (Graph 7). From the analysis of the data 48.4% of the students strongly agreed that they need to improve their reading (Graph 8). Related to students’ getting suggestion, guidance and opinion and help to improve their reading skills 47% of them agreed the same (Graph 9). 48.4% of the students strongly agreed that the use of illustrations, pictures, charts, cartoons and other teaching aids are helpful in reading skills (Graph10).

The data analysis infers that 23% of the students strongly agreed that their reading skills will help them pass their academic exams with good marks (Graph 11). Related to their reading skills will also help them to better writing skills, it reveals that 45% of the students agreed the same (Graph 12). It is quite evident that 51.6% of the respondents agreed that their teachers assign them to read a contemporary English novel (Graph 13). 56.7% of the students agreed that their teacher helps and corrects them while reading English novel (Graph 14). 31.6% of the students undecided and 18% agreed that they skip difficult words and phrases without knowing their meaning while reading novel (Graph 15). The analysis infers 61.7% of students agreed that they acquire the knowledge of grammar and vocabulary from reading novels (Graph 16). 68.4% of the participants agreed that they get ideas from many different available sources for reading (Graph 17). From the analysis of the data 43.4% of the students need to have more classes for developing reading skills (Graph 18). Related to students’ getting suggestion, guidance and opinion and help to improve my reading skills, 50% of them agreed that their language class will help me become a good reader (Graph 19). 57.7% of the respondents strongly agreed to the need of more practice in reading skills will help them in developing their communication skills (Graph 20).

This exploratory research discloses the fact that critical reading of the novel through learning by doing method is the best experiential learning which could enhance communication skills among the engineering students and further the research can be extended to professional graduates pursuing management, pharmaceutical and aviation from prestigious higher halls of learning similar to IITs and NITs to explore the facts whether the critical reading skills acquisition and practice in acquisition of EFL will enable them to be successful in their careers.

VII. SUGGESTIONS

Based on the frequency analysis drawn from the respondents’ feedback some suggestions are mentioned

i. To assign reading activity:

To strengthen critical reading skills for engineering students, the activity is assigned primarily in which students involve themselves into "learning by doing method" based on reading English novel. If students aren't sure about how to approach the activity, have them the help of the teachers in doing better way.

ii. To encourage students in developing reading with quick understanding:

In order to encourage students’ effective reading skills, it is suggested to develop the quality of reading among them. Largely the students depend on reading in the text books. Besides, they need to be encouraged reading such as novels and plays. Regular and constant practice also required for them to gain command with perfection on effective reading techniques through developing intensive and extensive practice which will help them to acquiring and skimming and scanning.

- It is required to assign the task for students to practice more reading activities based on selected topics of their choice.
- It is required to train up the students in extensive reading of various topics to develop their vocabulary and also to develop their ideas effectively in the EFL context.

VI. SCOPE FOR FURTHER RESEARCH
The more practice required to enable them in developing reading skills to reduce the students’ fear and inferiority in order to strengthen cognitive learning abilities.

The English faculty should focus on helping more to develop reading activities which would help them to develop students’ reading on reading for specific purpose and reading for entertainment.

Various learning modules can be designed to develop critical appreciation among the learners, need to be practiced to strengthen reading skills as the part of language labs to enhance competencies in the EFL context.

Individual reading practice as well as collaborative learning on reading skills to get language competencies is also required.

VIII. CONCLUSION

This paper concludes the overall perceptions drawn in the research are evident that critical reading with experiential learning practices in the reading of English novel through learning by doing method in the EFL context results significantly remarkable in enhancing professional communication skills among students studying undergraduate engineering course. Adequate practice sessions for developing reading skills imminently required for them to be successful in campus placement drives. The research proves that the participants need more practice sessions to obtain efficiency levels in the EFL (English as a Foreign Language) and ESL (English as a Second Language) context through learning and doing method.

REFERENCES

1. Allen, L., Q. (2004). Implementing a culture portfolio project within a constructivist paradigm. Foreign Language Annals, 37, 232-239.

2. Anderson, N. J. (2002). The role of metacognition in second/foreign language teaching and learning. ERIC Digest. Washington, DC: ERIC Clearinghouse on Languages and Linguistics. Anderson, N. J. (2003). Teaching reading. In D. Nunan (Ed.), Practical English language teaching (pp. 67-86). New York: McGraw Hill Publishers.

3. Razerman, C. (1985). Physicist reading physics: Schema-laden purposes and purpose-laden schema. Written

4. Grabe, W, Stoller, L. F. (2001). Reading for academic purposes: guidelines for the ESL/EFL teacher. M. Celce-Kotti, D. (2008). Experiential learning from theory to practice. Adult Education, 13, 35-41. (in Greek)

5. Mezrow, J. (1991). Transformative Dimensions of Adult Learning. San Francisco: Jossey-Bass.

6. Nayar, P. B. (1994). ESL/EFL dichotomy today: Language politics or pragmatics? TESOL Quarterly, 31, 9-37

BRIEF PROFILE OF THE AUTHOR:

Dr. Yeddu Vijaya Babu is presently Assistant Professor in the Department of Humanities and Social Sciences, National Institute of Technology, Raipur, Chhattisgarh, India. He has been teaching English Language and Communication Skills over a decade and more. He has participated in many international conferences in India and abroad. He has visited London, Dubai, Malaysia for attending academic conferences of prestigious academies. He has authored several books to his credit and striving to enhance English Language Communication Skills and Soft skills among professional learners.