The efficiency of reading in content-based topics vs. reading in variety of topics

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Abstract

The article studies the impact of the selection of reading materials on the quality of students' reading skills. The role of reading skills is discussed. Then a quantitative study is presented in order to compare the efficiency of application of content-based reading to reading in variety of topics. Teacher-centered instruction of reading does not involve any selection on the students' part. It is also textbook and syllabus driven. Students have no say in it, they just fulfill what they are told. In this article I call this approach content-based. Student-centered approach to reading should not simply take into consideration students' needs, interests' and knowledge background, but also make student an active learner: let him select topics of reading texts. This is what I call in this research variety of topics. The study was held at Ishik University, Iraq. It is concluded that the possibility for the students to select topics for their reading texts increases the level of reading skill development. The article should be interesting for both language (reading) teachers and language teaching researchers.

 Keywords: Reading, topic selection, content based teaching of reading, reading in variety of topics, book/teacher centered approach, student-centered approach

Introduction

According to Krashen (1981), listening and reading are those valuable outputs, from which a person learns a language. As language is one of the main tools of education, mastering reading on an adequate for receiving education level, is essential not only for learning a language, but also for education.

Most information can be internalized by the written words, and anyone who finds reading unnecessary or difficult is seriously weak in the civilized struggle for a place in the world. The ability to read English texts for students who want to increase their knowledge in their majors nowadays seems inevitable. This can be considered true, because most of the professional, technical and scientific literature today is published in English (Alderson, 1984). Textbooks and articles in English constitute about ninety per cent of all required reading matter in many colleges, in whatever language (native or foreign) the student is receiving the education (Jolliffe & Harl, 2008).

Educators have suggested that reading contributes to various dimensions of personal development, such as aesthetic appreciation (Adler, 1940). Reading has also been assumed to be important for maintaining an informed citizenry and thereby helping to preserve democratic institutions (Williams, J. 1993).

Researchers from diverse fields have reminded us that comprehension is always to some extent idiosyncratic (Williams, 1993), building on individuals' responses to the pragmatics of the particular reading situation as well as their understanding of the "content" of the text (Anderson, Pichert, & Shirey, 1979).

The knowledge and experience an individual brings to a reading task are critical factors in comprehension. In inferring the meaning from text, readers build their own elaborations; they "read" situational demands, review personal knowledge, and select what seems the most appropriate and useful for the task at hand.

Practice-engagement theory assumes that individuals acquire literacy through their participation in various literacy practices, both in and outside of school, according to Reder (1994). Presumably, the development of particular skills depends, at least in part, on the kinds of literacy-relevant practices in which individuals engage. Developing literacy abilities results in specific outcomes for individuals (e.g., at the most basic level, the ability to comprehend written texts of varying kinds; at a more global level, the ability to participate in society because one is more informed about various issues).

The question of how different reading practices contribute to various literacy outcomes for young adults has not generally been addressed in the research literature. Guthrie and Greaney (1991), however, contended that individuals who read to acquire knowledge, for example, will be more knowledgeable than those who do not read for this purpose. It might also be expected that adults who read many various print contents (e.g., books, newspapers, magazines, journals) - regardless of the particular purposes for reading - will demonstrate higher levels of literacy abilities than those who read in a narrower content area or do not read.

In many countries, like Iraq, English is learned by a large number of students who will never have the opportunity of conversing with native speakers, but

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who will have the access to the literature and periodicals, or scientific and technical journals written in the language they are learning (Rivers, 1981). Because of this situation, reading skill is more important in this context than other skills. In fact, to become a specialist, it is not enough for undergraduate students to have reading skills in their first language, because technical reading skills can hardly be transferred from the native language to the target one - Arabic characters are used in students' native language which are too different from the Latin alphabet, to say nothing about the direction (right to left) in which reading is done. So, besides the difficulties that other students are having while learning English (establishing letter-sound correspondence, recognition and comprehension of vocabulary and grammar, understanding between the lines, etc., this is an extra difficulty for Iraqi students while reading in English. Results of some studies support the view that reading in a language which is not the learner's first language is a source of considerable difficulty (Alderson, 1984).

Thus, it is obvious that reading skills in English are indispensible for university students majoring in various spheres, especially the technical ones. On the other hand, experience shows that students often are not motivated enough and do not demonstrate a professionally relevant level of reading skills.

Problem

Experts generally agree that there are three factors which are essential in the educational process: that is, the learners, the teacher, and the educational materials. In spite of the interdependency of these three factors, each can be considered independently of the others for research purposes. I concentrated my attention on the role of materials for reading for the quality of reading skills.

Students are often dissatisfied with the materials they are offered for reading: they find them uninteresting, not motivating, too difficult and useless. In contemporary student-centered pedagogy this opinion should be taken into consideration, so we need to find out how to select reading texts for university students while teaching English to them.

Research question

The present study was designed to answer the following questions regarding the selection of reading texts for young adults: How should we select reading texts for ESP students? Should all of them be content-based (related with the majors of the students) or may some represent a variety of topics, including non-ESP? And also should we permit students to make topic choice (student-centered teaching) or should the texts be chosen just according to textbook and/or teacher's selection (book/teacher-centered approach)?

Method of Study

I hypothesized that if I arrange the topics of the reading materials according to students' interests, learners will become more involved in decision-making, and, correspondingly, more enthusiastic and will volunteer to learn. This kind of teaching reading is student-centered. I expected that due to this, students would demonstrate better reading comprehension and would be eager to read more.

The study was conducted in the quantitative format. The purpose of this study was to investigate how well the students do in reading content-based texts selected in a textbook-author-centered way compared to a variety of topics (non-fiction & fiction, ESP and GE, students' majors and a wider selection of technical texts) chosen in a student-centered way. The testing of reading skills before, while, and after the completion of the experiment was designed to measure the results.

The experimental research was held in two different undergraduate groups majoring in Information Technologies at Ishik University in Arbil, Iraq. Correspondingly, content based reading for them included various topics dealing with their future professions.

During the spring semester of 2012-2013 (19 Weeks, 3 hrs of reading classes per week) the reading materials in the control group (content-based, teacher-centered) were a collection of reading passages based on the syllabus (Advanced English). The textbook was Infotech English for Computer Users (Esteras, 2008). In the experimental group (variety of topics, student-centered) the texts were selected from various spheres taking into consideration students' interests (some texts were selected from the textbook Deep into Meaning (Kanar & Bahar, 2010). Of course I realized that it was impossible to satisfy the needs of every student in the group, but the eventually selected texts were those who received most votes among the offered ones.

In the first half of the semester, the control group was dealing with texts in their majors, while the experimental group – with a selection of texts, some of which were fiction and some – non-fiction (to make the transition from the school reading practices easier for the students), some - dealing with their majors, while others were not.

In the second half of the semester, both groups were dealing with technical texts – the control group still had no choice and followed the book in their majors, while the experimental group was offered a list of EST (English for Science and Technology) topics, some of them directly related with their majors, while others – not.

Below find the list of topics offered to students and chosen by them (the ones with an "x" cross were chosen) (Table 1).

Ways of text presentation, types of activities, homework and assessment tasks were the same in both groups in order to achieve reliable results. 10 texts were studied in both groups in the classroom and

Table 1
The topics chosen by students to study in experimental group

Topics or Chapters introduced	Sphere/genre	Choice
Computers today	Computer, popular science	X
Input/Output devices	Computer, technical description	
Storage devices	Computer, technical description	X
Basic software	Computer, technical description	X
Faces of the Internet	Computer, popular science	
Creative software	Computer, popular science	X
Programming/Jobs in ICT	Computer, popular science	
Computers tomorrow	Computer, popular science	X
Mystery of Migration	Biology, popular science	
Nature versus Man	Nature, popular science	X
Packaging and Environment	Environment, popular science	
Doing away with a Legend	Traditional Literature	
The Future: What will it be like	Science Fiction	X
Exploring Space	Popular science	
Taj Mahal	Romance	X
The Story of Atlantis	Informational	
Surrogate mothers	Biology, informational	X
Balloons and Drigibles	History of technologies	
Temel on an Island	Humor	X

the results were assessed in the tests. To provide that texts in both groups were of the same difficulty level, we assessed them according to the software Lextutor, available for free on the internet (http://www.lextutor.ca/vp/eng/)

To assess students' reading skills, we made up a test which was divided into two sections. The first dealt with checking the comprehension level in general, while the second involved vocabulary questions. To provide test results reliability, the number of questions, their format and difficulty level in tests for both groups were same. Three out of four tests were held during official exam period to avoid extra stress for the students and, correspondingly, the negative impact on

the results. Assessors were other than lecturers (and experimenter), so the experimenter had no influence on assessment results, which made them rather objective, not driven by the experiment goals.

Experiment participants

Two undergraduate (freshman) groups majoring in Information Technologies at Ishik University in Arbil, Iraq participated in the experiment. Other details about participants are presented in my first article in this issue.

Students participated in the experiment and were split into groups on a volunteer basis (beforehand it

was explained what kind of teaching reading would be provided in each group). Instead of the traditional for educational research random assignment of students to two groups to make them equal, we wanted all students to study the way they preferred – with or without topic choice. Theoretically, all students are more motivated to make the choice themselves, but in practice they often prefer to leave the responsibility to the teacher. In our study the students who chose the control group were motivated to study without making any choice concerning texts and their topics, just following the texts in their specialty that the book offered, but eventually the choice that the textbook offered did not make them very happy.

However, as their reading skills were at the same – upper intermediate – level, the starting level of skills in both groups was practically the same, which made the results of two groups comparable.

There were totally 46 students – 22 of them chose to be in the control group, while 24 – in the experimental. (Tables 2 and 3)

If we compare the pre-test results in tables 2 and 3, we can see that they are very close, by all central tendency parameters, which makes the two groups really comparable.

As it is clear from Table 1, only three students in the control group from testing to testing increased during both following measurements, step by step, or maintained their grades. Three students did not show any improvement. Other students did, but only 8 of them – a significant enough improvement (10-12 points).

Mean results in the control group eventually are increasing (except between the first and second testing), however, rather slowly and to a slight degree. Standard deviation is 9.27-10.61, which is a bit high, which means the group is not very homogeneous, and it is even getting less homogeneous in the process of teaching, some students demonstrating very good results (90-100), while others - rather poor results (55-61) . Median, which is viewed as a more exact parameter than mean, is not really growing until the last stage. Modes (except the last test each represented only by 2 students) are so scattered that they do not permit to speak about any typical grade in the group. Not only the level of reading skills in the group is rather uneven, but also the results of each student from test to test are uneven.

According to table 4, all students but one demonstrated improvement or maintenance of level during both following measurements, which shows that their reading skills have benefitted from the offered approach. We cannot say so about the control group students. Naturally, the mean is also growing during both measurements and so is the median. 20 students out of 24 demonstrate a significant growth in points (by 10-24 points). The mode in each test is represented by 3-4 students, which shows that the group is becoming more homogeneous, while the standard deviation (8.27-8.59) which is at acceptable level shows that the group is more homogeneous that the control group, and the difference between the high (90-10) and low

(67-72) achievers in the last two tests is not so dramatic. This proves that even weaker students were really progressing. Statistically, the whole group was doing much better than the control group.

These results support our hypothesis that purely author/teacher-centered, content based teaching in our study proved to be less efficient for young adult students than the student-centered variety of topics approach.

Graphically the results are presented below. (Figure 1)
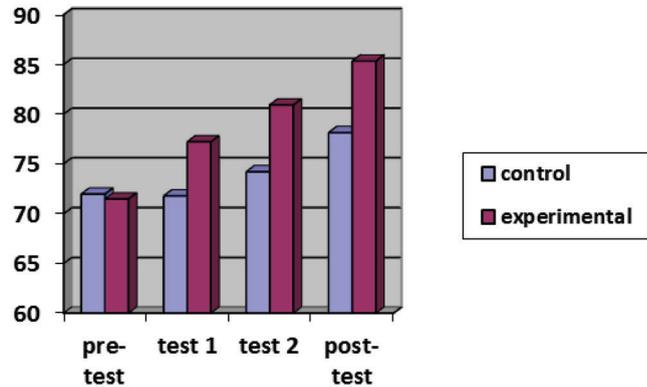
Figure 1
Comparison of mean results of control and experimental groups

Limitations of the study

The study was held with 46 students for one semester in one country and one university. Of course, it is not enough to make some overall conclusions. On the other hand, the results quite clearly indicate the tendency which supports our hypothesis.

Conclusions

Thus, the students' reading skills levels have significantly increased in the experimental group compared to minor increase in the control group. It supports our hypothesis – that student-centered selection of topics for reading materials enhances the development of reading skills of ESP students.

Table 2
Test results in the Control group

Student #/ assessment	Pre-test	Test 1	Test 2	Post-test	Stable growth or maintenance of level	Change
1	63	65	55	70		+7
2	78	74	85	71		-7
3	66	68	75	75	v	+9
4	72	77	80	70		-2
5	64	53	70	74		+10
6	65	73	68	70		+5
7	65	66	61	73		+8
8	70	80	74	82		+12
9	69	76	76	80	v	+11
10	74	84	84	82		+8
11	60	62	68	70	v	+10
12	89	85	70	98		+9
13	78	74	76	74		-4
14	80	75	85	90		+10
15	61	56	68	64		+ 3
16	88	90	95	90		+ 2
17	63	65	60	70		+ 7
18	72	70	69	80		+ 8
19	79	83	80	91		+ 12
20	62	55	60	65		+ 3
21	90	70	80	100		+10

Student #/ assessment	Pre-test	Test 1	Test 2	Post-test	Stable growth or maintenance of level	Change
22	75	78	93	80		+5
Mean	71.95	71.77	74.18	78.13	v	6.4
Standard deviation	9.27	9.95	10.61	10.19	-	-
Median	75	71.50	75	82	-	7
Mode(s)	63, 65, 72, 78	74	68, 76, 80, 85	70	-	-

Table 3
Test results in the Experimental group

Student #/ assessment	Pre-test	Test 1	Test 2	Post-test	Stable growth or maintenance of level	Total change
1	71	79	80	85	v	14
2	63	70	72	78	v	16
3	69	70	72	75	v	6
4	76	74	80	89	v	13
5	61	75	75	78	v	17
6	63	65	67	74	v	10
7	72	73	76	88	v	16
8	70	90	91	94	v	24
9	65	68	80	82	v	17
10	64	73	75	78	v	14
11	65	79	84	83	v	18

12	66	70	74	78	v	18
13	77	91	92	93	v	15
14	74	80	90	92	v	18
15	88	90	92	96	v	8
16	65	75	76	80	v	15
17	61	65	67	73	v	12
18	75	77	79	83	v	8
19	79	80	81	92	v	13
20	64	69	72	75	v	11
21	87	85	93	95		8
22	90	95	96	100	v	10
23	80	88	94	96	v	16
24	70	72	88	91	v	21
Mean	71.46	77.21	80.92	85.33	v	13.87
Standard deviation	8.59	8.65	8.90	8.27	-	-
Median	75.5	80	81.5	86.5	-	11.00
Mode(s)	65	70	80	78	-	-

References:

Adler, M.J. (1940). How to Read a Book: The Art of Getting a Liberal Education. New York: Simon & Schuster

Alderson, J.C. (1984). Reading in a foreign language: A reading problem or a language problem? In J.C. Alderson and A.H. Urquhart (Eds.), Reading in a Foreign Language. London: Longman, p. 1-24

Anderson, R.C., Pichert, J.W., & Shirey, L.L. (1979). Effects of the Reader's Schema at Different Points in Time. Urbana: University of Illinois, Center for the Study of Reading

Esteras, S.R. (2008). Infotech English for Computer Users. (4th ed.) Cambridge: Cambridge University Press).

Guthrie, J.T., & Greaney, V. (1991). Literacy acts. In R. Barr, M.L. Kamil, P. Mosenthal, & P.D. Pearson (Eds.), Handbook of Reading Research: Vol. II, New York: Longman, p. 68-96

Jolliffe, D. A., & Harl, A. (2008). Studying the "Reading Transition" from high school to college: What are our students reading and why? College English, 70(6), p. 599-617

Kanar, M. N. and Bahar, M. (2010). Deep into Meaning (2nd edition). Guvender Publishing, Turkey

Krashen, S.D. (1981). Second Language Acquisition and Second language Learning. Pergamon Press. University of Southern California

Reder, S. (1994). Practice engagement theory: A sociocultural approach to literacy across languages and cultures. In B.M. Ferdman, R.M. Weber, & A.G. Ramirez (Eds.), Literacy Across Languages and Cultures. Albany, NY: SUNY Press, p. 23-74

Rivers, W.M. (1981). Teaching Foreign Language Skills. Chicago: The University of Chicago Press

Williams, J. (1993). Comprehension of students with and without learning-disabilities - identification of narrative themes and idiosyncratic text representations. Journal of Educational Psychology, 85(4), p. 631-641