The Importance of Learner-Learner and Learner-Instructor Interaction among EFL Learners in Payame Noor University: A Constructivist Approach[1]

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Abstract *The main purpose of this study was to analyze learner-learner interaction, and learner-instructor interaction among the EFL Learners in Payame Noor University based on the constructivist paradigm. About 100 EFL learners were selected randomly. They were junior students getting a BA in TEFL. They were 90 females and the average age was 28. The materials used in the study were formal and informal interviews, an open ended questionnaire, and a validated Likert questionnaire designed after a pilot study by the researcher. The data were analyzed using the SPSS and the emergent themes were discussed. The results showed little interaction among the learners. The reasons and the pedagogical implications of the study are also given.*

1. Introduction

Payame Noor (The Message of Light) University (PNU) is a long-distance university based in Tehran, Iran. Distance education or distance learning is a field of education that focuses on teaching methods and technology with the aim of delivering teaching, often on an individual basis, to students who are not physically present in a traditional educational setting such as a classroom. It has been described as 'a process to create and provide access to learning when the source of information and the learners are separated by time and distance, or both' (Honeyman & Miller, 1993).

The analysis of a dynamic interaction among language learners involved in the learning environment between one learner and another and between a learner and the instructor and how knowledge is constructed in such an environment is the main concern of this study. Emphasising on a dynamic atmosphere is in line with constructivism; According to Santrock (2001), learning is best achieved when the individual actively construct knowledge and understanding. That is, individuals must actively participate in the teaching and learning process, thus to discover, to reflect and to think critically on the knowledge they acquire (Richardson, 2003). Hence, the constructivist approach does not allow for rote memorization but encourages the construction of meaningful knowledge and understanding, for these reasons and more, the constructivist approach to learning is perceived as a theory of student learning rather than as a theory of teaching (Richardson, 2003).

The present research, thus, tries to analyze some Payame Noor University classrooms to see whether they are compatible with the characteristics of a constructivist classroom. According to Audrey Gray (1997), the characteristics of a constructivist classroom are as follows:

- The learners are actively involved
- The environment is democratic

- The activities are interactive and student-centered
- The teacher facilitates a process of learning in which students are encouraged to be responsible and autonomous

Moore (1989) identified three types of interaction that shape the learning process: learner-content interaction, learner-instructor interaction, and learner-learner interaction. Hillman, Willis, and Gunawardena (1994) added another type: learner-interface interaction, which describes the interaction between the learner and the tools needed to perform the required task.

Therefore, this study tries to answer the following general questions along with 20 specific questions the learners were required to answer in the designed questionnaire:

1. How much learner-learner interaction is there among the EFL learners in Payame Noor University classrooms?
2. How much learner-instructor interaction is there among the EFL learners in Payame Noor University classrooms?

2. Background to the Study

The constructivist pedagogies that are increasingly part of teacher education course work and expectations emerge from an intellectual world where knowledge is seen as created rather than received (von Glasersfeld, 1991), mediated by discourse rather than transferred by teacher talk (Vygotsky, 1962), explored and transformed rather than remembered as a uniform set of positivistic ideas (Dewey, 1915; Rorty, 1979).

According to the social constructivist approach, instructors have to adapt to the role of facilitators and not teachers (Bauersfeld, 1995); a facilitator helps the learner play an active role in the learning process. The emphasis thus turns away from the instructor and the content, and towards the learner (Gamoran, Secada, & Marrett, 2000). This dramatic change of role implies that a facilitator needs to display a totally different set of skills than a teacher (Rhodes and Bellamy, 1999). A teacher tells, a facilitator asks; a teacher lectures from the front, a facilitator supports from the back; a teacher gives answers according to a set curriculum, a facilitator provides guidelines and creates the environment for the learner to arrive at his or her own conclusions; a teacher mostly gives a monologue, a facilitator is in continuous dialogue with the learners (Rhodes & Bellamy, 1999). The learning environment should also be designed to support and challenge the learner's thinking (Di Vesta, 1987).

Roblyer, Edwards, and Havriluk (1997) points out that constructivists focus on what drives the students to learn, achieve and to efficiently comprehend and utilize what they learn outside the four borders of the classroom. According to Santrock (2001), learning is best achieved when the individual actively construct knowledge and understanding. That is, individuals must actively participate in the teaching and learning process, thus to discover, to reflect and to think critically on the knowledge they acquire (Richardson, 2003). Hence, the constructivist approach does not allow for rote memorization but encourages the construction of meaningful knowledge and understanding. For these reasons and more, the constructivist approach to learning is perceived as a theory of student learning rather than as a theory of teaching (Richardson, 2003). According to Richetti and Sheerin (1999, p. 58) "the fundamental to the constructivist theory of learning is the acknowledgment of the learner as a thinker with capability and value. After all, why would we need to understand the student's point of view if the teacher's view is the only one that matters?"

The social constructivism theory emphasizes on the presence and the role of dynamic interaction between individuals involved in the learning environment, for instance, between one learner and another, between a learner and the instructor, and the assigned learning task (McMahon, 1997). This interaction between individuals and the learning tasks allows for an optimal learning environment in which the learner possess the

opportunity to construct their individual understanding from the presence of the dynamic interaction available (McMahon, 1997).

Furthermore, constructivism is a set of beliefs about knowing and learning that emphasizes the **active** (my emphasis) role of learners in constructing their own knowledge (Anderson, 1987; Jonassen, 1995; Resnick, 1987; Schauble, 1990; von Glasersfeld, 1989).

Active learning involves providing opportunities for students to meaningfully talk and listen, write, read, and reflect on the content, ideas, issues, and concerns of an academic subject. (Meyers & Jones, 1993, p. 6)

Examples of some active learning formats that work well in a large lecture hall are cooperative group work (Johnson, Johnson & Smith, 1991), class-wide discussions (Gullette, 1992), and interactive lectures (Mazur, 1993; Sokoloff, 1994; Van Heuvelen, 1991).

Research has suggested, however, that to achieve these goals faculty must be knowledgeable of alternative techniques and strategies for questioning and discussion (Hyman 1980) and must create a supportive intellectual and emotional environment that encourages students to take risks (Lowman, 1984).

Active learning (AL) is an instruction method in which students actively participate in their learning process (Bonwell & Eison, 1991) via learner-centered activities that exercise the higher-order thinking skills of analysis, synthesis, and evaluation rather than passively listening to a lecture. Weimer (2002) outlines the key premises of learner-centered teaching as:

- Assume that students are capable learners who will blossom as power shifts to a more egalitarian classroom.
- Use content not as a collection of isolated facts, but as a way for students to critically think about the big questions in the field.
- Change the role of teacher from sole authoritarian to fellow traveler in search of knowledge.
- Return the responsibility for learning to the students, so that they can understand their learning strengths and weaknesses and feel self-directed in their knowledge quest.
- Utilize assessment measures not just to assign grades, but as our most effective tools to promote learning.

Based on the above theoretical background, this study tries to analyze two kinds of interactions which may exist among the English learners in Payame Noor University in Iran.

3. Methodology

3.1. Participants

About 100 EFL learners were selected randomly. To observe the codes of ethics, the place in which this research was done is kept anonymous. They were junior students trying to get a BA in TEFL. They were 90 females (49 singles & 41 married) and 10 males (2 singles & 8 married) and the average age was 28.

3.2. Materials

The materials used in the study was formal and informal interviews, an open ended questionnaire, and a validated Likert questionnaire designed after a pilot study by the researcher who is an instructor in Payame Noor University.

3.3. Procedure

First, 40 learners were asked to take part in a pilot study and they were told that they would be given an open questionnaire to fill. They were asked to write about their interaction with their classmates and their professors. Based on the pilot study and doing needs analysis, the Likert questionnaire was designed and validated by the researcher. The questionnaire had 20 questions asking for the amount of interaction learners had with their classmates and their instructors. The scale based on frequency was from very little to a great deal with little and somewhat in between. The first 10 questions were asking for the learner-learner interaction type and the second 10 (from 11 to 20) questions were the learner-instructor interaction questions type. Then, about 100 EFL learners answered the final questionnaire and another open-ended questionnaire as well. They results were analyzed using the SPSS software and the frequencies were counted and the emergent themes of the open questionnaire along with the interview results were categorized and discussed.

4. Results

In regard to the first question whether they knew their classmates' names, most of the students reported that they knew very little about their classmates' names (41% male, 34% females). Only 10 percent of the females reported that they know their classmates' names (see Table 1). The second question asked about their general understanding of the learners regardless of their names. 35% percent of the males and 26% of females had very little knowledge. No one in both groups claimed to know each other a great deal based on our likert scale.

   The result of the third question which was about their level of intimacy was almost the same as 29% of males and 16% of females reported that they had very little relationship with them. Only 6% of both groups had intimate relationship with their classmates. In regard to their inside classroom relationship which was the concern of the fourth question, the responses of the males was exactly the same as those of question number 3. Females seemed to have more relationship, but this also was not significant.

   The fifth question was about their interaction outside of the classroom. About 82% of the males and 56% of the females had very little interaction.

   Generally, both groups had almost the same responses to the following 5 other learner-learner interaction type questions (questions 6 to 10) (see Table 1).

6. To what extent do you cooperate with your classmates in group activities?
7. How much do you believe in the necessity of close relationships between learners?
8. Comparing with a full-time university, how much do you think is Payame Noor University a suitable place for human communication?
9. How much do you think are the factors of human communication effective as a motivation for learning?
10. With no respect to academic issues and educational facilities and only concerning students relationships, how much would you prefer Payame Noor University to be a full-time university?

Table 1. Learners' responses to learner-learner interaction questions type

Subjects	Frequency	1	2	3	4	5	6	7	8	9	10
Male	Very Little	41%	35%	29%	29%	82%	64%	0%	25%	6%	18%
	Little	35%	41%	41%	42%	6%	18%	12%	20%	6%	12%
	Somewhat	24%	24%	24%	29%	6%	12%	18%	49%	29%	29%
	A great deal	0%	0%	6%	0%	6%	6%	70%	6%	59%	41%
Married	Very Little	33%	45%	22%	33%	89%	78%	0%	33%	11%	33%
	Little	45%	33%	33%	45%	11%	22%	22%	0%	0%	0%
	Somewhat	22%	22%	45%	22%	0%	0%	11%	67%	33%	45%
	A great deal	0%	0%	0%	0%	0%	0%	67%	0%	56%	22%
Single	Very Little	50%	25%	38%	26%	76%	51%	0%	15%	0%	0%
	Little	25%	50%	50%	37%	0%	12%	0%	40%	12%	25%
	Somewhat	25%	25%	0%	37%	12%	25%	25%	30%	25%	12%
	A great deal	0%	0%	12%	0%	12%	12%	75%	15%	63%	63%
Female	Very Little	34%	26%	16%	10%	56%	47%	4%	30%	1%	8%
	Little	22%	56%	37%	40%	27%	25%	8%	34%	6%	19%
	Somewhat	34%	18%	41%	37%	12%	22%	43%	28%	29%	31%
	A great deal	10%	0%	6%	13%	5%	6%	45%	8%	64%	42%
Married	Very Little	43%	34%	20%	13%	62%	54%	2%	27%	0%	12%
	Little	25%	46%	41%	46%	31%	22%	8%	25%	2%	27%
	Somewhat	20%	20%	37%	31%	5%	22%	56%	40%	37%	34%
	A great deal	12%	0%	2%	10%	2%	2%	34%	8%	61%	27%
Single	Very Little	25%	25%	15%	8%	48%	47%	2%	35%	0%	4%
	Little	2%	62%	32%	32%	27%	25%	8%	40%	7%	13%
	Somewhat	47%	13%	45%	45%	19%	20%	36%	17%	26%	29%
	A great deal	8%	0%	8%	15%	6%	8%	54%	8%	67%	54%

Table 2. Learners' responses to learner-instructor interaction questions type

Subjects	Frequency	11	12	13	14	15	16	17	18	19	20
Male	Very Little	29%	41%	18%	76%	0%	6%	0%	24%	64%	24%
	Little	36%	41%	41%	18%	0%	12%	6%	29%	12%	18%
	Somewhat	29%	18%	35%	6%	35%	12%	18%	35%	24%	29%
	A great deal	6%	0%	6%	0%	65%	70%	76%	12%	0%	29%
Married	Very Little	22%	22%	11%	78%	0%	0%	0%	22%	56%	46%
	Little	45%	67%	56%	22%	0%	11%	0%	22%	22%	11%
	Somewhat	33%	11%	33%	0%	45%	11%	22%	45%	22%	33%
	A great deal	0%	0%	0%	0%	55%	78%	78%	11%	0%	11%
Single	Very Little	38%	63%	25%	76%	0%	12%	0%	25%	75%	0%
	Little	25%	12%	25%	12%	0%	12%	12%	38%	0%	25%
	Somewhat	25%	25%	38%	12%	25%	12%	12%	25%	25%	25%
	A great deal	12%	0%	12%	0%	75%	64%	76%	12%	0%	50%
Female	Very Little	60%	56%	18%	56%	0%	1%	1%	35%	51%	8%
	Little	30%	31%	42%	31%	5%	6%	6%	35%	34%	16%
	Somewhat	7%	10%	35%	12%	29%	37%	35%	27%	14%	27%
	A great deal	3%	3%	5%	1%	66%	56%	58%	3%	1%	49%
Married	Very Little	58%	49%	22%	68%	0%	2%	0%	37%	56%	13%
	Little	30%	39%	44%	25%	2%	10%	8%	37%	23%	15%
	Somewhat	10%	10%	34%	5%	32%	41%	43%	24%	21%	40%
	A great deal	2%	2%	0%	2%	66%	47%	49%	2%	0%	32%
Single	Very Little	63%	63%	15%	46%	0%	0%	2%	36%	50%	4%
	Little	31%	25%	40%	35%	6%	4%	4%	31%	40%	17%
	Somewhat	4%	10%	37%	19%	27%	33%	27%	31%	8%	17%
	A great deal	2%	2%	8%	0%	67%	63%	67%	2%	2%	62%

As the results show, there is little cooperation among the learners, most of whom see it necessary to have close relationship, though at present it is rare, most of them consider human communication to be an effective factor for learning and somehow they want to have their university to be a full-time university.

The responses of the learners to the following 10 learner-instructor questions (11 to 20) also show little interaction among the learners and their instructors (see Table 2). For a full analysis of the results, the marital dichotomy has also been shown in Tables 1 & 2. The results of the single males, of course, are not generalizable due to the number of the subjects involved.

11. How much do the professors know your name?
12. To what extent do the professors know about your personality and abilities?
13. How much do you consult to and take guidance from your professors inside the classroom?
14. How much do you go to your professors to take guidance outside the classroom?
15. How much do you think is professors' familiarity with students effective as a motivation for learning?
16. How much can the professors' personality be influential on students as an appropriate model?
17. How much do you believe in the necessity of friendly relationships between students and professors?
18. Comparing with a full-time university, how much do you think is Payame Noor University a suitable place for human relationships between students and professors?
19. How much do you cooperate with the professors in academic activities?
20. With no respect to academic issues and educational facilities and only concerning students-professors' relationships, how much would you prefer Payame Noor University to be a full-time university?

In the second type of questions, it is evident that the instructors' familiarity with the learners seems important for the learners, the instructors' personality is very important for the learners and almost 60% of them have taken this factor as an important one. Many of them see the instructors' relationship with the learners as vital, most of them think that this kind of university is not a suitable place for human relationship and almost most of them have no interaction with their instructors in academic affairs.

5. Discussion and Pedagogical Implications

The objective of this study was to analyze the interaction of learners and their instructors in Payame Noor University which is hypothesized to be static and not cooperative. The results of the interviews and the open questionnaires show that the learners have some problems and recommendations:

The problems:
- Being afraid of professors
- Stressful atmosphere of the class while the professor is asking questions
- Professor's inability to control the class
- The limitation of educational facilities
- Lack of friendly relationships between professors and students
- No participation in class activities in
- The great number of textbooks
- No exchange of information
- Not mid-term exam
- Inappropriateness of this university for majors such as English translation
- Not teaching oral skills
- Students' unfamiliarity with each other
- Professors' not paying attention to students' learning

- Few number of sessions during a term
- Young and inexperienced professors

Learners' recommendations:

- Having a friendly atmosphere in university
- Holding mid-term exam as a motivation for more studying
- Increasing the number of classes during a term
- Improving the student-professor relationship
- Emphasis on the importance of holding classes
- Having academic discussions
- Changing the educational system of Payame Noor University
- Giving tasks (such as projects, lectures, etc.) to students in order to improve their scores
- Providing a timetable at the beginning of each semester
- Taking care of professors' irresponsibility in holding classes on due time
- Holding make-up sessions
- Consistency in holding classes in the same place during the term
- Teaching the whole content of the textbooks
- Availability of book references
- Clarifying the definition of human relationships
- Learners' access to specific data banks

The pedagogical benefits of this research are both local and international. The local educators, syllabus designers, language teachers and policy makers in Iran may become more aware of the problems of English learners and construct better ways of dealing with the educational problems as far as there is a competitive situation among the English learners to enter a good university. Payame Noor University managers can motivate these learners by facilitating the problems and encouraging more research for that matter. Internationally, the post-modern trend of education is pressing toward a virtual kind of education with its own merits and demerits. The results of such researches may shed some more light on the dark side of distance education where the value of human interaction is going to gradually decline. More research, of course, with a lager sample, can be done in the related field and the results can be more generalizable.

References

Anderson, C. W. (1987). Strategic teaching in science. In B. F. Jones, A. S. Palincsar, D. S. Ogle & E. G. Carr (Eds.), *Strategic teaching and learning: Cognitive instruction in the content areas* (pp. 73-91). Alexandria, VA: Association for Supervision and Curriculum Development.

Bauersfeld, H. (1995). The structuring of the structures: Development and function of mathematizing as a social practice. In L. P. Steffe & J. Gale (Eds.), *Constructivism in education* (pp. 137-157). N. J.: LEA, Lawrence Erlbaum Associates, Publishers.

Bonwell, C. C., & Eison, J. A. (1991). Active learning: Creating excitement in the classroom. Washington, DC: ERIC Clearinghouse on Higher Education. The George Washington University.

Dewey, J. (1915). The school and society. (Rev. Ed.). Chicago: The University of Chicago Press.

Di Vesta, F. J. (1987). The Cognitive movement and education. In J. A. Glover & R. R. Ronning (Eds.), *Historical foundations of educational psychology* (pp. 203-233). New York: Plenum Press.

Gamoran, A., Secada, W. G., & Marrett, C. B. (2000). The Organizational context of teaching and learning. In M. T. Hallinan (Ed.), *Handbook of the sociology of education* (pp. 37-63). New York: Kluwer Academic/Plenum Publishers.

Gray, A. (1997) Constructivist teaching and learning. SSTA Research Centre Report #97-07. Regina, SK: Saskatchewan School Trustees Association. [Online] Available: <http://www.ssta.sk.ca/research/instruction/97-07.htm>.

Gullette, M. M. (1992). Leading discussion in a lecture course: Some maxims and an exhortation. *Change, 24* (2), 32-39.

Hillman, D., D. Willis, and C. N. Gunawardena. (1994). Learner-interface interaction in distance education: An extension of contemporary models and strategies for practitioners. *American Journal of Distance Education, 8* (2), 30-42.

Honeyman, M, & G. Miller (1993). Agriculture distance education: A valid alternative for higher education? *Proceedings of the 20th Annual National Agricultural Education Research Meeting*: 67–73.

Hyman, R. T. (1980). *Improving discussion leadership.* New York: Columbia Univ., Teachers College Press.

Johnson, D. W., Johnson, R. T. & Smith, K. (1991). *Cooperative learning: Increasing college faculty instructional productivity.* Washington, DC: ERIC Clearinghouse on Higher Education. The George Washington University.

Jonassen, D. H. (1995). Computers as cognitive tools: Learning with technology and not from technology. *Journal of Computing in Higher Education, 6*, 40-73.

Lowman, J. (1984). *Mastering the techniques of teaching.* San Francisco: Jossey-Bass.

Mazur, E. (1993). *Peer instruction: A user's manual.* Unpublished manuscript, Department of Physics, Harvard University, Cambridge, MA.

Meyer, C., & Jones, T. B. (1993). *Promoting active learning: Strategies for the college classroom.* San Francisco: Jossey-Bass.

McMahon, M. (1997). *Social constructivism and the World Wide Web - A paradigm for learning.* Paper presented at the ASCILITE conference. Perth, Australia.

Moore, M. (1989). Three types of interaction. *American Journal of Distance Education, 3* (2), 1-6.

Resnick, L. B. (1987). *Education and learning to think.* Washington, DC: National Academy Press.

Rhodes, L. K., and Bellamy, T. (1999). Choices and consequences in the reform of teacher education. *Journal of Teacher Education, 50*, 17-26.

Richardson, V. (2003). Constructivist pedagogy. *Teachers College Record, 105* (9), 1623–1640.

Richetti, C., & Sheerin, J. (1999). Helping students ask the right question. *Educational Leadership, 57* (3), 58-62.

Roblyer, M. D., Edwards, J., & Havriluk, M. A. (1997). *Integrating educational technology into teaching.* Upper Saddle River, New Jersey: Prentice-Hall, Inc.

Rorty, R. (1979). *Philosophy and the mirror of nature.* Princeton, NJ: Princeton University Press.

Santrock, J. W. (2001). *Educational psychology: International edition.* New York: McGraw- Hill Companies, Inc.

Schauble, L. (1990). Belief revision in children: The role of prior knowledge and strategies for generating evidence. *Journal of Experimental Child Psychology,* 49, 31-57.

Sokoloff, D. R. (1994). Enhancing physics learning in lecture with interactive, microcomputer-based demonstrations. *A AP T Announcer, 24,* 4-63.

van Heuvelen, A. (1991). Overview, Case Study Physics. *American Journal of Physics, 59*, 898-907.

von Glasersfeld, E. (1989). Cognition, construction of knowledge, and teaching. *Synthese, 80*, 121-140.

von Glasersfeld, E. (1991). Cognition, construction of knowledge and teaching. In M. R. Matthews (ED), *History, philosophy and science teaching* (pp. 117- 132). New York: Teachers College Press.

Vygotesky, L. S. (1962). *Thought and language.* Cambridge, MA: The M. I. T. Press.

Weimer, M. (2002). *Learner-centered teaching: five key changes to practice.* San Francisco, CA: Jossey-Bass.