

The Effect of Self-Directed Training on ESP Learners' Self-Directed Learning Readiness

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Abstract

The major role of self-directed learning (SDL) in a successful learning at distance education has been confirmed by various studies. Although learners pass General English courses before studying any ESP courses at distance education of Iran, they usually lack the preliminary skills for independent language learning. The current study aimed to explore the effect of self-directed training (SDT) on ESP learners' self-directed learning readiness (SDLR). Eighty-six B.A students (19 male and 67 female) studying English for Economy and Management at Tabriz Payam-e-Noor University participated in this study. A demographic questionnaire and Guglielmino's (1978) self-directed learning readiness scale (SDLRS) were implemented to select the participants of the control and experimental groups. The experimental group was provided with SDT in three different stages a) an introduction to SDL, b) SDT workshop, and c) SDT pamphlet. Then, a post-test of SDLRS was given to the two groups. ANCOVA was applied to analyze the data. The results revealed that SDT could enhance ESP learners' SDLR. The findings imply that an appropriate training is needed to improve learners' SDLR. Higher levels of SDLR can contribute to a successful ESP learning at Payam-e-Noor University in Iran.

Keywords: distance learning, ESP, self-directed learning, self-directed language learning, self-directed training

Introduction

In recent decades, the aim to make learners independent from teachers leads to a new concept in the system of education called "Distance Learning". As Petty and Johnston point out "distance learning takes place out of rigid boundaries of classroom, using a textbook accompanied by lectures on tapes, CDs, or online programs handed on a particular schedule to learners studying at home, with the aim to create a hybrid program by combining elements of learning at classroom and distance learning" (2002, p. 2).

Distance learning has been used for many years at developed and developing countries in the world. Even it has been used ever since Socrates (died 399 BC). It was applied in Iran by establishing Payam-e-Noor University in 1988. At this University, students study the materials provided to them independently. However, they are provided with some sessions to meet their teachers in order to ask them any questions they might have come across in their studies.

The main reason in conducting this research originated from my own personal experiences as an English language learner at Payam-e-Noor University. During my B.A. studies, I realized that many ESP learners came across problems in English learning. In many cases, they came to others or me as an English learner at Payam-e-Noor University for help. ESP learners at different courses used to question how they should improve and learn English language in their ESP modules.

Learning ESP is an eminent prerequisite for non-English majoring learners to act efficiently not only in their current education, but also in their future work. Therefore, learners spend a considerable time learning ESP during their B.A. studies. The need for learning ESP even gets more prominence thanks to the rapid changes and creation of new knowledge, and access to technology. ESP learners must keep abreast of new information, current issues, and technological aspects of their scientific studies. Therefore, they need to broaden their ESP abilities by updating their sources of information independently beyond what is needed to know about ESP in order to pass the entrance exams of the postgraduate studies. This effort can be labeled as self-directed learning (SDL).

SDL is defined by several scholars in different terms. For example, Knowles (1975) defines SDL as a process in which an individual learner takes the advantage to recognize his learning needs, establish learning goals, identify appropriate materials, implement relevant strategies in learning, and evaluate the learning progress, with or without the help of others. Hiemstra (1994) believes that SDL is any study in which an individual learner takes the responsibility to plan, implement, and evaluate his own learning process. Besides, Vann (1996) states that SDL is a learned phenomenon that is based on affective traits, love of learning and basic skills, and cognitive exercises. SDL is defined by Kumaravadevelu (2003) as a state of learning in which making all the decisions related to learning are shouldered by the learner; however, main factors in implementing the decisions are necessarily given by authorities. On the other hand, Smedley (2007) believes that SDL is an approach to learning

that relies on flexibility in time and place of learning and entrust responsibilities of learning to the learner.

Whereas SDL is common among all ESP learners, it could be a salient feature of ESP learners in distance learning. In such a setting, learners are obliged to apply SDL during their whole studies and cope with the requirements of this university. It is claimed that SDL is the essential factor in succeeding and accomplishment of courses in distance learning (Gearhart, 2002; Gan, 2004). However, as learners in Iran are accustomed to learn in formal education with a lock-step style for many years, learning in a SDL method seems very demanding to them. Therefore, they may confront problems in conducting SDL in their courses, in particular language learning courses.

Despite the plethora of literature developed in the area of SDL across the world, it seems that we are far from understanding the beneficial role of SDLL in distance learning of Iran. In order to keep the trends of SDLL, a helpful instruction of how to conduct SDL is required. This brings about a new kind of training named “Learner Training” which focuses on explicit teaching of techniques and procedures of learning a language and appreciation of strategies and their appropriate use to be a self-directed learner (Williams & Burden, 1997).

Several researchers implemented learner-training courses as an intervention program in various fields of study. They found that it enhances learners’ SDLR and achievements of main courses (Gearhart, 2002; Gan, 2004; Saha, 2006; Hunag, 2008).

The critical state of ESP learning at Payam-e-Noor University and the evident necessity for such training confirms the need for conducting research in this area. Hence, this research is going to tackle this issue via steps in training such students in self-directed procedures - afterwards termed ‘*self-directed training*’ (SDT) - and try to direct them toward SDLL. In this study, the major aim is to find the effect of SDT on ESP learners’ SDLR. Accordingly, the following research question was posed:

- Does self-directed training affect ESP learners’ degree of readiness for self-directed language learning?

Literature review

There is no doubt that formal education gained high value in most countries compared to SDL, but as Paul.E. Gray (cited in McGuinness, 2005, p36) believes "The most important outcome of education is to help students become independent of formal education." This is what exactly fostered in stating the great aim of distance learning in Iran that is to create equitable opportunities for learners to continue their education independently by their own effort. Truog (2004) suggests that learners should be equipped with rubrics and strategies of assessing learning environment and exploiting it in order to carry out a successful SDL. He believes that the culture of preparing learners for test should be substituted with a culture of preparing learners for the test of life i.e. SDL. SDL that leads to conducting independent studies is not totally a new concept in the field of learning (Grow, 1991). It can be traced back to the lives of Greek philosophers such as Socrates, Plato, and Aristotle (Hiemstra, 1994). However, the groundwork of SDL was laid during last three decades of 20 century by Tough, Knowles, Guglielmino, and Long (Hiemstra, 1994). Tough in his dissertation tried to analyze self-directed teaching activities that resulted in publishing a book, *The Adult's Learning Projects* in 1979. Knowles's two famous publications, *Self-Directed Learning* in 1975 and *Andragogy not Pedagogy* in 1968, provided definitions and assumptions as foundations for further researches. Guglielmino's (1978) dissertation leads to development of an instrument to measure SDLR by *Self-Directed Learning Readiness Scale (SDLRS)*. Finally, Long and his colleagues established an annual *International Symposium on Self-Directed Learning* in 1987.

All these works spawned numerous publications, researches, and instrument developments by other researches throughout the world. Gibbons et al. (1980) studied the biographies of 450 self-directed learners to propose principles for SDL. Long (1989) focused on the importance of building theory and principles for SDL in terms of sociological, pedagogical, and psychological dimensions. Candy (1991) illustrated the dichotomy of SDL as a process and as a goal. Brockett and Hiemstra (1991) proposed *Personal Responsibility Orientation (PRO)* model that focused on similarities and differences between SDL as an instructional method and as a set of personality characteristics. Hiemstra (1994) studied SDL in terms of learning and learner's ability or willingness to take the responsibility of learning and accepting its consequences. Hiemstra and Brockett (1994) explored how to overcome internal and external sources of resistance to SDL.

With accelerating interest in SDL, new roles were assigned to teacher and learners. Gibbons, Baily, Comeau, Schmuck, Seymour and Wallace (1980)

focus on the active role of learners in engaging at challenging activities rather than passive and abstract-theoretical activities. Tough (1967) emphasizes the shift of responsibility from teacher to learner in conventional learning and SDL. He asserts that the range of responsibilities varies along a continuum in which at one pole the maximum responsibility is shouldered by the teacher whereas at the other pole the maximum responsibility is shouldered by the learner.

Rothwell (1999) defines teachers' roles in SDL as facilitator, enabling agent, and resource agent. As a facilitator, teacher guides learners through providing strategies by which learners conduct their learning process to achieve specific goals. By adopting the role of enabling agent, teacher mediates with learners, provides means for pursuing learning process, and helps them to discover learning problem and find a solution to carry out SDL. As a resource agent, the teacher connects learners who have a problem in carrying out SDL with resources that can help them to solve the problems.

Despite the fact that teacher has a significant role in learning procedure, we should not ignore the primary role of learner as an individual who is eager to learn relevant materials in his own controlled, pace, time, and style. The learner and the teacher are taught as co-managers in the process of learning; therefore, teaching cannot automatically leads to learning because of the fact that learning is a personal construct controlled by individual learner (Kumaravadivelu, 2003).

Knowles (1990) acknowledges that some learners might not be familiar with SDL; therefore, they require time to adapt to SDL (as cited in Saha, 2006). Learners at any stage of self-direction can acquire a self-directed orientation toward language learning by adapting various steps proposed by several authors of SDL. SDL ability in learners can be facilitated by applying several steps such as introducing appropriate learning activities, creating opportunities for being independent, implementing facilitating methods, and assessment methods (Huang, 2008).

Carter (2001) acknowledges that the first phase of any training to facilitate SDL and autonomy in learners must be the exploring of learners' educational background. He contends that this investigation can determine the degree of learners' willingness to assume responsibility in learning.

Chamnot, Barnhardt, El-Dinary, and Robbins (1999) suggests four process of planning, monitoring, problem solving, and evaluating for language learning relevant to all skills of listening, speaking, reading, and writing (as cited in Kumaravadivelu, 2003). They asserts that beyond these processes learners'

awareness of learning strategies and teachers effectiveness in learner training are two major factors in conducting an independent language learning.

Considering all the above discussion, it is needed to provide learners with SDT that includes information about skills, strategies, and appropriate steps for managing SDLL process.

Methodology

Participants of the study

Eighty-six B.A students (19 male and 67 female) studying English for Economy and Management (ESEM) at Tabriz Payam-e-Noor University were selected to participate in this study. They were selected according to four major criteria. First, those who passed General English (GE) course were selected. Then, those who studied ESEM once and failed the final exam of university were discarded from the study. Moreover, those who were studying English in institutes more than 1 year were discarded. Finally, those who were not sure to attend in all sessions of ESEM course were discarded.

Having selected participants according to these criteria, the final participants were chosen according to the normal distribution of scores in General English course and SDLRS questionnaire.

Descriptive statistics of learners' GE scores displayed the mean score and standard deviation of 15.2 and 2.4, respectively. In order to have enough number of participants, scores between two standard deviations above and below the mean score of GE were selected. However, as those who failed GE were filtered in the first stage of selecting participants there are not any score between the ranges of 10.5-12.

Furthermore, in order to select participants based on their scores in SDLRS questionnaire, a descriptive statistics of SDLRS were calculated. The mean score and standard deviation of SDLRS scores are 220.5 and 18.9, respectively. Those scores between two standard deviations above and below the mean score of SDLRS were selected.

At last, the participants were divided into two groups and the homogeneity of two groups was confirmed by calculating an independent samples t-test of GE and SDLRS scores. Then, one group was assigned to the control group and the other to the experimental group arbitrarily. Table 1 represents the demographic distribution of the two groups.

Table 1

Participants in the Two Groups

		Gender		
		Male	Female	Total
Groups	Control	13	30	43
	Experimental	6	37	43
Total		19	67	86

Instruments

For data collection, a demographic questionnaire was prepared to elicit general information from students including name, age, gender, major, general English score, language learning experiences, etc. Guglielmino’s (1978) SDLRS was adopted as a pretest and posttest. Moreover, the scores obtained from this questionnaire were also used for selecting participants and homogenizing the two groups.

SDLRS is a 58-item scale, a highly valid and reliable questionnaire, used in more than 250 studies of SDL. The main focus of items are on 8 factors: openness to learning opportunities, self-concept as an effective learner, initiative and independence in learning, informed acceptance of responsibility for one’s own learning, a love to learn, creativity, future orientation, and the ability to use basic study skills and problem-solving skills. Each item have a 5-point likert format scale including almost never true of me, usually not true of me, sometimes true of me, usually true of me, almost always true of me.

Procedure

Data was collected from intact classes at Tabriz Payam-e-Noor University. Two questionnaires were distributed among learners and they were assured that all information would be confidential and would not have any effect on their scores. They were instructed to complete demographic questionnaire and then read the items of SDLRS. They were explained to read items and select one of

1-5 points according to their first impression of statement about their learning experiences.

Data obtained from the two questionnaires were analyzed to select the participants of the control and experimental groups. The experimental group received special treatment while the control group instructed by ESP teacher as is usual at Tabriz Payam-e-Noor University. Treatment was provided to the experimental group in three different stages. First, the experimental group was provided with the concept of SDL, SDL models, its relevant issues, and SDLL in three different sessions, each session lasting 20 minutes. In order to avoid any intrusion to learner's program, a workshop lasting one hour and a half was scheduled to teach the important issues of SDLL, skills and strategies, and steps necessary for a successful SDLL. Finally, the researcher decided to supply a pamphlet to the experimental group covering all the issues discussed earlier in the workshop.

Having provided the corresponding treatment, SDLRS questionnaire was given to the two groups after 6 weeks to check the effect of treatment. Data obtained from this questionnaire, used as posttest, were analyzed to check the difference of participants' SDLR before and after treatment in the experimental group. Moreover, it was used to check the difference between the control and experimental group regarding their SDLR.

Data analysis

All the data collected in different stages of conducting this research were analyzed by Statistical Package for the Social Sciences (SPSS) version 16.0 in order to carry out descriptive statistical procedure and further calculations.

ANCOVA was used to compare SDLRS scores of the control and experimental group. The reason for selecting ANCOVA was that it provides more details about any differences between and within groups regarding readiness for SDLL after providing treatment to experimental group, while controlling pretest scores of SDLRS in two groups. Significant level for all analysis in this study was set at $p < 0.05$.

Discussion

In order to get a general view of learners' SDLR, a descriptive statistics of pre-test SDLRS of the two groups is calculated. After testing homogeneity of the two groups, the pre-test mean score and standard deviation of control and experimental groups were 221.3721 and 14.95871; and 221.4186 and 17.75392, respectively.

According to Guglielmino (1978, p5), the mean score of 221 is classified in average level of SDLR. She concludes that learners in this level “are more likely to be successful in more independent situations, but are not fully comfortable with handling the entire process of identifying their learning needs and planning and implementing the learning”.

Following giving instruction of SDT to experimental group a post-test of SDLRS was implemented. The post-test mean score and standard deviation of control and experimental groups were 225.0233 and 14.49218; and 242.3256 and 16.46457, respectively.

In order to determine the existence of meaningful difference between pre-test and post-test scores of SDLRS, ANCOVA was employed. As Table 2 indicates Wilks' Lambda equals to 0.568 with F value of 63.773 (df=1, Error of df=84) and a significant value of 0.000. Because the significant amount is less than 0.05, it is confirmed that learners' post-test scores of SDLRS in the two groups has increased during conducting this research.

Moreover, based on the results provided in Table 2, Wilks' Lambda equals to 0.727 with F value of 31.486 (df=1, Error of df=84) and a significance value of 0.000. Because the significant amount is less than 0.05, it can be claimed that the difference of post-test and pre-test scores of SDLRS in experimental group is significantly more than that in control group.

Table 2

Multivariate Tests of Pre-test and Post-test SDLRS

Effect		Value	F	Hypothesis df	Error df	Sig.
Pre-test and Post-test of SDLRS	Wilks'	.568	63.773	1.000	84.000	.000
	Lambda					
Pre-test and Post-test of SDLRS * control and experimental groups	Wilks'	.727	31.486	1.000	84.000	.000
	Lambda					

Furthermore, according to Table 3 that displays a comparison between the two groups, the F value equals to 7.923 with a significant level of 0.006.

Table 3

Tests of Between-Subjects Effects of SDT

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Intercept	8904805.209	1	8904805.209	21815.631	.000
Group	3235.558	1	3235.558	7.923	.006
Error	34303.233	84	408.372		

The significance value is less than 0.05 that reveals that a difference can be observed in learners post-test scores of SDLRS in experimental group in comparison to those scores in control group. This difference can be traced back to implementing SDT to experimental group during studying ESEM course at Tabriz Payam-e-Noor University.

These differences of post-test scores and pre-test scores of SDLRS within and between two groups are clearly illustrated in figure 1. It is evident that post-test scores of SDLRS in two groups have been improved in comparison to pre-test scores of SDLRS. Moreover, this figure manifests the differences of post-test scores of SDLRS between experimental and control group, obviously.

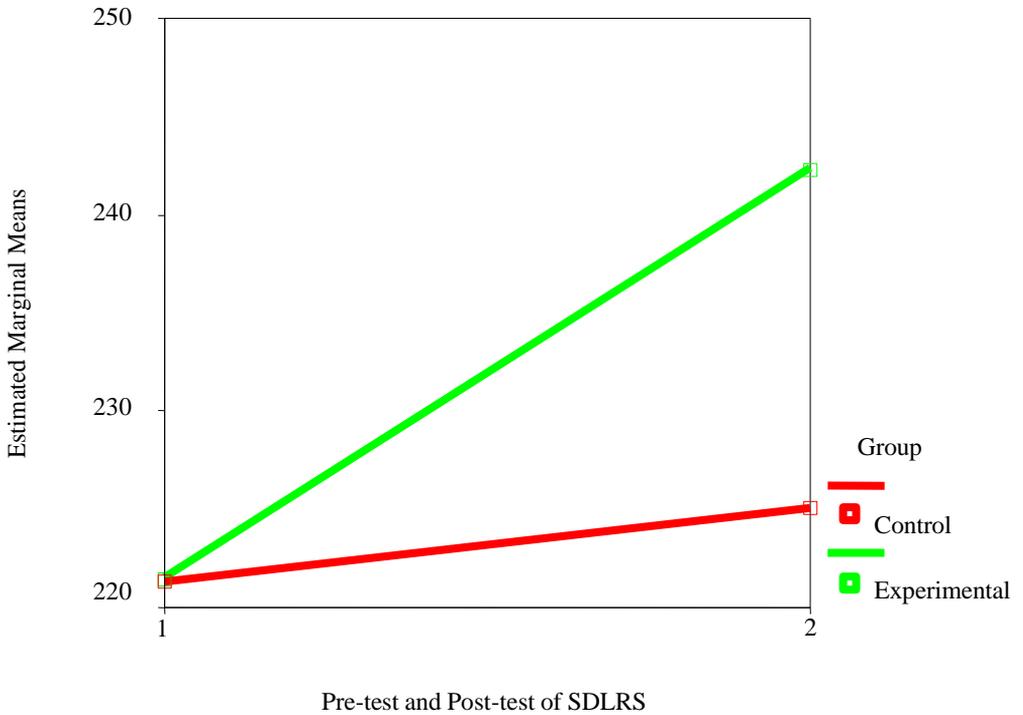


Figure 1: Differences of post-test and pre-test mean scores of SDLRS

Conclusion

With the advent of other forms of education such as distance learning, investigating factors that enhance learning in this educational system gained more importance. SDL one of the essential issues in distance learning was explored during recent decades by scholars.

This study aimed to find the effect of SDT in universities that incorporate this educational system in Iran. By implementing SDT on selected participants, it was revealed that SDT could improve ESP learners SDLR significantly. This research with the focus on providing SDT to ESP learners in distance learning highlights the role of teachers, learners, and material developers in exploring the state of SDLL and exploiting the information necessary to enhance learning in distance education of Iran.

Considering all the possible limitations of this study, some important points are suggested for further exploration in future. The researchers should repeat this study in other branches of Payam-e-Noor University in Iran with selecting participants randomly from various majors to explore the effect of SDT in different majors. Moreover, it is needed to repeat this study with sufficient time to provide SDT to learners and check the long time effect of it on learners SDLR and their ESP achievements. Further research is needed to investigate the effect of SDT on learners' ESP achievements and SDLR by taking in to account their motivation, self-confidence, socio-cultural factors, and age. Last but not least, it is essential to explore the effect of SDT on foreign language learning in distance education of Iran.

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