Autonomous Learning in an ESP Context: Students' Attitudes, Readiness and Efforts: A Case Study

SELAMA Sid Ali
Ecole Supérieure des Sciences Appliquées
Alger

Abstract

This study addresses the concept of learner autonomy in an ESP context. A concept that has been attracting scholars' attention on a worldwide scale since the 1980's. Our interest in autonomy within an ESP realm stems from the fact that most of ESP teachers who lecture in the Algerian Engineering studies institutions do not master the discipline students major in. Put simply, they are not Engineering-subject specialists. Consequently, we will argue, through this paper, that autonomy should be integrated into the ESP curriculum. However, researchers like Aoki (1999) hold that "the core of learner autonomy is a psychological construct" (p. 144).This quotation demonstrates the extent to which such a psychological dimension as students' attitudes is essential to the autonomous language learning process. Accordingly, this study attempts to explore ESSAA students' attitudes towards, and readiness for self-dependent ESP learning. It also unveils the activities students engage in both inside and outside the classroom within the framework of their perceived responsibilities. To this end, a survey questionnaire was distributed to a randomly selected sample of forty (40) Engineering students. The questionnaire was an adaptation of Cotterall's (1999) and Joshi's (2011) Learner Autonomy Questionnaires. Research findings are discussed with regard to students' needs appealing for future research and for innovations in the teaching/learning process.

1. Introduction

Based upon the need to more thoroughly address ESP-related issues, this paper first establishes a case for why ESP teachers should implement a student-centred learning mode. Then, it reports on the results of a study conducted to reveal students' attitudes towards, readiness for and activities of autonomous learning. As a matter of fact, ESP, as an approach for English language teaching/learning, is getting more and more researchers' interest all over the world including Algeria. The latter claim is proved by the increasing number of research articles, master/magister dissertations and PhD theses done by researchers to meet the identified need of specific groups of learners. Every single research work acknowledges the many key roles ESP course plays in one's academic, professional, occupational… career. Such roles, however, seem to be ignored by all Algerian scientific and technical studies departments, in that the time they allocate for ESP is a mere weekly ninety-minute class which usually takes place on Wednesday or Thursday afternoon: that is the end of the week.

Another fact worthy of mentioning is that ESP teaching makes additional demands on teachers who are, at the same time, course designers. In that, they expectedly design courses through cooperating with subject experts to "find out what students' needs are and what kind of tasks they will need to carry out in their professions" (Xu, 2012, p. 94).Not all this, however, is enough for the

engineering student in order to get ready for work. Because in its nature, engineering as a profession is applying the principles of mathematics, science and technology, which are inexorably evolving, in order to find workable resolutions to technical problems. Thus, learning and profession development are pressingly relentless for the engineer. Under these conditions, exhorting students to develop their autonomous learning skills should be important to teachers in every discipline, but it should be of particular importance to the teachers of those Engineering students who are learning English for specific purposes. Put differently, in helping students for professional life, teachers should not only be devoted to the teaching of language skills. But, they should also be committed to develop a life-long learning sense of their students, because "teachers can never teach "all there is to know", since new knowledge is created daily [...] Therefore, what people need in order to be able to maintain their ground in a rapidly changing world are skills that allow them to independently address new questions and new situations, integrate already acquired and new information, developing new" (Sercu & Raya, 2007, p. 7).In the same line of thought, Bransford(1979) contends that "if people can discover things on their own, they not only acquire new knowledge but also develop skills for effectively utilizing what they already know" (p. 243). Moreover, Belcher (2017) affirms that "learner-centeredness has been the priority of ESP since it

searliest days" (p.2). Inspired by the above stances, the present paper is an attempt to investigate the beliefs of a sample of 40 Algerian Engineering students about autonomous ESP learning. Although the study has been conducted at ESSAA, its insights could be valuable to the other Algerian colleges of Engineering and technical studies as well, since ESP should be the most widely used approach to teaching English in higher education institutions in Algerian and abroad as well.

2. ESP origins: a critical overview

Many scholars seem to concur that ESP came into existence after WWII when science and technology transfer became conditioned by the mastery of English, which in its own turn, was accepted as a global lingua franca. In this respect, Hutchinson and Waters (1987) argue that ESP emerged in unplanned and incoherent way. The increasing need, the writers explain, for an international language to keep up with both the expansion of international trade and advances in technology resulted in the need for specific language courses which paralleled the acceptance of English as the international language after the Second World War. Hutchinson and Waters put forward two other factors for the rise of ESP. The first one is the revolution in linguistics that was marked by the shift of attention from grammar of language to the use of language whose teaching became "tailored to specific need". The second

factor is the focus on learners' need and interests in learning (pp. 6-8). Bouabdellah (2014) portrays ESP as a response to such a number of practical concerns as:

> - The need to prepare growing numbers of non-English background students for study at American and British universities from the 1950s;
> - The need to prepare materials to teach students who had already mastered general English, but now needed English for use in employment, such as non-English backgrounds doctors, nurses, engineers, and scientists (p. 14).

Contrary to all the previously exposed arguments and assumptions that English language in general and ESP in particular was willingly and naturally given the status of the first international language through which political, economic, academic… concerns are communicated, some scholars believe in another history of ESP. In her book, *Critical English for Academic Purposes: Theory Politics and Practice*, Benesch (2001) questions the neutrality of English spread over the world and gives alternative grounds for the acceptance of English with such a prestige. She argues that many British and American governmental and private agencies either organized or funded conferences, teacher-training courses and other programs in different parts of the world to ensure the dominance of English over the other rival

languages, i.e. German and French. It follows from this latter assumption that English was planned to linguistically dominate the universal academic research for political and ideological motives. Benesch writes: "ESP did not develop inevitably and naturally. The 1971 Beirut conference is just one example of the conscious planning on the part of industry, aided by governments, foundations, and academic" (p. 30). The researcher continues to assert that the people who wanted English to receive such a universal acceptance saw it "as a ticket to the modern world" (p. 33). In the same vein, Philipson (1992) refers to an Anglo-American collaboration on the plan for "English language imperialism" which "facilitated global imperialism" (pp. 64-69). All what has been said so far does not lend support to the claim that ESP came into existence because of "three important factors: the expansion of demand for English to suit particular needs and developments in the fields of linguistics and educational psychology." (Hutchinson & Waters, 1987, p.8).

3. Learner Autonomy and ESP

So many efforts have been made by specialists to substantiate the effectiveness of Learner-Centred Approach in foreign languages teaching/learning. Hutchinson and Waters (1987) in their part, stress the significance and role of learners in designing and implementing the ESP course. The authors even expand

the concept of self-dependence from a philosophy of teaching/learning to a philosophy of life when they open chapter 5 of their book by citing a well know Chinese saying:

> Give a man a fish and you feed him for a day
> Teach a man how to fish and you feed him
> for a lifetime (p. 39)

Quoting such a saying implies that both writers strongly believe in creating a life-long and self-dependent learner rather than restricting the learning process to the classroom setting. Pirsl, Popovska & Pirsl (2013) argue that due to researchers' recent interest shift from what to learn into how to learn "autonomous learning and metacognitive strategies are suggested as the two basic essentials for teaching and learning ESP" (p.5). As far as ESP students are concerned, Dobrota (2009) concludes that since they are urged to master the professional English, ESP students "need to be given necessary guidance to become autonomous learners, able to cope independently with the various challenges in their working environment" (p. 511).

There are voices calling for a broader change in the EAP teaching/learning conditions by involving students in the design of ESP curriculum. Benesch (2001), for example, criticizes the traditional procedures of EAP teaching. She mainly addresses the professional' standpoint that EAP

"is not viewed as a vehicle for questioning or improving those conditions" (p. 49). The writer, then, proposes *students' rights analysis* through critical EAP as a solution. According to Benesch, *rights analysis* "assumes that each academic situation offers its own opportunities for negotiation" (p. 58). The researcher further explains that "critical EAP teachers do not know what might emerge but are prepared to help students enact their reactions in a thoughtful, cooperative, and communitarian fashion" (p. 58). Clearly then, what Benesch calls for is involving students in reciprocity and negotiation with their teachers about all what concerns their ESP course taking into account the prevailing academic, pedagogical, political and economic context in which the teaching/learning process is taking place. In Benesch's terms, "rights analysis is a theoretical tool for EAP teachers and students to consider possible responses to unfavourable social, institutional, and classroom conditions" (p.102). In an elaboration to Benesch's model of rights analysis, Ahmadvand, Barati & Ketabi (2015) write: "Critical EAP asks for students' ideas on present and future academic assignments to keep open the possibility of change; it helps students show their resistance, objections, or unwillingness, and helps them to exercise their democratic rights as members of an academic discourse community" (p. 7). This, however, raises many questions about student-teacher power relations.

4. The Psychological Dimension of Teaching /Learning Process

There is empirical evidence given by language teaching /learning scholars that learners' attitudes have an enormous influence on their learning achievements in general and developing autonomous learning strategies in particular. For example, Little (1991) argues that learner autonomy "entails that the learner will develop a particular kind of psychological relation to the process and content of his learning" (p.4). Therefore, Swales (1980, as cited in Stika, 1999, p. 33) recommends that ESP designers should know about their students' will to learn. He states: "it is very important for a course designer to know not only what his students can do and need to do but also to know what they would be willing to do or could be persuaded to do within the confines of their particular educational environment" (p.68). Hutchinson and Waters (1987) put forward a diagram (figure 01) through which they explain how important it is when the learner wants to learn. According to this diagram, the first step of learning is the learner's will to learn. To sum, learner's beliefs are so important when autonomy is to be implemented "simply because the beliefs and attitudes learners hold have a profound influence on their learning behaviour" (Cotterall, 1995, p. 1).

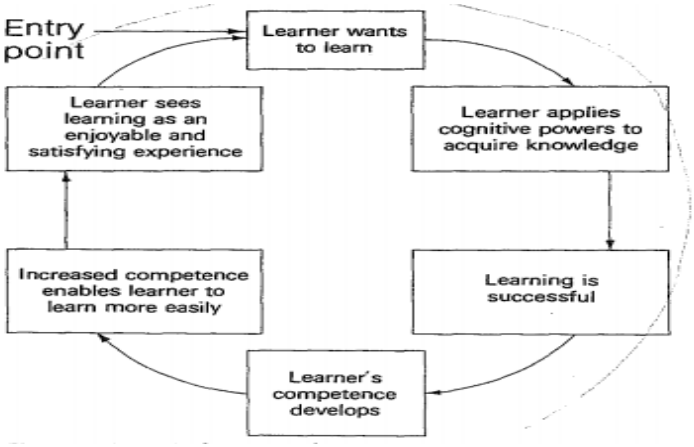

Figure1: A positive learning cycle. (Hutchinson and Waters, 1987, p. 47)

The concerned literature shows, however, that learner autonomy is not developed only on an individual scale but it can be also constructed at a social level. Put differently, learner autonomy can be either encouraged or discourages through individual and social discourses. In this respect, Nunan, Lai &Keobke (1999) argue that "the extent to which it is feasible or desirable for learners to embrace autonomy will depend on a range of factors from personality to the cultural context in which they find themselves" (p.70). In the same line of thought, Riley (1999) states the following: "the way we talk to children determines the kinds of learners they become"

(p.35). These two citations acknowledge the fact that developing learner autonomy is concerned with both the individual and social interactions.

5. Statement of the Problem

The growing interest in languages for specific purposes among applied linguists has made ELT researchers turn their attention to ESP. As far as the Algerian situation is concerned, learner autonomy in general and students' attitudes towards it in particular in the ESP curriculum has not been adequately addressed. Accordingly, we believe that revealing students' beliefs about and attitudes towards this learning trend is of a great importance to the whole teaching/learning as both cognitive and social process. In this regard, Hutchinson and Waters (1987) argue that learners, like all people, have their like and dislikes that should not be ignored because they may result in success or failure in learning. (pp. 46-47). The same idea is put by Hozayen (2011)who states the following: "exploring the learners' beliefs could help in explaining particular learners' success or failure in language learning as well as their degree of readiness to become self-directed, inquisitive and independent learners" (p. 117).

To fill the research gaps mentioned above, the present study aims to:

1. Identify ESSAA students' attitudes toward, and readiness for an autonomous language learning;

2. Explore ESSAA students' the activities students engage in both inside and outside the classroom within the framework of their perceived responsibilities.

6. Methodology

6.1 Participants

The present study was conducted at The High School of Applied Sciences of Algiers (L'École Supérieure de Sciences Appliquées d'Alger; Ex L'École Préparatoire Sciences & Techniques d'Alger).The sampling group consisted of forty (40) 2nd cycle 1st year students enrolled in Electrical Engineering. They have already had a two-year ESP course during the 1st cycle of their studying in one of the preparatory schools across the country. The subjects were all willing to participate in the study.

6.2 Instrument of the study

The instrument we used in this study is a questionnaire. It was adapted (with permission) from Cotterall' (1999) and Joshi's (2011) questionnaires on learners' beliefs about key factors in successful language learning that might reflect learners' autonomy. It consisted of 48 items. The items are divided into factors related to the

autonomous learning: the role of the teacher, the role of feedback, learner independence, learner confidence in study ability and students' activities.

6.3 Results

The study results are presented in this section. The data, which were mainly elicited from the survey questions, are reported in the following tables.

Factor 1: The Role of the Teacher

Items	Strongly agree		Agree		Neutral			Disagree	Strongly disagree	
(28) *I like the teacher to tell me what my difficulties are*	11	27.5 %	24	60 %	3	7.5 %	0	0 %	1	2.5 %
(29) *I like the teacher to tell me what to do*	8	20 %	15	37.5 %	10	25 %	5	12.5 %	2	5 %
(31) *I like the teacher to tell me how long I should spend on an activity*	7	17 %	14	35 %	8	20 %	7	17.5 %	5	12.5 %
(32) *I like the teacher to offer help to me*	13	32.5 %	19	47.5 %	6	15 %	1	2.5 %	1	2.5 %
(33) *The teacher should always explain why we are doing an activity in class*	20	50 %	16	40 %	2	5 %	1	2.5 %	1	2.5 %

Table 1: Students' beliefs about the role of the teacher

In commenting on the importance of the teacher, Table 1 shows clearly that the majority of subjects saw the teacher's role as consisting of identifying learners' difficulties (Item 28: 87.5%), telling them what to do in

their learning (Item 29: 57.5%), telling them how long they should spend on an activity (Item 31: 52%), helping learners learn effectively (Item 32: 80%), explaining the purpose of learning activities (Item 33: 90%). These results indicate that students see the teacher's role in language learning as dominant.

Factor 2: Role of Feedback

Items	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
(7) *It is important for me to be able to see the progress I make*	23	57 %	11	27.5 %	4	10 %	1	2.5 %	1	2.5 %
(8) *I need the teacher to tell me how I am progressing*	7	17.5 %	20	50%	7	17.5 %	4	10 %	4	10 %
(10) *I find it helpful for the teacher to give me regular tests*	9	22.5 %	15	37.5 %	9	22.5 %	6	15 %	1	2.5 %
(11) *I have my own ways of testing how much I have learnt*	1	2.5 %	13	32.5 %	8	20 %	15	37.5 %	3	7.5 %
(14) *Talking to the teacher about my progress is embarrassing for me*	2	5 %	13	32.5 %	8	20 %	10	40 %	7	17.5 %

Table 2: Students' beliefs about the role of feedback

The underlying meta-cognitive strategies which were also examined when questioning learners' readiness for autonomy include *evaluation* and *feedback* on their learning progress. Students' responses to Items 8 and 10 (see Table 2) reflect a great dependence on the teacher as a source of feedback. 67.5% agreed that they need the

teacher to tell them how they are progressing. Likewise, 60% of students incline to depend on the teacher in giving learners regular tests (Item 10: 60%), where as only 35% self-monitor their learning, which shows that students assign these responsibilities to the teacher. It should also be mentioned that 57.5% of the subjects responded they do not get embarrassed when talking to teacher about their progress.

Factor 3: Learner Independence

(7) *It is important for me to be able to see the progress I make*	23	57 %	11	27.5 %	4	10 %	1	2.5 %	1	2.5 %
(8) *I need the teacher to tell me how I am progressing*	7	17.5 %	20	50%	7	17.5 %	4	10 %	4	10 %
(10) *I find it helpful for the teacher to give me regular tests*	9	22.5 %	15	37.5 %	9	22.5 %	6	15 %	1	2.5 %
(11) *I have my own ways of testing how much I have learnt*	1	2.5 %	13	32.5 %	8	20 %	15	37.5 %	3	7.5 %
(14) *Talking to the teacher about my progress is embarrassing for me*	2	5 %	13	32.5 %	8	20 %	10	40 %	7	17.5 %

Table 3: Students beliefs about learner independence

Surprisingly, most of students agree with these statements which indicate that they are likely to be comfortable experimenting with new activities (65%), and to have clearly-defined goals (68%). Students'

responses demonstrate their propensity to operate independently with learning obstacles (Item 20: 62.5%). Subjects' affirmative response to Items 23 shows that they appreciate the difference between language learning and other types of learning. It can be inferred from the above data that these students are ready to be autonomous. They are probably dependent on their teachers or feel more secure when surrounded by them. It could be argued, however, that these students might occasionally use technical English textbooks, but are ready to study on their own and independently of the teacher.

Factor 4: Learner Confidence in Study Ability

Items	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
(3)*I know how to study languages well*	0	0 %	13	32.5%	16	40 %	7	17.5%	4	10 %
(4)*I know how to study other subjects well*	1	2.5 %	18	45 %	17	42.5%	3	7.5 %	1	2.5 %
(18) *I expect to be successful in my language learning in the future*	11	27.5%	22	55 %	6	15 %	1	2.5 %	0	0 %

Table 4: Students beliefs about their confidence in study ability

These items concern the learners' confidence in their overall ability to learn a language, as well as their ability to achieve more specific language goals. Table 4 indicates that almost one third of the subjects (32.5%) believe they know how to study languages well (Item 3). While 40% of the informants were undecided about their ability of language learning, 27.5% of them, however, were considerably less confident of their learning ability. It must be noted that reporting of group responses to Item 4 may reflect a success or failure to recognize the difference between the skills and knowledge required to succeed in language learning and those required for success in other subjects. Table 4 clearly shows that the subjects' confidence was higher on other subject learning ability (4with 47.5%) than that of the general language learning ability (Item 3, with 32.5%). Students' responses to Item 18 reflect that the majority of them (82.5%) have a high confidence to be successful in studying language in the future.

Factor 5: Autonomous Learning Activities

Items	Never		rarely		Some times		Often		Always	
(36) *I make good use of my free time in studying English*	8	20 %	12	30 %	14	35 %	3	7.5 %	3	7.5 %
(37) *I preview before class*	17	42.5%	15	37.5 %	6	15 %	2	5 %	0	0 %
(38) *In the class, I try to use every opportunity to take part in the activities where and when I can speak in English*	4	10 %	1	2.5 %	16	40 %	14	35 %	5	12.5 %
(48) *Besides the contents prescribed in the course, I read extra materials in advance*	11	27.5 %	17	42.5 %	8	20 %	3	7.5 %	1	2.5 %

Table 5: Students autonomous learning activities

The data also shows interesting responses about students' independent work habits in language learning (Table 5). Twenty per cent of them do not make use of their free time in studying English and thirty percent rarely do this. Regarding Item 37 -I preview before class- 42.50% rarely use it as their part of autonomous learning activities. 37.5% of them use it only rarely and 15% use it sometimes. Only two students often preview before class and no one do it always. Table 5 indicates that Item 38 is

sometimes and often practiced by the majority of subjects i.e. 40% and 35% respectively. 12.5% of the population also answered that they always practice this activity. There only four students who never do it and those who rarely do so remain 2.5 % of the subjects. Item 48 was prepared to see if students read extra materials besides the contents included in the course. The results show that only a minority (i.e. 2.5%) of them always undertook the activity. The majority rarely do it, while 27.5% never practice it.

7. Discussion

The role of the teacher: the majority of students agreed on the significance of the teacher's role. These results show that students still think that they cannot successfully learn a language without dependence on the teacher. Students' beliefs that the teacher should be at the center of their learning and that s/he is capable enough to plan their learning goals might be the consequence of a teaching philosophy. That is to say, the education these students have received all along their learning process might have been teacher-dominated.

The role of feedback in language learning: students' responses to the items that reflect students' perceptions about *the role of feedback in language learning* showed their belief in the teacher as an external source of feedback. However, "their agreement need not necessarily be associated with dependence on the teacher.

Rather, it could reflect an understanding of the importance of monitoring progress and a recognition of the assistance a teacher can provide in that process" (Cotterall, 1995, p.).

Learner independence: students' agreement with the statements indicates that they are likely to have clearly-defined goals, and to be comfortable experimenting with new activities. However, a number of obstacles to learner independence have been identified. As aforementioned, culture and educational background interact as they contribute to learners' beliefs about the role they should play. It may be reasonable to argue here that having the willingness to plan their learning goals renders those students autonomous to a certain degree.

Learner confidence in study ability: Students' efficacy beliefs are strongly correlated with learning achievements. Students with high *self-efficacy* believe that they can learn well and believe they have a certain degree of control over learning process. In her study, Cotterall (1999) links respondents' lack of confidence in study ability, identified in *Factor 4*, to their inability to use strategies for self-monitoring and self-evaluating identified in the items that investigated the role of feedback. Among the beliefs that students hold which have a direct impact on their confidence refer to beliefs about the lack of language learning skills.

Autonomous learning activities: seem to engage in autonomous activities "never" or "rarely" rather than "often" or "always". Students' engineering-subjects-overloaded program, which devotes a limited time to ESP, in addition previous studying habits learned in high schools, and the classroom activities carried out by previous teachers, particularly those with traditional teaching styles, may be a cause of this behavior.

Conclusion

In order for ESP students to be able to cope independently with the various challenges in their working environment and pursue their academic and professional development even after graduation like attending in-service professional training events or writing reports on professional-related issues, they need to develop their autonomous learning skills. This, more likely than not, implies that ESP teachers are expected to engage their students in a more student-focused teaching/learning environment. However, engaging in such a learning mode requires a certain level of willingness and readiness so that students have the right learning behaviour. Therefore, the present study aimed at revealing a sample of ESP students' attitudes towards, readiness for and practices related to autonomous learning. To reach this aim, we based our survey on eliciting information from forty (40) Engineering students by means of questionnaire.

The analysed data showed encouraging signs of students' willingness to engage in an autonomous ESP learning mode. However, students' responses to the items that investigated their views on the role of the teacher and the role of feedback indicated that they still believe in teacher as the centre of teaching/learning process. Another important elicited data, which relate to the area of students' confidence, indicated that the majority of respondents expressed low confidence in their general ability to learn a language.Concerning the area of autonomy-oriented practices, Informants declared that they do not tend to engage in self-dependent learning activities. Such a condition calls teachers to work on how to encourage students to change their learning behaviours. The obtained results prove that students' perceptions on learning styles are so crucial that teachers should be aware of the impact they may have on learning behaviors. Therefore, teachers, as pointed to by Chen (2016), may try to "change ESP learners' attitudes towards their own learning abilities by showing them that their failures can be attributed to the lack of effective strategies rather than to the lack of ability or to laziness" (p. 620).Finally, teachers are recommended to provide autonomy-oriented instructions of ESP learning and find what kinds of strategies are useful and effective for students to acquire the needed professional English.

References

AHMAD M. BARAT. H. & KETABI S. 2015. Rights Analysis of ESP Courses: Towards Democratizing ESP Education. *English for Specific Purposes World*.46. Pp 1-13.

BELCHER D. 2017. Recent Developments in ESP Theory and Research: Enhancing Critical Reflection and Learner Autonomy through Technology and Other Means. In N. Stojković. M. Tošić & V. Nejković (Eds.) *Synergies of English for Specific Purposes and Language Learning Technologies*. (pp. 2-19). Newcastle upon Tyne, UK: Cambridge Scholars Publishing.

BENESCH S. 2001. *Critical English for Academic Purposes: Theory, Politics, and Practice*. Mahwah, New Jersey: Lawrence Erlbaum Associates.

BOUABDELLAH F. H. 2014 A Course Design in ESP: The Case of Master's Students in the Department of Biology University of Tlemcen. Unpublished PhD Thesis. University of Tlemcen.

BRANSFORD, J. D. 1979. Human cognition: Learning, understanding and remembering. Belmont: Wadsworth Publishing.

CHEN Z. 2016. "Grammar Learning Strategies Applied to ESP Teaching." *Theory and Practice in Language Studies*. 6(3).Pp. 617-621.

Cotterall.S.1995.Readiness for Autonomy: Investigating Learner Beliefs. *System*. 23(2). Pp. 195-206.

COTTERALL S. 1999. Key Variables in Language Learning: What Do Learners Believe aboutThem? *System*. 27(4). Pp. 493-515.

DOBROTA C. 2009. Learner Autonomy for ESP Adult Course. *Diacronia* 24(2), www.diacronia.ro /indexing/ details/ A3422/pdf

HOZAYEN G. 2011. Egyptian Students' Readiness for Autonomous Language Learning. In D. Gardner (Ed.), *Fostering autonomy in language learning* (pp. 15-25). Gaziantep: Zirve University. Retrieved from http://ilac2010.zirve.edu.tr

HUTCHINSON T. & WATERS A. 1987. *English for Specific Purposes: A Learner-Centred Approach*. Cambridge: Cambridge University Press.

JOSHI K. R. 2011. "Learner Perceptions and Teacher Beliefs aboutLearner Autonomy in Language Learning." *Journal of NELTA*.16(1-2). Pp. 13-29.

Little. D. 1991. *Learner Autonomy 1: Definitions, Issues and Problems*. Dublin: Authentik.

NUNAN D; LAI J; KEOBKE, K. 1999. "Towards Autonomous Language Learning: Strategies, Reflection and Navigation." In S, Cotterall & D, Crabbe (Eds.), *Learner Autonomy in Language Learning: Defining the Field and Effecting Change* (pp. 69-78).Frankfurt: PETER LANG.

PHILIPSON R. 1992. *Linguistic Imperialism*. Oxford: Oxford University Press.

Pirsl D. POPOVSKA S. & PIRSL T. 2013. Critical Thinking, Autonomous Learning and Metacognitive Strategies in ESP Science Teaching. *International Journal of Scientific Engineering and Research*. 1(2). Pp. 1-6.

RILEY P. 1999. On the Social Construction of 'the Learner'. In S. Cotterall & D. Crabbe (Eds.) *Learner Autonomy in Language Learning: Defining the Field and Effecting Change*. (pp. 29-39). Frankfurt: PETER LANG.

STIKA G. 1999. "The Role of Needs Analysis in English for Specific Purpose."*TEFLIN Journal*. 10(1). Pp. 31-47.

XU L. 2012. "The Application of Learner Autonomy Theory and Model into ESPTechnology-assisted Curriculum Construction." *International Journal of English* Linguistics. 2(5). Pp. 94-100.