World Applied Sciences Journal 18 (10): 1347-1354, 2012
ISSN 1818-4952

DOI: 10.5829/idosi.wasj.2012.18.10.2272

Teachers' Attitude Toward Using the Subcategories of Learner Control Strategy

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Abstract: The aim of this study was twofold; the first was to determine the using levels of learner control strategy among the teachers according to their field about using option of the usage suitable strategy and skill (control of the strategy and skill) covered by learner control strategy and the other was to determine the course teachers' using levels of the option of responsibility of learners own learning. The participants of this research were 219 teachers teaching in Adana-Turkey state primary schools in 2010-2011 education year. Data were gathered by administering Learner Control Strategy Questionnaire for teachers developed by the researcher. The ANOVA results revealed no significant differences between the usage about option of the usage suitable strategy and skill (control of the strategy and skill) and the option of responsibility of learners own learning according to the fields of the teachers and their length of service.

Key words: Learner control strategy · Active learning · Constructivism · Learning strategies · Instructional strategies

INTRODUCTION

Learning process is considered not a passive process rather so active that both teacher and learners should work together. In today's societies, it is vital for the individuals that they have not only basic knowledge and skills but also they have the ability of thinking, interpreting, analyzing, evaluating and solving the problems when they need arises. For this reason teacher should differentiate their instructional approaches as also stated by other researchers Saban [1]. Teaching content of micro-level selecting, editing, moving, merging and recommendations about level with the macro summaries has been developed for this purpose Reigeluth and Stein [2]. Some of the instructional designers state that if learners make selection, teaching strategies and techniques, the learners can raise their motivation and they are aware of the responsibility of learners own learning, which encourage their involvement Williams [3].

Learners are not passive recipients in teaching and learning environments. However, in traditional classes, learners are considered as the passive recipients which affect both the teachers' instructional approaches and learners' learning styles so the problem of the research: if the appropriate level authority control and responsibility are given to students whose motivation at the top level within their own learning, the effectiveness and attractiveness of teaching may increase. Students should be free about using suitable strategy and skill and they should control the strategy and skill. They should choose the teaching strategies and ordering the contents in the strategy of learner control. They should also have the ability of controlling their own learning and studying so that they can be aware of the responsibility of their own learning Reigeluth [4]. Learner control is the opportunity and ability to directly influence and determine decisions related to the educational process Baynton [5]. In such kinds of events, usage suitable strategy and skill in addition control of the strategy and skill of learner and control of the learning process are factors.

Learner Control: Learner control includes strategy selection and using the selected strategies to fulfill the needs of learners during teaching process which enable learners to perform well. During this process the more the learners can choose, order and improve his ability the more they control their own learning. Teaching process involves comprehending and improving teaching methods, which in turn help learners control themselves in a possible way during learning process. According to Reigeluth [6], the purpose of teaching is to make teaching process to be more effective, more productive and more

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attractive. According to Reigeluth [4] learner can choose the control about elements of teaching strategy and a macro prescriptive framework for selecting, sequencing, synthesizing and summarizing the content. In addition, learner control increase learner's performance and also learner control can be used in some level in every teaching Merrill [7]. It is not important supplying learner control strategy, rather using this strategy is more important. Merrill's [8] categorizes level of student's control as 1.Content control 2. Control of pace 3. Display (strategy) control. 4. Control of internal processing. Learners develop an internal process triggering their own learning, so they use metacognition and they aware of their own cognitive structure and learning features. According to Gage and Berliner [9], Klausmeier [10] metacognition is the knowledge about learner's own cognitive system, structure and study. In other words, metacognition involves learners' awareness of their own internal process about their own success of in learning process.

Learner control strategies' options can be described as opportunities to analyze learners' own comprehension and needs and to use instructional components according to analyzed needs. For instance, if teacher allows students to choose their own group partners, it can be described as a learner control option. Learner control enable learners to determine the teaching strategies and to decide on cognitive strategies and they can also gain appropriate strategies and skills during such a process Merrill [8]. Santiago and Okey [11] emphasized that learner control is effective in about the control of content, control of pace, control of strategy, control of internal processing (metacognition), control of decision, exercise, kind, time and amount with a little or completely alternative installation of the responsibility in the scope of instructional design.

In addition Cook [12] learner control is a strategy learners use to make decisions about teaching process during which learners control their own learning process. Research on learner control can be classified into two categories. The first one examines the effects of learner control strategies by having students choose and control one or more instructional options such as pacing, sequencing, amount of practice, difficulty level, reviewing, content selection, completion time, feedback and instructional strategies (Kinzie, Sullivian and Berdel [13] ; Klein [14] ; Lopez and Harper [15]; Steinberg [16, 17]; Yang [18]. The other deals with the relationships between learner control and learner characteristics other than instructional options, such as general ability, prior knowledge, cognitive style and locus of control Yang [18].

Learning Strategies and Study Skills: Understanding style of learning, learning strategies and study skills may help for more effective learning. Learners should become aware their preference for using their visual, auditory, or kinesthetic modality for learning new information Wong [19]. And teachers should give permission to students for using their learning styles, learning strategies and study skills in addition they become aware of their own responsibility of his or her own learning. They should improve their self-esteem in addition they should take control of their life Pauk [20]. This is the most essential item for learning process. Learning is an individualized process which includes different educational and background experiences, personality traits, levels of motivation and numerous other variables affect the way learners learn. Processing information of memory system is crucial item for learning strategies and study skills and this process covers paying attention to incoming sensory input, limiting the number of items and the speed at which you take in stimuli, discovering meaning, significance and interest in new information, using elaborative rehearsal techniques, avoiding use rote memory when you rehearse, making a conscious effort to think about related categories and to create associations, allowing ample time to practice frequently. A weekly time management schedule, daily schedules, task schedules are detailed plan that serves as a guide for planning study time. Goals are important for learning process. Goals are student's road map and the other items which are important for learning style and also learning strategies is making adjustment in the study area for instance noise level, lighting, creating concentration. Learners should boost their memory and prepare for tests. They should combat the process of forgetting. Active reading is the process of engaging learner's mind in the reading process with the ultimate goal of understanding, learning and using or applying information. Active reading is an essential skill of study skills. Learners should strength their comprehension. Taking textbook notes, listening and taking lecture notes, visual note taking systems are the important process. Learners should choose their note taking system. Developing strategies for objective test, math and essay test are the other crucial study skills for the study process.

Learner Control and Constructivism: Learner control provide students with a wide number of employing strategy options or complete responsibility in teaching and learning environment Santiago and Okey [11]. According to constructivist view, learning is a constructing process based upon a particular object,

event, the fact outside the world or concept about structure, his/her information in his/her mind or at least interpreting the process referring the experiences of the previous configuration Jonassen [21]. The learners can have beliefs about something which have already been constructed and these are affected by things such factors the social and cultural environment they are grown up. Human mind can use a filtering system in the interpretation process which is based upon the attitudes, beliefs and values obtained in advance from the outside of the world according to events, cases and concepts Deryakulu [22].

Individual experiences are the results of their previous information (prior knowledge) to which they refer when they interpret and unify the information. In this way learner and individual make information internal and unique. Every individual has different and unique information structure resulted from the fact that every individual has individual information and experience. Every individual perceives, assimilates and makes construction according to their own memory. Learner control strategy helps learners build the cognitive structure which equip them to comprehend complex situations much easier to comprehend, through either directive or constructivist approach. Constructivists approach is the organization of activity which is fundamentally self-referent and self repeating; people continually experience and monitor their sense of personal identity.

Learner Control and Computer Assisted Instruction: The role and the abilities of personal computer technology are becoming more and more varied in society today. Ideally, education would be able to this multi-abilitied technology to its incredible variety of students Miller [23]. Computer based training designs allow users to exert significant control over sequence of learning, content and pace of instruction Bell and Kozlowski [24]. Among the researchers studying on the effectiveness of learner control in computer-assisted instruction. Lunts [25] reports that the amount of learner control affects the effectiveness of the method, with greater control associated with improved creativity and learner initiative. The same author also reports that, the common idea is that learner control is a useful tool for adapting a learning environment to students' need. Learner control strategy positively affects motivation and the amount of effort invested in the learning task Perez, Kester and Van Merrienboer [26].

Learner control, computer assisted instruction and student-centered teaching have been intriguing the researchers in teaching and learning environment. Learner control has become an important strategy in computer-assisted learning and student-centered instruction, because individualism is effective for learners in both instructions. Computer-assisted learning provides choosing (selection) of content, exercise, kind and speed so that individuals may control their own learning process in their own speed with the aid of computers.

AIMS: The using levels of teachers about option of the usage suitable strategy and skill (control of the strategy and skill) covered by learner control strategy and the option of responsibility of learners own learning selected two aims of this research, so that the following questions were asked for this ultimate aim;

- Is there any significant difference between the fields of the teachers and the usage level of option suitable strategy and skill (control of the strategy and skill) contained by learner control strategy?
- Is there any significant difference between the fields of the teachers and the usage level of option responsibility of learners own learning contained by learner control strategy?

Methodology: A correlational research design is used in this study. Both quantitative and qualitative methods of descriptive data collection were administered. The using levels of the course teachers about using option suitable strategy and skill (control of the strategy and skill) and the using levels of the option responsibility of learners own learning covered by learner control strategy were studied in this study. The researcher visiting the schools collected the data on his own during one month. Frequency, percentage and the results of one-way ANOVA and Levene test were taken into consideration in the analysis of data performed by using SPSS for Windows 11.5.

Instruments: The questionnaire was developed and applied in Turkish language to the teachers by the researcher. Data which was concerned about development of the questionnaire investigated by factor analysis consisted Kaiser- Meyer Olkin (KMO) and Bartlett test was used for the validity of the questionnaire, cronbach alpha is used for the reliability of the questionnaire's internal consistency.

Table 1. The items of the Learner Control Strategy Questionnaire

Participants: The participants of this research were 219 state primary school teachers study (teach) in Adana (Turkey) state primary schools located in the center of Adana in 2010-2011 education year. They are chosen by randomly. Table 2. Information about the teachers

The frequency and percentage values of teachers are presented in Table 2, 91 men and 128 women teacher participated in this research. In addition 123 class teachers, 20 Turkish teachers, 20 English teachers, 16 Math teachers, 15 Science teachers, 11 Social Sciences teachers, 9 Religion and Morals teachers, 5 Computer and Technology teachers, participated in this research. The group whose length of service ranging between 16 and 20 years was the most crowded teacher group in this research. The working experience of the second most crowded teacher group was between 21 and 25 years. The third group was between 26-30 years and the least crowded (group) was 36 years and above. Most crowded teacher group was class teacher. In addition Table 2 displays percentage values of information about the teachers.

Findings: Table 3 displays ANOVA results of the teachers' fields according to learner's option of the usage suitable strategy and skill covered by learner control strategy. Item 27, Item 28, Item 19, Item 25, Item 15 and Item 26 are examined. These items seek answers to using suitable strategy and skill as a component of learner control strategy. The results of factor analysis indicate that Item 27, Item 28, Item 19, Item 25, Item 15 and Item 26 were correlated with the usage suitable strategy and skill (control of the strategy and skill) as a component of learner control strategy.

Table 3. The analysis results of one-way-ANOVA related to teachers' field about Item 27, Item 28, Item 19, Item 25, Item 15 and Item 26.

Table 3 displays the analysis results of one-way-ANOVA related to teachers' field about item 27, Item 28, Item 19, Item 25, Item 15 and Item 26 are about usage option of suitable strategy and skill. $F(7\text{-}211) = 1.893$, sig.(p-value) = 0.961; $p>0.01$. There is not significant differentiation between the fields of teachers and the item 27. $F(7\text{-}211) = 0.552$, sig.(p-value) = 0.794; $p>0.01$. There is not significant differentiation between the fields of teachers and the item 28. $F(7\text{-}211) = 1.724$, sig. (p-value) = 0.105; $p>0.01$. There is not significant differentiation

Table 1: The items of the Learner Control Strategy Questionnaire

Items of the questionnaire
1. I ask my students to express their views and opinions on my teaching methods.
2. I ask my students to express their views and opinions on the speed of my lesson presentation.
3. I ask my students to express their views and opinions on whether they need prerequisites of the lesson.
4. I ask my students to express their views and opinions on whether they need giving examples.
5. I ask my students to express their views and opinions on whether they need more exercises.
6. I ask my students to express their views opinions on whether they a summary of the lesson.
7. I ask my students to express their views and opinions on whether they need any repetition during my presentation.
8. More than half of my students know and use the strategies they need.
9. My students have a background knowledge necessary for the lesson.
10. I ask my students to express what they mean
11. My students can work on exercises they like
12. My students can work on as many exercises as want.
13. My students can express their views on how long the lesson should last.
14. My students know what to learn during the lesson.
15. My students, apart from me, get help from guidance counselor, advisor and/ or other teachers.
16. In addition to the course books, my students can access the other learning sources such as the books in library, software, internet and etc.
17. My students can afford lesson materials.
18. My students can decide on due time to submit their performance and projects assignments.
19. My students can think over how they should study when they want to learn a topic.
20. My students are aware that they are responsible for their own learning.
21. My students can decide on what course they should take.
22. My students can choose what topic, unit or part of unit they want to study.
23. My students can ask what they do not understand during the lesson.
24. I respect to my students decisions(thoughts).
25. My students can try out different ways in learning a new topic.
26. More than half of my students have critical study skills.
27. How to learn is important to my students.
28. My students can decide on how to learn during the lesson.

Note: The questionnaire items ranged from item 1 to item 28

Table 2: Information about the teachers

Gender	*f*	%
Man	91	41.6
Woman	128	58.4
Fields of the teachers	*f*	%
Class teacher	123	56,2
Turkish Teacher	20	9,1
Math Teacher	16	7,3
Science Teacher	15	6,8
Social Sciences Teacher	11	5,0
Religious and Morals Teacher	9	4,1
English Teacher	20	9,1
Computer and Tech. Teacher	5	2,3
Length of Service	*f*	%
1-5	22	10
6-10	28	12,7
11-15	27	12,4
16-20	42	19,2
21-25	41	18,7
26-30	29	13,2
31-35	26	10,6
36 and above	4	1,9

F : Frequecy% : Percentage value

Table 3: ANOVA results of the teachers' fields according to usage about learner's option of the usage suitable strategy and skill covered by learner control strategy about Item 27, Item 28, Item 19, Item 25, Item 15 and Item 26.

Items	Sum of Squares Between Groups	Sum of Squares Within Groups	Sum of Squares Total	Sum of Squares Between Group df	Sum of Squares Within Groups df	Sum of Squares Total df	Mean Square Between Groups	Mean Square Within Groups	F	Sig.
27	12.685	201.946	214.630	7	211	218	1.812	0.957	1.893	0.072
28	4.615	252.079	252.079	7	211	218	0.659	1.195	0.552	0.794
19	13.449	235.135	248.584	7	211	218	1.921	1.114	1.724	0.105
25	4.851	269.377	274.228	7	211	218	0.693	1.277	0.543	0.801
15	29.364	329.248	358.612	7	211	218	4.195	1.560	2.688	0.015
26	7.405	182.074	189.479	7	211	218	1.058	0.863	1.226	0.290

Note: F(7-211) = 1.893, sig.(p-value) = 0.961; P>0.01. There is not significant differentiation between the fields of teachers and the item 27. F(7-211) =0.552, sig.(p-value) = 0.794; P>0.01. There is not significant differentiation between the fields of teachers and the item 28. F(7-211) = 1.724, sig.(p-value) = 0.105; P>0.01. There is not significant differentiation between the fields of teachers and the item 19. F(7-211) = 0.543, sig.(p-value) = 0.801; P>0.01. There is not significant differentiation between the fields of teachers and the item 25. F(7-211) = 2,688, sig.(p-value) = 0.015; P>0.01. There is not significant differentiation between the fields of teachers and the item 15. F(7-211) = 1.226, sig.(p-value) = 0.290; P>0.01. There is not significant differentiation between the fields of teachers and the item 26.

Table 4: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
S27	1.104	7	211	0.362
S28	0.429	7	211	0.883
S19	1.207	7	211	0.300
S25	1.599	7	211	0.137
S15	0.687	7	211	0.683
S26	1.091	7	211	0.370

Note: sig.(p-values) P>0,05. The distribution provides homogeneity of variance.

Table 5: ANOVA results of the teachers' fields according to usage about learner's option the responsibility of his/her own learning covered by learner control strategy about Item 27, Item 28, Item 19, Item 25, Item 15 and Item 26.

Items	Sum of Squares Between Groups	Sum of Squares Within Groups	Sum of Squares Total	Sum of Squares Between Groups df	Sum of Squares Within Groups df	Sum of Squares Total df	Mean Square Between Groups	Mean Square Within Groups	F	Sig.
S23	0.982	171.767	172.749	7	211	218	0.140	0.814	0.172	0.991
S17	8.820	198.066	206.886	7	211	218	1.260	0.939	1.342	0.232

Note: F(7-211) = 0,172, sig.(p-value) = 0,991; P>0,01. There is not significant differentiation between the fields of teachers and the item 23.

F(7-211) =1.342, sig.(p-value) = 0,232 ; P>0,01. There is not significant differentiation between the fields of teachers and the item 17.

Table 6: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
S23	0.710	7	211	0.664
S17	1.162	7	211	0.326

Note: sig.(p-values) P>0,05. The distribution provides homogeneity of variance.

between the fields of teachers and the item 19. F(7-211) = 0.543, sig. (p-value) = 0.801; p>0.01. There is not significant differentiation between the fields of teachers and the item 25. F(7-211) = 2.688, sig.(p-value) = 0.015; p>0.01. There is not significant differentiation between the fields of teachers and the item 15. F(7-211) = 1.226, sig.(p-value) = 0.290; p>0.01. There is not significant differentiation between the fields of teachers and the item 26. These results display that there is not meaningful difference between the fields of teachers and the items which are concerned usage suitable strategy and skill (control of the strategy and skill) as a component of learner control strategy.

Table 4. Levene test of item 27, Item 28, Item 19, Item 25, Item 15 and Item 26

As seen in Table 4, the results of levene test related to item 27, Item 28, Item 19, Item 25, Item 15 and Item 26 which are about the usage about option of suitable strategy and skill (control of the strategy and skill) contained by learner control strategy and it is concerned the analysis of variance and it indicates that variances are homogeneous. Significant values are higher than 0.05

Table 5 displays ANOVA results about the course teachers' using levels of the option of responsibility of learners own learning covered by learner control strategy. Item 23 and Item 17 are examined. These items includes the option of responsibility of learners own learning as a component of learner control strategy. The questionnaire's result of factor analysis indicates that Item 23 and Item 17 are contained by option of responsibility of learners own learning as a component of learner control strategy.

Table 5. The analysis results of one-way-ANOVA related to teachers' field about Item 23 and Item 17 .

Table 5 displays the analysis results of one-way-ANOVA related to teachers' field about item 23, Item 17are about option of responsibility of learners own learning. F(7-211) = 0.172 sig.(p-value) = 0.991; p>0.01. There is not significant differentiation between the fields of teachers and the item 27. F(7-211) =1.342, sig.(p-value) = 0.232; p>0.01.

As seen in Table 5, the results of one way ANOVA related to usage about option of responsibility of learners own learning covered by learner control strategy according to their fields, there are not meaningful differences between the usage about option of responsibility of learners own learning and their fields. The results of one-way ANOVA display that there are not significant differences between the teachers' field and the usage about option of responsibility of learners own learning contained by learner control strategy.

Table 6. Levene test of item 23 and Item 17 .

As seen in Table 6, the results of levene test related to Item 23, Item 17 which are about the usage about option of responsibility of learners own learning contained by learner control strategy and it is concerned the analysis of variance and it indicates that variances are homogeneous. Significant values are higher than 0.05

RESULTS AND DISCUSSION

When the responses of the teachers obtained with the help of learner control strategy questionnaire (for teachers) was considered, the ANOVA results revealed no significant differences between the usage about option of the usage suitable strategy and skill (control of the strategy and skill) and option of responsibility of learners own learning included using learner control strategy and the fields of the teachers. We assume that the option of the usage suitable strategy and skill (control of the strategy and skill) and option of responsibility of learners own learning are component of learner control strategy are used in the schools by the teachers. In addition, the analyzed data revealed that that teachers working in state primary schools are employing the option of the usage suitable strategy and skill (control of the strategy and skill) and option of responsibility of learners own learning are the components of learner control strategy in class. This implies that Learner Control Strategy is a common strategy referred by the teachers in learning and teaching process. In addition, teachers seems to be generally sharing several similar beliefs about using the options in their courses.

There is a great amount of research on learner control strategy. In Rubincam and Oliver's research [27], students were given eight topics and were allowed to control the sequences of objectives within each topic and to decide whether to be instructed before the test or to be given the test without instruction. Students using strategies consistently performed better than those who did not using these strategies. Carrier and Williams [28] stated that if learners could monitor their current state of knowledge a dequately, they are likely to make better use

of instructional options provided to them. In addition, Hannafin [29], Merrill [7] stressed the importance of effective learner strategies used under learner control.

Goetzfried and Hannafin [30] examined the effects of learner control in a computer-assisted instruction lesson for learning mathematics rules with three conditions: adaptive control, learner control with advisement treatment and linear control. They studies on forty-seven seventh graders in a remedial class. Furthermore, Klein and Keller [31] studied ability and learner control using the instructional program included advertising concept designed by Carrier *et al*. in 1984. They found that scores on a test of mental ability determined 42% of the variance on the increase in achievement from pretest to posttest. This corresponds with the other researchers who have suggested that learner control would be a greater benefit to learners with higher levels of prior knowledge or ability Hannafin [29]; Lawless and Brown [32]; Merrill [33] Williams [3].

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