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Student Teachers' Views Regarding the Impact of Effective Teaching Strategies on Student Motivation[1]

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Abstract
The study attempts to identify student teachers' views on the impact of effective teaching strategies regarding student's motivational levels. The participants of this descriptive study include 144 student teachers enrolled in four departments (primary education, mathematics education, chemistry education, physics education and secondary mathematics education) of Faculty of Education in a university in Ankara, Turkey. The data were collected through a questionnaire including 22 teaching strategies. The main results of the study indicated that the participants regarded 'paying importance to communicate' as the most important strategy (Mean=4.74) whereas they considered 'use of different classroom arrangements' as the least important strategy (Mean=3.48) to motivate students. In light of these results, it is possible to note that there are many things that can still be investigated about motivation in educational context which should be studied in future research.

Key Words: Motivation, effective teaching strategies, descriptive study, student teachers

Introduction

Effective teaching is a multi-dimensional concept, and it has been stated that many factors namely teachers, students and learning atmospheres play a significant role in this process. Since effective teaching is the basis for effective learning, it is one of the most frequently studied topics. It is clear that effective teaching and effective learning are interconnected phenomena. It is obvious that the concept of learning is hard to define due to its complex structure. Therefore, different theories have provided various definitions for this concept. However, nearly all the theories have focused on certain components which all influence learning such as motivation, enthusiasm and repetition.

Among others, motivation is regarded as being one of the most influential agents on the learning process. According to Seifert (2004), students' motivation may be thought as patterns of behaviour and affect. In fact, one of the most important components of learning in any educational environment is motivation (Yükseltürk & Bulut, 2005, p. 96; Elton, 1996). Motivation identifies the direction of student conduct, its determination (Fidan 1985, p. 128; Green, 2002, p. 989). It is the factor that arouses, directs, and sustains increased performance (Duttweiler, 1986; cited in Chang, 2005). From an

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educational point of view, the term 'motivation' can therefore be applied to any process that activates and maintains learning behaviour (Palmer, 2005).

Motivation cannot be explained using just one dimension. According to Bouffard and Couture (2003), motivation is based on a variety of elements of which relevance and weight vary depending on different dimensions. Therefore, as Harlen and Crick (2003) pointed out, all the factors affecting motivation to learn should be taken into consideration. A review of learning motivation research has identified the diversity and variety of motivational factors as self-perceptions of ability, effort, intrinsic goal orientation, task value, self-efficacy, test anxiety, self-regulated learning, task orientation and learning strategies (Garcia, 1995; Garcia & Pintrich, 1995; Nolen & Haladyna, 1989; Pintrich & Blumenfeld, 1985; cited in Tuan, Chin, & Shieh, 2005). Several researchers have stated that motivation can be considered as the 'will to learn' and is at the very heart of the learning process (Johnston, 1996; cited in Harlen & Crick, 2003) and will always be an integral part of teaching and learning process (Maehr & Meyer, 1997). On the other hand, Brophy (1999) states that: "… the best developed lines of theory and research on motivation in education are not sufficient for explaining how learners may come to value particular learning domains or activities or how teachers might stimulate the development of such value…"

Motivation is among the most powerful determinants of student's success or failure in school (Reeve, 1996; Ryan & Connell, 1989; cited in Hardre et al., 2006). According to Tuan, Chin, Tsai and Cheng (2005), motivation is related to an individual's inner force to accomplish a learning task. In other words, motivation is a key concept in successful learning (Reece & Walker, 1997; Givvin et al., 2001; cited in Zoldosova & Prokop, 2006) and is influential in student achievement (Rudduck & Flutter, 2004, p. 44). Motivation may wane, as learning becomes increasingly difficult (Hynd et al., 2000). Fidan (1985, p. 128) argues that the reason for learning difficulty in school and problems with discipline emerges, is partly due to motivation levels. Hastings (1996) also adds "motivation seems to explain why some children engage enthusiastically with their work, some misbehave and others sit quietly and do little; why some persevere in the face of difficulty and others give up as soon as the going gets tough; why some make good progress and others make little or none; why some take with their work and others seem not to care..." (p. 55). Several lines of theory and research suggest that the consistency between learners' perceptions of themselves and their perceptions of learning opportunities have strong potential for fuelling motivation to learn (Brophy, 1999). Students' motivation and interest affect their learning (Zoldosova & Prokop, 2006) as mentioned earlier. Reece and Walker (1997) state that highly motivated students may be more successful in contrast to less motivated students. In a sense, instructors have a significant responsibility to increase motivation through the learning atmosphere or to improve the current level of motivation. "…The motivation of adolescents is a critical issue - it is, in fact, a problem that must be solved" (Ander-

man & Maehr, 1994, pp. 287-8; cited in Rudduck & Flutter, 2004, p. 44). On the other hand, Linnenbrink and Pintrich (2003) have pointed out that it is interesting for teachers to have students with different levels of motivation and therefore becomes more challenging. However, some researchers state that motivating students is not an easy task for teachers. Capel, Leask and Turner (1995, p.95), for example, explains this as follows:

> "It is often very difficult for a teacher to identify what is motivating a particular pupil at a particular time or indeed for a pupil to identify exactly what is motivating her. As a teacher you can often only infer whether or not pupils are motivated by observing their behaviour, for example, a pupil who is not motivated may not be listening to what you are saying, is talking, looking bored or staring out of the window. Low motivation may result from a number of factors, e.g. boredom or a task being too difficult."

Thus, the crucial question that should be answered is that what should teachers do to motivate the students in the teaching and learning process? With regard to this question, many researchers have similar definitions on the roles of teachers. Capel et al. (1995, p. 94) point out that the central aim of teachers is to motivate pupils enough to make them want to learn. Teachers might affect students' motivation directly or indirectly (Reeve, 1996; cited in Hardre et al., 2006). At all levels of teaching, teachers must ensure that they adequately pay enough attention to student learning. Students are motivated when they regard the task interesting and relevant (Linnenbrink & Pintrich, 2003). Capel et al., (1995, p. 94) note that. "…Even though some pupils may not be inherently motivated to learn, the school ethos, teachers' attitudes, behaviour, teaching style and strategies in the classroom can increase their motivation to learn. Pupils are not motivated to learn are more likely to misbehave. If the teacher does not manage the class and their behaviour effectively the learning of all pupils in the class can be negatively affected". In a similar way, Hardre et al., (2006) argue that the decisions teachers made during the instructional process influence student's level of motivation. Assessment or evaluation techniques can also be considered as important issues in motivating students in teaching and learning process. As Reece and Walker (1997, p. 97) point out that "feedback to the students such as "good answer" or "that's an interesting observation' give the students social approval, and such praise appears to be a powerful motivational technique".

Games and simulations motivate students to participate in the learning (Reece & Walker, 1997, p.98). Besides, classroom management skills and styles adopted by the teachers also affect the student's motivational levels (Wu, 2002; cited in Hardre et al., 2006). The learning environment emerges through the interaction of teaching strategies, classroom activities and teacher-student interactions, which all exert a huge impact on motivational levels in the learning process. Elton (1988) argues that the dis-

advantage of many instructional strategies is that they do not require students become active agents in the learning environment. Therefore, active teaching strategies appear to be influential in increasing student motivation. Another important factor is the teaching arrangements (Linnenbrink & Pintrich, 2003). Teachers may organize the learning environment with an aim to activate the student's interest and curiosity about the topic. Teachers may also employ visual aids and posters to achieve this aim (http://honolulu.hawai.edu). Additionally, researchers provide several suggestions which they believe could increase student motivational levels. Some of these strategies include making the content relevant to daily life, engaging students to participate in the process, using several instructional strategies, employing individual and group activities, providing regular feedback and evaluation, and stating learning aims in a clear way (Palmer, 2005; Capel et al, 1995; Rudduck & Flutter, 2004). All in all, although the factors which affect learning have been frequently investigated, the studies on motivation are mainly theoretical, and there appears to be less empirical research in this area.

The aim of the research

In this study, motivation is investigated in relation to effective teaching strategies based on student teachers' views. The main aim of the present study is to identify the student teachers' views on the impact of effective teacher strategies with respect to student's motivational levels. This study aims to answer the following research questions:

1. To what extent do student teachers (ST) regard effective teaching strategies (ETS) as an important factor in terms of the student's level of motivation?
2. How often do student teachers consider using such teaching strategies to increase the students' motivation?
3. What are student teachers' opinions regarding the realization of these teaching strategies in relation to the students' motivation?
4. Does their gender lead to any difference on the student teachers' views of the importance of effective teaching strategies to increase the student motivation?
5. Does their gender lead to any difference on the student teachers' views about the use of effective teaching strategies in regard to the students' motivation?
6. Does their gender lead to any difference of the student teachers' views on their realization of effective teaching strategies to motivate the students?

Methodology

The participants of the study

The sample of this descriptive study includes 144 student teachers (91 females and 53 males) enrolled in four different departments of faculty of education in a university in Ankara, Turkey. The departments of the participants are primary education mathematics education, chemistry education, physics education and secondary mathematics education.

Data collection and analysis

The present study is descriptive research, and the data were collected by means of the questionnaire developed by the researcher. The questionnaire is made up of two parts; part one contains demographic information, and part two involves the effective teaching strategies section regarding motivation. The development process includes the following steps. First, in order to identify effective teaching strategies related literature was reviewed. The review of literature revealed that although there is not a specific teaching strategy suggested increasing motivation, researchers have pointed out several common points regarding this issue. It is assumed in this study that effective teaching strategies are correlated with the motivational levels of students. In the study, effective teaching strategies refer to those which facilitate learning or which motivate students to learn. In the questionnaire, 22 teaching strategies were covered. Teaching strategies were prepared based on related literature. After gaining the experts' views on the questionnaire, it was finalized. Both five and three Likert type items were employed in the questionnaire. The views of the subjects on the effects of teaching strategies on the student's motivation were identified at three levels: the importance of the strategies, frequency of the use of these strategies and their estimation about their future use. On the first level, five Likert type scales was used (1=not important, 5=very important). Again, five-point Likert scale was employed in the second level (1=never, 5=always). In the last section, three Likert type scales were used (1= <30%, 3= >70%). Overall, the Cronbach-alpha coefficient of the instrument is .91. The views of the subjects are given in three tables. Their views are presented in terms of percentage (%) and frequency (f). In order to determine the effect of gender on the participants' views, the t-test was used. Statistical procedures were fulfilled by means of SPSS. The details about these procedures are as presented in Table 1:

Table 1. Details of the scales used in the questionnaire

Parts of the questionnaire	Intervals in the questionnaire	Options given in the parts of the questionnaire
First Part	4.21-5.00	Very important (5)
	3.41-4.20	Quite important (4)
	2.61-3.40	Partly important (3)
	1.81-2.60	Less important (2)
	1.00-1.80	Not important (1)
Second Part	4.21-5.00	Always (5)
	3.41-4.20	Frequently (4)
	2.61-3.40	Sometimes (3)
	1.81-2.60	Rarely (2)
	1.00-1.80	Never (1)
Third Part	2.34-3.00	more than %70 (3)
	1.67-2,33	between %30-70 (2)
	1.00-1.66	less than %30 (1)

Results

The first question addressed by the study is as follows: 'To what extent do student teachers regard effective teaching strategies (ETS) as an important factor in terms of the students' level of motivation?' Following this question, the participants were asked 'How often do student teachers consider using such teaching strategies to increase the students' motivation?' and 'What are student teachers' opinions regarding the realization of these teaching strategies in relation to the students' motivation?'. Table 2 provides the student teachers' views with regards to these three questions.

Table 2. The distribution of ST's views regarding ETS on students' motivation

Effective Teaching Strategies (ETS)	Consideration of ST regarding ETS on students' motivation		Use of ETS by ST regarding students' motivation		Implementation of ETS regarding students' motivation by ST	
	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD
1.Providing information about the goals of the course	4.66	.50	4.37	.71	2.56	.58
2.Use of varied and rich examples	4.52	.59	4.27	.61	2.50	.60
3.Use of proper methods and techniques in presentation	4.48	.66	4.10	.82	2.25	.66
4.Active student participation	4.40	.66	4.15	.73	2.48	.60
5.Use of different classroom arrangements	3.48	.89	2.98	.77	1.76	.71
6.Proper and efficient use of time	4.60	.61	4.56	.66	2.47	.61
7.Answering the student questions	4.49	.67	4.38	.71	2.51	.63
8.Use of visual-audio aids	4.27	.79	3.79	.84	2.23	.64
9.Providing information about what is expected from the students	4.27	.65	4.04	.79	2.31	.67
10.Guiding the student work	4.44	.62	4.21	.79	2.47	.60
11.Use of varied assessment techniques	3.95	.91	3.79	.93	2.17	.74
12.Positive expectations from the students	4.22	.71	4.06	.78	2.25	.65
13.Taking into account individual differences in presentation	4.44	.68	4.10	.83	2.29	.60
14.Proper use of voice	4.67	.60	4.65	.53	2.52	.60
15.Paying importance to communicate	4.74	.45	4.59	.55	2.54	.57
16.Efficient use of body language and gestures	4.50	.60	4.34	.72	2.41	.64
17.Paying personal attention to the students	4.27	.81	3.94	.91	2.20	.68
18.Proper use of rewards and punishment	4.47	.74	4.04	.90	2.35	.61

19.Consistent behaviour	4.70	.52	4.59	.67	2.60	.59
20.Use of humour	4.00	.89	3.47	.87	2.04	.68
21.Reinforcing activities	4.36	.71	3.97	.81	2.38	.59
22.Being sympathetic	4.43	.80	4.07	.93	2.41	.67

Table 2 shows that the participants consider almost all the strategies to be very significant. Therefore, they considered that effective teaching strategies were important and an essential way to improve student's motivation. However, the results also indicate that the participants regarded "paying attention to communicate" as the most important strategy ($\bar{x}$ =4.74) whereas "use of different classroom arrangements" as the least important strategy ($\bar{x}$ =3.48). Table 2 also indicates that the student teachers reported that they would mostly use "the proper use of voice" strategy ($\bar{x}$ =4.65) and that they will infrequently use "different classroom arrangements" ($\bar{x}$ =2.98). Overall, their views show that they will frequently employ these strategies except for the fifth one. Finally, Table 2 indicates that "consistent behaviour" to improve students' motivation was regarded as the most possible way which will be used by the participants ($\bar{x}$ =2.60). However, "use of different classroom arrangement" is again stated to be the least ($\bar{x}$ =1.76) possible way which the subjects consider to use in their future profession. This result suggests that there is consistency regarding the participants' views on the significance of how they recognize the importance and use of these strategies. For instance, if they regard any teaching strategy as less important, they also report that they will infrequently employ it.

The next research question in the study was "Does their gender lead to any difference of the student teachers' views of the importance of effective teaching strategies in regard to the student motivation?" Table 3 displays the results.

Table 3. The t test results on the ST' views of the importance of ETS in terms of the gender

Gender	N	$\bar{x}$	sd	t	p
Male	91	4.45	142	3.258	.001*
Female	53	4.27			

** p<.05 **p< .01*

Based on the statistical analysis of this question, it was found that the gender of the participants affects their views on the importance of the teaching of the teaching strategies [t (142) = 3.25, p<.05]. Female student teachers regarded these strategies to be more important ($\bar{x}$ =4.45) than the male subjects ($\bar{x}$ =4.27). Specific effects of the participants gender on teaching strategies are also investigated and found that the following teaching strategies have different preferences by female and male partici-

pants: (1) use of paper teaching methods and techniques in presentation (t (142) =5,28, p<.005), (2) active participation of the students ([t (142))=2,03, p<.05)], (3) proper use of time [t (142) =1,98, p<.05)], (4) use of audio-visual aids [t (142)=3,46, p<.05)], (5) use of varied assessment techniques[t (142) =2,80, p<.05)], (6) emphasizing communication [t (142) =2,47, p<.05)], (7) efficient use of body language and gestures [t (142) =1,98, p<.05)], and (8) use of reinforcing activities [t (142) =1,98, p<.05)].

Another question in the study was "Does their gender lead to any difference of the participants' views about the use of effective teaching strategies in regard to the students' motivation?" The results are given in Table 4.

Table 4. The t- test results of the distribution of student teachers' views regarding how often they use effective teaching strategies about students' motivation in terms of gender (n=144)

Gender	N	$\bar{x}$	sd	t	p
Male	91	4.18	142	2.878	.005
Female	53	4.00			

**p<.05 **p< .01*

A statistically significant correlation is also found for the relationship between the student teachers' gender and their views on how often they use effective teaching strategies about students' motivation [t (142) = 2.878, p<.005] as can be observed in Table 4. In other words, the participants' gender influences their views on their future of the teaching strategies. Female subjects report that they will employ ($\bar{x}$ = 4.00) these strategies more frequently in contrast to male participants ($\bar{x}$ =4.18). Further analysis was also carried out in order to identify specific effects of the gender on teaching strategies. The following teaching strategies are found to be influenced by the subjects' gender; item 3 (Use of proper methods and techniques in presentation, [t (142) =5,28, p<.05)],), item 8 (Use of visual-audio aids, [t (142) =3,46, p<.05)]), item 14 (Proper use of voice, [t (142) =1,91, p<.05)]), item 19 (Consistent behaviour, [t(142)=2,60, p<.05)]), and item 20 (Use of humour, [t (142) =2,77, p<.05)]).

The last research question was "Does their gender lead to any difference of the participants' views on their realization of effective teaching strategies to motivate students?" The results are given in Table 5.

Table 5. The t- test results on the ST' views on implementation of ETS n in terms of gender (n=144)

Gender	N	$\bar{x}$	sd	t	p
Male	91	2.38	142	2.290	.023
Female	53	2.26			

**p<.05 **p< .01*

A statistically significant correlation is also found for the relationship between the student teachers' gender and their views on the realization of the teaching strategies (p<.005). Similarly, in contrast to the male participants ($\bar{x}$ =2.38), the female participants reported that ($\bar{x}$ =2.26) they can mostly implement these teaching strategies in their future professional life. The results show that female student teachers paid more importance to these strategies rather than employing the,m and felt that they could implement them.

Conclusion, Discussion and Recommendations

This study aimed at uncovering the views of the student teachers on the effects of effective teaching strategies on the students' motivation. As stated by Linnenbrink and Pintrich (2003), student's motivation is important and should be considered by all teachers. Similarly, the views of the student teachers regarding the significance of efficient teaching strategies to increase the student motivation are also very crucial. In the study, the following major results are obtained.

The student teachers considered the efficient teaching strategies as very significant to improve the student motivation. Overall, they stated that they would employ all strategies "frequently" and "continuously". However, one teaching strategy, namely "the use of different classroom arrangement", was considered by the participants as less significant than others. A number reasons could explain this situation. The participants may not have enough information about the teaching strategy in question. It may also be a result of the lack of experience involving this strategy. This suggests that although student teachers are provided theoretical information on classroom organization, only giving theoretical knowledge does not alter student teachers' views. Therefore, it can be suggested that teaching programs not only emphasize the importance of classroom arrangement but they also focus on different classroom set ups. In fact, the teaching program emphasizes the importance of classroom arrangement on students' motivation; however, student teachers should be given the opportunity to implement these strategies in their own teaching practice. In the study conducted by Nichols (2006), it is also stated that although preservice teachers agreed on the need for teacher control in the classroom, there was less agreement about their perceptions of the need to create a classroom environment of positive affirmation and student empowerment. It was

also found in this study that the gender of the student teachers influences their views about effective teaching strategies in terms of student motivation. And such effects are statistically significant. Female student teachers appeared to be more concerned with effective teaching strategies.

As Brophy (1982) states, pre-service and in-service teacher education can do a much better job than it usually does to alert teachers to students' needs and prepare teachers to deal with these needs effectively. In conclusion, motivation is essential if effective learning is to emerge. Since each component of the effective teaching process has an integral role to play, attempts to improve the students' motivational levels are also critical. The current study has revealed that effective teaching strategies offer teachers a diverse range of possibilities which can be selected accordingly to the students' response and their level of motivation on the course. Finally, the literature indicates that there are many things still can be investigated about motivation in educational context. For example, research suggests that there is a positive relationship between student motivation and teacher motivation (Atkinson, 2000). All these issues should be studied with different subjects and in different contexts.

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