

Factors Influencing Learning Interest in Handicraft Lessons

Kelli Rinne¹ MA; Ene Lind² PhD

School of Järveküla, Estonia¹; Tallinn University, Estonia²

kelli.rinne@gmail.com¹; enelind@tlu.ee²

Abstract: Interest in learning is a topic that has provided research material to many researchers around the world. The causes of declining learning interest in different subjects have been studied, as well as how to support and stimulate students' interest in learning. Research has shown that the main reasons for declining learning interest are the nature of the learning tasks (too easy or too difficult, not interesting) and the attitude of the teacher. Handicraft and home economics in the Estonian general education curriculum is a practical integrated subject where students can apply the knowledge they have acquired in different subjects and realise their creative ideas. Thus, it could be assumed that the subject is of interest to students. At the same time, based on student surveys and classroom observations, it can be stated that there are students in almost every class and school who are not interested in learning a craft and are not motivated to participate in the learning activities. As craft lessons differ from other lessons due to their practical nature, it was decided to investigate the learning interest in handicraft. The aim of the study was to identify the factors influencing learning interest in handicraft lessons in order to understand how handicraft teachers could support students' learning. A quantitative research method was chosen for the research, and a survey was used as a research instrument. As a result of the research, it can be stated that comparing the factors influencing learning interest in handicraft lessons with the results of other similar research, we can state that although handicraft is slightly different from other subjects due to its practical nature, the factors influencing learning interest are similar across the subjects. The interest in the subject largely depends on the age of the students and the activities of the teacher.

Keywords: learning interest, handicraft, school level, teacher's activities.

Introduction

The learning process at school should be a pleasant experience for both students and teachers. However, learning can be enjoyable for both parties if a suitable environment is created to support learning. One of the important components of a learning-friendly environment is the presence of interest – both the teacher's interest in the subject and the topic being taught and the student's interest in learning (Brophy, 2014). In other words, the teacher themselves should also be interested in both the students and in what they are teaching (Minor et al., 2002). Learning interest refers to the appreciation or positive attunement of the learning content or process, as a result of which the learner has focused their attention on the learning or learning activity (Brophy, 2014), that is, the interaction between the person and the learning content (Hidi, 2006).

Stimulating interest is the main goal in education, as interest in what is learned leads to meaningful learning, promotes long-term knowledge retention, and provides motivation for further learning (Krapp et al., 1992; Deci, 1992; Schraw et al., 2001; Hidi et al., 2006; Brophy, 2014).

At the beginning of the learning process, it is important to stimulate a positive feeling about the topic being studied and to build on the students' prior knowledge of the subject (Hidi et al., 2006). In order for the interest to deepen and change from a situational to an individual interest, the student must develop curiosity and various questions about the topic or the activity. Questions can arise if there is a prior or basic knowledge of a topic or activity (Renninger, 2000). Students may be motivated to learn, which, however, does not mean that they are interested in or enjoy a particular topic or activity (Renninger, 2000; Brophy, 2014). Many researchers on learning interest and motivation have pointed out that generating interest in learning situations activates motivation, which influences students' academic achievement (Hidi et al., 2004; Harackiewicz et al., 2016). The difference, however, is that individual interest generally refers to a person's relationship to a topic or activity and a constant desire to engage in it, but intrinsic motivation can be either a momentary or longer-term interest in a topic (Renninger et al., 2002). In the case of extrinsic motivation, the student may not be interested in the

subject, but wants to get a good grade, for example. Therefore, when motivating students, it is important to link teaching to the students' interests. Through extrinsic motivation (creating situational interest), that is, generating interest in what is being learned, students' intrinsic motivation and will to act is increased (Schraw et al., 2001).

Students' interest in what they are learning can be greatly influenced by the teacher, who creates a learning environment that is conducive to students' learning. If the relationship between teacher and students is good, students are more likely to come to class and are more likely to enjoy the lesson. This, in turn, creates an opportunity for students to be more involved in what they are learning (Lee et al., 2014). Inevitably, teachers have problems motivating students who are not interested in learning. They often do not have a clear understanding of how to increase and retain students' learning interest. However, the idea that if there is no interest, it cannot be generated and developed is not true. (Hidi et al., 2006).

The teacher should create an environment that supports learning rather than performance (Marshall, 1994). Learning interest may also be affected by the grading method used in the subject. More attention should be paid to what the student learned and what the student's development has been. According to Brophy (2014), the teacher should emphasise that it is important to understand what is being learned, not just to try to give the right answers or to complete tasks.

The aim of the research was to find out the factors influencing the learning interest in handicraft lessons in order to understand how a handicraft teacher could support students' learning.

Methodology

A quantitative research method was chosen to conduct the research in order to obtain objective empirical data on the learning interest in handicraft lessons. The survey was used as a research tool. The questionnaire was created in Google Forms. The questionnaire consisted of nine blocks of question with a choice of answers and one open-ended question where the respondent could express their views in their own words.

Responding to the questionnaire was voluntary and anonymous, only the respondent's background information (gender, school, class, and mother tongue) had to be indicated. The second part of the questionnaire was designed to find out about the students' experiences of handicraft lessons so far, how the students themselves assess their learning interest in handicraft lessons, and what factors might influence their learning interest. In order to investigate the actual experience, questions were designed with a Likert scale of response options to investigate how often the different statements related to learning interest in handicraft lessons were true. In the third part, there were questions that built on the statements made in previous research about the factors influencing learning interest: whether they increase, do not affect, or reduce students' learning interest in handicraft lessons. Also included in the third part of the questionnaire were a number of statements where the respondent was able to select the ones that might make them less interested in learning in a handicraft lesson.

Test surveys were also conducted before the questionnaire was sent to schools. The questionnaire was first answered by a 6th grade student, and provided information on how well the questions were understood by the students. The revised questionnaire was then tested on five adult volunteers, whose feedback was used to make further changes to the questionnaire.

The five schools participating in the research were randomly selected with the aim of obtaining data on the experiences and perceptions of students' learning interests in handicraft lessons in different schools. 215 students answered the questionnaire: 179 girls and 36 boys who had chosen handicraft and home economics as their field of study. Among the students who participated in the study, there were 106 students in grades 4–6 (second school level) and 109 students in grades 7–9 (third school level). To ensure anonymity, schools were coded and provided with a combination of letters and numbers for analysis (School 1, School 2, School 3, School 4, School 5).

For statistical analysis, all questionnaire responses from the Google Forms environment were moved to a Microsoft Excel spreadsheet. As a single spreadsheet, it was possible to clean up the data and also to process the original data. In order to be able to analyse the data, it was necessary to quantify the verbal answers. Numerical indicators were used to look at both averages and proportions of respondents.

Results and Discussion

Handicraft lessons in Estonian general education schools start in the second school level (4th grade), so one of the factors influencing learning interest may be the transition from the first to the second school level. Changing school levels brings a lot of changes, as in the first school level it is mainly the class teacher who deals with the students, but in the second school level each subject has a different teacher, the demands are higher, and teachers cannot always allow for choice. Changing school levels also brings changes in the organisational part of learning, it is important to support students of the first school level to adapt to the new situation, not to lose confidence, and to understand that they can cope with what they are learning (Brophy; 2014).

A comparison of the data by school level revealed differences in the way students' previous experiences of handicraft lessons were assessed, as well as in the factors influencing their learning interest. Comparing the level of learning interest of students in the second and the third school levels, it can be seen that in higher grades the proportion of students with little or no learning interest is higher (see Figure 1). In the 4th and 5th grades, when the curriculum has changed and new technologies and tools have been added compared to the first school level, a very large proportion of students have a high level of learning interest and there is no lack of interest in handicraft lessons. From the 6th grade, interest in learning handicraft declines significantly. The fact that learning interest changes over time and decreases in the second and third school levels was also confirmed by E. Alliksaar (2019) in his research among Estonian students. She justified this on the grounds of the ageing of the students.

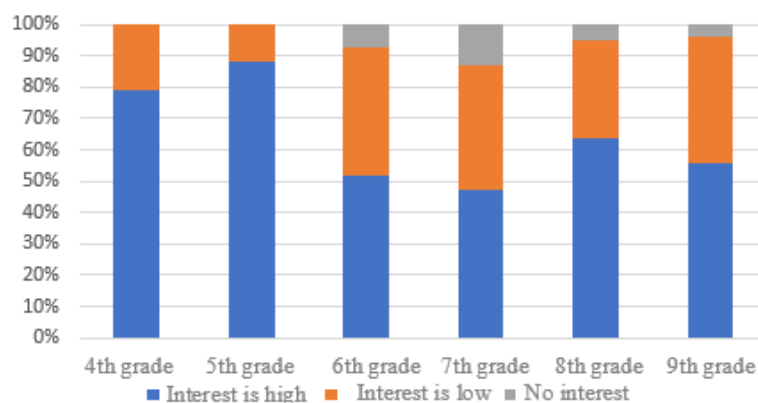


Figure 1. Scale of learning interest in handicraft lesson by class.

Younger students are more likely to perceive tasks as interesting and relevant to their daily lives. For them, the feedback from the teacher is almost always pleasant. However, students of the third school level are less likely to perceive these factors. Compared to students of the third school level, students of the second school level are slightly less likely to be able to choose what to do for practical work in handicraft lessons. However, the freedom granted to students of the third school level is understandable as they have come across a wider range of technologies and experiences.

There are greater differences in how students at the two different school levels perceive the factors that influence their learning interest in handicraft lessons and how they do so (see Table 1).

Table 1

How the following factors affect interest in what is taught in handicraft lessons, comparison by school level

Factors influencing the learning interest	Second school level n-106			Third school level n-109		
	increases interest	does not affect	reduces interest	increases interest	does not affect	reduces interest
support at home	42%	58%	0%	35%	64%	1%
the handicraft teacher assigning a practical object	38%	50%	12%	17%	55%	28%

Factors influencing	Second school level n-106			Third school level n-109		
prior knowledge	60%	36%	4%	56%	41%	3%
learning a new topic	68%	26%	6%	37%	54%	9%
the handicraft teacher's attitude towards the students	65%	33%	2%	59%	37%	4%
feedback from the handicraft teacher	66%	34%	0%	67%	32%	1%
explanation of the topic by the handicraft teacher	57%	40%	3%	56%	40%	4%
playful learning activities	67%	30%	3%	50%	46%	4%
entering basic school from primary school	39%	59%	2%	25%	70%	5%
listening to music during practical activities	62%	33%	5%	71%	26%	3%
Grading	41%	51%	8%	25%	63%	12%

Based on the averages of the responses of students of the second school level, it can be pointed out that they feel that the factors presented in the survey have a positive impact on their learning interest. However, these indicators are sometimes lower in the case of students of the third school level. Compared to students of the second school level, a higher proportion of students in the higher grades consider that the factor suggested by the survey does not influence or even reduces their learning interest.

More than half of the students in both groups think that the following factors could increase their learning interest: relevant prior knowledge or skills, teacher's feedback and attitude towards the students, handicraft teacher's explanation, playful learning activities, listening to music during practical activities. A comparison of grades shows that the impact of playful learning activities on learning interest decreases over time, and that there are significantly fewer students in the final years of basic school who find that they could increase their interest. The majority of the respondents of the second school level have also mentioned the learning of a new subject in crafts as an uplifting factor, but students of the third school level stated that this does not affect their learning interest. For students at both levels, the following factors were similar and did not affect their interest in handicraft lessons: support at home, entering basic school from primary school, grading in handicraft lessons, and a practical object to be made, as assigned by the handicraft teacher. At the same time, in the column of factors that reduce interest, the top factor for students of the third school level (28% of respondents) is when the teacher assigns what has to be done as a specific practical object, that is, students at this age already value freedom of choice (see Table 1). However, interests and preferences cannot always be taken into account, there may also be learning goals that require the student to do something that makes them reluctant (Brophy, 2014).

Difficult tasks and teachers not having the time to listen to students were the factors most often cited by students at both levels as making learning less interesting (see Figure 2).

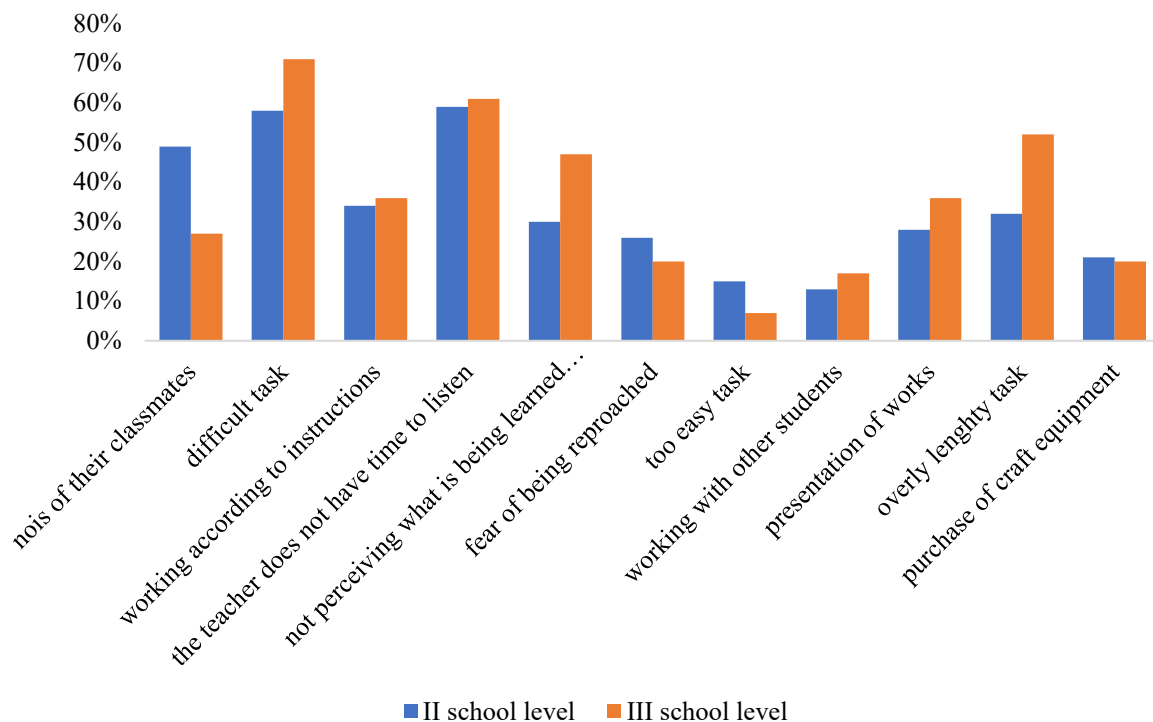


Figure 2. Factors reducing learning interest.

As it can be seen from the figure, more students in the third school level than in the lower school levels stated that their learning interest is also reduced by overly lengthy tasks and by not perceiving what they were learning as necessary. Students of the second school level find to a greater extent that the constant noise of their classmates also reduces their learning interest in handicraft.

When entering basic school from primary school, a student in an Estonian school should be able to choose whether they want to study handicraft and home economics or technology. The goal is for the student to learn the technologies that interest them the most. However, 58% of all respondents (n=215) indicated that, when they entered the second school level, they could not choose which subject they wanted to study, whether handicraft and home economics or technology, until the end of 9th grade. At School 5, students perceived to a greater extent that they were able to choose the subjects they wanted to study when they entered the second school level from the first school level. Compared to other schools, the level of learning interest is also higher in School 5 (see Figure 3).

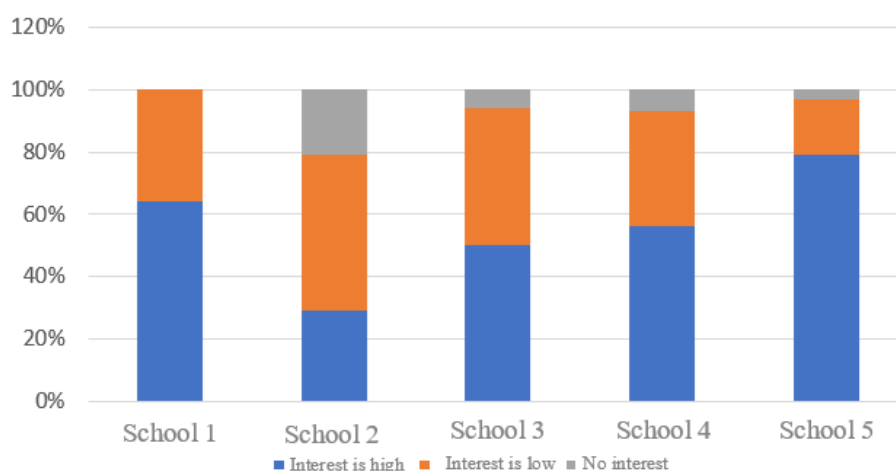


Figure 3. Level of learning interest in handicraft lessons, comparison among schools.

The experiences of handicraft lessons for students from different schools were in many ways similar when looking at the averages, but, at the same time, there were also small differences (see Table 2).

Table 2

Factors that increase learning interest in handicraft lessons. Comparison among schools

Factors increasing the learning interest	School 1	School 2	School 3	School 4	School 5
support at home	55%	22%	25%	36%	49%
the teacher assigns the object	36%	21%	25%	25%	31%
prior knowledge or skills	82%	64%	50%	56%	60%
learning a new topic	64%	36%	44%	43%	70%
teacher's attitude towards the students	73%	43%	41%	67%	70%
feedback from the handicraft teacher	82%	64%	50%	64%	76%
teacher's explanation	73%	43%	36%	59%	49%
playful learning activities	55%	43%	53%	61%	63%
learning from primary school to basic school	55%	7%	19%	29%	43%
listening to music	46%	57%	61%	75%	66%
grading	18%	28%	31%	31%	40%

In School 1, students are more positive than respondents from other schools in terms of factors influencing the learning interest in handicraft lessons. More than half of the respondents have indicated that many of the factors identified in the survey increase their learning interest in handicraft (see Table 2). Compared to other schools, however, this school has the highest number of students (36% of the respondents) who believe that making an object assigned by a teacher can also increase learning interest. It is important to use the student's persistent individual interests to develop other skills. If the teacher is aware of the topics or activities that the student likes, they can take them into account and thereby support the student's learning activities (Renninger et al., 2002). All students are different and also their interests and preferences are different. Knowing the interests and preferences of students, we can offer them choices and autonomy, and we must ensure that the learning goal is achieved. When creating learning content, students' existing interests and prior knowledge should be taken into account and, where possible, linked (Harackiewicz et al., 2016).

Research has shown that a moderate prior knowledge supports learning interest, but a very high or a very low prior knowledge can inhibit it (Schraw et al., 2001). This was also reflected in the survey, and was particularly evident in the responses of students in School 2: more than half of the respondents in that school felt that prior knowledge increased learning interest in handicraft lessons (64%), but so did the teacher's feedback (64%) and listening to music during practical activities (57%).

The importance of prior knowledge was also evident in the responses from School 3. Listening to music during practical activities (61%), playful learning activities (53%), and the feedback from the handicraft teacher (50%) were also cited by more than half of the students from School 3 as factors that increased their learning interest.

At School 4, the majority of the surveyed students indicated that listening to music during practical activities (75%), the teacher's attitude towards the students (67%), the feedback from the handicraft teacher (64%), playful learning activities (61%), the teacher's explanation (59%), and prior knowledge (56%) could most increase their learning interest in handicraft lessons. In School 5, students identified the feedback from the handicraft teacher (76%), learning a new topic (70%), the teacher's attitude towards the students (70%), listening to music (66%), playful learning activities (63%), and prior knowledge or skills (60%) as factors that increase learning interest in handicraft lessons.

Differences in students' opinions between schools are largely due to the professionalism of the teacher. Seven important aspects are identified as the characteristics of an effective teacher: leadership and supervision skills, student-centred teaching, ethical and professional behaviour, knowledge and

enthusiasm for both the subject and the students. The teacher's cognitive abilities are important: encouragement and multifaceted support for students, patience, honesty and fairness, caring, flexibility, and self-analysis (Minor et al., 2002). If the teacher explains the new part well, takes into account the students' wishes, gives objective feedback, and is friendly towards the students, this will have an impact on their learning interest in the subject.

Conclusions

Comparing the factors influencing the learning interest in handicraft lessons with the results of other similar research, we can state in this research that although handicraft is slightly different from other subjects due to its practical nature, the factors influencing learning interest are similar across subjects.

Students of both the second and the third school level were of the opinion that their learning interest could be increased most by their prior knowledge or skills, the teacher's feedback and attitude towards the students, the handicraft teacher's explanations, playful learning activities, and listening to music during practical activities.

- A comparison of school levels showed that learning a new topic and interest in playful learning activities had a positive impact on the learning interest of students of the second school level in handicraft lessons. It was also found that students of the second school level like it when the teacher assigns the object to be made in the handicraft lesson, while students of the third school level prefer to make their own choices.
- The important role of the teacher in supporting the student's learning interest was confirmed. The teacher's feedback, explanations, and attitude towards the students are factors that increase learning interest. Among the factors that impact negatively is the teacher not having time to listen to the students, overly complex and lengthy tasks, and not perceiving what the students are learning as necessary. The importance of the role of the teacher was also evident when comparing the responses of students from different schools.
- The majority of students did not perceive any change in their choice of subject when changing school level. At the same time, there is no overview of the extent to which students have had the opportunity to choose between different fields of study.

Unfortunately, as students from only five schools took part in the survey, the data cannot be generalised. The topic deserves to be addressed in a broader way, in order to be able to provide teachers with guidelines for more effective teaching.

Bibliography

1. Alliksaar, E. (2019). *Põhikooli õpilaste õpihuvi muutumise tendentsid ja võimalikud põhjused nelja erineva koolitüübi näitel* [Tendencies and possible reasons for changing the interest of basic school students in learning on the example of four different types of school]. Master's thesis.
<https://www.etera.ee/zoom/61675/view?page=26&p=separate&search=alliksaar&tool=search&view=0,1235,2481,2273> (in Estonian)
2. Brophy, J. (2014). *Kuidas õpilasi motiveerida: käsiraamat õpetajatele* [How to motivate students: a handbook for teachers]. Tallinn: SA Archimedes. 236-264. (in Estonian)
3. Deci, E. L. (1992). The relation of interest to the motivation of behavior: A self-determination theory perspective. *The Role of Interest in Learning and Development*. (Eds. Renninger, A., Hidi, S. and Krapp, A.). 62-66. Erlbaum, Hillsdale.
4. Harackiewicz, J. M., Smith, J. L., Priniski, S. J. (2016). Interest Matters: The Importance of Promoting Interest in Education, *Policy Insights Behav Brain Sci*. October; 3(2), 220-227.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5839644/pdf/nihms945590.pdf>
5. Hidi, S. (2006). Interest: A unique motivational variable. *Educational Research Review* 1, 69-82. https://www.academia.edu/27911095/Interest_A_unique_motivational_variable
6. Hidi, S., Renninger, K. A. (2006). *The Four-Phase Model of Interest Development*, 111-123.
<https://sciencecommunication.ut.ee/wp-content/uploads/2018/09/Article-5-The-Four-Phase-Model-of-Interest-Development.pdf>

7. Hidi, S., Renninger, K. A., Krapp, A. (2004). Interest, a Motivational Variable That Combines Affective and Cognitive Functioning. *Motivation, Emotion, and Cognition: Integrative Perspectives on Intellectual development and functioning*. (Eds. David, Y. D., Sternberg, R. J.). 89–115. Lawrence Erlbaum Associates.
8. Krapp, A., Hidi, S., Renninger, K. A. (1992). Interest, learning and development. *The Role of Interest in Learning and Development*. (Eds. Renninger, A., Hidi, S., Krapp, A.). 3–25. Erlbaum, Hillsdale.
9. Lee, D.-C., Lu, J.-J., Mao, K.-M, Ling, S.-H., Yeh, M.-C., Hsieh, C. (2014). Does Teachers Charisma Can Really Induce Students Learning Interest? *Procedia - Social and Behavioral Sciences*, 116, 1143–1148.
10. Marshall, H. (1994). Children's understanding of academic tasks: Work, play, or learning. *Journal of Research in Childhood Education*, 9, 35–46.
11. Minor, L. C., Onwuegbuzie, A. J., Witcher, A.E., James, T. L. (2002). Preservice Teachers' Educational Beliefs and Their Perceptions of Characteristics of Effective Teachers. *Journal of Educational Research* 96 (2), 116–128.
12. Renninger, K. A. (2000). Individual interest and its implications for understanding intrinsic motivation. Sansone, C., Harackiewicz, J. M. *Intrinsic motivation: Controversies and new directions*. San Diego, CA : Academic Press. 373 – 404.
13. Renninger, K. A., Hidi, S. (2002). Student interest and achievement: Developmental issues raised by a case study. *The development of achievement motivation*. 173–195. San Diego, CA: Academic Press.
14. Schraw, G., Flowerdayand, T., Lehman, S., (2001). Increasing Situational Interest in the Classroom. *Educational Psychology Review*, Vol. 13, No. 3, 211-221. <http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=59F52E66E6D749FA0A3E80E73499E710?doi=10.1.1.501.7404&rep=rep1&type=pdf>
15. Schraw, G., Lehman, S. (2001). Situational interest: A review of the literature and directions for future research. *Educational Psychology Review*, Vol. 13, No. 1, 23-52.