Young Learners' Objectives related to Multimedia Use and Homework Completion

El uso de multimedias en las tareas académicas por los estudiantes

Dr. Erdem Öngün is Instructor in the Preparatory School of Kadir Has University (Turkey) (erdem.ongun@khas.edu.tr).

Dr. Aşkın Demirağ is Instructor in the Department of Management Information Systems in the Faculty of Commerce at Yeditepe University (Turkey) (ademirag@yeditepe.edu.tr).

ABSTRACT

Individuals of all ages are inevitably affected by today's technology. The main purpose of this study is to explore the objectives of 8th grade students related to the utilization of multimedia instruments ranging from personal computers to the Internet use while they are doing their homework. Specifically, it tries to find out whether there is a significant relationship between «for what purposes 8th graders use multimedia tools» and «which personal traits are reinforced while doing homework with multimedia tools?», where gender differences were also taken into consideration in the analysis of the related items in the questionnaire form. The population of the study is made up of 435 students who were randomly selected from five secondary schools in the city of Istanbul, Turkey. As a data collection method, a questionnaire form with a set of related research questions was used. Findings from the study show that 8th graders in their use of multimedia platforms are provided with a more interactive and independent learning environment where they can find more learning aids while accomplishing their homework objectives. Gender-based evidence from the study shows that digitally, male students are more active and they exploit the fun side of homework more compared to their female counterparts.

RESUMEN

Las personas de todas las edades se ven inevitablemente afectadas por la tecnología de hoy. El principal propósito de este estudio es analizar en los estudiantes de octavo grado la relación entre los cambios experimentados en la utilización de los instrumentos multimedia y el uso de los ordenadores personales e Internet mientras están haciendo sus deberes. En concreto, se trata de averiguar si existe una relación significativa entre «para qué fines los estudiantes de octavo grado usan herramientas multimedia» y «qué rasgos personales se refuerzan mientras hacen los deberes con herramientas multimedia», y esto, teniendo también en cuenta las diferencias de género en el análisis de las partidas recogidas en el formulario de preguntas. La población del estudio se compone de 435 estudiantes elegidos aleatoriamente de cinco escuelas secundarias en la ciudad de Estambul, en Turquía. El método utilizado para la recolección de datos consistió en un cuestionario con preguntas relacionadas con la investigación. Los hallazgos del estudio evidencian que los estudiantes de octavo nivel que utilizan las plataformas multimedia reflejan un ambiente de aprendizaje más independiente e interactivo en el que encuentran un respaldo mayor mientras realizan sus tareas. Atendiendo a la perspectiva de género, el estudio muestra que, digitalmente, los estudiantes masculinos son más activos y desarrollan más el lado divertido de las tareas que sus compañeras.

KEYWORDS | PALABRAS CLAVE

Technology, learning, homework, homework goals, personal traits, multimedia, young learners, statistical analysis.
Tecnologías, aprendizaje, deberes, metas de tarea, rasgos personales, multimedia, jóvenes estudiantes, análisis estadísticos.

1. Introduction

Learning is a multi-faceted and longitudinal process. When we think of real performers and participants of a learning process from a wider perspective, we find teachers and students that are supposed to play collaborative and interactive roles in that process. The environments in which learning and teaching take place and the materials utilised should also be given a great attention. So, what about the question of homework? Often regarded as intermittent task, homework is a reinforcement or extra load on students' shoulders that they have to take home and which they often pretend to do for the sake of their parents' or teachers' satisfaction.

Homework is a valuable instrument that contributes to the development of children's education and knowledge. It can be considered as a sort of out-of-school learning. It is believed that homework has not yet received the serious attention that it deserves in the research literature. School systems have to give serious attention both to increasing awareness of homework motivation and preferences in children and in parents and to equipping both children and parents with the information and techniques necessary to accommodate homework tasks to these preferences as well as their motivation levels and sources (Milgram & Hong, 2000). It is obvious that schools should promote a better understanding of homework. In this respect, homework and its overt, essential role in the instructional process needs to be examined more closely to see whether it is located inside or outside the learning and teaching circle.

The relationship between homework and technological aids has often been neglected. Homework is often perceived as an issue that directly and solely relates to a task to be completed outside school. In that case, its process and completion are little observed. In fact, technological developments provide a wide range of means for facilitating homework completion. Whether new instructional methods change or even broaden children's learning styles is a question often raised by technological advances. The concrete walls of old libraries have fallen and today's libraries offer immense virtual spaces that are full of usable data for learners to prepare their homework or projects. The increasing dominance of information and communication technologies in locations such as homes and schools has also promoted students' use of these tools for their homework. Consequently, a new approach to homework completion has been adopted and it has been affecting all the trends from past to present. This is an issue that supports significant focal points to study

the relationship between technology and homework regarding students' switching goals targeted at homework and also homework planning and organization in which innovative aids are exploited more efficiently. In addition to the importance given to homework, particular attention to young learners' new homework trends would be of a greater concern to study where gender stands out to be more than a demographic value. It might redraw the lines in-between.

2. Literature review
2.1. Homework

Often considered to be extra-curricular activity, homework is a strong tool aiding the advancement of children's education and knowledge. Not having yet received the merited attention in the research literature, homework is a kind of learning often completed outside school. Contrary to widespread popular beliefs, current studies point out that homework is not a single activity assigned to students, it is rather an interaction including many other factors in the process.

As stated by Marzano, Pickering and Pollock (2001), homework and similar activities are instructional techniques that teachers are quite familiar with. In presenting homework to students, teachers provide opportunities for students to deepen their understanding and improve their skills relative to the content. Appropriately used, homework can pave the way to significant improvement in academic achievement.

Yan (2003), in his study on difference of age in understanding the social complexity of the Internet, suggests that children start to understand the Internet as a complicated tool cognitively and socially between the ages of 9 and 12. As students get older, they develop more positive attitudes towards consuming new media technologies. They use especially the internet and other computer mediated tools in doing and organizing their homework. Furthermore, Kupperman and Fishman (2001) point out that as the number of K-12 students who log onto to the Internet at home and at school increases, students, families, and schools gain more potential to use this resource in new ways.

Regarding the gender differences in terms of regarding type of homework performances, findings in a study conducted by Altun (2008) demonstrate that students (70%) had positive attitudes towards online homework assignments. In addition to that, male students tend to use online homework assignments more effectively and practically than their female counterparts. On the other hand, the study also shows that female students are more attentive as far as ethical issues are concerned.

Smolira (2008) studied student perceptions concerning online homework assignments in an introductory finance class and found that, in general, students felt that compared to traditional homework assignments that are turned in to the instructor, online homework was more preferable. In addition, the study also found that homework assignments increased students' understanding of the material and the time they spent in preparing for the class. In that context, learners' perceptions of the role of homework and technology are changing. In addition, assignments and responsibilities adopted during this new learning process are also becoming more interconnected. Blended with technology, homework assignments are reshaped in a way that learners enjoy and exploit more aspects of a learning process taken outside school walls. Thus, thanks to multimedia tools, students are encouraged to immerse themselves in a more exploratory activity.

In most learning systems across the world, homework is meant to be a «take away» and «bring it back» task. However, homework is meant to be a positive experience motivating children to learn. Contrary to the popular belief, tasks assigned as homework should not be regarded as a punishment. Over the last ten years, studies on homework have started to concentrate on the relationship between homework and student achievement, and they have made the case much stronger and more effective for assigning homework. The question of whether homework actually enhances students' academic achievement is often supported by various findings. A large number of teachers and parents agree that homework develops students' initiative and responsibility and it also meets the expectations of students, parents, and the public (Milbourne & Haury, 1999). The case against homework displays some global facts. According to this, countries such as Japan, Denmark, and the Czech Republic with the highest scoring students on achievement tests have teachers who give little homework to their students. However, students in Greece, Thailand, and Iran have some of the worst average scores. Teachers from these countries assign a lot of homework (Bennett & Kalish, 2006). It seems that controversy over pros and/or cons of assigning homework will last a long time and it seems that this issue will further cause different discussions in the literature.

2.2. Technology use and homework

Developments in technology allow people to ascertain whether new teaching methods change or make children's learning style more comprehensive. As a result of computer-assisted learning, as reported in

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some studies, there is a change in learning style. Students' use of the internet and other computer-based communication tools for their homework will increase as such tools become more common in homes. The ways families make use of computer technology for educational purposes has already become an area of research. For completing their homework assignments, students have already been using computer technology such as for searching web sites and using CD-ROMs for research projects, communicating with peers and experts through the Internet, and using the computer as a tool for writing and graphs. Using computer technology systematically for homework design provides students with many other exciting possibilities for individualization.

Using technology in the classroom for increasing student achievement is a topic influencing educational

literature today. However, there is little evidence for the improvement in homework assignments resulting from the use of technologies, in both the short- and long-term. In order to provide extra practice to students, regardless of individualized needs for such practices, teachers often assign homework. Homework, in turn, is often regarded by students as nothing more than «busy work» and it is therefore deemed unimportant for their learning. Technology can be used for changing these two types of homework from paper-and-pencil «chores» or «busy work» to motivating learning opportunities which extend classroom learning into the home. In the past, stressing a student's personal abilities and interests with regard to homework has been a slightly worrying task. Most teachers had little time or energy to assign individualized homework assignments which met student needs. In fact, all the students, regardless of their individual instructional needs, were often given the same assignment to complete, which resulted in the «busy work» perception. Instructors can now have the role of «assigner and designer» of the homework rather than «facilitator» in the homework reinforcement process while they are using technology. Instead of asking that all students fulfil a specified generic assignment, the teacher can ask students to use technology to practise the skills or display the knowledge learned. When the use of technology is extended to the home by assigning meaningful homework, three goals are accomplished. Firstly, meaningful homework assignments which were designed to meet the individual reinforcement needs of students are encouraged. Secondly, practice of important technology skills helping students further than the accomplishment of the homework itself is maintained. And thirdly, students are provided with fun and engaging homework activities (Zisow, 2000). In that sense, homework can be likened to a fruitful tree with numerous branches.

For discovering varied information, the internet serves as an effective, direct, and new method. In addition, for personalizing homework and supporting the participation of families in the homework process, the internet can be accessed at the convenience of its users whom it serves as an interactive tool (Salend, Duhaney & Anderson, 2004).

Results from a study on ungraded homework versus graded homework online by Allain & Williams (2006), show that there are no significant differences in conceptual understanding. It was also reported by students that when online homework was graded, they spent more time studying course materials outside of class. As Aksut, Kankilic and Altunkaya (2008) point out in their study, students have difficulties while they do their homework at Internet cafés. Results from the study also show that their teachers do not have the full ability or the skill to use information technologies. Furthermore, as recently put forward by new regulations, school and public libraries do not fulfil the needs for «performance homework». In light of schools' technological renovation, their study also draws attention to the fact that if intensive training on information and education technology use is given to teachers, their students' homework performance will also be positively affected.

In their study Cakiroglu, Akkan and Kosa (2008) state that although using another person's idea or a part of his or her work and pretending that it is your own was defined as plagiarism, students still did not hesitate to copy and paste from the internet while preparing homework and projects. Excessive and uncontrolled use of such tools carries various risks for both students and parents.

Also described in Kodippili and Senaratne's (2008) study with some interesting findings, such risks should be considered as a failure. This was based on inferences that computer-generated interactive mathematics homework can be more influential than a conventional teacher-graded homework. These inferences can be listed as small sample size, lack of complete random assignment of participants and failure to manage indirect influences. Tutorial help from the school and the effect of gender and age as variables can be considered among such influences. Such obstacles may create doubts as to whether parents or teachers can suggest computer-generated homework preparation without any restrictions. It seems that students enjoy and consume not only innovative instruments but also ones they have fun with. Concluding the subject of online versus traditional homework, Mendicino, Razzaq and Heffernan (2009) found that when students are given computer feedback, they learned significantly more than when they are doing traditional paper-and-pencil homework. When the size of the effect is considered, giving web-based homework if students have an access to the equipment needed may be worth the cost and effort. For this, schools which implemented one-to-one computing programs can be given as a good example.

3. Material and method

In the study, a Chi-Square Independence Test was used in order to study the relationship among qualitative variables as the scale for variables is nominal. After the collection of the questionnaire data, related

data for this study were analysed using the Statistical Package for the Social Sciences (SPSS).

3.1. Technique for data collection and the properties of the sample

Students answered a set of questions in the questionnaire which included respectively gender, for what purposes 8th graders use multimedia tools and which personal traits are reinforced while doing homework with multimedia tools; and how well, quickly and punctually they can plan, organize and do their homework. The study sample included 435 8th grade students from secondary schools in the city of Istanbul, Turkey. A more advanced grade was chosen for the study due to the fact that students in this grade are more likely to have better computer literacy. It was also assumed that such students are more likely to benefit from technological tools in a more efficient way.

In terms of gender, in the study, the percentages of male and female students were 48.7% and 51.3% respectively. For data assessment process regarding gender, this ratio is believed to maintain an equally targeted balance in the distribution of participants. The study examined which of the following six positive personality traits were reinforced through the use of multimedia tools for homework: 1) Sharing 2) Collaboration 3) Researching 4) Self-confidence 5) Creativity 6) Communication. Although not shown in tables here, the frequency for each choice has the following results: 92.2% of the students think that using multimedia tools while doing homework helps them gain self-confidence followed by 88.7% for collaboration, 82.1% for communication, 78.4% for sharing, and 75.9% for creativity. 16.1% of students reported that multimedia tools did not help them develop their research skills.

4. Results
4.1. Goals of multimedia use and personal traits reinforced

Findings related to the relationship between the questions «for what purposes do 8th graders use multimedia tools?» and «which personal traits (sharing, collaboration, self-confidence, creativity and communicativeness) are reinforced while doing homework with multimedia

tools?» were given as Chi-Square Test results in table 1 below.

Table 1 shows that there is a significant relationship between chat and sharing at 5% level (sig=,006). This data shows that students are most likely to realize their sharing through chat in an interactive way. In terms of homework requirements whose guidelines were specified by their teachers, students are expected to communicate with their friends in order to exchange valuable information while completing their tasks. This would be a pre-planned conversation. Online chat tools could serve as a valuable asset for collaborative tasks. In that sense, as homework is often considered to be an individual task, the data set above yields results that refute this classical understanding of homework as a single-person task.

As for chat and collaboration, data from table 1 shows that there is significance at 5% level (sig=,007), which can be interpreted as «students tend to collaborate more during chat as they are more likely to be prepared and relaxed».

Data related to the relationship between chat and collaboration supports the data related to the relationship between chat and communicativeness in that a collaborative chat also may help students' confidence level increase. Holding a conversation on an online chat platform might encourage students to express themselves better as there is less social and environmental pressure from their peers or teachers. Thus, gelatophobic (fear of being laughed at) effects are minimized. In other words, when students are immersed in multimedia-aided tasks, they are likely to develop, improve, and demonstrate more of their productive and reflective sides by feeling that they possess more or fuller control over what they are doing. This may result from the fact that when left alone to tackle numerous configurations, younger students are more likely to feel more confident and at ease, and challenged; as the more they explore and exploit, the more they seem to enjoy technological instruments.

Table 1: Relationships between chat and personal traits					
	Pearson Chi-Square			Fisher's Exact Test	
	Value	df	Asymp.Sig (2-sided)	Exact Sig. (2-sided)	Exac Sig. (1-sided)
Relationship between chat and sharing	7,505	1	,006	,007	,004
Relationship between chat and collaboration	7,279	1	,007	,009	,005
Relationship between chat and self-confidence	6,754	1	,009	,012	,007
Relationship between chat and creativity	7,655	1	,006	,007	,004
Relationship between chat and communicativeness	26,595	1	,000	,000	,000
N of Valid Cases	435				

As we see in table 1, students' self-confidence increases as they feel more comfortable and liberated in producing more creative ideas during chat.

As for chat and communicativeness, data from table 1 shows that there is significance at 5% level (sig=,006). As doing homework often requires group work as assigned by their teachers, students tend to get themselves involved in interactive communication. Altogether, it can be inferred that online conversation is supportive of interactivity and creativity.

As for the relationship between gaming and personal traits such as sharing, collaboration, self-confidence, and creativity, table 2 provides the related significance levels.

In that sense, it is noticeable that there is a significant relationship between gaming and sharing at 5% level (sig=,002). This means while doing their homework online, students find it as enjoyable and as entertaining as playing games.

It is also seen that data regarding the relationship between gaming and collaboration supports the data related to the relationship between gaming and sharing in that students tend to collaborate online more as a part of their online gaming tools. Team games have become very popular among children. These make their online participation, interaction, and communication more collaborative.

As students use the internet, they happen to find more opportunities for self-realization, which reinforces self-confidence as well. The relationship for this was found significant at 5% level (sig=,002).

Data for the relationship between gaming and creativity (sig=,006) show that as most games include various interactive tools that require development strategies, students' creativity is promoted significantly. A digital game can often be as challenging, time consuming and procedural as homework itself.

It is a well-known fact that homework assignments include various tasks that often require research. For that reason, to better understand the relationship between research and personal traits (collaboration, self-confidence and communication), table 3 provides the related significance levels.

As shown in table 3, data concerning the relationships between research and personal traits such as collaboration, self-confidence and communication show that using multimedia tools with the aim of rese-

arch reinforces collaboration and communicativeness, which also help students build more self-confidence for group work and self-regulation as they start searching the information they have been looking for. Put into practice in the elementary classroom, multimedia-assisted homework activities help students in three ways. These are learning self-regulatory and time-management skills, developing self-efficacy, and learning to self-reflect on their performance.

Table 2: Relationships between gaming and personal traits					
	Pearson Chi-Square			Fisher's Exact Test	
	Value	df	Asymp.Sig (2-sided)	Exact Sig. (2-sided)	Exac Sig. (1-sided)
Relationship between gaming and sharing	9,532	1	,002	,002	,001
Relationship between gaming and collaboration	11,176	1	,001	,001	,000
Relationship between gaming and self-confidence	9,311	1	,002	,002	,001
Relationship between gaming and creativity	7,414	1	,006	,007	,004
N of Valid Cases	435				

In addition to research and personal traits relationships, data related to the relationship between doing homework and creativity and data related to doing homework and communicativeness show that doing homework using multimedia tools requires the use of multi-skills and this enables students to reveal and improve their personal traits. Collaborative homework assignments support interactivity and creativity. Thus, communication among students is fostered in a creative way.

4.2. Goals of multimedia use and homework processing

Table 4 shows that there is a significant relationship between using multimedia for conducting research and homework at the 5% level. Those who use multimedia tools for research can plan their homework better through digital organizers such as word-processor, paint brush, PowerPoint etc. It should not be forgotten that planning is an essential part of research and exploration, as is homework.

Accordingly, students who use multimedia tools for research can plan their homework significantly better through visual and auditory tools. This is because multimedia resources offer various and numerous applications that are hardly available in traditional homework that is solely dependent on limited aids.

4.3. Relationship between use of multimedia and gender differences

Finally, gender differences often play a discriminatory role in many studies and such differences may

Table 3: Relationships between research and personal traits					
	Pearson Chi-Square			Fisher's Exact Test	
	Value	df	Asymp.Sig (2-sided)	Exact Sig. (2-sided)	Exac Sig. (1-sided)
Relationship between research and collaboration	9,819	1	,002	,002	,001
Relationship between research and self-confidence	4,417	1	,036	,048	,026
Relationship between research and communication	8,600	1	,003	,004	,002
Relationship between doing homework and creativity	5,770	1	,016	,017	,010
Relationship between doing homework and communicativeness	4,892	1	,027	,032	,017
N of Valid Cases	435				

reflect interesting results concerning the general perspective of a study.

As in table 5, overall data from the study show that male students use multimedia tools more for fun and gaming. As for personal traits improved by doing homework through multimedia tools, related data shows that male students' collaboration and sharing skills are comparatively more developed. This also supports the finding that male students use multimedia tools predominantly for fun and gaming.

5. Discussion and conclusion

Earliest investigations show that no research found any kind and amount of benefit to assigning homework in elementary school. Furthermore, not even a positive correlation between, having younger children do some homework versus none, or more homework versus less, and any measure of achievement was found (Kohn, 2012). In this respect, multimedia-assisted homework assignment in this study is thought to serve as a new supplementary and interactive tool for young learners rather than an instrument to maintain complete and absolute achievement for the satisfaction of either parents or instructors. This draws a line between the traditional concept and understanding of homework performance and the one supported by highly interactive digital platforms. It is obvious that homework should engage students in independent learning. This could be achieved through pursuing knowledge individually and imaginatively as students investigate, research, write, design, and make. As stated by related research, either in its current format or with some changes, over 70% of students using online homework would be willing to reuse it (Brewer, 2009).

Our study produced a three-dimensional view of the issue of homework. These are young learners' relationship with home-

work, learners' autonomy and gender factors in the related process. Overall data from our study support the assertion that use of multimedia tools helps students develop their independence as a learner when they are given more responsibility for their own learning as students are generally found to be receptive to its use.

Technology acts a catalyst for an interactive and collaborative accomplishment of homework. Multimedia-aided homework performance fosters communication among students through online chat and games. In addition to this, digital organizers and online tools help students both develop and improve exploratory research skills. This data is also supported in a study by Richards-Babb, Drelick and Henry (2011), where they found those students' online homework attitudes were positive in general. A large majority of students view online homework favourably (80.2%), as worth the effort (83.5%), relevant (90.5%), challenging (83.4%), and thought provoking (79.0%). Eggers, Wooten and Childs (2008) also found that fifty-three percent of students believed that online homework use enhanced the quality of their study time and 55% believed that it led to a greater understanding of the topics and problems.

Finally, findings from our study also show that male students use multimedia tools mostly for fun and gaming. Compared to their female counterparts, male students tend to share more by using multimedia tools for doing homework.

However, as also stated in a related study, for both male and female students, online homework provides a time- and cost-effective means to enhance pedagogy in large classes (Richards-Babb & Jackson, 2011).

We have no evidence to support online homework performance over traditional hand-graded

Table 4: Relationship between research and homework planning through visual and auditory tools					
	Pearson Chi-Square			Fisher's Exact Test	
	Value	df	Asymp.Sig (2-sided)	Exact Sig. (2-sided)	Exac Sig. (1-sided)
Relationship between research and homework planning through visual and auditory tools	4,503	1	,034	,039	,024
N of Valid Cases	435				

homework. However, the study suggests that in terms of traditional homework, girls do more out of school homework than boys at both 10th and 12th grade (Mau & Lynn, 2000). Therefore, it

Table 5: Relationships between gaming, collaboration and gender					
	Pearson Chi-Square			Fisher's Exact Test	
	Value	df	Asymp.Sig (2-sided)	Exact Sig. (2-sided)	Exac Sig. (1-sided)
Relationship between gaming and gender	29,222	1	,000	,000	,000
Relationship between collaboration and gender	6,069	1	,014	,015	,010
N of Valid Cases	435				

would be appropriate to remind readers that such a comparison could further highlight the basics of our study. In addition, no data was collected in this study which would provide insight into teachers' and parents' concerns about using online homework. It is likely that teachers and parents would have views similar to or different from those expressed by the students in this study. This study, as limited to a small group of students, was expected to provide enthusiasm and inspiration for related studies in the future from a multi-dimensional point of view.

Note

Extensive dataset as an extension of the current one can be found at http://dx.doi.org/10.6084/m9.figshare.1097568.

References

AKSUT, M., KANKILIC, E.G. & ALTUNKAYA, F. (2008). *The Attitudes of Elementary and Secondary School Students towards Internet Use while they are doing their Homework.* (http://goo.gl/SvqPPO) (15-03-2014).

ALLAIN, R. & WILLIAMS, T. (2006). The Effectiveness of Online Homework in an Introductory Science Class. *Journal of College Science Teaching, 35*(6), 28-30 (http://goo.gl/tCJlds) (12-03-2014).

ALTUN, E. (2008). 6th, 7th and 8th Graders' Attitudes towards Online Homework Assignments Sites. *The Turkish Online Journal of Educational Technology, 7,* 4, 5-17 (http://goo.gl/f2Euj1) (02-04-2014).

BENNETT. S. & KALISH, N. (2006). *The Case against Homework: How Homework is Hurting our Children and What We Can do about it* (pp. 259). New York: Crown Publishers.

BREWER, D.S. (2009). *Effects of Online Homework on Achievement and Self Efficacy of College Algebra Students.* (http://goo.gl/d3qORm) (23-06-2014).

CAKIROGLU, Ü., AKKAN, Y. & KOSA, T. (2008). *The Effect of Internet about Plagiarism during Homework Preparing Period.* (http://goo.gl/4TA11A) (11-02-2014).

EGGERS, J.D., WOOTEN, T. & CHILDS, B. (2008). Evidence on the Effectiveness of on-line Homework College. *Teaching Methods & Styles Journal, 4,* 5, 9-16. (http://goo.gl/sK2Oh3) (21-04-2014).

KODIPPILI, A. & SENARATNE, D. (2008). Is Computer-generated Interactive Mathematics Homework more Effective than Traditional Instructor-graded Homework? B*ritish Journal of Educational Technology, 39,* 5, 928-932. (DOI: http://doi.org/fw9f9s).

KOHN, A. (2012). *Homework: New Research suggests it may be an Unnecessary Evil.* (http://goo.gl/sDYaB) (25-06-2014).

KUPPERMAN, J. & FISHMAN, B.J. (2001). Academic, Social, and Personal Uses of the Internet: Cases of Students from an Urban Latino Classroom. *Journal of Research on Technology in Education, 34,* 2, 189-215 (DOI: http://doi.org/tkr).

MARZANO, R.J., PICKERING, D.J. & POLLOCK, J.E. (2001). *Classroom Instruction that Works. Research-Based Strategies for Increasing Student Achievement* (pp. 60). Alexandria, VA (USA): Association for Supervision & Curriculum Development.

MAU, W. & LYNN, R. (2000). Gender differences in Homework and test scores in Mathematics, Reading and Science at Tenth and Twelfth Grade. *Journal of Psychology, Evolution & Gender, 2,* 2, 119-125. (DOI: http://doi.org/b2vs94).

MENDICINO, M., RAZZAQ, R. & HEFFERNAN, N.T. (2009). A Comparison of Traditional Homework to Computer-Supported Homework. *Journal of Research on Technology in Education 41,* 3, 331-359. (DOI: http://doi.org/tng).

MILBOURNE, L.A. & HAURY, D.L. (1999). *Helping Students with Homework in Science and Math.* (http://goo.gl/dVq6cY) (12-02-2014).

MILGRAM, R.M. & HONG, E. (2000). *Homework Motivation & Learning Preference* (pp. 4). Westport, CT (USA): Greenwood Publishing Group, Incorporated.

RICHARDS-BABB, M., DRELICK, J. & HENRY, Z. (2011). Online Homework, Help or Hindrance? What Students Think and how they Perform. *Journal of College Science Teaching, 40,* 4, 81-93. (http://goo.gl/bsPo66) (15.06.2014).

RICHARDS-BABB, M. & JACKSON, J.K. (2011). Gendered Responses to Online Homework Use in General Chemistry. *Journal of Chemistry Education Research and Practice, 12,* 409-419 (DOI: http://doi.org/bwcd5h).

SALEND, J.S., DUHANEY, D. & ANDERSON, D.J. (2004). Using the Internet to Improve Homework Communication and Completion. *Journal of Teaching Exceptional Children, 36,* 3, 64-73 (http://goo.gl/HYzMLO) (09-03-2014).

SMOLIRA, C.J. (2008). Student Perceptions of Online Homework in Introductory Finance Courses *Journal of Education for Business, 84,* 2, 90-95. (DOI: http://doi.org/c3vm9c).

YAN, Z. (2003). Age Differences in Children's Understanding of the Complexity of the Internet. *Journal of Developmental Psychology, 26,* 4, 385-396. (DOI: http://doi.org/ct239m).

ZISOW, M.A. (2000). Teaching Style and Technology. *Journal of Tech Trends, 44,* 4, 36-38. (DOI: http://doi.org/cr5pq8).