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Dear IJONTE Readers,

International Journal on New Trends in Education and Their Implications- IJONTE appears on your screen now as Volume 4, Number 2. In this issue it publishes 20 articles. And this time, 38 authors from 6 different countries are placed. These are Ethiopia, India, Iran, Malaysia, Pakistan, Tunisa and Turkey.

Our journal has been published for over four years. It has been followed by many people and a lot of articles have been sent to be published. 162 articles have been sent to referees for forthcoming issues. They will be published according to the order and the results. Articles are sent to referees without names and addresses of the authors. The articles who get positive responses will be published and the authors will be informed. The articles who are not accepted to be published will be returned to their authors.

We wish you success and easiness in your studies.

Cordially,

1st April, 2013

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TURKISH 6th-8th GRADE STUDENTS' SOCIAL EMOTIONAL LEARNING SKILLS AND LIFE SATISFACTION

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ABSTRACT

The purpose of this study is to find out that whether 6th-8th grade Turkish students have any life satisfaction differences depending on gender, class level, and perceived parents attitude and whether students' social emotional learning skills are a predictor of life satisfaction. The participants were 388 students, between age range of 15–18, who were attending seven different elementary schools in Burdur, Turkey. Their ages ranged from 10 to 15 years old. Data were collected by using Social-Emotional Learning Skills Scale and the Multi-Dimensional Student Life Satisfaction Scale-Short Form. Results indicated that life satisfaction did not differ by gender, but did differ by class level and perceived parental attitudes. According to stepwise multiple regression analysis, 8th grade, perceived parental attitudes (over tolerant), self-esteem enhancing skills and stress-coping skills were significant predictors of students' life satisfaction.

Key Words: Life satisfaction, Social-emotional learning skills, Perceived parent attitudes, Gender.

INTRODUCTION

In the past decade, there has been an increasing interest in positive psychology and in examining positive psychological constructs like happiness, meaning in life, subjective well-being, and life satisfaction. Positive psychology focuses on improving the quality of life of individuals and preventing the pathologies caused by negative events and stress (Seligman and Csikszentmihalyi, 2000). One of the most important constructs in positive psychology is subjective well-being. Diener, Suh, Lucas and Smith (1999) contended that subjective well-being as the assessment of cognitive and emotional life of a person consisted of several components: positive emotions, negative emotions, and life satisfaction. Life satisfaction represents the cognitive dimension of subjective well-being (Huebner, Suldo, Smith, and McKnight, 2004) and provides an overall assessment of the quality of a person's life and the perception of important life goals (Diener, Emmons, Larsen, & Griffin, 1985; Diener, Suh, Lucas, and Smith, 1999). These general assessments about life include the desire to change the life satisfaction from the past and the future and comments about a person's life by that person's relatives (Diener, Suh, Lucas and Smith, 1999). In other words, life satisfaction covers the comparison between a people's criteria imposed by themselves and perception of the living conditions, therefore, It contains valuing their own life (Pavot and Diener, 1993).

According to Gilman and Huebner (2003), life satisfaction is one of the most important concepts in positive psychology. It is multidimensional, in that one can examine satisfaction with school, friends, and family relationships, among other domains. Currently, there are more studies of life satisfaction in adults than there are in samples of children and adolescents. Research on adults indicates that high life satisfaction is associated with positive social relationships, active participation in politics, fewer physical complaints, and a longer life, whereas low life satisfaction is associated with adjustment disorders, depression, isolation, aggressive behavior and alcohol and drug addition (Huebner, 2004). Research on children and adolescents yield similar findings,



with findings showing relationships between life satisfaction and several variables, including physical health, self-perception, depression and social relationships, extraversion, internal focus of control, self-concept, active coping, pro-social behaviors, the use of addictive substances, and psychopathology (Huebner, 2004; Kaya & Siyez 2008).

The studies related to life satisfaction mostly deal with the university and high school students (Aydıner, 2011; Chow, 2005; Çeçen, 2008; Çivitçi, Çivitçi and Fiyakalı, 2009, Çeçen, 2007; Gündoğar et al., 2007; Handal and Fenzel, 2000; Miller, 1995; McKnight, 2005; Paolini, Yanez and Kelly, 2006; Shek, 1999; Tuzgöl, 2007; Young and Moller, 1996). Identifying the factors that

affect life satisfaction at early ages helps to take measures to improve the future life satisfaction, to plan the preventive activities. In studies on children and adolescents, the relationship between life satisfaction and family support (Bradley and Corwyn, 2004; Nansook, 2004; Nansook, 2005; Petito and Cummins, 2000; Young et al., 1995), self-efficacy, extraversion (Fogle, Huebner, and Laughlin , 2002), parental and friend relationships (Levin and Currie, 2010, Nickerson and Nagle, 2004), self-esteem, physical appearance (Huebner, Gilman, and Laughlin, 1999), age or education level (Dew and Huebner, 1994; Greene , 1990, Huebner, 1991; Huebner et al., 2000), gender (Dew and Huebner, 1993, Huebner, 1991; Huebner and Alderman, 1993; Huebner et al., 2000; Verkuyton, 1996), academic success (Salmela- Aro and Tynkkynen 2009) are investigated.

According to Zhang and Leung (2002), self-esteem is an important variable in addition to demographic characteristics, social relationships, personality and coping skills for explanation of life satisfaction. The relationship between self-esteem and life satisfaction has been demonstrated in many research (Campbell, 1981; Çivitci, 2007, Diener and Diener, 1995; Leung and Leung, 1992; Lucas, Diener and Suh, 1996). Self-esteem of a person reflects the perceptions and evaluations about oneself but the life satisfaction includes the person's evaluation of whole life (Diener and Diener, 1995). Self-esteem is one of the important dimensions of being sufficient in social and emotional aspect and corresponds to the social and emotional learning skills that increase self-esteem enhancing skills (Kabakçı and Korkut, 2008, and Kabakçı and Korkut Owen, 2010). Social and emotional learning is defined as gaining skills like recognizing and managing emotions, dealing with the other people and being responsible, building positive relationships, giving responsible decisions, managing the difficult situations. (Devaney, Brien, Tavegia and Resnik, 2005; Elias, Zins, Graczyk, and Weissberg, 2003; Mooij and Smeets, 2009). According to Kabakçı and Korkut-Owen (2010), social emotional learning can be defined as recognizing and managing emotions, effectively solving problems, establishing positive relationships with other people and competencies that are required for all students. In particular, social emotional learning ability known as coding, translating the social and emotional information and putting them into logical framework is related to children's social behavior (Mckown, Gumbiner, Russo, and Lipton, 2009). The Collaborative for Academic, Social, and Emotional Learning (CASEL) explains social and emotional competence in five components (Merrell, 2010).

Those are as follows:

- *Self-awareness:* It is exactly people's feelings, interests, values and strengths assessment, protection of their self-confidence based on a solid foundation.
- Self-management: Coping with stress, controlling urges and regulation of feelings for a person to be patient while overcoming obstacles, personal and academic goal-setting and monitoring the progress, expressing the feelings properly.
- Social awareness: Looking through the other people's eyes and establishing empathy with them, recognizing individual and group differences and similarities and giving them sufficient importance, knowing and being able to use the school and family resources.
- *Relationship skills:* Establishing and maintaining collaborative and healthy relationships, resisting negative social pressure, preventing, managing and solving interpersonal conflicts, seeking help when needed.



 Responsible decision making: Making decisions taking into account the ethical standards, safety concerns, the appropriate social norms, respect to others, the possible outcomes of different events, applying decision-making skills to academic and social situations, participating in building well-being schools and society.

Social and emotional learning skills are important to determine the quality of life for all ages. People with strong social and emotional sides are more successful in many areas such as solving social problems, establishing interpersonal relationships, having self-knowledge and self-understanding (Kabakçı and Korkut, 2008). According to Zins, Weissberg, Wang, and Walberg (2001), the potential effects of social emotional learning are divided into two groups. The primary effects are; academic achievement, motivating learning, increasing the interest in and commitment to the school, decreasing the possibility of expulsion from the school, graduating with a higher degree and increasing the possibility of finding a job. Secondary effects can be seen in the areas like expectation of greater competence, increased cooperation with others, developed social and problem-solving skills, community cohesion and increased healthy life expectations, less drug and violence usage and improved family relations (Kabakçı and Korkut, 2008).

Research dealt with improving children's and adolescents' social emotional skills help to improve controlling emotions, establishing positive relations with others, making responsible decisions and coping with difficult situations as well as increasing academic achievements (Devaney, Brien, Tavegia and Resnik, 2005). In addition, determining elementary school students' predictors of life satisfaction can give direction for psychological counseling and guiding this age group. Researches on increasing life satisfaction will contribute to professional efforts for increasing positive experiences more than removing the negative aspects. Thus, as positive psychology suggested, children and adolescents as well as psychological consultants can focus on more positive concepts. Even though social emotional learning skills are supportive for general well-being (Humphrey, Lendrum, Wigelsworth, & Kalambouka, 2009), there is no research dealing with children's and adolescents' social emotional learning skills and their life satisfaction together in Turkey. In summary, this study has two fundamental aims. First, to examine whether life satisfaction show differences with regard to gender, class level and perceived parents attitude. Second to examine whether students' social emotional learning skills, class level and parents attitude are a predictor of life satisfaction.

METHOD

Participants

Participants consisted of 388 Turkish students in the 6th (96, 24.7%), 7th (128, 33%), and 8th (164, 42.3%) grades from seven elementary schools. The group included 196 (50.5%) female and 192 (49.5%) male students. Their ages ranged from 10 to 15 years old (M = 13.15, SD = .965). Socio-economic status (SES) data were not collected; however, participants were attending public schools serving predominantly middle and upper SES families.

Measures

Social Emotional Learning Skills Scale (SELSS): In this study, SELSS (Kabakçı, Korkut & Qwen, 2010) was used to measure students' social-emotional learning skills. SELSS consists of 40-items divided across four subscales (a) problem solving (11 items), (b) communication (9 items), (c) self-esteem (10 items) and (d) coping with stress (10 items). Participants respond to items on a four-point Likert scale, and both a total score as well as four subscale scores are provided. Total scores can range from 40 to 160, with lower scores indicating fewer social emotional learning skills. Kabakci et al. reported a Cronbach's alpha coefficient of .88 for the total score of alphas between .61 and .83 for subscale scores. Test-retest coefficients were .85 for the total score and between .69 and .82 for subscale scores.



Exploratory and confirmatory factor analysis were used to establish structural validity. An exploratory factor analysis with varimax rotation yielded four factors and the four factor model was supported by a confirmatory factor analysis In similar validity scales, positively and significant (p < .01) relations similar to the ones found in scales of determining conflict resolution, self-esteem scale, social skills scale and coping strategies scale used in stressed life were found. Discriminant validity of the scale for the top and bottom groups was found significant at (p < .001) level. In addition, the relationships between the subscales and total scores are in (p<.01) significant level. Cronbach alpha estimates for SELSS scores in this study were .88 for the total score, of problem solving, for communication , for self-esteem, and for coping with stress and they vary between .65-.80 for the subscales.

The Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS): In this study, to evaluate students' life satisfaction, The Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS) adopted by Siyez and Kaya (2008) were used. The BMSLSS (Huebner, Suldo, Valois, Drane, and Zullig, 2004) is a five-item measure in which each item denotes one of the five life satisfaction domains (i.e., family, school, friends, self, and living environment). The five items are summed to obtain a total life satisfaction score. Each item is rated on a seven-point Likert scale with responses ranging from "Terrible" (1) to "Delighted" (7). An additional item (i.e., "I would describe my satisfaction with my overall life as...") was included with the BMSLSS items

as a validity check (Seligson, Huebner, & Valois, 2005). The scores from Turkish form of the BMSLSS had acceptable test-retest reliability (r=.82) and internal consistency (r=.89). Item-total correlations varied from .64 to .78. A significant correlation was observed between the BMSLSS and the Children's Depression Inventory and between the BMSLSS and the Piers Haris Self-Concept Scale. Cronbach Alpha coefficient of Multidimensional Students' Life Satisfaction Scale calculated in this research is .80

Data Analysis

In this research, t-test, one-way analysis of variance (ANOVA) and stepwise multiple regression analysis were used to analyze the data. After getting data set ready for analysis, multiple regression analysis assumptions have been tested. After analysis, it has been observed that one independent variable tolerance value which cannot be explained by other independent variables is greater than 20, variance increasing factor (VIF) values are lower than 10 and condition index (CI) value was lower than 30. Thus, it has been decided that there is no multicollinearity between the independent variables (Büyüköztürk, 2010). Since gender, class level, and perceived parent attitude are classified variables, they have been coded as artificial (dummy) variable into the regression analysis. Produced dummy variable amount is one less than the group number. SPSS 16.0 software was used for analysis.

RESULTS

Preliminary Analyses

Descriptive statistics and skewness and kurtosis values are presented in Table 1. As can be seen in the table, skewness and kurtosis values in all data were between -1.0 and +1.0 (Muthén and Kaplan, 1985), which is within acceptable limits for a normal distribution. Also, Mahalonobis distance indicated no extreme values (Tabachnick and Fidell, 2007).

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Table 1: Descriptive statistics

		Mean	SD	Skewness	Kurtosis
Life satisfaction	on	35.05	4.88	748	.224
Communicati	on	28.25	4.38	395	240
Problem solvi	ng skills	34.91	5.22	487	.010
Coping with S	tress	25.39	5.03	.035	293
self-esteem skills	enhancing	34.92	3.84	198	240

The relationship between life satisfaction and social emotional learning skills were examined and the Pearson Correlation coefficients results are given in Table 2.

Table 2: Pearson Correlation Coefficients of Variables

	1	2	3	4	5
Life satisfaction	-				
Communication	.224**	-			
Problem solving skills	.313**	.574**	-		
Coping with Stress	.259 ^{**}	.473**	.537**	-	
Self-esteem enhancing skills	.490**	.423**	.481**	.244**	-

P < 0.01

As shown in Table 2, correlation coefficient was calculated .22 between life satisfaction and communication skills, .31 between life satisfaction and problem solving skills, .26 between life satisfaction and coping with stress and .49 between life satisfaction and self-esteem enhancing skills. And also, correlation coefficient was calculated .57 between communication skills and problem solving skills, .47 between coping with stress and .42 between self-esteem enhancing skills. The correlation coefficient is .54 between problem solving skills and coping with stress, .48 between self-esteem and the correlation coefficient between coping with stress and self-esteem enhancing skills was calculated as .24. The correlation coefficients between variables are statistically significant (p<.01). Obtained correlation coefficient shows that the relationship between variables can be tested by multi regression analysis.

Results about Group Differences

Results of a t-test indicated that females (M = 34.97, SD = 4.77) and males (M = 35.13, SD = 5.01) did not differ significantly or meaningfully on life satisfaction, t (386) = .31, p > .05, d = .03. An ANOVA indicated that eight graders (M = 33.99, SD = 5.25) reported significantly higher scores than students in the 6th (M = 35.94, SD = 4.38) and 7th (M = 35.73, SD = 4.52) grades, F(2-385) = 6.908, p < .01. However, the effect size was very small, $\eta^2 = .035$. Finally, life satisfaction differed significantly by parental type, F (4, 383) = 4.22, p < .01. Students with protective parents (M = 35.68, SD = 4.67) reported higher life satisfaction than students with over-tolerant (M = 32.91, SD = 4.75), authoritative (M = 33.18, SD = 5.32), careless-inconsistent (M = 31.11, SD = 8.24) parents. Similarly, students with democratic parents (M = 35.25, SD = 4.66) reported significantly lower scores than those with over-tolerant and careless-inconsistent parents. However, the effect size for these differences was also small, $\eta^2 = .04$.



Results for the stepwise multiple regression analysis

Stepwise multiple regression analysis was used to examine whether students' social emotional learning skills, class level and parents attitude are a predictor of life satisfaction. The results of the multiple regression analysis are presented in Table 3.

	SE	â	t	р	R	R∠
13.322	1.984		6.716	.000	.49	.24
.622	.056	.490	11.023	.000		
11.252	2.057		5.471	.000		
.576	0.57	.453	10.016	.000	.51	.26
.145	.044	.149	3.298	.001		
12.498	2.085		5.993	.000		
.559	.057	.440	9.760	.000	.52	.28
.149	.044	.143	3.196	.002		
-1.224	.434	124	2.824	.005		
12.951	2.083		6.2157	.000		
.542	.057	.427	9.441	.000		
.152	.044	.156	3.465	.001	.53	.29
-1.321	.433	134	-3.051	.002		
-2.053	.891	101	-2.305	.022		
	.622 11.252 .576 .145 12.498 .559 .149 -1.224 12.951 .542 .152 -1.321	.622 .056 11.252 2.057 .576 0.57 .145 .044 12.498 2.085 .559 .057 .149 .044 -1.224 .434 12.951 2.083 .542 .057 .152 .044 -1.321 .433	.622 .056 .490 11.252 2.057 .453 .576 0.57 .453 .145 .044 .149 12.498 2.085 .440 .559 .057 .440 .149 .044 .143 -1.224 .434 124 12.951 2.083	.622.056.49011.023 11.252 2.0575.471.5760.57.45310.016.145.044.1493.298 12.498 2.0855.993.559.057.4409.760.149.044.1433.196-1.224.4341242.82412.9512.0836.2157.542.057.4279.441.152.044.1563.465-1.321.433134-3.051	.622.056.490 11.023 .000 11.252 2.0575.471.000.5760.57.453 10.016 .000.145.044.1493.298.001 12.498 2.0855.993.000.559.057.4409.760.000.149.044.1433.196.002.149.044.1433.196.002.12.9512.0836.2157.000.542.057.4279.441.000.152.044.1563.465.001.1321.433134-3.051.002	.622.056.49011.023.000 11.252 2.057.453 5.471 .000.51.5760.57.453 10.016 .000.51.145.044.149 3.298 .001.5112.4982.0855.993.000.52.559.057.4409.760.000.52.149.044.1433.196.002.149.044.1433.196.002.149.044.1433.196.002.129512.0836.2157.000.542.057.4279.441.000.152.044.1563.465.001.53.1321.433134-3.051.002

Table 3: Stepwise Multiple Regression Analysis Results for Predicted Life Satisfaction.

Second Step: F (2-384) = 67.746 , *P<.001

Third Step: F (3-383) = 48. 643, P<.001

Fourth Step: F (4-382) = 38.220, P<.001

In Table 3 it can be seen that stepwise multiple regression analysis was completed in four steps and for variance contribution, self-esteem enhancing skills improvements skills, coping with stress skills, class and parents attitudes are important predictors of student's life satisfaction. Self-esteem enhancing skills explains 24% of the total variance in first step (R = .49, R2 = .24, F(1-385) = 121.46, P<.001). When coping skills included in the analysis in the second step, the variance raised to 26% (R = .51, R2 = .26, F (2-384) = 67.74, P <.001). Once class variable added into the analyses in the third step, the variance goes up to 28%. (R = .52, R2 = .28, F (3-383) = 48. 64, P<.001). In the fourth step, parents attitude included in the analysis and the variance rose up to 29%. (R = .53, R2 = .29, F (4-382) = 38,22, P < .001). When we looked at the signs of

regression coefficients, there is a positive relationship between life satisfaction and self-esteem enhancing skills and coping with stress skills, but there is a negative relationship between life satisfaction and class, parents attitude. Once we examined the regression coefficient (β), the importance order of predictor variables are; self-esteem enhancing skills, coping with stress skills, class and parents attitudes, respectively. In addition, the gender variable is not a significant predictor of life satisfaction.



DISCUSSION

In this study, no significant difference was found in the life satisfaction levels of students by gender. This finding is consistent with other studies reporting a no significant difference between children's and teenagers' life satisfactions depending on gender (Chow 2005; Duru, Rose, Uskun, Demirci, and Keçeci 2007; Fugl-Meyer, Melin, and Fugl-Meyer, 2002; Hampton and Marshall, 2000; Hintikka, 2001; Huebner, 1991; Katja, Paivi, Marja-Terttu and Pekka, 2002; Tuzgöl, 2007). With this, it can be concluded that gender is not a significant variable to explain 6th-8th grade level Turkish students' life satisfaction.

Another result of this research shows that students' life satisfaction varies by class level. 8th grades students' life satisfactions are lower than 6th and 7th grade students' life satisfaction. This result is difference with Huebner's (1991) research findings. This difference can be explained by the Turkish educational systems. Level Placement Test for elementary school applied in 2008 at first time but it was gradually abolished in 2010. Accordingly, 6th grade students in 2010 have also entered 8th grade level placement test in 2012. Level placement test spread into three years and grade weighted score for 8th grade placement test is higher than those in 6th and 7th grades. Therefore, 8th grade students are in intensive exam preparation. They spend most of their time studying, but not spending enough time with their friends, hobbies and sports. However, researches show that hobbies and extra-curricular activities have positive effects on life satisfaction (Gilman, Meyers, and Perez, 2004). Gilman (2001) has reported that extra-curricular social activities increase life satisfaction. In addition, 8th grade students not only deal with exams and choosing problems but also deal intensely with emotional adolescence problems. For these reasons school psychological counselors' preventive works associated with students' exam preparation and adolescence times and directing them to social activities related to their interest and abilities can help them to get more satisfaction from their life. There had been a change in the transition to elementary schools at the end of completing the research and Minister of National Education has declared that 6th and 7th grade students wouldn't enter the exam but 8th grade students would enter. For this reason, further studies should investigate relationships between grade level and leisure time activities.

Another finding of the present study shows that students' life satisfaction differ depending on perceived parental attitude. Students with protective parents have higher level of life satisfaction than the students careless-inconsistent and over-tolerant parents. It is defined as parents protective with authoritative, attitude prevents children to achieve autonomy, but it is also believed that interpretation of these results should be done by considering the cultural differences. Like many Asian and eastern societies, Turkish society has collectivistic culture. In collectivistic cultures, the fact that people connected to each other is important. In this cultures, roles and tasks expected from people are determined and it gives people to strengthen their connection with others (Kağıtçıbaşı, 2006). In collectivistic cultures, people cares each others' life more and family's social support is important. For this reason, the protective parents attitude might not be considered as a negative one by the students. It can be said that this attitude makes their life easier and increase their life satisfaction. According to the results, students who has democratic parents attitude have higher life expectations than those who has over-tolerant and careless-inconsistent parents attitude. Democratic parents attitude is defined positive. Similar studies show positive correlation between life satisfaction and positive parents attitude (Çivitçi, Çivitçi and Fiyakalı, 2009; Demo and Acock, 1996; Petito and Cummins, 2000). Democratic parents pay attention to their children's needs and they respect and support to the children's decisions. Life satisfaction should tie with realization of goals and objectives. It is thought that students with democratic parents attitude use their family's support to reach their goals. For these reasons, Students with democratic parents attitude may have higher life satisfaction.

The findings of this research shows that class level, perceived parents attitude and social emotional learning skills, self-esteem enhancing skills and coping with stress skills are predictor for life satisfaction, but gender,



communication and problem solving skills don't predict the life satisfaction. Variable that contributed most to the prediction of life satisfaction is self- esteem enhancing skills which are a sub-dimension of social emotional learning skills. This result agrees with many researches demonstrating that the most important predictor of life satisfaction is self-esteem (Casas et al., 2007, Chow 2005 Çeçen 2008; Çivitçi and Çivitçi, 2009, Gilman and Huebner, 2006; Huebner, 1991 Huebner et al., 1999, Huebner and Gilman, 2006; Neto, 2001; Myers and Diener, 1995; Yetim 2003, Zhang and Leung, 2002). Collaborative Academic, Social and Emotional Learning (2003) defines the information like social emotional learning skills, learning and managing emotions, caring the other people and earning responsibility, establishing positive relationships, taking responsible decisions, adequately handling difficult situations as skills and attitude implementation and winning process (Zins and Elias, 2006). Self-esteem enhancing skills are important social emotional learning skills that help students to feel self-sufficient in social, emotional and academic area. Self-esteem enhancing skills contains positive evaluations about a person oneself. When a person detects that a person is positive and self-sufficient then a person can feel oneself sufficient to reach own life goals and can have more life satisfaction. As mentioned in CASEL (2003), social emotional skills are teachable (Zins and Elias, 2006). For this reasons, school counselors can coordinate training programs to increase students' social emotional learning skills. Moreover, students may be encouraged to participate in individual or group counseling where they can learn cope with stress and improve self-esteem.

According to this research results, other significant predictor of life satisfaction is coping with stress skills. It is observed that there is a positive significant correlation between life satisfaction and coping with stress skills. According to DuPont (1998), coping with stress skills can control urges which trigger destructive behaviors. This situation is also related to emotional self-regulation and it includes assessment about how a person feels in the case of stress (Kabakçı and Korkut, 2008). Therefore, students with ability to cope with stress can manage and handle difficult situations. In Turkey, elementary school 6th, 7th and 8th grade students enter the placement test. These students are in the adolescent period and as known this period is hard for adolescent. And then they also have to cope with exam stress. Therefore, school psychological counselors can plan to increase students' life satisfaction by organizing psycho-educational programs which helps students to gain skills to cope with exam stress.

Class level is third significant predictor of life satisfaction. According to the results in this research, life satisfaction decreases with increasing class level. But, Huebner (1991) found that there was no significant relationship between life satisfaction and age or class level. This can be explained by educational differences. In our country, academic expectations from eight grade students are high and the importance given to academic success increases with the high class level and these have negative impact on students. It is expected that life expectations decrease for students who don't spend their time for activities other than studying, oscillates between school and private lessons, has to solve tests all time.

Parents attitude is fourth significant predictor of life satisfaction. According to the results, life satisfactions are lower for the students who has over-tolerant parents attitude. Over-tolerant parents attitude is considered as negative parents attitude. Over-tolerant parents don't limit their children for any behavior, tolerate their wrong behavior and give unlimited rights and freedoms (Çağdaş and Seçer, 2010). According to Razon (1981) a child grown-up in such environment might have difficulties to take responsibilities and to establish healthy relationship with others (Çağdaş and Seçer, 2010). Children grown up in over tolerant attitude have difficulty to distinguish right or wrong and to follow rules. These children might have disappointments and some adaptation problems when they started to the school and face with some rules (Özyürek and Şahin, 2010). Children who have over-tolerant parents attitude might expect same tolerance from other people, when they see that this is not happening, they might have some negative experiences. This might be the reason for the drop of their life expectations. On the other hand, previous studies show that healthy relationships based on trust between parents and children and positive parents attitude increase the life expectation (Çivitci, Çivitci



and Fiyakalı, 2009; Demo and Acock, 1996: Nickerson and Nagle, 2004; Levin and Currie, 2010: Petito and Cummins, 2000).

In conclusion, the developments in field of psychological counseling and guidance for last 10 years, guidance approach not only focuses on problems. And it is expected that psychological counseling and guidance services in schools have preventive and positive services. Life satisfaction is a cognitive dimension of subjective well one of the important concept in positive

psychology. Studies that predict life satisfaction in children and adolescents are important for planning prevention programs for children and adolescents. For example it can be prepared psycho-educational program to improve children's social emotional learning skills. Social emotional learning skills program for children and adolescents provide more effective results in small groups (Neil, Ann, Michael, & Afroditi, 2009). For this reason, psycho-educational programs to improve children's social emotional learning skills in schools should be done with small groups. According to Taylor and Dymnicki (2007), it is important considering the cultural properties when these programs implemented. For this reason, further studies should develop psycho-educational program about social-emotional learning skills for Turkish culture. And also, this research results shows that friendly relations in family and parents attitudes are predictors of life satisfaction. Therefore, the school counselors should inform the parents of their parents attitude and moreover these parents may be encouraged to participate in individual or group counseling where they can share their parental attitudes and relationships with their children.

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THE ROLE OF ARABIC ORTHOGRAPHIC LITERACY IN THE PHONOLOGICAL AWARENESS OF TUNISIAN CHILDREN

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ABSTRACT

This article investigated the effect of Arabic orthography on the phonological awareness acquisition. A sample of Tunisian primary school and preliterate were asked to manipulate syllables and phonemes through segmentation, counting and deletion tasks. Results showed that manipulation of syllables is far easier than that of phonemes. Also, the deletion of phonemes was an easier task than phoneme segmentation and counting, in contrast to findings attendant to alphabetically written languages such as English and Hebrew. Data were interpreted by the nature of Arabic orthography and diglossia.

Key Words: Early childhood, Phonological awareness, Reading literacy, Arabic orthography, Diglossia.

INTRODUCTION

Phonological awareness refers to the ability to hear and distinguish sounds (i.e., recognizing, adding, deleting, and moving sounds). It is crucial for learning to read in alphabetically written languages like Arabic and French. According to Gillon (2004), phonological awareness is a reliable predictor of more advanced reading ability, which makes it subject to substantial research not only from linguistics but also from educational psychology. Phonological awareness is one component of a larger phonological processing system which differs from other phonological sub-skills due its meta-linguistic character as it requires conscious awareness and reflection on the structure of language.

The role of phonological awareness in the reading acquisition in alphabetic scripts originates from systematic relationship between the letters in printed words (or graphemes) and the phoneme sequences underlying spoken language (Byrne, Freebody, and Gates, 1992). Phonological awareness has been empirically investigated in many alphabetically written languages such as English (e.g., Bradely and Bryant, 1983), French (Gillon, 2004) and Hebrew (Bentin, Hammer and Cahan, 1991; Oren, 2001). According to Morais et al. (1987), phonological awareness is a series of organized abilities, some of which are acquired long before learning to read, and others later. The earlier aspects of phonetic awareness (i.e., manipulation of syllables, rhymes and alliterations) constitute a prerequisite for learning to read. The later aspects correspond to a phonemic awareness and require a higher level of abstraction. The latter cannot appear before the acquisition of the reading skill in an alphabetical writing system.



BACKGROUND OF THE STUDY

Gombert (1992) considers that the cognitive activities determine two sets of phonological behavior, epiphonological (i.e., intuitive) and meta-phonological. The first refers to linguistic knowledge that is more or less automatically applied spontaneously and intuitively whereas the meta-phonological behavior corresponds to the conscious and thoughtful activity on the components of speech. These two sets are more distinguished by the quality than by the degree of the processing in use. Meta-linguistic ability could appear in the manipulation of phonemes as well as for syllables. This conception (1992) differs in part from that of Morais et al. (1987) who confined the meta-phonological ability to phonemic units.

With regard to the Arabic orthography, it includes 28 letters, all consonants except three long vowels: /a:/ /u:/ and /i:/ and short vowels are represented by diacritical dots. Most Arabic consonants have more than one written form (e.g. /f/ =) depending on whether they occur in the beginning, middle, or end of a word. This specificity brings into existence two forms of spelling: with or without vocalisation. The vowels added through a consonantal skeleton by means of diacritical marks produce a shallow orthography whereas vocalisation is missing, orthography is deep and the word behaves as homograph that is semantically and phonologically ambiguous: the unvoweled word /*k*-*t*-*b*/, for example, supports several alternatives as /*kataba*/ (he wrote), /*kutiba*/ (it was written), /*kutubun*/ (books), etc. Voweled spelling is taught to novice readers, while unvoweled spelling constitutes the standard form and is gradually imposed at later reading literacy stages. These linguistic characteristics infer that phonological lexical representations developed by Arabic literate children operate on the basis of a clear distinction between consonants and vowels. Therefore, the position of consonants is more salient than that of vowels.

Arabic is characterized by diglossia that is the use of two language varieties: Modern Standard Arabic that is the official language taught at schools and colloquial Arabic that is the language of everyday communication outside official settings (Saiegh-Haddad, 2005). Diglossia gives rise to great phonological alteration during the shift from Modern Standard Arabic to colloquial Arabic. But the most important alteration have affected vowels and spared consonants (Abu-Rabia, 2001). For example, words like /qalam-/ (a pencil), /kita:b-/ (a book), and /tifl-/ (a child) in Modern Standard Arabic are pronounced respectively /qlam/, /kta:b/ and /tful/ in colloquial Arabic.

We assume that this phonological variability is determined by the morphologic structure of Arabic. Our hypothesis is that oral processing of Arabic words is different from that of English words. Acquisition of the meta-phonological ability in Arabic is closely determined by the consonantal part of the linguistic system. As we hoped to examine the meta-phonological abilities with children at different grades, we proposed tasks that could avoid as much as possible the risks of floor and ceiling effects. This might be approachable through considering the nature of the sound to be manipulated in light of the large number of tasks with various levels of difficulty exerted on both syllables and phonemes.

According to Gombert (1992), we retained three tasks which could influence one's meta-phonological ability with respect to syllables and phonemes. These included deletion, counting, and segmentation tasks. In the deletion task, the sound to be deleted was set at the beginning, in the middle or at the end of the given utterance. The phonemic deletion was exclusively applied to the consonants in order to get pronounceable sequences and also because of the prevalence of the consonantal structure in Arabic.

According to Gombert (1992), the cognitive demands should be different for each task. The order of success should proceed as follows: counting, segmentation, deletion. As suggested by MacDonald and Cornwall (1995), success in deletion depends on the position of the sound to be deleted within a given utterance. Syllable deletion at the beginning or at the end of the utterance should be easier than that in the middle. They claimed



that the deletion of middle-position sounds would require greater cognitive effort since children first proceed to the analysis of the word stimulus to locate the target syllable/phoneme and then to a synthesis in order to recompose the remaining syllabi. Such processing operations might be highly testing on short-term memory for capacity-limited children.

Like in other alphabetically written languages (e.g., French and Hebrew), it is expected in the present study that Arabic does not deflect from the rule that literacy of the alphabetic system would have stong bearing on children's phonological awareness, and so to their reading abilities. However, unlike the abovementioned languages, the comparatively complex nature of the Arabic morpho-syntactic character and the phenomenon of diglossia are hypothesized to overburden Tunisian children's reading processing abilities.

METHODOLOGY

Participants

Subjects were 110 Tunisian children enrolled in primary education schools and kindergartens, largely of low to middle class backgrounds. Girls and boys were evenly represented. There were 20 preliterate kindergarteners with a mean age of 5.6 years. Students of primary education were 30 in first grade (G1), 30 in second grade (G2), and 30 in third grade (G3). Their mean ages for each group were as follows: 6.8 years for Grade 1, 7.9 years for Grade 2, and 8.11 years fro Grade 2. Each grade was represented by two sub-groups, with 15 informants each.

These groups were screened out of a larger sample that had participated in a collective test of word identification written in voweled Arabic. The test was largely inspired by a test design developed in Khomsi (1993).¹ The preliminary sample was composed of 240 students, with 80 students corresponding to each grade. They were randomly chosen among four public schools. Two criteria were adopted for subject selection: (a) classification according to the student's global score in the collective test, and (b) the teacher's assessment of the student's reading mastery. In the event of disagreement between these two criteria, the subject was excluded from the sample. After the screening procedure, a sample of informants was selected for the subsequent experimental procedure. They were divided into two sub-groups under each grade category, except for the group of kindergarteners. They were respectively operationalized as Good Readers, Poor Readers, and Preliterate.²

Instruments

In order to elicit data attendant to the phonemic and syllabic treatment of words in Arabic, two sets of measures of meta-phonological abilities composed of 72 items: 46 items for the syllabic set (Appendix 1) and 46 items for the phonemic set (Appendix 2). We suggested the voweled script instead of the unvoweled one because it is usually used at Tunisian primary schools for learning to read. The items were made up of two or three syllables in the syllabic condition and of one or two syllables in the phonemic condition. Among each measure set, children was asked to manipulate 12 colloquial Arabic words, 12 Modern Standard Arabic words, and 12 pseudo-words. Manipulation of syllables and phonemes was carried out by means of three tasks: counting, segmentation and deletion.

¹ The Khomsi Test was specifically designed to French-speaking dyslexic children. The test is composed of two main rubrics: word identification and word reading comprehension. The present study focused on the main part and the chief change was to opt for words in Arabic instead of French.

² Mention of these terms in capitalized font accounts for their use as between-subjects variables and not simplistic measures of judgment. Also, the term *Preliterate* was preferred to *Kindergartners* because the latter may include subjects who might have received some instruction in alphabetic literacy.



The tasks were administered to both preliterate and literate children in small groups that did not exceed fifteen subjects. The instructions were given to the informants in colloquial Arabic. We used "large sound" and "small sound" terms to refer to syllable and phoneme, respectively. In the counting and the segmentation tasks, the utterance was pronounced and the child was asked to repeat it and to count by his fingers the number of syllables or phonemes it involved. Then he (or she) was asked to articulate the sounds s/he had just counted, separately and in order. In the deletion tasks, the child was asked to say what remained when one sound was removed from the utterance.

Each subject was tested individually in a relatively quiet room at the school and the test required between five to ten minutes for each subject. Prior to the administration of each data elicitation task, every child had to perform three practice items. S/he was then asked to repeat the demonstration trial. Upon completion of the trial, the test items were presented. Each correct response was followed by confirmation. We corrected any incorrect responses and demonstrated the correct response. Each child's score consisted of the number of correct responses.

RESULTS

The results reported in the present study were presented across two main conditions: the syllabic condition and the phonemic condition. As far as the syllabic condition is concerned, descriptive statistics of the data gleaned by the aforementioned tasks suggested that the literacy level of children did not yield substantial differential effect across the three experimental activities of segmentation, counting, and deletion. Accordingly, Table 1 shows that the Preliterate group scored even better than the literate children with respect to the counting activities. Similarly, results related to Grade 1 children within the Poor Readers' group outscored their counterparts of Grades 1 and 2 within the Good Readers group.

Table 1: Mean scores for the syllabic tasks

	G	Good Readers			Poor Readers		
	G1	G2	G3	G1	G2	G3	
Counting	12.20	13.87	15.87	15.20	12.20	11.33	16.80
Segmentation	13.60	13.60	16	14.80	13.27	11.20	15.65
Deletion	13.73	15.80	15.07	6	10	12.87	8.15

Note: G = grade.

Equally, analysis of variance (ANOVA) using the variables grade (Preliterate, G1, G2, and G3), reading status (Good/Poor Reader) and task type (counting, segmentation and deletion) showed no significant effect for reader's grade (i.e., [F (2,267) = 1.81, P = 0.164]), contrary to the significant effect for reading status [i.e., F (2,327) = 13.69; P < 0.001]. *Post-hoc* comparisons showed that Good Readers obtained scores in the deletion task that were markedly higher than those of Poor Readers [i.e., F (1, 88) = 37.87, P < 0.001] and those of the Preliterate group [i.e., F (1, 63) = 56.56, P < 0.001]. Also, scores of the Preliterate group in the counting task were considerably higher than those of Good Readers [i.e., F (1, 63) = 14.29, p < 0.001] and those of Poor Readers in Grade 1 [i.e., F (1, 63) = 22.55, P < 0.001].

As for the deletion task, we examined the effect of the syllable location on accuracy scores. Data were calculated using the number of items for each syllable location, that is the frequency and the number of subjects across each category of subjects as the maximum score. Results presented in Figure 1 attested to the assumption that the manipulation of the medial syllable was the most difficult task for all tested groups.



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Conversely, it was easier for them to delete the initial or the final syllable, and there were no considerable differences between accuracy scores of the initial and the final syllable, as exemplified by scores under Grades 1 and 2.

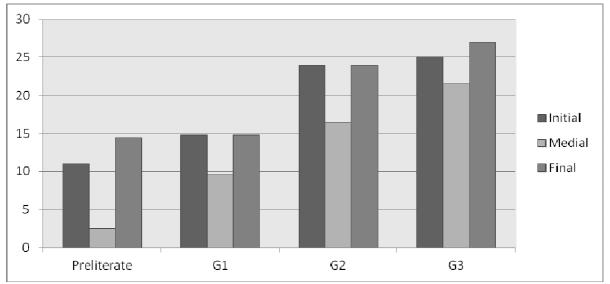


Figure 1: Distribution of accurate responses across groups in the syllabic condition

For the phonemic condition, Table 2 displays mean scores for the correct responses across the groups of informants. Descriptive results presented in the table reveal that phonemic awareness was most associated with the level of reading literacy regardless of the task type. The scores under the Good Readers category were the highest and the ones collected from the Preliterate subjects were the lowest. Findings related to the Deletion task were by far high the highest among the Good Readers whereas the Preliterate informants scored poorly. In the same vein, the mean scores within each group level increased as we move up in the grade scale, which further corroborates the influence of reading literacy on the meta-phonetic manipulation.

	0	Good Reade	rs	ŀ	Poor Reader	s	Preliterate
	G1	G2	G3	G1	G2	G3	
Counting	2.93	4.47	8.87	1.07	2.53	4.07	0.15
Segmentation	0.80	0.47	6.60	0.13	0.40	1.20	0
Deletion	9.87	10.87	14.07	2.80	5.87	9.53	4.40

Table 2: Mean scores for the phonemic tasks

Note: G = grade.

Inferential statistics of the data bear out the effect patterns in the phonemic condition. In order to examine the effect of the phoneme location on accuracy scores in the deletion task, data were calculated using the number of items for each phoneme location, that is the frequency and the number of subjects across each category of subjects (i.e., 45 for the Good Readers group, 45 for the Poor Readers group, and 20 for the Preliterate group as the maximum score). ANOVA showed no significant effect of the phoneme location [i.e., F(2, 51) = 0.10, P = 0.904]. The effect of subject's category was significant [i.e., F(2, 51) = 42.17, P < 0.001], indicating that the Good Readers group could delete phonemes more accurately than the Poor Readers group or the Preliterate group, and that the latter group were the least accurate.



DISCUSSION

The present study sought to explore the development of meta-phonological awareness of Tunisian children through the implementation of deletion, segmentation, and counting tasks. It followed that the subjects had better scores in the syllabic condition than in the phonemic condition. These results are in agreement with those reported in other alphabetically written languages. The best performances of Good Readers confirm the idea supported by many researchers (e.g. Byrne et al., 1992; Gombert, 1992) that reading failure may manifest itself through a lack of phonemic awareness. The lowest results of the Preliterate children suggest that phonemic awareness does not develop spontaneously, but only in the specific context of learning to read an alphabetic script at school. This phenomenon was observed in many alphabetically written languages, such as English French (Gillon, 2004; Morais et al., 1987), and Hebrew (Bentin et al., 1991; Oren, 2001).

In the syllabic condition, the majority of children were able to attend to this type of sounds. Nevertheless, only the Poor Readers and the Preliterate groups were negatively affected by the deletion tasks and they were better in the segmentation and counting tasks. The relative ease of the segmentation and counting tasks did not seem to be linked on a high abstract and elaborate phonological knowledge, but to intuitive behavior. In fact, Gombert (1992) has emphasized the epi-phonological character of the syllabic segmentation tasks since they require only simple sound repetition. Accordingly, scores of the Preliterate group in the counting task were far above those of Good Readers and Poor Readers. These findings are in concordance with the observations of Liberman Shankweiler, Fisher, and Carter (1974) with respect to English, showing that preliterate children could succeed in some syllabic tasks.

The poor performance of literate children indicates their tendency to resort to some representations that are closely linked to the alphabetic code. This strategy is not efficient enough to manipulate syllables in spoken words. Furthermore, the failure of the Preliterate and the Poor Readers groups in the syllabic deletion task was considerable. Not only their accuracy scores, but their performances in the other tasks were far behind those of Good Readers. Comparison of the syllabic tasks with the other tasks showed that the degree of difficulty depended not only on the sound to be deleted (i.e. syllables or phonemes) but also on the task to be performed. Data were congruent with Gombert's (1992) claim that the meta-phonological ability is likely to appear in the manipulation of syllables as well as phonemes.

Success in the syllabic deletion task was relative to the position of the syllable to be deleted. All groups had better scores when the syllable to be deleted was at the end or at the beginning than when it was in the middle (c.f., Gillon, 2004; Kurtz, 2010). Scores on the medial syllable deletion task were markedly lower than those of the final or the initial one. This seems to agree with Gombert's (1992) assumption that deletion of the medial syllable is the most difficult because it requires a high level of conscious control. It involves a greater degree of cognitive complexity since the child must first proceed to an analysis of the spoken word stimulus in order to extract the target syllable, then to a synthesis in order to recompose the remaining syllables. Execution of this variety of operations would be high loading on short-term memory. It would need a well-developed capacity of control and consciousness while manipulating the verbal stimuli.

In the phonemic condition, scores were very low and floor effects were notable among the Poor Readers and Preliterate groups. The order of success was so as follows: deletion, counting, segmentation. Contrary to the findings in other alphabetically written languages, phonemic segmentation task was the most difficult. For instance, Vandervelden and Siegel (1995) have shown that presentation of a phonemic segmentation task to English-speaking children in the first grade results in substantially correct responses. Likewise, Bentin et al. (1991) found that success rate of Hebrew-speaking children in the same school grade for the same kind of task was equally high. Nevertheless, the phonemic segmentation task of the present study showed less correct responses for Good Readers in the first grade and the highest accuracy rate was among Good Readers of the



third grade. The Arabic-speaking children experienced difficulties in accomplishing this sort of tasks. Such difficulties stem from the constraints of diglossia as evidenced by Saiegh-Haddad (2005). Phonological changes with which children were usually confronted had posed an additional burdening factor in the explicit phonemic identification.

As shown above, the phonemic deletion task was the easiest for our sample of Arabic-speaking children. If we take into account that the phonemes concerned by deletion were exclusively consonants, our findings testify to more developed analysis abilities of the consonantal phonemes than of vocalic ones. Arabic phonological awareness may be related to the language structure that is principally morphological. As a rule, Arabic words are formed by mounting a word pattern of vowels on a root that is a skeleton of consonants. The importance of consonants in the inflectional system explains the better performances in manipulating the consonantal phonemes. Moreover, consonants have conserved their privileged status within diglossia. Phonological variations between Modern Standard Arabic and colloquial Arabic have affected vowels while preserving consonants. Exceptional phonologic invariability of consonants in the two Arabic spoken languages may allow children to develop fixed representations about the consonantal segments (see Abu-Rabia, 2001).

Gombert (1992) supported that success in the phonemic deletion tasks depended greatly on the phoneme location. In the same vein, Ziegler and Goswami (2005) found that deletion task scores were better for the initial or the final phoneme than for the medial one. However, our findings showed that the phoneme location is not significant. Divergence between the performances of Arabic-speaking and English-speaking children confirms that the representations about the consonantal segments were not the same.

CONCLUSION

The study reported in this paper had the merit of replicating in part the findings on the development of phonological awareness among children across alphabetically written languages. It nonetheless accentuated an extent of variation with respect to the uniqueness of Arabic orthography system and diglossia. Other research attempts involving direct comparisons between meta-phonological acquisition of consonants and vowels should permit an in-depth examination of the specific effect of the consonantal prominence in the Arabic orthography system. Also, it would be interesting to investigate the type of reading strategies children should develop to enhance the reading ability with respect to this linguistic constraint. Cross-cultural studies, following the research line of Ziegler and Goswami (2005), might well contribute substantial validity to the results reported here and across other languages.

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	Segmentation and counting	Deletion
	/ka`ba:t/	/kri:(ma)/
	/kugi:na/	/(mun)ga:la/
Colloquial Arabic words	/stiluwa:t/	/nwa:(mir)/
	/jitfa:hmu/	/jit`(a:)rik/
	/mtarqa/	/man(di):la/
	/jizrib/	/(bar) a/
	/manzilun/	/«aj(na)/
	/jam i:/	/(haq)lun/
1odern Standard Arabic words	/qittun/	/ja«(ti:)/
	/masaku:/	/«as(wa)dun/
	/da`a:/	/(mi)`tafun/
	/jarsumu/	/jar(fa)`u/
	/bani`a/	/hi(mu)run/
	/lafnu:/	/fur(ki:)/
Pseudo-words	/rihkadun/	/saqra:(bin)/
	/kranga/	/(hi)lsun/
	/barni:fa/	/(bran)ku:/
	/rizfun/	/rah(wa)da/

Note: Syllables to be deleted between parentheses.

	Segmentation and counting	Deletion
	/:am/	/fa(k)/
	/hufra/	/(b)la:jis/
Colloquial Arabic words	/jurqid/	/ma(r)qa/
	/h im/	/(n)sa:/
	/j u:f/	/j(d)iz/
	/mra:/	/flu:(s)/
	/ud/	/di:ku(n)/
	/«abi:/	/(I)am/
Aodern Standard Arabic words	/sa:ra/	/ja(k)fi:/
	/hal/	/(n)a:ma/
	/i:dun/	/qu(l)/
	/min/	/ka(j)fa/
	/riz/	/ra: u(n)/
	/maku:/	/ba(l)ku:/
Pseudo-words	/wal/	/h(r)u:/
	/hi:saf/	/(k)u /
	/snu:fi/	/(f)a:bu/
	/rfan/	/sma(q)/

Note: Phonemes to be deleted between parentheses.



M-LEARNING: A NEW LEARNING PARADIGM

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ABSTRACT

21st century is known as an age of learning. It was declared to be the age of information and communication technology due to the revolution of mobile technology. Mobile technology has become an integral part of our lives. We cannot work in the society without mobile, internet etc. every body is using online technology in day today working. According to Telecom Regulatory Authority of India (TRAI), "India had 456.7 million mobile subscribers...". Mobiles are not just a playing but beyond it, it is an amazing educational tool for teaching and learning process. M-learning is the new sensation in the field of education. M-learning is now creating a new wave of educational development for sustainable and viable learning option. It is based on the convergence of mobile technologies and wireless infrastructure. The present paper highlights the concept of M-learning, Characteristics, Types, Significance, M-Learning System, Categories of Mobile learning and their Technologies, Advantages and Disadvantages of M-learning.

Key Words: Learning, M-learning, E-learning, M-technology, PDAs.

INTRODUCTION

In this new millennium modern technology plays inevitable role in our lives. Without modern technology we cannot go forward. Now-a-days anywhere anytime education is made possible. The practice of providing education with the help of modern technologies is termed as e-education or e-learning or m-learning. Mobile technology in word open various ways for new educational technologies aimed at fulfilling the country's educational needs. There are various ways to use mobile phones for enhancing learning.

Mobile phones plays an important role in our day today lives in various purposes. One of the important purposes is learning. Mobile learning, as a novel educational approach, encourages flexibility; students do not need to be a specific age, gender, or member of a specific group or geography, to participate in learning opportunities. Restrictions of time, space and place have been lifted.

CONCEPT OF M-LEARNING

Mobile learning, sometimes called m-learning, is learning accomplished with the use of small, portable computing devices. These computing devices may include: smart phones, personal digital assistants (PDAs) and similar handheld devices. There is some debate on the inclusion of tablet and laptop computers. Often, wireless two-way internet connection is assumed as an integral component. Mobile learning refers to the use of mobile or wireless devices for the purpose of learning while on the move. Typical examples of the devices used for mobile learning include cell phones, smartphones, palmtops, and handheld computers; tablet PCs, laptops, and personal media players can also fall within this scope (Kukulska-Hulme & Traxler, 2005). M-learning is the idea that a student can learn from any place at any time using portable learning devices. M-



learning or 'mobile learning' is any sort of learning that takes advantages of learning opportunities offered by mobile technologies.

- M learning means "acquisition of <u>any knowledge</u> and skill through using mobile technology <u>anytime</u>, <u>anywhere</u> that result in <u>alteration of behaviour</u>".
- M learning also brings strong portability by replacing books and notes with small RAM's filled with tailored learning contents.
- M-learning implies different things to different people. Here there are some definitions of M-learning given below:
- According to Quinn (2000) "Mobile learning is learning through mobile computational devices".
- Shepherd (2001) Says: M- learning is not just electronic, it's mobile.
- Colazzo, Ronchetti, Trifonova, and Molinari (2003) state that, "A mobile learning educational process can be considered as any learning and teaching activity that is possible through mobile tools or in settings where mobile equipment is available."
- Polsani (2003) defines "mobile learning as a form of education whose site of production, circulation and consumption is the network".
- Pinkwert et. al. (2003), who defines m-learning as ". . . e-learning that uses mobile devices and wireless transmission."
- Trifonova (2003) Any form of learning (studying) and teaching that occurs through a mobile device, or in a mobile environment.
- Kynaslahti (2003) identifies three different elements for mobility and all of these are valuable to teachers and students while they are teaching and learning –
- \rightarrow Convenience
- \rightarrow Expediency
- \rightarrow Immediacy
- Keegan (2005) The provision of education and training on PDAs/palmtops/handhelds, smartphones and mobile devices.
- Sharples (2005), who defines m-learning "... as a process of coming to know, by which learners in cooperation with their peers and teachers, construct transiently stable interpretations of their world."
- Traxler (2005) defined it as "any educational provision where the sole or dominate technologies are hand held and palmtop devices."
- Pea and Maldonado (2006) stated that mobile learning incorporates "transformative innovations for learning futures" (p. 437).
- Parsons & Ryu (2006) M-Learning is broadly defined as the delivery of learning content to learners utilizing mobile computing devices.
- Peters (2007) also stated that it was a subset of e-learning, a step toward making the educational process *"just in time, just enough and just for me"* (Peters, 2007, p. 15).
- Ally (2009) The process of using a mobile device to access and study learning materials and to communicate with fellow students, instructors or institution.

M-learning provides the potential to provide the right information to right people at the any time and any place using portable learning devices. Thus the m-learning can be summarized in a single statement – **"deliverance of education or any learning via any portable devices".**

CHARACTERISTICS OF M-LEARNING

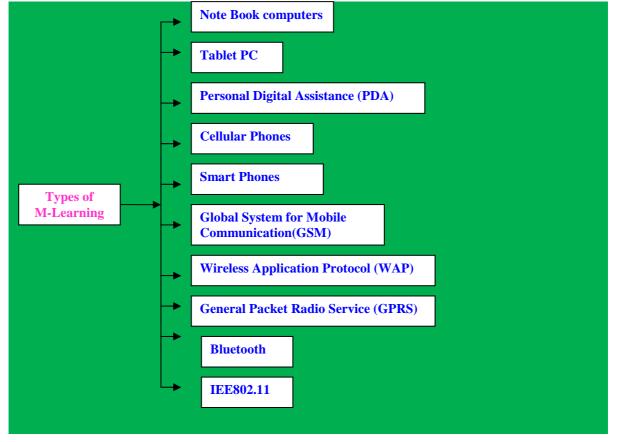
- **a.** Accessibility The information is always available whenever the learners need to use it.
- b. Immediacy The information can be retrieved immediately by the learners.
- c. Interactivity The learners can interact with peers, teachers and experts efficiently and effectively through different media.



- **d. Context-awareness** The environment can adopt to the learners real situation to provide adequate information for the learners.
- e. Permanency The information remains unless the learners purposely remove it.
- f. Flexible Learning, Large mass covered, reduces students' indiscipline and unrest problem.
- g. Used Very where at every time.
- h. Most of mobile devices have lower prices than desktop PCs.
- i. Similar size and light weight than desktop PCs.
- **j.** Ensure bigger students engage as m-learning is based on modern technologies, which students use in everyday life.

TYPES OF M-LEARNING

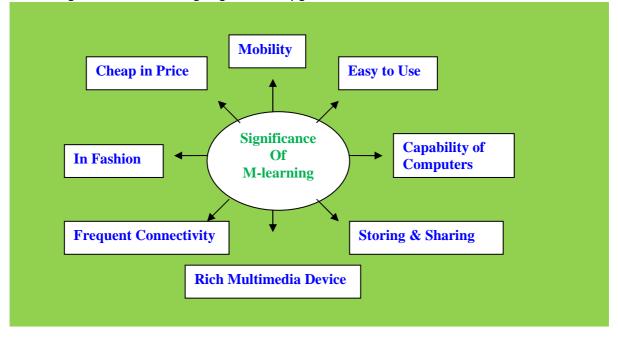
The main types of mobile devices for m-learning used in education process are given below:





SIGNIFICANCE OF M-LEARNING

Here the significance of M-learning diagrammatically given below:



Mobility: M-learning decreases limitation of learning location; it focuses on the mobility of learner and learning. Mobile devices can be used anywhere, and any time, including at home, college or even in traveling.

Easy to Use: Now-a-day, we can use mobile easily. We can access information, take photographs, record our thoughts with one device, and that we can share with our friends which make mobile phone as user as friendly and personal device.

Capability of Computers: Mobile devices have all of the functional capabilities of modern computers, especially smart phones, symbin and PDA phone devices have all of the computing capabilities which helps learner to support various learning software of M-learning.

Data Storing and Sharing Capacity: There are two different types of Mobile phone memory – Internal and External. Both memories can be used to data storage; we can save our important data or file on memory card. All the multimedia mobiles have capacity of transfer information between mobile to mobile or mobile to PC through USB cable/ Bluetooth. In this way these connections help learner to exchange data with other people and gain considerable knowledge.

Rich Multimedia Device: Mobile devices are not a single utility tool but it is a multi-utility device which engages learners through providing rich media content like music, videos, games and other entertaining and informational content which make it best multimedia device.

Frequent Connectivity: Connectivity is the most important factor of M-learning. With the help of a strong connectivity network, one can connect and interact with each other. There are various mobile applications like Bluetooth, Wi-Fi, infrared which help to connect with other devices and users.



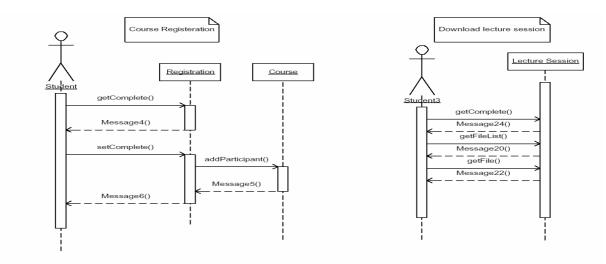
In Fashion: Basically young students are largely adopters of new technologies because novelty has its place of life. Today's mobiles are not just a communicative device of students for many it is a part of life. Young students use the mobile phone as a way of expressing their sense, style and luxurious life in this way mobile phones are now became a symbolic tool of fashion.

Cheap in Price: Very beginning mobile was considered as luxury. The price of a handset and call rates was beyond the reach of an ordinary people. But in present prices fall and it is very cheaper than other devices.

- Beside these, there are some other significances of M-learning:
- > It is important to bring new technology into the classroom.
- > It will be more light weight device compare to books PC's etc.
- > Mobile learning could be utilized as part of a learning approach which uses different types of activities.
- Mobile learning needs to be used appropriately, according to the groups of students involved.
- Mobile learning can be a useful add-on tool for students with special needs. However, for SMS and MMS this might be dependent on the students specific disabilities or difficulties involved.
- Good it supports is needed.
- Mobile learning can be used as a 'hook' to re- engage disaffected youth.
- > It is necessary to have enough devices for classroom use.
- > Encourage and support learning at any time of day / location.
- Facilitates personalised learning.
- 'TEL' without location-fixed computers.
- Facilitates work-based learning.
- Promotes collaborative learning.
- Supports evidence-gathering / work-based assessments.

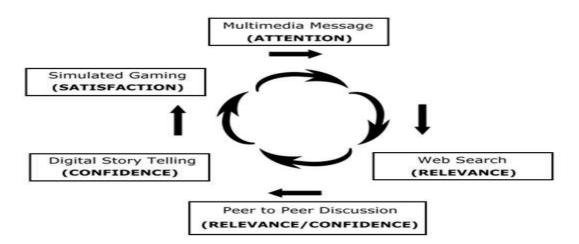
M-LEARNING SYSTEM

Here the interaction between users and M-learning system is diagrammatically given below:-



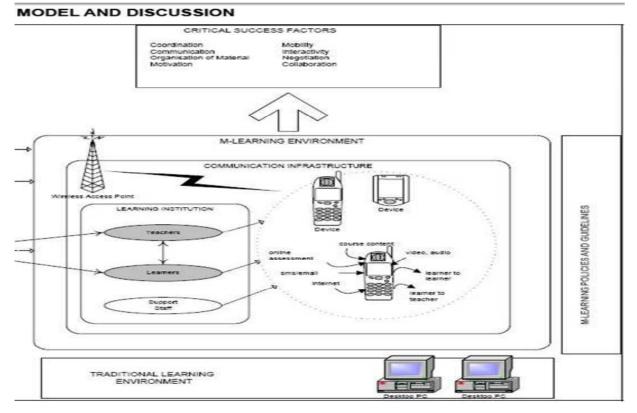
(The sequence diagram of the interaction between the user and the m-learning system)





(Learning Cycle in Shih's Mobile Learning Model)

Recommendation for adoption of M-learning in developing countries. When considering the adoption of wireless technologies in education, schools need to ensure that learners, teachers and parents are involved as much as possible in the planning mobile learning initiatives. The school also provides support and training in order to make success of m-learning.



(Model for M-learning adoption)



The stakeholder in the proposed model include

- 1. Learners
- 2. parents
- 3. Teachers
- 4. System designers (execute on the device include both software developer and hardware manufacturers)
- 5. device venders (sell the devices)
- 6. support staff.

CATEGORIES OF MOBILE LEARNING AND THEIR TECHNOLOGIES

Aspect of Mobile learning	Networks	Technology	Technology Characteristics	Device
Portable e-learning		Cable	Direct, wired connection. Least complicated, least flexible	PDA, iPad, smartphone, flash drive
	Local-Area Networks, rally	GSM	Global System for Mobile - the major telephone and data standard used in World	
Classroom learning	internet	Wi-Fi	IEEE standard 802.11 for wireless networking,	laptop computer PDA's, mobile
		IR	Infra-Red light - Inexpensive, but increasingly out of favor as it requires line of-Sight	Phones cell phones
		Bluetooth	An increasingly common networking standard found in many devices. Costs continue to go down and capability goes up, but it does have power requirements.	
	Wide-Area Networks	WiMax	A promised wireless, broad-reach, broadband network.	Palms, 3G cell phone ,
Rural mobile learning		GPRS	Code Division Multiple Access .	PDA, smart phone and iPODS
		GSM	Global System for Mobile - the major telephone and data standard used in World	

ADVANTAGES OF M-LEARNING

There are a lot of advantages of mobile learning. These are listed below:-

- Increased mobility: Learning is not restricted to fixed locations any more. Mobile devices allow learners to
 access learning content and learning interactions anywhere, such as factories, museums, hospitals,
 shopping malls, cafes and outdoor areas.
- Time-saving: People can now study when they are commuting and traveling.
- Environmental-friendly: It is amazing to find out how much information a mobile device can carry despite its light weight. Less printing is required.
- Interactive: Mobile technology enables students to closely link with their peers, teachers, distant partners, and even interest groups worldwide.
- Use of relatively inexpensive everyday technologies.
- Better opportunities to acquire skills at one's own pace, with a degree of privacy that may be missing when using shared computer facilities or relying on equipment belonging to somebody else.
- Good support for preferred modes of interaction, e.g. accessing audio content or participating in social networks on the move.



- Catering for interests beyond what is provided in class, through access to additional content such as podcasts or free learning materials (e.g. OpenLearn).
- Handheld devices are often an everyday part of business, so learning can contribute directly to enhancing employability, life skills and work practices.
- Opportunities for learners to give immediate feedback on their learning experience.
- Better assessment and diagnosis of learning problems as they occur.
- Psychological support for those at risk of dropping out, through social networks or personal guidance from a mentor.
- Learning materials can become accessible to a larger audience, through podcasts, mobile applications, blogs and e-books, which are seen by potential students.
- Catering for disadvantaged social groups for whom mobile learning presents an opportunity to improve their life chances.
- Revitalizing the curriculum, rethinking teaching methods and implementing improved feedback to learners.
- Turning geographically dispersed learners into a valuable teaching resource by enabling them to contribute their local knowledge and research data more easily.
- Supporting learner retention, progression and transition.
- Making the learning experience more tailored to the changing needs of individuals, encouraging learners to return for knowledge updating and further study.
- Mobile educational systems have started to emerge as potential educational environments supporting lifelong learning though other forms of learning like distance learning etc are very popular in India, learning is yet to find a pathway into Indian educational system. Also to notice that India's mobile services market is growing at a very rapid pace and the technological base required to support mobile devices is also quite strong in India. So India has the potential to be considered as a strong market for M-learning.
- The learning material is mostly colourful and inviting which may prompt students to go back and forth and practice more.
- Learner gets stimulated in learning.
- Convenient.
- Interesting.

DISADVANTAGES OF M-LEARNING

- There is no denying that the storage capacities of PDA are limited.
- Device may become outdated quickly and students have to keep combating obsolescence.
- The buttons on the keypad or styles pens are small and can be trickily for some people to manipulate. There are attachable keyboards available for some devices but these are also small, can be different to use to cost money.
- Too small display.
- Usable with some models only.
- Network connectivity limitations.
- Expenses / Costs.

CONCLUSION

Despite some disadvantages, m-learning will became more and more popular with the progress of information and communication technologies. M-learning as new technology that was imposed by the fast development of the technology. Mobile technology progressing education. The M-learning community is still fragmented, with different national perspectives, differences between academic and industry and between the school, higher education and lifelong learning sectors. Mobile learning may currently be most useful as a supplement to ICT, online learning and more traditional learning methods, and can do much to enrich the learning experience. It is



widely believed that mobile learning could be a huge factor in getting disaffected young adults to engage in learning, where more traditional methods have failed. As mobile phones combine PDA functions with cameras, video and MP3 players, and as tablets combine the portability of PDAs with the functionality of desktops, the world of learning becomes more mobile, more flexible and more exciting.

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A NEGOTIATED SYLLABUS: POTENTIAL ADVANTAGES AND DRAWBACKS IN ENGLISH PREPARATORY PROGRAMS AT UNIVERSITIES

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ABSTRACT

One of the most basic process in language teaching contexts is the design of the curriculum and syllabus. Although there are certain models in the literature, changing needs of language teaching leads to new ones which appeals to the learners better than the others. One of these new models is the negotiated syllabus in language classrooms. This study aims to theoretically discuss the potential implementation of a negotiated syllabus and the situations where a negotiated syllabus is necessary are presented and then, they are associated with the cases in preparatory programs by discussing the common points. Finally, the advantages and probable drawbacks of a negotiated syllabus in these programs are presented and several solutions are suggested for the stated drawbacks. Finally, the paper summarizes the important points and proposes a discussion point that would lead to further research studies.

Key Words: A Negotiated Syllabus, Potential Advantages, Drawbacks, English Preparatory Programs, Universities.

INTRODUCTION

Curriculum design in language teaching process is a very broad term which involves several variables that need to be focused on before and during this process. Since it is a broad term with so many variables, several curriculum models (Nation & Macalister, 2010; Graves 2000; Murdoch; 1989) have been proposed in the literature to systematize and present it in a principled way. In all these models, there are several items which are mainly related to out of class issues such as gathering data on the learner profile or investigating the physical facilities of the environment. On the other hand, several variables in these models are closely related to the in-class issues which basically involve learning and teaching process together with teachers, learners, activities, assessment and monitoring. These elements which are experienced with the participation of teachers and learners are combined under an umbrella term called syllabus.

According to some scholars, syllabus is different from curriculum. In the curriculum design model presented by Nation & Macalister (2010), syllabus refers to the inner circles which consist of goals, format and presentation, content and sequencing, monitoring and assessment. According to Breen (1984: 47), "syllabus is a plan of what is to be achieved through our teaching and our students' learning." Nunan (1999: 73) states that "a syllabus consists of list of content to be taught through a course of study." This list of content determines the type of syllabus that will be used for the course. When the content is based on the functions of a language, it is called as a functional syllabus. If the content is organized through different tasks, it is a task-based syllabus. The content could be based on certain topics, which make it a topical syllabus. As it is seen, in decision making for a



syllabus, what should be in it basically determines the type of syllabus that will be used in the teaching process. However, in one of the current practices in curriculum design process, rather than what should be included in a syllabus, the focus is on how the syllabus is made; that is called a negotiated syllabus.

NEGOTIATED SYLLABUS AND THE CASE IN PREPARATORY PROGRAMS

"A negotiated syllabus involves the teacher and the learners working together to make decisions at many of the parts of the curriculum design process" (Nation & Macalister, 2010: 149). It provides learners' active involvement in the shared tasks of developing a syllabus via the process of negotiating with the teacher. Breen & Littlejohn (2000: 1) makes a to the point definition and describes negotiated syllabus as "the discussion between all members of the classroom to decide how learning and teaching are to be organized." Due to the shift towards learner centeredness, autonomy and collaboration in language teaching, negotiated syllabus has gained importance in curriculum design process in most of language teaching contexts.

In Turkey, an EFL context, there are a lot of language teaching settings, but probably the most intensive and principled ones are the English preparatory programs at universities. These programs provide intensive language courses to the students in their first year at universities in various levels for general purposes and their departmental studies. The program starts immediately with the beginning of the new academic year and continues to the end of it. At the end of an academic year, the students take a proficiency exam and whether they pass the program is determined according to their scores in this exam. As these programs are quite loaded and massive ones, there are of course several issues leading to some problems. Depending on the informal discussions with instructors from various preparatory programs, one of the most problematic issues they face is related to their curriculum design process since they do not have a national curriculum applied in all programs. It is thought quite challenging to make a decision on the syllabus that will appeal to their learners who come from different socio-cultural and socio-economical backgrounds with different levels of English, needs and wants. When these programs are analyzed carefully in terms of syllabus decision process, it can be seen that the situation is similar to the ones presented by Breen & Littlejohn (2000: 272) in which a negotiated syllabus is almost unavoidable.

- 1. Where the teacher and students have different backgrounds.
- 2. Where time is short and the most useful choices must be made.
- 3. Where there is a very diverse group of students and there is a need to find common ground.
- 4. Where initial needs analysis is not possible.

As it is clearly seen the conditions in English preparatory programs at universities in Turkey are quite similar to the ones in which a negotiated syllabus could be useful and practical. For this reason, it can be said that a negotiated syllabus which is implemented carefully and in a planned way may have several advantages for teachers and learners in English preparatory programs in Turkey in EFL teaching process.

THE REASONS FOR A NEGOTIATED SYLLABUS IN PREPARATORY PROGRAMS

First of all, it will be explanatory to focus briefly on the situations presented by Breen & Littlejohn (2000) and their connection and similarity with the situation in preparatory programs.

1. Where the teacher and students have different backgrounds

One of the common situations in most of these language teaching contexts in Turkey is that there becomes an atmosphere at the beginning of the academic year in which the teacher and the students have totally different backgrounds and do not know anything about each other. They usually have no idea about each other's way of thinking at the beginning because they come from different socio-cultural and socio-economical backgrounds



and see each other in class for the first time. No matter what the demographic features the teacher and the students have, they begin to know each other in time due to the differences they have.

2. Where time is short and the most useful choices must be made

The most challenging issue for preparatory programs in syllabus decision process is probably the problem of time limitation. The academic year begins one or two weeks after the students register for the university. Most of the time, it is not possible to give the right decisions for the current learner profile in terms of syllabus design. The teachers in these programs make choices and get prepared for the upcoming academic year in a one-month period, which is a very short time give the right decision that will contribute to the learning and teaching process.

3. Where there is a very diverse group of students and there is a need to find common ground

In Turkey, students take a university entrance exam when they graduate from high school and they prefer universities according to their scores in that exam. The students in a certain university have close scores in the exam but they are from different cities and regions of Turkey. Since Turkey has many variables in terms of social, cultural, ethnic and economic elements, English preparatory programs have a very diverse group of students with different lifestyles, social abilities, beliefs and ethnic origins every year. In such an atmosphere, a prominent step for teachers is to provide or set a common ground for this diverse student group.

4. Where initial needs analysis is not possible

Conducting a needs analysis, which provides significant data about learner profile in terms of their needs, lacks and wants in language teaching process, is one of the crucial points in curriculum design process. However, while designing their curriculum and deciding on the syllabus that will be appropriate for their learners, preparatory programs do not have a chance to conduct an initial needs analysis. After the results of the university entrance exam are announced, students usually register for their programs at the beginning of September and the academic year starts at the third week of it. Due to this time limitation and many other factors such as heavy work load and lack of academic staff, it is mostly not possible to carry out a needs analysis for learners at the beginning of the term.

These are the situations which are also the common points of preparatory programs in Turkey and the conditions in which a negotiated syllabus is almost unavoidable. At this point, where there are so many common grounds, it could be beneficial to mention the advantages of a negotiated syllabus for preparatory programs and its potential drawbacks.

THE ADVANTAGES OF A NEGOTIATED SYLLABUS AND ITS POTENTIAL DRAWBACKS

Firstly, a negotiated syllabus provides an alternative to the traditional role of teachers which is an authoritarian one who is the source of knowledge in classroom and makes the decisions related to classroom setting on his/her own. In a negotiated syllabus, teachers in preparatory programs can determine their classroom procedures such as the pace of work, the type of activities and assessment elements with their class members. By doing so, these teachers may have a more supporting and guiding role which is the ideal role of teacher in current pedagogy. The negotiation process helps the teachers in these programs know the students who they have just met and so they become more conscious about the needs, wants and lacks of their learners. Being aware of these features, teachers arrange the tasks, activities, supplementary materials that will definitely appeal to the learners. With the help of the negotiation process, teachers will be aware of the topics, issues and subjects that attract the attention of their students so that they can prepare more fruitful lessons. Such kind of a consciously preparation for an academic year will also contribute to the self-development of the teachers. Thanks to this process, the teachers in preparatory programs will not be a classical teacher who depends on a certain book and does everything according to it, but will follow the current methodology and materials that help a better teaching.



A negotiated syllabus may also have several advantages for learners in preparatory programs. Many of these programs design their syllabi and courses without any kind of reference to the consultation with their learners. In these contexts, teachers and administrators make most of the decisions regarding classroom work and their potential learners' needs. As Boon (2011) states, learners are absent from the key decision making process as the teachers or administrators work alone to predict, interpret, and map out a pre-designed syllabus the aim of which is to lead the learners to a particular state of knowledge over a certain period of time. At this point, several misunderstandings occur and this may slow down the learning process for many learners. However, through a negotiated syllabus in these programs, the learners become actively involved in negotiating the purposes, content, management and means of assessment. Students set their own goals and become highly motivated to achieve these goals, which can also be a solution for the demotivated students in these programs. Therefore, students approach learning tasks knowing what to expect and what is expected of them. As Nation & Macalister (2010) suggest, involving the learners in shaping the syllabus has a strong effect on motivation, satisfaction and commitment to the course. They take a greater responsibility for their own learning and this promotes their power of learning and autonomy in this learning process.

The advantages of a negotiated syllabus in university preparatory programs for teachers and learners and why it could be useful in these programs have been mentioned so far. As in other kinds of methodological issues, a negotiated syllabus may also have some drawbacks. These problematic points may have various origins but their possible solutions could be found through negotiation and collaboration.

The first and a probable problem with a negotiated syllabus in English preparatory programs may stem from the term "negotiation" with Turkish students who mostly come from a background where teacher is the source of knowledge and highly respected. The students may feel uncomfortable to talk with the teacher about what should be done in class. For such a case, the students may have an orientation of one or two weeks through which they could be trained on the negotiation process. After this training, a conservative example of a negotiated syllabus by Nation & Macalister (2010), in which the students first start with a set of program having a variety of activities and then they start negotiating after being familiar with a shared classroom atmosphere, could be a starting point. Such a strategy makes the students feel more comfortable and encourage them to participate in the decision making process which will determine the goals and content of the learning and teaching process.

Another problematic issue for a negotiated syllabus in these programs could be the assessment issue. Although Smith (2000) describes and proposes an effective way of how to negotiate assessment in language teaching classrooms, this issue is much more challenging in such intensive programs as in preparatory schools because there are so many classes and levels. At this point, the assessment issue of such a diverse context could be handled through well-working testing offices with qualified staff. A close coordination of the teachers and testing office is the key factor. The teachers will inform testing offices about what they cover in their lessons, which skills they focus on and what to cover in the exams. The testing offices will prepare the materials and exams depending on this information. Such a strategic coordination contributes to the well-implementation of a negotiated syllabus in preparatory programs.

CONCLUSION

This paper synthesizes a potential implementation of a negotiated syllabus in English preparatory programs at universities in Turkey. It focuses on the advantages of it for learners and teachers, and provides some reasonable solutions to the potential problems that students and teachers may face during the process. Many studies in the literature (Boomer et. al., 1992; Breen & Littlejohn, 2000; Huang, 2006; Nguyen, 2010) have shown that classroom negotiation makes the teaching program more appropriate for learners' needs, encourage students and increase their self-confidence, develop learner-centeredness and autonomy.



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Depending upon on these positive impacts, this paper suggests that the implementation of a negotiated syllabus should be open to discussion by scholars and curriculum designers in Turkey and some possible ways should be found to integrate this syllabus into the curriculum of preparatory programs. The aim of this paper is not to propose a negotiated syllabus model since it could only be the result of further research studies that will be conducted in preparatory programs via empirical data and great care. It only aims to be a kind of start for this process and create awareness for a syllabus type that could be practical and useful for preparatory programs in the future.

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LEARNING STYLES AND CHARACTERISTICS OF GOOD LANGUAGE LEARNERS IN THE IRANIAN CONTEXT (A STUDY ON IELTS PARTICIPANTS)

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ABSTRACT

Research in the area of characteristics of good language learners has been the home of choice for SLA researchers since mid 1970. In this regards, both learning and learner variables have been researched (see Griffiths, 2008). Yet, one of the features almost left intact in this scope is the relationship between the characteristics of good language learners and their achieved scores and results in the standard proficiency tests such as IELTS and TOEFL. The present study was an attempt to investigate the characteristics of good language learners in the Iranian context. . 34 Iranian IELTS examinees who received 6 plus band score were selected and then they received the learning style and the style recognition questionnaires. They were also asked to take part in the interview sessions to report about the styles. They were asked to submit their own written reports about their learning styles and self-recognition. Based on the results of this study, the learners emphasize employing styles enabling them keep more vocabularies in mind and activate them. In terms of style also the findings revealed that there is a high correlation between high scores in IELTS and possessing Kinesthetic, Auditory, and Visual styles. It also presented that the learners were interested in individuality rather than group work. In terms of Tactility style, of course the participants of the study recorded a high score.

Key Words: Characteristics, good learners, IELTS, learning style, learning strategy.

INTRODUCTION

Research in the area of characteristics of good language learners has been the home of choice for SLA researchers since mid 1970. In this regard, both learning and learner variables have been researched (see Griffiths, 2008). Yet, one of the features almost left intact in this scope is the relationship between the characteristics of good language learners and their achieved scores and results in the standard proficiency tests such as IELTS and TOEFL. Most of the early studies in the field of language learning strategies focused on identifying the characteristics of good language learners. Identifying and discussing the styles used by good language learners were considered as a good way to make the learners aware of the notion of language learning strategies. The findings provided insight into how successful learners learn, and, subsequently, teachers tried to teach the strategies used by successful learners to those who were unsuccessful with the hope the strategy training could help them become successful.



Learning a second language involves variety of social, cognitive, affective and educational setting factors. A lot of individuals develop a very well-organizedL2 experience and a lot more are not successful second language learners. Rubin (1975) implies that the successful second language learners enjoy specific characteristics which might be helpful, providing us with strategies and insights which probably could be helpful for the poorer learners of the second language. Iranian learners develop English as a foreign language and for many of them learning English is a burden and one of the most important and demanding tasks they will need to accomplish. That is why an awareness of how to learn a language, not just what to learn, is very important for these learning efficiency. Additionally, recognizing the features of good language learners might provide the teachers and ELT educators with a vehicle to help the poor learners of the second language to improve their learning. The results of the study might be found intriguing enough to shed some lights for the researchers to investigate the application of specific strategies the good language learner makes use to pave the way for the ones who have not been successful in this respect. It is hoped that the result of this study can help the ELT educators and second language teachers to provide the poor learners with a tentative way of success.

Theoretical Background

The Good Language Learner

A number of recent studies on language learning styles and strategies have attempted, tried to define the "Good" language learner. During the 1970s, teachers and researchers reached conclusion that no single method of language teaching and research findings would end to the universal success in teaching a second language (Brown, 2007). It seems that learners would be successful in language learning regardless of methods or teaching techniques. In this regard, Brown (2007) says that, "Certain people appeared to be endowed with abilities to succeed; other slacked those abilities" (p.132). Many observations and research studies (Rubin, 1975; Stern, 1975; Rubin and Thompson, 1994) tried to describe "good" language learners in terms of personal characteristics, styles, and strategies. In this regard, are (2012) believes that good language learners:

1. Find their own way, taking responsibility for their own learning, 2. Organize information about language, 3. Are creative, and try to feel the language by experimenting its grammar and words, 4. Create opportunities for practice in using the language inside and outside the classroom, 5. Learn to live with uncertainty by not getting confused and by continuing to talk or listen without understanding every word, 6. Use memory strategies to bring back what has been learned, 7. Make errors work for them and not against them, 8. Use linguistic knowledge, including knowledge of the first language, in learning a second language9. Use contextual cues to help them in comprehension, 10. Learn to make intelligent guesses, 11. Learn chunks of language as wholes and formalized routines to help them perform "beyond their competence", 12. Learn to use certain tricks to keep conversations going, 13. Learn certain production strategies to fill in gaps in their owncompetence, 14. Learn different styles of speech and writing and learn to vary their language regarding the formality of the situation. (pp. 1-2).

The studies on defining the good language learner provide a basis for the understanding of what good language learners do in order to learn a second language. Finding and clarifying the strategies of successful language learners helps the teachers and researchers to teach these strategies to less successful learners. On the other hand, the methods and criteria of determining a good language learner is unclear and under question. It seems easy to classify a language learner as a good one: if s/he has developed the four basic skills and can use them17 successfully, she/he is considered as a good language learner. The problem is to decide about a learner who has only learned one or two of these skills. Speed of acquisition, learner's previous exposure to English, learner's goal, and student's level of proficiency should be taken into account in determining the good language learner (Sewell, 2003).However, understanding and knowing the strategies and techniques good language learners use, can help them enhance learning efficiency.



Learners Variables

Motivation

It is no doubt that good language learners are motivated. Experienced teachers believe that high achievers are highly motivated as well. The personal motivation has been the source of success during the life. Without motivation, success will be hard to come by, and the case of learning a second or foreign language would be different. Motivation is listed by Rubin (1975) among the three essential variables on which good language learning depends. Also, Gardner and Lambert (1972) cited in Ushioda (2008) believe that motivation has a social psychological perspective on learner attitudes and is related to the language cultures and the native speakers. Gardner and Lambert (1972) saw language learning motivation qualitatively different from other forms of learning motivation. Also, Gardner and Lambert (1972) cited in Ushioda (2008) found out that learner' attitudes to the new culture and people had a great influence on their motivation leading to their success in learning a new language.

Age

The role of age in development of second language acquisition and the relationship between age and other affecting variables in learning a new language has been hotly debated. There are different ideas about the impact of age on language development and different research studies add to this controversy. According to Brown (2007) young language learners are better language learners than adults. Some of these research studies are about the analogies between the process of first language acquisition and second language learning. In this regard, Brown (2007) believes that this is a big mistake. If we consider language learning as a cognitive process, the age of the language learner will play a great role in being successful in this process. Learning Styles

A very important question for language researchers is the effect of individual differences on the efficacy of language learning. For example, learners differ from one another in the ways in which they process information from the environment. The way we learn things in general and the way we try to solve a problem is based on our personality and cognition; Brown (2007) calls is as "cognitive style" (p.119). When cognitive styles are related to education contexts, then they are referred to as "learning styles" (Brown 2007; p. 120). Skehan (1991) believes that learning style is "a general predisposition, voluntary or not, toward processing information in a particular way." (p. 288).Learning styles relate emotion to cognition. For instance, a reflective style is rooted in a reflective personality or a reflective mood. Or, an impulsive style usually arises out of an impulsive emotional state. The learners' styles depend on how they internalize their total environment. According to Brown (2007), since this internalization process is not a merely cognitive process, we can see that physical, affective and cognitive factors play great roles in learning styles. According to Reid (1987), and research has identified four basic perceptual styles preferences: visual (for instance reading, charts), auditory (for instance lectures, tapes), kinesthetic (involving physical activity), and tactile (for instance building models or doing laboratory experiments). To these Reid added the dimensions of group versus individual learning preferences to develop the well-known Perceptual Learning Style Preference Questionnaire. Ehrman and Leaver (2003) researched the relevance of nine styles to second language acquisition as: field independence/dependence; random (non-linear) vs. sequential (linear); global vs. particular; inductive vs. deductive; synthetic vs. analytic; analogue vs. digital; concrete vs. abstract; leveling vs. sharpening; impulsive vs. reflective. The terms field dependence and field independence are used to describe two extreme dimensions of human perception of stimuli. The more a learner is able to separate relevant material from its context (or field), the more field independent they are said to be (Witkin and Goodenough, 1981 cited in Nel 2008). Research into the impact of field dependence/independence on perception suggests that these are stable traits that affect individual responses in a variety of situations. For example, learners who are field dependent are likely to see problems as a whole and have difficulty separating component parts (Witkin and Goodenough, 1981). In contrast, fieldindependent learners tend to be more analytical and prefer breaking down problems into component parts.



METHOD

Participants

A group of 56 IELTS candidates (both male and female) taking part in the IELTS preparation courses in the TEFL research center, Tehran, Iran were given a version of a standardized IELTS test (documented as specimen Materials,2003EMC/1667b/3y01UCLES 2003) which consisted of 25 listening comprehension items, 35 reading comprehension items, and 2 types of writing. The test was administered for purpose of selecting the appropriate candidates for the study. The 34 participant selected to take part in the study were the ones receiving6 + band score. It is worth mentioning that the scientific background, major, gender, age, and other individual differences of the learners were not taken into consideration in the present study.

Instrumentation

Interviews with participants

Both controlled and open ended (free) types were employed. The interviews with the participants were recorded, listened to, and analyzed for their main points.3.2.2. Free writing of the participants then the participants were asked to answer the questions in the essay type form. This ensured the researcher if they had missed a point in the interview session.

IELTS General Module

A Standard version of the IELTS General Module test (documented as Specimen Materials, 2003EMC/ 1667b/ 3y01 UCLES, 2003), the reliability of which, based on K-R 21, was reported to be .78 and its construct validity based on the Cronbach's alpha was acceptable ($\alpha = .74$).

Strategy Inventory for Language Learning (SILL), Version 7.0, developed by R. Oxford (1989), available atricharddpetty.files.wordpress.com/2010/03/sill-english.pdf Learning Style Questionnaire developed by Barsch (2009) available at <u>http://www.engr.ncsu.edu/learningstyles/ilsweb.html</u>

Validity and Reliability of the data collection Instruments

The *interview items* for both styles and strategies were developed based on the prominent concepts reported in the literature (Barsch, 2009; Ehrman, 2008; Felder& Henriques, 1995; Griffiths, 2008; Reid, 1987; Ting-Hui, 2006)

Procedures

56 IELTS candidates taking part in the preparation courses of IELTS General Module in the TEFL research center, Tehran, Iran took part in a standard version of IELTS General Module. They were tested against the criteria set for the four skills in the IELTS General Module. The experienced IELTS examiners dealing with the job administered the test specifically in the speaking part. 34 individuals whose overall scores were 6+ were selected for the study. They were interviewed and asked to write down their own reports of the experiences they had in developing their second language. They were asked to report their preferred strategies while studying English as well. They were also requested to fill out the55 learning strategy and learning style questionnaires. The results of interviews and open ended questions were specifically organized and classified via employing both descriptive and explanatory methods. The learners' responses to the standardized questionnaires also were analyzed by SPSS system Version 20.



Data Analysis and Discussions Qualitative Analysis

Which learning styles are more prevalent among good language learners of English in the Iranian context? To answer the question 34 participants of the study were interviewed and then they were asked to answer the questions in the essay type form and write their own self reports. This ensured the researcher if they had missed a point in the interview session and also allowed the participants to feel free to present whatever they thought in a less stressful situation and correct their own writings and present their ideas the best way possible. The interviews with the participants were recorded, listened to, and analyzed for their main points. The self reports of the learners also were analyzed through axial and open coding methods (Creswell, 2008).Through the interview and report results; frequency of each and every style related description was pursued. To do so participants' proposed items were transcribed, coded, and categorized. Then the Learning Style Inventory (Barsch, 2009) was taken into consideration and the participants' descriptions were categorized and matched to the scale presented. In case there was something of very low frequency it was omitted and if there was a new item referred to it was added to the table. The most eye catching learning styles reported by the participants were categorized and reported.

Row	Style	Related Items
1	Visual	2 /3/7/10/14/16/20/22
2	Auditory	1/5/8/11/13/18/21/24
3	Kinesthetic	4/6/9/12/15/17/19/23
4	Tactile	37/38/39/40/41/42
5	Group	25/26/27/28/29/30
6	Individual	31/32/33/34/35/36

Table 4.2: Learning style preferences item analysis

Based on the data gathered preference means for each and every learning style was calculated and reported (see table 4.3. below).

Table 4.3: Learning Style Preference Means

NNs	Visual	Auditory	Kinesthetic	Tactile	Group	Individual
Means	16.28	16.36	17.58	16.10	11.39	15.34
N=34						
			major learning sty r less = negative le	•		0–13.49 = minor

Based on the results obtained one can come to know that IELTS candidates taking part in the study are mostly moving towards the being Kinesthetic, Auditory, and Visual in terms of the style they are more inclined to. Analysis of the results also presents that the learners are interested in individuality rather than group work. In terms of Tactility style, the participants of the study have recorded high degree, though. The highest rank belongs to kinesthetic style and the lowest rank belongs to the Group work style. Table 4.4, below represents the ranking value of the style preferences by the participants.



Row	Learning style	Means	Rank
1	Kinesthetic	17.58	1st
2	Auditory	16.36	2nd
3	Visual	16.28	3rd
4	Tactile	16.10	4th
5	Individual	15.34	5th
6	Group	11.39	6th

Quantitative study

In order to investigate the strategies used by the Iranian students taking part in IELTS preparation courses in TEFL research center 34 students with different backgrounds received the Strategy Inventory for Language Learning(SILL), Version 7.0, developed by R. Oxford (1989). This version of the strategies inventory for language learning has been designed for students of English as a second/ foreign language. There are statements about learning English including Memory, Cognitive, Compensation, Meta-cognitive, Affective, Social strategies. Based on their real situations of English learning, participants were required to choose the answer. Participants were also briefed that the survey was not a test so they did not need to be worried about the results affecting their academic performance. There are fifty questions being categorized into six main strategies. *Memory Strategies* contain nine questions. *Meta-cognitive Strategies* contain nine questions. *Social Strategies* contain nine questions. This questionnaire takes about 20-30 minutes to complete. The questionnaires were gathered and analyzed based on the scales presented in the manual and the average frequency of the language learning strategies use was also computed.

Table 4.6: Frequency of Language Learning Strategies Use									
	Memory	Cognitive	Compensation	Meta- cognitive	Affective	Social			
Highest grade	4.0	4.0	5.0	4.1	4.4	4.7			
Lowest grade	2.1	2.5	2.3	2.0	2.4	2.4			
Average grade	2.9	3.1	3.7	3.1	3.3	3.4			

Table 4.6 below represents the frequencies thereof.

Table 4.6 shows the results of the survey. In this questionnaire, the highest-grade in Memory strategies is 4.0; the lowest grade is 2.1, and the average grade is2.9. In the chart, we can see learners get lower grade than other strategies. The highest grade in Cognitive strategies is 4.0, the lowest grade is 2.5, and the average grade is 3.1. Obviously, the participants do not get high grade in these strategies either. From this, we know people use the two strategies not often. The highest grade in Compensation strategies is 5.0, the lowest grade is 2.3, and the average grade is 3.7. Compared with other strategies, it gets the highest grade. The highest grade in Meta-cognitive strategies is 4.1, the lowest grade is 2.0 and the average grade is 3.1. The highest grade in Affective strategies is 4.4the lowest grade is 2.4, and the average grade is 3.3. The highest grade in Social strategies is 4.7, the lowest grade is 2.4 and the average grade is 3.4. It seems that the frequency of the three strategies is in the middle part. According to the average grades, the researcher ranked the six main learning strategies and found out that Compensatory strategies were the top choice for participants. The second top



main strategy was Social strategies and was closely followed by the Affective strategies. Then, Cognitive and Meta-cognitive strategies got the same grades and are equally used by the students. Surprisingly, Memory strategies were the least one to be used by the participants.

DISCUSSION

The findings of the study in the domain of style inventory revealed that IELTS candidates taking part in the study are mostly inclined towards being Kinesthetic, Auditory, and Visual. Analysis of the results also presented that the learners are interested in individuality rather than group work. Of course in terms of Tactility style, the participants of the study have recorded a high degree. The highest rank belongs to kinesthetic style and the lowest rank belongs to the Group work style.

CONCLUSION

The findings of the study revealed that there is a high correlation between the good language learners' scores in the IELTS test and their obtained scores in the style inventories. In terms of style also the findings revealed that there is a high correlation between high scores in IELTS and possessing Kinesthetic, Auditory, and Visual styles. Analysis of the results also presented that the learners were interested in individuality rather than group work. In terms of Tactility style, of course the participants of the study recorded a high score.

Pedagogical Implications

The style inventory results in the present study also represented the most eye catching styles the learners (study participants) possess. Though limited the number of the participants was in the present study, these characteristics could be into some extent the representative features of advanced Iranian learners of English. Language teachers, curriculum developers, and teacher trainers might employ the findings of the present study in their work, enriching the task in hand to help the learners more proficiently. Paying attention to individual differences of the learners, learners' style of learning, and strategy enrichment processes could be of paramount importance when teaching and learning of English in the EFL context comes in. Employing the aforementioned findings of the study teacher of English could enrich classroom interactions and would help subsequent L2 development of the learners.

Suggestions for Further Research

- Future studies might consider examining the residual effects of style preferences and strategies to explore whether and how long-term these effects actually could be. A semi-longitudinal study of the concept of noticing on a specific group of learners could reveal if this theory energizes "retention of vocabulary items, grammatical points, pronunciation features, and the like in the learners' mentality or not.
- 2. Further research is recommended to explore the role of cooperative learning, instructed noticing, attention, and awareness in second language development, and the characteristics of highly proficient learners, their relationship together or the likely effect they leave on learner autonomy, self regulatory factors of learning, and learner motivation.
- 3. Work needs to continue on the grouping of styles, on investigating the degree to which students report using one group or another and the relationship with proficiency.



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IN THE NAME OF REFORMATION- CRITICAL REVIEW ON THE EDUCATION REFORMATION IN PAKISTAN THROUGH HISTORICAL LENS

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ABSTRACT

Through the historical lens, this paper critically evaluates the reformation phases crossed by Muslims in the sector of education. The paper also throws light on the role of super power (USA) in funding our current education system. The Muslim education system was highly dominated during Pre-Colonial era, but gradually, British and American tried to control our education system with hidden motives. It is the need of an hour to take certain efficient measures to curtail the Muslims' deprivations in the areas of education.

Key Words: Education Reformation, Pakistan, Historical Lens.

HISTORICAL REVIEW

Education is considered as the most powerful tool in solving many global issues. Any country with strong foundation of education leads towards prosperity and development.

Islam has always directed Muslims to acquire both worldly knowledge through the experience as well as spiritual knowledge, revealed in the form of Holy Quran. Islam considers both to be of vital importance and directs its followers, both men and women, to go and seek knowledge (Helen, 2002). In the early days of Islam, mosque became the central place for the access to education. Our beloved Prophet Mohammad (SAW) also used mosque to assemble people to listen to his revelations and their interpretation (Munir, 1987).

If we look into the history of Muslim Education during Pre- Colonial era, the Muslim philosophy was influenced by religion. The whole infrastructure of education was highly dominated and based on ethical and moral values of Islam. Madrasahs, maktabs, mosques, private houses, all kinds of institutions existed in harmony. Spiritual as well as worldly education (in the form of vocational training) was provided to the Muslims. Skills were taught to the Muslims in order to meet the challenges and to earn livelihood.

The Muslim education at that time passed through different phases. During that period, the education system in North India consisted of three stages: At the first stage, a child's education began with the teaching of Holy Qur'an (Gilani, 1982) followed by learning of Persian (the official language of the country) Prose and Poetry. These included the works of major writers such as Sa'di, Hafiz, Salman Saoji, Anwari, and others (Gilani, 1982). The second stage was dedicated to an intensive study of the Arabic language as well as fiqh (Al-Nadvi & Moinuddin, 1985). In the third stage, also called fadhilat, advanced books of each science, particularly principles of jurisprudence were studied. Rational sciences and kalam (dialectics) were not paid much attention in the regular curriculum. Only a few basic texts of logic and kalam such as al-Qutbi and Sharh as-Sahaif were



studied (Gilani, 1982). The seekers of knowledge travelled far and wide. The well-to-do people of each town take care of these seekers of knowledge and consider it a great honor to serve them.

During the Colonial era, British tried to dominate Muslims. Although the Mughal emperors were keen patrons of education, and there was a considerable development in the area of education, however social injustice and discrimination in education existed during the Mughal Era. The society of the Mughal period was categorized into the rich, middle and poor class. The difference between the richest sections of society and the poorest prevailed. There was an intellectual Bankruptcy as the Mughals failed to produce any intellectual leader who could teach the country a new philosophy of life. Sarkar (1938, p.8) points out that "There was no good education and no practical training of the Mughal mobility. They were too much patted by eunuchs and maid servants and passed through a sheltered life from birth to manhood. Their domestic tutors were an unhappy class, powerless to do any good except by love of their pupils, brow-beaten by eunuchs, disobeyed by the lads themselves and forced to cultivate the arts of the courtier or to throw up their thankless office" (http://library.thinkquest.org/C006203/cgiin/stories.cgi?article=society§ion=history/mughals&frame=pare nt).

The Madrassah played an important role in imparting Islamic education, increasing literacy, and strengthening Islamic consciousness and most importantly providing training to the prospective candidates of civil service. However, the policies of British colonial rule made the most indelible marks on madrassah education. From the policies to the structure of education and the curriculum of madrassahs, the Muslim education system was highly disregarded by the British. The Madaris were reduced by British when the education system was in their hand but the revivalist movements such as Faraizi Movement, Islamic movement of Syed Ahmad Shaheed Barelvi etc. played a crucial role in knotting Muslims during the downfall of the Mughal and it was because of these movements that the Madaris system was kept alive.

The tri-parallel schooling system was introduced throughout the colony by the British to train the natives with western education. Since British wanted to establish civil and military system, they preferred to recruit natives for which, it was necessary for the British to train the natives with Western education. The injection of foreign and alien interference started dominating Muslims.

Macaulay (1835) in his Minute on Education said "We must at present do our best to form a class who may be interpreters between us and the millions whom we govern; a class of persons. Indian in blood and color, but English in taste, in opinions, in morals, and in intellect".

The colonists perfected the mechanism of dismantling the old educational systems and replacing them with systems that served the colonial administrative machines. The Muslims who lost the power struggle with the British for control of India, had a deep distrust of the foreigners (Ahmed, n.d.). The British considered Muslims education as less productive.

After reading the Macaulay (1835) speech to Parliament, the researcher realized that he did not consider Indians as high moral and value based community rather he considered them as demoralized community. He felt that it is due to the high domination of Arabic and Sanskrit that Indians failed to acquire respect and high status jobs. Since the Arabic and Sanskrit languages were the main domain of learning for the Muslims and that Hindi, and Arabic literature was highly dominated at that time, the British were in fear that it may suppress English, so they wanted Sanskrit and Arabic to be abolished. In short, the British wanted to dominate Indo-Pak through English but blamed that our education system was poor, which, in my opinion was not completely justified.

During that time, the investment of the British in the field of education, social work, providing grants and aids had some concealed motives. They played tactic to abandon allocation of stipends to the students of Arabic



and Sanskrit to hamper Muslims progress. The British were in favor of teaching foreign language (English) to the Indians, which was the language of the ruling class, to promote the future vision, i.e., keeping in view of the rising demand of English to connect greater powers to India to flourish trade, business, etc. The Indians felt that the British wanted to mould Indians to be their slaves and wanted to break the unity of Muslims by attacking their spiritual and social infrastructure. Macaulay wrote in 1836 that 'No Hindoo, who has received an English education, ever remains sincerely attached to his own religion. Some continue to profess it as a matter of policy; but many profess themselves pure Deists, and some embrace Christianity. It is my firm belief that, if our plans of education are followed up, there will not be a single idolater among the respectable classes in Bengal thirty years hence' (cited as in Clive, 1987: 411). Western science and English literature, as Viswanathan (1998) argues that the British wanted to disseminate and secure not only the hegemony and legitimacy colonial power, but also of its religion.

The Missionary activity was activated in India whose work had been intimately interconnected with the British Empire in India. They were hired to extend the scope of British practices among the natives. The missionary schools were founded to prepare workers, for which Mathematics and English were taught to them as a strategy to be submissive to the British. It was also seen as having a role to play in its own right (as secular education) in preparing the minds of India's elites for the ultimate reception of Christianity. Duff (1839) provides an enthusiastic and revealing description, in his mammoth India and India Missions. He was conducting a junior class in which he asked, 'What is rain?' A student replied that it came from the trunk of the elephant of God Indra. Pressed for his source, he replied that he learnt this from his guru, whose authority in turn was a Shastra, a Hindu text. Instead of directly contradicting the student, Duff describes how he led his students through the everyday example of rice boiling in a pot, the rising of steam, condensation, the reformation of water—at each point, explaining the process and gaining the assent of students for the explanation. Thus, it was a gradual but a strong motive of British to mold young minds.

INTEREST OF USA IN PAKISTAN

America is a super power country who wants her domination over the weak nations. Today, our education system of Pakistan is improving at a gradual pace but since US is not satisfied, keeping in view their interest in suppressing third world countries, she felts that our education system should be reformed. Pakistan's Madrassa system of Islamic education has come under intense scrutiny, Congress, the Bush Administration, and the 9/11 Commission each have identified this issue as relevant to U.S. interests in South Asia to reform Madaris education system in Pakistan. In the post-9/11 period, U.S, as a part of their foreign policy efforts, assisted Pakistan in the creation of a more stable, democratic, and prosperous country actively combating religious militancy. Education was one of the most important areas, where the commitment of US to support Pakistan was on long term basis. The Americans are in fear that after 9/11, taliban is training young minds to become anti.-Americans, and that it can only be controlled, if the Americans invest in the process of education reformation in Pakistan (Kronstadt, 2004). The Americans consider madressah education as a platform for preparing the people of Pakistan against America.

One of the main goals of America is to bring madrassa curriculum into the mainstream of Pakistan's general education system through the inclusion of secular subjects and to register all the madrassa. The government is also trying to persuade the schools to teach science, mathematics, English and Urdu. This would provide students with the option, now usually lacking, of eventually enrolling in professional schools' (Wall Street Journal, 2002). The government has gone so far as to suggest that Madrassas would receive government aid only if they begin providing what could be termed a "modern education (Rubin, 2002). This view was highly refused by many of the religious scholars as they were against the aid, provided by the U.S for the reformation of education in Pakistan. According to the International Centre for Religion and Diplomacy, the US-based conflict-resolution charity, only 10% of madrasas complied with the government's voluntary registration programme launched in 2002 (http://icrd.org/?option=com_content&task=view&id=12&Itemid=41).



The Daily Times (2009) reported that, in his address to the National Assembly, the Minister for Religious Affairs, Hamid Saeed Kazmi stated "The government registered 9,866 madrassas between 2005 and June 30, 2009, taking the total number of madrassas registered across the country to 15,843... there were 5,355 madrassas operating in Punjab, 2,852 in Sindh, 1,242 in the NWFP, 297 in Balochistan, and 120 madrassas in the federal capital".

According to the document, the Secretary of State Powell identified the madrassas as offering programs that do nothing but prepare youngsters to be fundamentalists and to be terrorists. The same is the concern of Pakistani Government. Many analysts view that although not all madrassas are directly links with Terrorism (Bergen & Pandey, 2006), but approximately 10-15 percent are (Singer, 2001). At the same time, madrassas' role in shaping radical views among the masses, and specifically among their students is a serious concern for many analysts and policymakers (Asia Report, 2004).

According to Farooq (2010) although critics accused madrassahs' curriculum as stagnant and static, however, contemporary Pakistani madrassah curriculum is not the same as it was earlier. After the technological and institutional changes introduced by the colonial administration in the nineteenth century, the South Asian madrassahs are constantly adjusting, readjusting and reviewing the curriculum according to the need of the time. However, the officials in Pakistan have confirmed that Taliban leaders are buying and selling children for use as suicide bombers

(http://www.soschildrensvillages.org.uk/charitynews/childsuicideboughtbypakistantaliban.htm).

The training of Taliban is preparing children for suicide attacks with the message that, "only jihad can bring peace to the world" (BBC News), which can only be countered with a solid education system that can provide a foundation of core values. This news has alerted America to control our education system and to modify the curriculum in compliance with America

To combat terrorism and dominating our education system, one of the strategies used by the United States was the announcement of foreign aid to the students. The United States Agency for International Development (USAID) reestablished a permanent presence in Pakistan in 2002 as part of the U.S. Government's commitment to help Pakistan in the fight on global terrorism. The program is focused on four areas: education, governance, health and economic opportunity. USAID implements most of the U.S. government projects in primary and secondary education. According to the U.S. Embassy in Islamabad, USAID has provided more than \$250million since 2002 to reform and revitalize Pakistan's educational system (USAID, 2008).

The USCIRF Annual Report (2010) noted that: "In mid-2005, the Pakistani central government renewed its effort to require all madrassas to register with the government and to expel all foreign students. By that year's end, despite an outcry from some violent extremist groups, most of the religious schools had registered. However, the registration process reportedly has had little if any effect on the curricula, which in many of these schools remains intolerant and includes exhortations to violence. The government also still lacks controls on the madrassas' sources of funding. It remains doubtful whether these efforts to curb extremism through reform of the country's Islamic religious schools will be accompanied by other measures that would make them effective" (p.93).

But why are we getting the grants, funds and scholarships from the US? The researcher view that it is the need of time to avail such opportunities with optimistic approach, as our government failed to improve the infrastructure of education. The National Education Policy (1972, 1979, 1998-2010) promised to improve our education system but failed to achieve basic goals. The Constitution of Islamic Republic of Pakistan (1973) guaranteed the access of free and compulsory secondary education to all but the access to education for all is still a dream. The Constitution of Islamic Republic of Pakistan (1973) clearly lays down the provision in Article



37 (b) that: "The state of Pakistan shall... remove illiteracy and provide free and compulsory secondary education within minimum possible period". Despite the constitutional guarantee of free and compulsory secondary education as stipulated in 1973 Constitution, Pakistan has been unable to achieve targets of universal primary enrollment objectives in over four decades, which may be one of the reasons that USA started taking interest in the field of education in order to gain control over our Education system.

According to the Economic Survey, Government of Pakistan (2010), the Net Enrolment Rate (Primary) was only 57%.

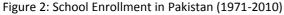
Indicator/Area	Total	Rural Areas	Female
Literacy Rate (10+)	57 %	48 %	45 %
Net Enrolment Rate (Primary)	57 %	53 %	54 %

Figure 1: Net Enrolment Rate (Primary)

Above statistics, released by the Govt. of Pakistan indicates that about 43% people in Pakistan are illiterate, and only 57% children of age 5-9 are enrolled in primary schools.

According to UNESCO (2010), the value for School enrollment, secondary (% gross) in Pakistan was 34.23. Still, our focus is not on practical implementation of education rather on the enrolment, which is one of the drawbacks of our education policies.





The report highlighted that the Education Sector Reform (2001) is providing universal education with increased completion rates which was based. According to (PILDAT, 2010), we can achieve 64% literacy (10+) by the end of 2015. The projected rate of literacy and net enrolment rate by 2015 is given below.



Indicators/Year		Rates as per PSLM Survey (Pakistan Economic Survey 2009-10)			Projected Rate by 2015
	2006-07	2007-08	2008-09		
Literacy Rate (10+)	55	56	57	1.818%	64
Net Enrolment Rate (Primary)	56	55	57	0.892	60.12

Figure 3: Projected Rate of Literacy

The above data reveals that Pakistan may need another 15 years to achieve 86% literacy rate and 38 years to achieve universal primary education (UPE).

USAID funded quality education in Pakistan with an emphasis on the Balochistan and Sindh province and also constructed schools particularly in the tribal areas of Pakistan. The education reformation was launched by government in 2001. The funds that were provided were designated for primary education, literacy programs, basic health, food aid, and support for democracy, governance, and elections, with almost all of the funds going through and disbursed by USAID (Ibrahim, 2009).

According to the U.S. Agency for International Development (USAID), between 2002 and 2007, the educational programs of the agency totaled more than \$255 million "to reform and revitalize all levels of Pakistan's education system," and currently these programs "benefit more than 600,000 children and 60,000 teachers." The appropriation for the education program in Pakistan until 2012 amounts to around \$90 million which is to be implemented by USAID's partner, the American Institutes of Research, spanning around 10,000 schools (http://www.usaid.gov/pk/education/index.htm).

Douglas M. Johnston, the organization's president, urges USAID and international donor support for madrassa reform saying: "To prevent Pakistan's slide toward a failed nuclear state, broad educational enhancement of the madrassas will be essential" (http://www.cfr.org/pakistan/pakistans-education-system-links-extremism/p20364).

Many of the religious scholars and madrassa leaders are not in favor of taking US grant as they consider it as a tactic to gain control over our country. Dr Sarfraz Naeemi¹ said, the U.S. is behind the move to suppress the growing Islamic influence which is resiliently rising after the U.S. aggression on Afghanistan and has now gained momentum after the recent war in Iraq. Maulana Abbas Naqvi² is in view not to accept any conditional aid that amounts to interference in our independence and sovereignty which is supreme for us.

In view of some analysts that the US and other donors may direct their resources at reform of Pakistan's public education sector, as it is the most effective and least controversial means of reversing the influence of Islamic extremists and their threat to Pakistan stability. I disagree with the views presented for the public education sector about preparing extremist; however, I agree that since the public education system looks after the education of the large proportion of the school-going-age population, education reform should take place. Most of the schools are poorly managed, impart education of poor quality, use poorly written textbooks and

¹ Dr Sarfraz Naeemi is a Principal at Jamia Naeemia Lahore and Secretary General **of** Tanzimul Madaris Pakistan

² Maulana Abbas Naqvi is a Secretary-General at Wifaq-ul-Madaris-al-Shia



use curricula that are not relevant for the needs of the 21st century. Reforming the entire system, therefore, is of critical importance. The statistics give below shows the enrolment comparison of educational institutions.

1000000000				Enrolment by	Stage*		
Instituti	ons Type		2006-07			2007-08	
	162	Male	Female	Total	Male	Female	Tota
	Public	2,504,636	2,051,082	4,555,718	2,512,292	2,000,406	4,512,698
Pre- Primary	Other Public	49,107	46,608	95,715	50,580	47,074	97,654
Pre- Primary	Private	1,523,730	1,247,999	2,771,729	1,532,113	1,260,481	2,792,594
	Total	4,077,473	3,345,689	7,423,162	4,094,985	3,307,961	7,402,946
	Public	6,689,572	5,037,961	11,727,533	6,744,320	5,136,353	11,880,673
	Other Public	138,116	132,652	270,768	139,498	135,307	274,805
Primary	Private	2,797,795	2,245,841	5,043,636	2,808,988	2,263,808	5,072,796
	Total	9,625,483	7,416,454	17,041,937	9,692,806	7,535,468	17,228,274
	Public	2,184,306	1,432,483	3,616,789	2,154,209	1,439,198	3,593,407
	Other Public	49,217	49,578	98,795	50,200	50,568	100,768
Middle	Private	892,973	759,051	1,652,024	901,902	766,641	1,668,543
	Total	3,126,496	2,241,112	5,367,608	3,106,311	2,256,407	5,362,718
	Public	970,638	602,318	1,572,956	1,025,221	643,399	1,668,620
51508	Other Public	26,718	26,379	53,097	27,520	27,169	54,689
High	Private	368,465	320,698	689,163	375,835	327,111	702,946
	Total	1,365,821	949,395	2,315,216	1,428,576	997,679	2,426,255
	Public	349,921	366,111	716,032	357,897	370,536	728,433
Higher Sec/	Other Public	13,037	8,519	21,556	13,428	8,691	22.119
Inter Colleges	Private	83.612	81,248	164,860	86,118	82,873	168,991
	Total	446.570	455,878	902,448	457,443	462,100	919,543
	Public	112,830	189,123	301,953	113,959	191,014	304,97
Degree	Other Public	12,591	3,066	15,657	12,716	3,097	15,81
Colleges (XI-XIV)	Private	11,308	19,896	31,204	11,422	20,095	31,51
(//-////	Total	136,729	212,085	348,814	138,097	214,206	352,30
Non-Formal Ba	sic Education	123,850	237,897	361,747	236,446	301,031	537,47
ARTON BRIDGE	Public	56,642	29,598	86,240	54,927	33,039	87,96
Technical & Vocational	Other Public	13,192	9,507	22,699	14,457	8,696	23,15
Institutions	Private	86,659	55,025	141,684	90,239	54,278	144,51
	Total	156,493	94,130	250,623	159,623	96,013	255,63
	Public	413,896	208,093	621,989	418,033	210,174	628,20
leachers Training	Other Public	92 2	1	28	2	-	
Institutions	Private	2,439	1,992	4,431	2,464	2,013	4,47
	Total	416,335	210,085	626,420	420,497	212,187	632,68
11/1/03/03/22/07/5	Public	285,949	232,626	518,575	325,777	311,260	637,03
Universities	Private	64,241	23,069	87,310	73,190	30,865	104,05
	Total	350,190	255,695	605,885	398,967	342,125	741,09
	Public	27,698	12,096	39,794	25,049	15,143	40,19
Deeni Madaris	Other Public	2,766	2,392	5,158	3,247	1,963	5,21
	Private	959,278	583,845	1,543,123	971,343	587,211	1,558,55
	Total	989,742	598,333	1,588,075	999,639	604,317	1,603,95
	Public	13,719,938	10,399,388	24,119,326	13,968,130	10,651,553	24,619,68
Total	Other Public	304,744	278,701	583,445	311,646	282,565	594,21

Figure 4: Education Comparison

(Source: http://www.moe.gov.pk/Pakistan%20Education%20Statistics%2007-08.pdf)

Many people who oppose foreign aid say that America should poke nose in their own matter and let the rest of the world take care of their own. Foreign aid should be accepted without conditions. It should be better distributed and not scrapped.



America was founded upon the idea that all men are created equal and that any people living under any oppressive government has the right to alter or abolish that government and form a new government. Such equality must be appreciated in Pakistan. We are by far the wealthiest nation in the world with ample of resources. We need to recognize our own potential in order to become an egalitarian state.

CONCLUSION

All in all, once, the British wanted to dominate us through education and today, the U.S is dominating us through funding and reforming our education system, according to their strategic needs.

We must try to identify our own human resources and recognize the loopholes to bring positive changes in the infrastructure of education.

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SCHOOL EFFECTIVENESS AT PRIMARY LEVEL LEVELS OF EDUCATION IN RELATION TO COMMUNITY PARTICIPATION

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ABSTRACT

The study aims to investigate the relationship of School Effectiveness with regard to Community Participation at primary level of education. The objectives of the study were to identify the more-effective and less-effective schools; to find out the differences between more-effective and less-effective schools in relation to physical facilities, Head Master and Teachers' performance and Students' performance; to find out the relationship between the school effectiveness and community participation. The descriptive survey method was used to carry out this study. A Total number of 27 more-effective and 35 less-effective primary schools were included in the sample of the present study. And also all principals of selected schools and 5 community members from each locality of these schools were selected incidental purposively, to investigate their participation in school activities. In order to collect data from the selected samples the School Effectiveness Schedule and Community Participation Interview Schedule were developed by the researcher. On the basis of the findings of the present study it is revealed that the schools having better Physical facilities, HM and teachers' performance and Students' performance were identified as more-effective schools. It is essential to identify schools which are less-effective and provide necessary help to develop their physical facilities and other aspects so as to develop the performance of students in order to increase school effectiveness. One of the significant findings of the present study is the higher community participation is associated with greater school effectiveness.

Key Words: Community Participation, School Effectiveness, Physical Facilities, Students Performance, Quality Education.

PROLOGUE

Improvement of quality of education raises many issues such as curriculum renewal, textbooks improvement, better teaching methods, effective teacher education and provision of material facilities in the schools. Improving the working of one teacher schools, progressive methods of evaluation, democratization and humanizing school administration and supervision, provision of rich and varied programme of co-curricular activities, healthy interaction between school and the parents and community. In fact the issue of wastage, stagnation, dropouts and improvement of quality of primary education are interlinked. While appreciable efforts have been made much need to be done and, perhaps one of the most crucial steps to improve the quality of education at primary level is to ascertain the effectiveness with which schools are imparting educations at primary level.

The studies based on community effort in enhancing school effectiveness and learning achievement revealed that empowering communities could improve relevance and efficiency in primary schools in order to attract and keep more children school as well as for effective management and development of schools (Agarwal and Harding, 1995; Jalali, 1995; Seetharamu, 1995). Ambasht and Rath (1995); Barpanda, (1997) were pointed out



that the participation of community increases the enrolment, retention and achievement of students in the primary schools. The findings of some studies on community participation and school effectiveness also revealed a positive relationship of community participation in the functions of the school management committee and its formation, getting financial support to the schools from the community (Kumar, Patel and Mehta, 1998; Rao, 1998).

Overall, we can say, improvement of quality of elementary education raised many issues such as curriculum renewal, textbooks improvement, better teaching methods, effective teacher education and provision of material facilities in the schools, progressive method of evaluations, democratization and humanizing school administration and supervision, provision of rich and varied programmes of co-curricular activities, healthy interaction between school and the community, improvement of single teacher schools etc. In fact the issue of wastage, stagnation, dropouts and improvement of education are inter-linked. The reasons for such School effectiveness, Community Participation and Classroom Teaching at primary schools provide us with many valuable insights into the diverse aspects of the problem. Therefore, the researcher realized that there is a need for this type of studies to investigate the relationship of School Effectiveness with regard to Community Participation at primary level of education.

Objectives of the Study

- 1. To identify the more-effective and less-effective schools.
- 2. To find out the differences between more-effective and less-effective schools in relation to physical facilities, Head Master and Teachers' performance and Students' performance.
- 3. To find out the relationship between the school effectiveness and community participation.

Hypotheses of the Study

- 1. More-effective schools will be having better physical facilities, Head Master and Teachers' performance and Students' performance.
- 2. There exists real association between school effectiveness and community participation as a whole.
- 3. There exists real association between school effectiveness and community participation with dimension wise.

To test the above hypotheses for the present study the researcher following null hypotheses were framed.

- 1. There exist no significant differences between More-effective and Less-effective schools in Physical Facilities, Head Master and Teachers' performance and Students' performance.
- 2. There exists essentially unrelated or independent between school effectiveness and community participation as a whole.
- 3. There exists essentially unrelated or independent between school effectiveness and community participation with dimension wise.

METHODOLOGY

The present study utilizing descriptive survey method endeavors to select the More-effective and Less-effective primary schools and find out the relationships with regard to Community Participation and Classroom Teaching. For this purpose a two-phased study was planned. In the *first phase* the more-effective and less-effective schools were selected from the rural area. In the *second phase* for getting the Classroom Teaching data, classrooms were observed and from that locality the community members were interviewed. Classroom Teaching was compared in both the types of schools at three levels of the teachers' involvement *i.e.* low, moderate and high. Also the levels of community members was done by applying the formula *i.e.*, Mean $\pm \frac{1}{2}$ SD to the score values.



Sample Size and Sampling Technique

All the rural primary schools and their Teachers, Students and the Community Members (Where the schools are situated) in Orissa constituted the population. There are 30 districts in Orissa. But the sample of the study was taken from two districts viz., Puri & Ganjam. These two districts were selected randomly. After selection of these two districts one block from each district was selected by simple random sampling method. Pipili Block from Puri District and Hinjili-cut Block from Ganjam District were selected. In Pipili Block there are 109 Rural Primary Schools and in Hinjili-cut Block there are 94 Rural Primary Schools, where 5 or more teachers were working (at the time of selection of schools). In the first phase to find out more-effective and less-effective schools, the interview was taken by the researcher with the Block Development Officers (BDOs) for listing the primary schools in their blocks as more-effective and less-effective. In Pipili block out of 109 schools, the BDO listed 17 as more-effective and 30 as less-effective schools. In Hinjili-cut block out of 94 schools, BDO listed 25 as more-effective and 22 as less-effective schools. A total number of 94 primary schools, 47 schools from each block were listed by the BDOs. Further, the School Effectiveness Schedule was administered to the Headmasters/ Headmistresses of all the 47 schools of each block. The School Effectiveness score of each school was calculated. The School Effectiveness score were classified into two groups on the basis of their effectiveness i.e., more-effectiveness and less-effectiveness by adopting the criteria of Mean ± ½ SD i.e., Schools scoring Mean – $\frac{1}{2}$ SD were included in Less-effective school, those scoring Mean + $\frac{1}{2}$ SD were included in the More-effective school. Finally, the 9 more-effective & 23 less-effective schools from Pipili Block and 18 more-effective & 12 less-effective schools from Hinjili-cut Block were selected for the final sample. A Total number of 27 more-effective and 35 less-effective primary schools were thus included in the sample of the present study. And also 5 community members from each locality of these schools were selected incidental purposively, to investigate their participation in school activities.

Data Collection Instruments

In order to collect data from the selected samples, following tools were used. School Effectiveness Schedule and Community Participation Interview Schedule tools were developed by the researcher himself.

- 1. School Effectiveness Schedule: For Headmaster/ Headmistress
- 2. Community participation Interview Schedule: For Community Members.

ANALYSIS AND DISCUSSION OF RESULTS

Identification of more-effective and less-effective schools through School Effectiveness Schedule

For identification of more-effective and less-effective schools through School Effectiveness Schedule, the data collected from Headmasters/Headmistress. The School Effectiveness score were classified into two groups on the basis of their effectiveness i.e., more-effectiveness and less-effectiveness by adopting the criteria of *Mean* \pm ½ *SD* i.e., Schools scoring *Mean* - ½ *SD* were included in *Less-effective school*, those scoring *Mean* + ½ *SD* were included in the *More-effective school*. Finally, the 9 more-effective & 23 less-effective schools from Pipili Block and 18 more-effective & 12 less-effective schools from Hinjili-cut Block were selected. A Total number of 27 more-effective and 35 less-effective primary schools were found in both the blocks.

Table-1: Significance of difference between the mean scores of overall More-effective and Less-effective schools.

Schools	N	Mean	SD	SEd	'ť	Level of sig.
More- effective	27	100.41	12.07	2.53	15.71	.01
Less- effective	35	60.66	6.00			

Df=N1+N2-2=60, The table value at .05 level = 2.00 and .01 level = 2.66



The table-1 shows that the mean scores of overall More-effective and Less-effective schools are found to be 100.41 and 60.66 with SDs of 12.07 and 6.00 respectively. The calculated't' value 15.71 is much greater than the table value at .01 level (2.66). Therefore, it can be concluded that it is significant beyond .01 levels. Thus, the Null Hypothesis-1 of the study that there exists no significant difference between more-effective and less-effective schools is rejected for all dimensions i.e. Physical facilities; HM and teachers' performance; and Students performance.

It is further reveals that the mean scores on all dimensions i.e. Physical facilities; HM and teachers' performance; and Students performance of more-effective schools are higher than that of less-effective schools. It means that in more effective schools existing available Physical facilities; HM and teachers' performance; and Students performance are better than the less-effective schools. Therefore, the Hypothesis-1 of the present study that more-effective schools will be having better Physical facilities; HM and teachers' performance; and Students performance is retained.

Table-2: Significance of Difference between the mean Scores on Physical Facilities of More-effective and Less-effective Schools.

Schools	N	Mean	SD	SEd	'ť'	Level of sig.
More- effective	27	63.70	7.71	1.72	10.52	.01
Less- effective	35	45.51	5.27			

Df=N1+N2-2=60, The table value at .05 level = 2.00 and .01 level = 2.66

Table-2 highlights that the mean scores on Physical facilities of more-effective and less-effective schools are found to be 63.70 and 45.51 with SDs of 7.71 and 5.27 respectively. The calculated't' value 10.52 is greater than the table value at .01 level. Therefore, it can be said that it is significant beyond .01 levels. Thus, the Null Hypothesis-1 of the present study that there exists no significant difference between more-effective and less-effective schools is rejected for Physical facilities.

The above table further indicates that the mean scores on Physical facilities of more-effective schools are higher than that of the less-effective schools. It means that in more-effective schools existing/available Physical facilities are better than the less-effective schools. Therefore, the Hypothesis-1 of the study that more-effective schools will be having better Physical facilities; HM and teachers' performance; and Students' performance is retained for physical facilities.

Table-3: Significance of Difference between the mean Scores on HM and Teachers' Performance of Moreeffective and Less-effective Schools.

Schools	N	Mean	SD	SEd	'ť'	Level of sig.
More- effective	27	29.29	9.12	1.91	10.47	.01
Less- effective	35	9.29	4.46			

Df=N1+N2-2=60, The table value at .05 level = 2.00 and .01 level = 2.66

The above Table shows that the mean scores on HM and teachers' performance of more-effective and lesseffective schools are found to be 29.29 and 9.29 with SDs 9.12 and 4.46 respectively. The obtained't' value, 10.47 is higher than the table value at .01 level. Hence, the Null Hypothesis-1 of the present study that there



exists no significant difference between more-effective and less-effective schools is rejected for HM and teachers' performance.

The Table-3 further indicates that the mean scores on HM and teachers' performance of more-effective schools are higher than that of less-effective schools. It means that in more-effective schools HM and teachers' performance are better than that of the less-effective schools. Therefore, the Hypothesis-1 of the present study that more-effective schools will be having better Physical facilities; HM and teachers' performance; and Students' performance is retained for HM and teachers' performance.

Table 4: Significance of Difference between the mean Scores on Students' Performance of More-effective and Less-effective Schools.

Schools	N	Mean	SD	SEd	'ť	Level of sig.
More-	27	7.41	1.90			
effective				0.54	2.87	.01
Less-	35	5.86	2.38			
effective						

Df=N1+N2-2=60, The table value at .05 level = 2.00 and .01 level = 2.66

It can be found from Table-4 that the mean score on Students' performance of more-effective and lesseffective schools are found to be 7.41 and 5.86 with SDs of 1.90 and 2.38 respectively. The obtained't' value, 2.87 is greater than the table value at .01 level. Therefore, it can be said that it is significant beyond .01 levels. Hence, the Null Hypothesis-1 of the present study that there exists a significant difference between moreeffective and less-effective schools is rejected for Students' performance.

Table-4 further reveals that the mean scores on students' performance of more-effective schools are higher than that of the less-effective schools. It means that in more-effective schools Students' performance is better than the less-effective schools. Hence, the Hypothesis-1 of the present study that more-effective schools will be having better Physical facilities; HM and teachers' performance; and Students' performance is retained for Students' performance.

Thus, on the basis of above analysis and interpretation, it can be said that the more-effective schools are found to be having better Physical facilities; HM and teachers' performance; and Students' performance.

Findings of the present study of this Section revealed that there is significant difference between moreeffective and less-effective schools in Physical facilities; HM and teachers' performance and Students' performance. The more-effective schools have been found to be having better Physical facilities; HM and teachers' performance; and Students' performance, which is some way linked to a conducive school environment and pupils' performance. It is supported by the many researchers' (*Scwietzer, 1984; Mortimore et al., 1988; Creemers, 1994*) findings that physical and infrastructural environment has an effect of pupils achievement.

The findings of studies conducted in India (Buch & Buch, 1983; Govinda & Verghese, 1991, 1993; Sharma et al., 1992) lend adequate support as they are also in conformity with the findings of the present study that the level of infrastructure facilities played an important role in improving teaching learning process, learners achievement level as well as overall school quality. Similarly, the findings of the study conducted by Saxena et al. (1994) on "School effectiveness and learners achievement", found that the factors of educational and physical facilities in schools have shown positive associations with achievement. It is also shows in support of the physical facilities dimension of the present study.



In this study, the HM and teachers' performance has been considered a dimension of the school effectiveness. It means HM and teachers' performance plays an important role for develop0ment and improvement of school effectiveness. It is conformity with the studies conducted by the eminent researchers i.e. *Burkey (1997), Morly (1997), Davies (1998), Tiguryera (1999), Reynolds & Teddile (2000), and Thrupp (2001)*. Their studies emphasized that performance of the teachers in the learning process, their academic involvement and their qualification plays an important role for the progress of school. In conformity with the findings of the present study, it can be concluded with the findings of many researchers (*Saxena et al., 1994; Rajakutty, 1995; Das, 1997; Pathak et al., 1994; Rath and Rajesh, 1997; and Das, 2002*) that the teachers, physical environment in the school and teaching learning materials also have positive association with the school effectiveness.

• School Effectiveness in relation to Community Participation

In this section analysis has been done to fulfill the objective of the present study i.e. to find out the relatedness or independence of school effectiveness in relation to community participation. The analysis has been done in two phases i.e. (i) School effectiveness in relation to overall community participation, and (ii) School effectiveness in relation to different dimensions (Improving school complex, Resource mobilization, Organizing socio-cultural activities, Management of the school and Improving academic environment of the school) of community participation. For this purpose, community members were classified into three groups on the basis of their participation in school activities i.e., Low, Moderate and High groups by adopting the criteria of $M \pm \frac{11}{2}$ SD i.e., community members scoring $Mean - \frac{12}{2}$ SD were included in Low level of participation group, those scoring $Mean + \frac{12}{2}$ SD were included in the High level community participation group. The classification of community members into three groups on the basis of their community participation scores.

Table 5: Calculation of	Chi-Square	(χ^2)	Value	Showing	Association	of School	Effectiveness	and	Overall
Community Participation									

SCHOOLS	LOW fo fe		MOD fo	ERATE fe	HI fo	GH fe	Chi-square χ ²	Level of Sig.
More-effective	04	45.72	46	38.75	85	50.51	111.53	.01
Less-effective	101	59.27	43	50.24	31	65.48		

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210

The above Table shows that the obtained χ^2 value 111.53 of these three groups (Low, Moderate and High group) of the community members participation in more-effective and less-effective schools is greater than the table value at .01 level. It can be said that it is significant beyond .01 levels. Therefore, the Null Hypothesis-2(i) i.e. school effectiveness and community participation are effectively unrelated or independent is rejected.

It indicates that observed results are not close to those expected on the hypothesis of independence and there is greater evidence of real association between school effectiveness and overall community participation. Therefore, Hypothesis-2(i) of the present study i.e., there exists a real association between effectiveness and community participation is retained. It can be interpreted to mean that a significant majority of the community members belonging to the more-effective schools participates more in the school activities as compared to less-effective schools. It can also be observed that high community participation is associated with increasing the school effectiveness. It advocates that community participation is likely to increase the school effectiveness.



• School Effectiveness in relation to different Dimensions of Community Participation

Table 6: Calculation of Chi-Square (χ^2) Value Showing Association of School Effectiveness and Community Participation in Improving the School Complex

SCHOOLS	LC fo	W fe	MODI fo	ERATE fe	HI fo	GH fe	Chi- square χ ²	Level of Sig.
More- effective	03	31.66	85	69.47	47	33.85	61.62	.01
Less- effective	69	40.33	73	88.52	30	43.14		

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210

It is observed from the above table that in Dimension-I (community participation in *Improving School Complex*), the community members were divided into three groups such as Low, Moderate and High groups according to their participation in more-effective and less-effective schools. The calculated Chi-square (χ^2) value found to be 61.62. This value is greater than the table value at .01 levels of significance, it can be said that it is significant beyond .01 level. Therefore, the Null Hypothesis-2(ii) present study i.e. school effectiveness and community participation are essentially related or independent is rejected for community participation in *Improving School Complex*.

It is also observed that the observed results are not close to those expected on the null hypothesis of independence and there is evidence of real association between school effectiveness and community participation in improving the school complex. So, the Hypothesis-2(ii) of the study i.e. there exist a real association between school effectiveness and community participation in improving the school complex. It was also observed that where schools were functioning more-effectively, there was higher community participation in improving school complex Dimension in comparison to those schools functioning less-effectively. This can be interpreted to mean that high community participation is associated with increasing the school effectiveness.

SCHOOLS	LO	W	MODERATE		HIGH		Chi-	Level of
	fo	fe	fo	fe	fo	fe	square χ²	Sig.
More- effective	11	19.44	60	70.96	51	31.59	33.61	.01
Less- effective	29	20.55	86	75.03	14	33.41		

Table 7: Calculation of Chi-Square (χ^2) Value Showing Association of School Effectiveness and Community Participation in Resource Mobilization in the School

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210

The above table indicates that in Dimension-II (community participation in *Resource Mobilization*), the community members were divided into three groups such as Low, Moderate and High groups according to their participation in more-effective and less-effective schools. The calculated Chi-square (χ^2) value comes to be 33.61. This value is greater than the table value at .01 levels of significance, it can be said that it is significant beyond .01 level. Therefore, the Null Hypothesis-2(ii) present study i.e. school effectiveness and community



participation are essentially related or independent is rejected for community participation in *Resource Mobilization.*

It is also revealed that the observed results are not close to those expected on the null hypothesis of independence and there is evidence of real association between school effectiveness and community participation in improving the school complex. Therefore, the Hypothesis-2(ii) of the study i.e. there exist a real association between school effectiveness and community participation in *Resource Mobilization* of community participation is retained. It was also observed that where schools were functioning more-effectively, there was higher community participation in *Resource Mobilization* Dimension in comparison to those schools functioning less-effectively. This can be interpreted to mean that high community participation is associated with increasing the school effectiveness.

Table 8: Calculation of Chi-Square (χ^2) Value Showing Association of School Effectiveness and Community Participation in Organizing Socio-Cultural Activities in the School

SCHOOLS	LO fo	W fe	MODI fo	ERATE fe	HI fo	GH fe	Chi- square χ ²	Level of Sig.
More- effective	11	39.57	77	57.61	47	37.82	52.86	.01
Less- effective	79	50.42	54	73.39	39	48.18		

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210

On Dimension-III i.e. Community participation in *Organizing Socio-cultural Activities*, the community members were divided into three groups such as Low, Moderate and High groups according to their participation in more-effective and less-effective schools. The calculated Chi-square (χ^2) value comes to be 52.86. This value is greater than the table value at .01 levels of significance, it can be said that it is significant beyond .01 levels. Therefore, the Null Hypothesis-2(ii) of the present study i.e. school effectiveness and community participation are essentially related or independent is rejected for community participation in *Organizing Socio-cultural Activities*.

It is also revealed that the observed results are not close to those expected on the null hypothesis of independence and there is evidence of real association between school effectiveness and community participation in *Organizing Socio-cultural Activities*. Therefore, the Hypothesis-2(ii) of the study i.e. there exist a real association between school effectiveness and community participation in *Organizing Socio-cultural Activities* and community participation in *Organizing Socio-cultural Activities* of community participation is retained. It was also observed that where schools were functioning more-effectively, there was higher community participation in *Organizing Socio-cultural Activities* Dimension in comparison to those schools functioning less-effectively. This can be interpreted to mean that high community participation is associated with increasing the school effectiveness.



Table:9: Calculation of Chi-Square (χ^2) Value Showing Association of School Effectiveness and Community Participation in the Management of the School

SCHOOLS	LC fo	9W fe	MODI fo	ERATE fe	HI fo	GH fe	Chi- square γ ²	Level of Sig.
More- effective	11	40.06	42	47.90	82	47.03	x 84.68	.01
Less- effective	81	51.93	68	62.09	26	60.96		

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210

The above table-9 indicates that in Dimension-IV (community participation in *Management of the School*), the community members were divided into three groups such as Low, Moderate and High groups according to their participation in more-effective and less-effective schools. The calculated Chi-square (χ^2) value comes out to be 84.68. This value is greater than the table value at .01 levels of significance, it can be said that it is significant beyond .01 level. Therefore, the Null Hypothesis-2(ii) present study i.e. school effectiveness and community participation are essentially related or independent is rejected for community participation in *Management of the School*.

It is also observed that the observed results are not close to those expected on the null hypothesis of independence and there is evidence of real association between school effectiveness and community participation in *Management of the School*. Therefore, the Hypothesis-2(ii) of the study i.e. there exist a real association between school effectiveness and community participation in *Management of the School* of community participation is retained. It was also observed that where schools were functioning more-effectively, there was higher community participation in *Management of the School* Dimension in comparison to those schools functioning less-effectively. This can be interpreted to mean that high community participation is associated with increasing the school effectiveness.

Table 10: Calculation of Chi-Square (χ^2) Value Showing Association of School Effectiveness and Community Participation in Improving Academic Environment of the School

SCHOOLS	LO	W	MODERATE		HIGH		Chi-	Level of
	fo	fe	fo	fe	fo	fe	square χ²	Sig.
More- effective	08	35.27	61	56.17	66	43.54	58.59	.01
Less- effective	73	45.72	68	72.82	34	56.45		

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210

The above table indicates that in Dimension-V (community participation in *Improving Academic Environment of the School*), the community members were divided into three groups such as Low, Moderate and High groups according to their participation in more-effective and less-effective schools. The calculated Chi-square (χ^2) value comes out to be 58.59. This value is greater than the table value at .01 levels of significance, it can be said that it is significant beyond .01 levels. Therefore, the Null Hypothesis-2(ii) present study i.e. school effectiveness and community participation are essentially related or independent is rejected for community participation in *Improving Academic Environment of the School*.

It is also observed that the observed results are not close to those expected on the null hypothesis of independence and there is evidence of real association between school effectiveness and community



participation in *Improving Academic Environment of the School*. Therefore, the Hypothesis-2(ii) of the study i.e. there exist a real association between school effectiveness and community participation in *Improving Academic Environment of the School* of community participation is retained. It was also observed that where schools were functioning more-effectively, there was higher community participation in *Improving Academic Environment of the School* Dimension in comparison to those schools functioning less-effectively. This can be interpreted to mean that high community participation is associated with increasing the school effectiveness.

The above interpretations is revealed that there is a real association between school effectiveness and community participation as overall and in all the five dimensions such as: *Community participation in improving school complex, organizing socio-cultural activities, the management of the school and improving academic environment of the school.* The finding of the analysis also shows that in more-effective schools, there is a higher community participation in all the activities covered under all the dimensions. It is similar to the findings of Crispeels (1996) study that the support and participation of families, community members and agencies, and school staff in the community or at school, in activities and efforts that directly and positively affect students' achievement. The homework could be considered to be school practice, which links the role of parents and teachers.

Similarly, the findings of the study conducted by Creemers & Werf (1989) on "Effects and cost of community participation" revealed that there is a positive effective of community participation in management, evaluation, and monitoring and teacher professional development.

The Indian researcher, studies conducted in relation to the community participation variable, revealed that involvement of community in school activities develop the achievement of their student (Agarwal & Harding, 1995; Ambasht & Rath, 1995). In the present study also shows that in more-effective schools community participation is higher in comparison to less-effective schools. This is supported by some studies conducted in the Indian socio-cultural context. Ambasht & Rath (1995) and Barapanda (1997) found that in his studies, the community participation helps in increasing enrolment and retention of children in the schools.

The research findings of Kumar, Patel & Mehata (1998) related to the community participation variable of the present study found that there is a positive relationship of community participation in the functions of the school management committee and its formation, getting financial support to the school from community. This is also falls in line with the present study. Similarly, the findings of the study get almost a direct support from the findings of Rao's (1998) study i.e. there is a significant positive relationship between community participation and school effectiveness.

Thus, the above discussion reflects that there is a real association between school effectiveness and community participation as overall and in all the five dimensions such as: *Community participation in improving school complex, organizing socio-cultural activities, the management of the school and improving academic environment of the school.* It is also very clear that in more-effective schools, there is a higher community participation in all the dimensions.

EDUCATIONAL IMPLICATIONS

On the basis of the findings of the present study it is revealed that the schools having better Physical facilities, HM and teachers' performance and Students' performance were identified as more-effective schools. It is essential to identify schools which are less-effective and provide necessary help to develop their physical facilities and other aspects so as to develop the performance of students in order to increase school effectiveness.



One of the significant findings of the present study is the higher community participation is associated with greater school effectiveness. Community members must constitute the integral part of school education. School activities must be organized in constitution with the Village Education Committee (VECs). VEC must actively engage in the programmes meant for development of the school. So in order to make their actively participate and to get their whole hearted co-operations. School must organize community awareness programme on different occasions. It is also revealed that in decision making process such as taking decision on financial matters, improvement of physical facilities etc. there is lower community participation. Thus particular measure should be taken so as to make them on participation participate in the decision-making processes of the schools.

All school must be provided with appropriate teaching-learning material and at the same time the teacher must be encouraged to develop the improvised teaching Aids so as to suit the need of child in the classroom. During pre-service and in-service training programme, the teacher-educators and experts should give emphasis on development of the teachers profile, development of teacher-students interaction and the teaching activities. The orientation programmes for teachers should be organized at a regular interval. At the time of orientation and training programmes the HM/teachers from more-effective schools should be given a chance to exchange of their ideas and experiences on the classroom teaching techniques which were found effective in enhancing the school effectiveness at primary level.

Therefore, the findings of the present study has implications for Govt personals, educational planners, administrators, researchers, designers and others who involved with the task improvement of school effectiveness by improving learning environment and encouraging the community members to participate in school activities. VEC must be empowered in the development of school effectiveness programme.

Although some tall claims on the basis of a humble research effort based on a mere adequate sample cannot be made, however, it can be said in that the present study has implications for improving the school effectiveness at primary level of education. The findings of this study provide direction to improve the state primary education in the country, provided efforts are to be made in the right direction and at right moment

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EFFECT OF ENVIRONMENTAL FACTORS FOR TEACHING OF SCIENCE ON ACADEMIC ACHIEVEMENT AND INTEREST OF STUDENTS AND ON THEIR TEACHERS' JOB STATISFACTION

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ABSTRACT

Natural materials and objects of environments and devices for explore them are the necessity for early learning activities in school. The raw materials are shaped by the role of the teacher that plays in students learning. This research is to investigate effect of the use of environmental materials as active educational media for elementary school science courses. This study has been a quasi-experimental research. Six classes of third grade and other six classes from fifth grade were the research sample. The research instruments were an academic achievement test, a measure of academic interest and a job satisfaction inventory. T-Test was used for statistic analyses.

The results show that the use of existing facilities in the environment for teaching of concepts in science textbooks has a significant and positive impact on the students' academic achievement and academic interest. The teachers' job satisfaction also was improved in the two grades of subjects.

Key Words: Active learning, educational media, natural materials, academic achievement, Interest, Job Satisfaction.

INTRODUCTION

Comparative study of education systems in various countries shows that the function of education in presented formal reports are different what the teacher and student perform in real everyday activities. The differences are in many factors such as educational facilities, skills and professional competence of teachers, facilities,



student achievement, student learning or the learning environment and the socio-economic and political factors ... Depends. However, the idea of widespread use of educational media in the classroom teaching, education has been regarded by scholars.

These ideas can be divided into two general categories. The first category are those who powered the use of educational media for learning as well and that the use of educational media in teaching, learning is enhanced. Reinforcement learning, the effect of education increases, sometimes a thousand words, a picture does not take place (Sminahady, 2004).

The second group believes that the use of teaching aids in the learning appears to be sweet. However, further studies should be displayed side and the supply of information and knowledge is superficial. Using educational materials and visual media - listening in the classroom can be an effective agent for the subject is directly related to the students, and a variety of useful experience for the audience to provide objective and subjective, making possible the use of multiple senses, learners' interest and motivation in learning more can cause (Zoufan and Lotfi Pour, 2000). These materials are suitable for any age group or audience and Conditions teacher-centered to student-centered classroom making (Sahebzadeh, 2012). Use appropriate tools and resources for learning, effective learning environment of contacts (Kiamanesh, et al, 1998).

Mental stages of mental development of children in schools are trained. They are fascinated by the environment, animals, rocks, plants, bodies, and the sky behind it and the types of phenomena that may be fascinating for them, they are. Teaching science in this way not only helps children learn science, but also helps in achieving the school's goals(Amani Tehran, 1997). Intended to provide training in the use of objects and substances in the environment and the means to curiosity about their basic necessities activities of teaching - learning in the school (Sminahady,2004), Use natural objects and the environment to teach and provide training intended, Because of its importance in creating a first-hand experience students need to be in the educational environment of the school and the coach. Even many so-called experts in education and training assistance to numerous false and knowingly false, The term originated in the times when they do it at the time, but books and lectures, teacher training, there was no other species (Amani Tehran, 1997). Use of equipment, materials and environmental features are planned for the training content, so that instead of using the word in effective learning aids, including educational media, the application is said (Zoufan and Lotfi Pour, 2000).

Today in the world of progressive education of citizens, family duties, responsibilities in teaching - learning process learning of citizens participating in school activities, situations, conditions, and various facilities, according to several first hand experiences and personal contacts through intuition by manipulating and working with real objects and phenomena in the environment as the media and the means of learning (Sahebzadeh, 2012). On the development and upliftment of education in different countries, with the evolution of teaching methods, learning tools, and educational technology use in education is intended to provide an active, Become increasingly important, Children fascinated environment, lightning, light, sound, electricity, magnets, red, sky blue, and sometimes around the various phenomena that occur are. The best place to start teaching school and most attractive starting point for informal learning activities in the classroom is the students(Sadeqe pour, 1994). Training Media Revolution, Including the widespread use of the materials in the environment to provide conditions suitable for direct involvement of students with teaching activities learning And exploration and production and thus learning (Faghihi, and Rauf, 1996), Certainly the years that progressive education in developing countries occurred in education in our country (Iran) is also happening. This is the affected citizens not only knowledge and skills but also on the ability of science and scientific attitudes - their moral influence, Even the role of the teacher and the book will revolutionize the teaching process. With the widespread use of educational media to educate citizens, Scripture verses to choose the content of the training patterns and the role of teacher education and training provider in the direct speaker and ... In class, Provides a convenient location to a variety of learning opportunities for students to work with real materials and phenomena in the natural environment, For curiosity, the exploration, production and To



manage their own learning and knowledge-based activities in the teaching - learning process in the classroom and outside of it becomes (Harlan, 1998).

Summarizing the results of the TIMSS International Study Shows Iranian students utilizing basic skills, such as problem solving tools and measurement applications Related to the practical use of equipment and materials are in school learning activities, Students have a lot of lag compared to other countries (Kiamanesh, et al, 1998). Summarizes the results of several international field study shows that teachers use a variety of educational materials for teaching Not only diverse and engaging learning environment for teachers and students to be, But with the development of problem solving skills in students, and the depth of their learning improves. Citizens' needs are changing and developing every day. From another direction, citizens participated in today's training activities Teaching - Learning school may be a way for him to ensure that the needs of tomorrow. It should be training today and should be designed to generate interest in learning while the learner, Learners learn ways to learn new ways of learning that are constantly being produced and so on and use their abilities to learn, Themselves, learning new ways to learn and be able to use the knowledge they have obtained a simple and basic sciences, Science and technology, and to produce a new generation of science and technology, to the benefit.

In this case, one of the ultimate goals of education is the education system in the new world: learning to learn, learning how to learn, learning to learn (Faghihi, and Rauf, 1996) In other words, the goal is that students learn How to learn to be realized. And it will not happen except through the various processes of teaching - active learning. Concept of active learning, the type of learning activity and the learner's own scholarly efforts to explore scientific concepts and new knowledge in order to be involved (Sahebzadeh, 2012), If Einstein's definition of science, is said to have a glance: Science is nothing but a refinement of everyday thinking (Harlan, 1998), in the case of scientific contacts with the efforts of the education system, manipulating and working with real objects and phenomena. In their natural environment, to understand the facts and the law, and giving them scientific words is education. In these systems, instead of the heavy and science, such as friction and torque students are forced to take the action. They want to work - that your lab experience doing science for science to discover and produce their own activities, learn. Students use educational materials fulfilling the experiments, the activation of different senses of the students, students are encouraged to gain experience in scientific observation and scientific knowledge is discovered (Sminahady, 2004). It can be concluded from what has been said that what the student hears, remembers, and learns to read and repeat. What he remembers, and forgets his own efforts, but it does not enjoy, learn, and as a result it enjoys.

In 1957 AD, scientists in Russia could be the first spacecraft to its launch should follow this happened academic, government in America, a major conference attended by scholars and theorists ranking the field of education in order to investigate the reasons for the backwardness of America the progress of science held. The final result, changes in the science curriculum the following four features were proposed (Nasirnia, 1990): The first feature is the need to redefine the structure of educational content and learning objectives according to disciplines and processes of science education is concerned. The second feature is the role of the learner in the learning process returns. The third feature is the emphasis on the role of research and discovery in science curriculum and teaching methods. The fourth feature, It is important that the proposal for the role of educational technology and use of materials and tools as easy and expansion plans represent learning and curriculum and methods of teaching science to students in schools, Be allowed.

Today, the information explosion through increasingly rapid development of digital technology and the virtual world has been created in the field of information and communication, Nature of knowledge (education) and a change in what the students are called, Fundamental change is created. Instead, they learn and retain information, You must learn how to produce information or how to get information, and how the information obtained can be used and how the data are combined (Nasirnia, 1990).



Hence educational theorists, instructional method in which students actively participate in classroom activities, identify the most appropriate training method, The use of educational materials for teaching materials, in addition to interest and activity in teaching activities - learning, the class of steady-state and out-build the usual hush traditional classroom, nurturing the talents of the students, teachers opportunities Professional expands, so must education with whatever we have, let's (Sminahady, 2004). What makes the citizens who attend school and attend the lessons are fun and interesting class of scientific activity, Participate in educational activities and pursue the learning process, providing training for teaching - learning is active. The teaching - learning process actively discuss the important and fundamental issue is the educational technology (Zoufan and Lotfi Pour, 2000). Educational institutions - UNESCO World at the International Conference on Science and Technology curriculum links, Measures such as education, science and technology based upon the age and experience of school learners, Science and technology education through experiential activities in connection with the world outside the classroom, participating countries should be advised, And addressing environment, students have a good point to start a successful and effective educational programs in science and technology have been introduced (Nasirnia, 1990).

In progressive education, Using a variety of tools and media education as an integral part of an active and effective education and panache, Students learn through active participation in processes to higher levels of academic ability in three scientific attitude, scientific skills and scientific knowledge are achieved (Sahebzadeh, 2012). The reason is that students work on individual and group participation, the result of the work they do. Thus, in practice, the result of work done efficiencies of individual and group collaboration is important and valuable to know. This makes students feel a stronger motivation to participate in learning activities. When active learning strategies for teachers to use the opportunity to teach more effectively, and encourage students to get help. Meta-analysis of field studies show that the use of educational media for the purpose of teaching by teachers and instructional goals in the classroom has important effects on the rate, depth, diversity, and student learning is fun.

Meena (2000) investigated the effectiveness of a training kit school math in the city of Arak (central Iran) that use educational kit for teaching math, students are learning in the classroom increases, keeping in mind students this course increases, acquisition and retention of school-based sex and relationship is not significant, but the effect is more of the first application in the base (Mina, 1998). So the question of the research is to use the equipment, materials and natural resources in the environment for the teaching of science content is intended to be used in the classroom and the teaching processes - active learning (student-centered) what effects the rate of learning sustained student interest and job satisfaction of teachers is to educate students.

The main purpose of this study is to determine the environmental impact of facilities for active learning in science achievement and increase student interest in education and job satisfaction of elementary teachers. This purpose includes some particular objective:

- The use of environmental resources as a medium of teaching process, teaching learning activity books, science educational content to students in their educational achievement.
- The use of environmental resources as a medium of teaching process, teaching learning activity books, science educational content to students interested in studying them.
- The use of environmental resources as a medium of teaching process, teaching learning activity books, science educational content to students in the teachers' job satisfaction.

METHODOLOGY

A quasi-experimental research method was used. In this study, the experimental group used the academic content of science courses, with natural material of the environment as educational media for teaching the concepts and subjects as active. this activities Includes making students suites, student grouping and practical



training activities - group of students in the laboratory over a period of three months (second quarter of the year, January, February and March).

Statistic population was comprised of all the teachers and students in primary school of in Zabol, Iran. The subjects were from six classes of third grade and six classes of fifth grade (four classes of boys and two classes of girls). The classes were selected by random method from teachers who were volunteer for cooperate in the study. the control group was comprised of one class from girls of third grade, and one class from girls of fifth grade and four classes from boys of third-base and fifth grade. The experimental group also includes the similar sample.

RESULTS

To determine the impact of using natural materials found in the environment as a medium of instruction lasting learning, students, Test tools (questionnaires achievement) and questionnaires measuring academic researcher interested in the pre-test and post-test stage was used. Achievement test contains questions written responses depending on different levels of cognitive domains in two stages (pre-test and post-test) in the three-month interval between students in two groups (a witness and a experience) held.

Validity of the academic progress of students according to academic experts and specialists in education research and evaluation and was confirmed experimentally. To determine the amount of interest to students in the control and experimental groups, The researcher made questionnaire was used to study the gauge interest. Validity of the questionnaire Comments education specialists and psychologists and counselors were surveyed confirmation.

To determine the reliability of the questionnaire, Cronbach's Alpha calculation gauge interest in a two-stage pre-test and Post-test the table below (Table 1) were used.

Test	Number of students	Number of Questions	Cronbach's alpha coefficient
Pretest	27	25	0.81
Post-test	25	25	0.79

Table 1: Results validated attitude questionnaire students

In order to analyze the analytic findings, the classification scores and descriptive statistics including frequency, percentage of the mean, median and range of scores, drawing tables and inferential statistics, including correlation and Cronbach's alpha to determine the reliability of the questionnaire was used to gauge interest. To review the academic progress of students in the control groups and the experience with pre-test and posttest were used for T-TEST.

Data in this study, to eliminate the effect of pre-test and post-test, pre-test score of student achievement related to the academic achievement of students in the post-test score, was low. Level of statistical significance in all tests, 05/0, and all the calculations and statistical analysis of the performance obtained using the SPSS statistical software was used.

Analysis of three months after the implementation of research findings in the experimental group students by teachers in every classroom, teachers and students about body control (with its usual way, any way to have the teaching - learning science more have.) based on the three research questions were as follows. Describe the inferential statistics for students in grades. pre- scientific test third grade classes (control group) in the table below is pertaining.

Post-test

Statistical characteristic Achievement scores	Average	Mediocrity	Middle	Scores range
Pretest	7.0	11.0	19.0	17.0
Post-test	9.3	10.0	10.0	14.0

Table 2: Descriptive statistics characterized the pre-test and post-basic course in group III base

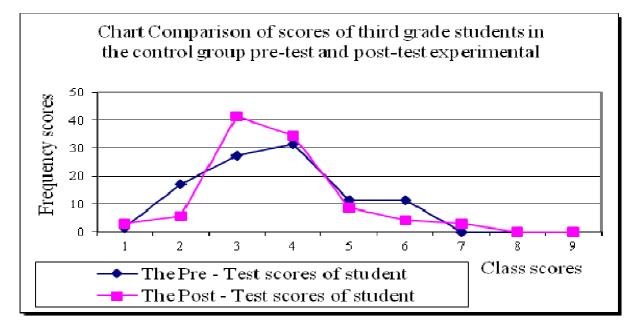


Figure 1: Comparison of scores of third grade students in the control group pre-test and post-test experimental science

The diagram (Figure 1) shows that the average score of the three basic classes of pre-test and post-test control group, there is not much difference. Compare the achievement scores of students in the group pre-test and post-test shows that the calculated value of 0.05 T of T indicates the degree of freedom of 69, at this level, is smaller. This result means that the statistical difference in the performance of third-grade students in the control group classes, the pre-test and post-test is not significant with 95% confidence.

Descriptive statistics characterized the pre-test academic achievement for students in classrooms at the base of the third group are described in the following table.

Table 5. Descriptive characteristics of the precess and post-test statistic based on a group of third grade								
Statistical	characteristic	achievement	Average	mediocrity	Middle	Scores range		
scores								
Pretest			7.8	8.0	8.0	14.0		

12.0

12.0

13.0

Table 3: Descriptive characteristics of the pretest and post-test statistic based on a group of third grade

10.4



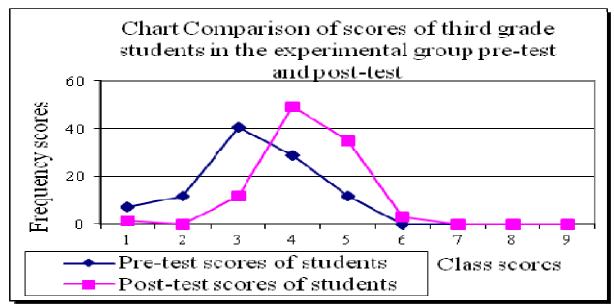


Figure 2: Comparison of scores of third grade students in the experimental group pre-test and post-test

The diagram (Figure 2) shows that the performance of score-based third-grade students in the experimental group pre-test and post-test, the difference is made visible. Compare the achievement scores of students in the group pre-test and post-test shows that the calculated value of 0.05 T of T indicates the degree of freedom of 69, at this level, is larger. This result is statistically significant difference in the academic performance of students in grades three groups based on experience, After three months of training using natural features in the environment, the pre-test and post-test with 95% confidence, is significant.

Descriptive statistics characterized the pre-achievement test for fifth grade students in the control group in the table below are based.

Statistical characteristic achievement scores	Average	mediocrity	Middle	Scores range
Pretest	14.4	15.0	14.0	15.0
Post-test	14.3	15.0	14.0	14.0

Table 4: Descriptive characteristics of the pretest and post-test statistic based on fifth grade control



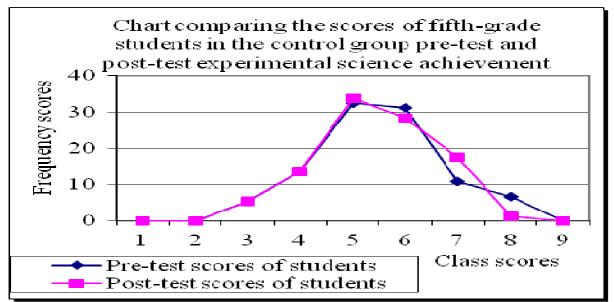


Figure 3: Comparison of achievement scores of fifth grade students in the experimental group

The diagram (Figure 3) shows that the average score of the fifth basic classes of pre-test and post-test control group, there is not much difference. Compare the achievement scores of students in the group pre-test and post-test shows that the calculated value of 0.05 T of T indicates the degree of freedom of 73, at this level, is smaller. This result means that the statistical difference in the performance of fifth - grade students in the control group classes, the pre-test and post-test is not significant with 95% confidence.

Descriptive statistics characterized the pre-test academic achievement for students in classes based on five experimental groups are summarized in the following table.

Table 5: descriptive statistic characteristics of the pretest and post-test achievement scores of fifth-grade students in the experimental group

Statistical characteristic	Average	mediocrity	Middle	Scores range
Achievement scores				
Pretest	10.2	11.0	10.0	13.0
Post-test	15.6	13.0	15.0	17.0



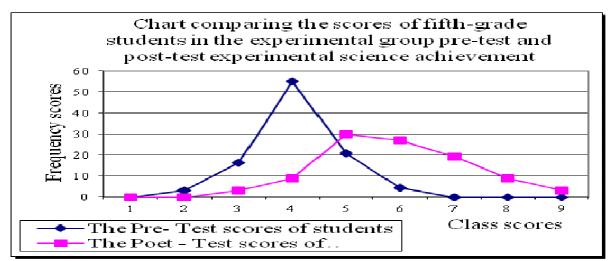


Figure 4: Comparison of scores of fifth grade students in the experimental group pre-test and post-test experimental science

The diagram (Figure 4) shows that the performance of fifth-grade students in the experimental group pre-test and post-test, the difference is made visible. Compare the achievement scores of students in the group pre-test and post-test shows that the calculated value of 0.05 T of T indicates the degree of freedom of 66, at this level, is larger. This result is statistically significant difference in the academic performance of students in grades fifth groups based on experience, After three months of training using natural features in the environment, the pretest and post-test with 95% confidence, is significant.

Analysis of the impact of research findings on the use and application of materials, devices, and natural features in the environment in a class taught by the teachers, the students are learning, Studies over a period of three months to plan quasi-experimental and calculated values of T show that the teachers of tools equipment normally found in the environment as a medium of instruction in teaching a class, the achievement of Learn the basic education of both groups of students had experienced a significant impact.

This finding results Rafiee (2009) The use of educational media in teaching elementary school students in science class experiment, Showed that the use of tools and educational media in teaching, learning and learning to be more permanent, Experiences that are not easily understood by the theory, the tools are better understood, This led to the development of a variety of teaching and learning is deeper ,And students in the regular education science equipment and teaching tools (educational media) is used, Over the course students are trained to develop common methods are consistent with (Sadeqe pour, 1994). Findings with results Chehrazi (1995) showed that students who study biology lab activity students will have learned to do better than students taught by teachers without testing has show. And the results of Mina (1998) and the results Qadir (2010) show that 95% of teachers use instructional materials in teaching high school students in learning, as effective (Mina, 1998), And by virtue of research (1998) shows that teachers use and educational tools are very effective in teaching students that are consistent with (Taghave, 1994).

The following tables, Comparison of attitudes toward distance education students in the experimental and control groups 3 months experience with the implementation of projects in the education of students in the group pre-test and post-test shows.



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Table6: Comparison of attitudes toward elementary school third -grade students in the experimental group and control groups within the project

Group	df	T Calculation	Relationship T with a calculated T	Result
Controls	69	6.99	Smaller	Not significant
Experience	69	62.8	Larger	Is significant

The table above shows The difference between the mean scores of the attitude questionnaire based study of third-grade students in the control group, the pre-test and post-test within three months of regular training in the classroom by teachers, there is a significant difference. However, this table shows the average difference between the interest rates earned in a questionnaire-based study of third-grade students in the experimental group at pre-test and post-test during the project, Teachers and students in the use of materials, equipment and facilities available in the natural environment and learn to teach educational content planning in science textbooks, the difference created a renewed interest in the education of students in this category is significant.

Table 7: Comparison of attitudes toward elementary school fifth-grade students in the experimental group and control groups within the project

Group	df	T Calculation	Relationship T with a calculated T	Result
Controls	73	3.33	Smaller	Not significant
Experience	66	52.5	Larger	Is significant

The above table shows the average fifth grade student feedback questionnaires in the control group during the pre-test and post-test attitudes to education, there is a significant difference. But a group of fifth grade students between comments, during the pre-test and post-test, a significant difference in the implementation of the project has been positive. This finding results Rafiee (1992) titled the use of educational media in learning and academic achievement in elementary school science class experiment, Which shows students learning the science, Use of teaching aids than with conventional students are trained to become interested in this subject (Sadeqe pour, 1994) are consistent.

Table 8: Evaluation of job satisfaction of teachers in the peer group, the use of natural resources in the environment for active learning in the science classroom

The frequency response	Very	High	Low
If questions	much	-	
Interested in new projects for students	16.7	83.3	0
Student learning activities in new projects	33.3	66.7	0
Student satisfaction rate of new projects	16.7	66.7	16.7
Overall satisfaction with the teaching of the tools available	16.7	66.7	16.7

The table (Table 8) which views teachers project the group is displayed, indicating that about 83% of the teachers, the use of equipment and natural materials, the students themselves, the environment providing and bring to the classroom have and training to enable the teamwork and practice - students are given laboratory, have been interested in this way of learning. 100% of the teachers have their students developing practical tools for activity - learning in the classroom, Much too large to have been active.

Approximately 83% of the teachers have their students' learning activities (learning) using equipment and substances in the natural environment too much to have a lot of satisfaction.



This finding results Abbasi (1992) entitled Application of the method of teaching aids in Isfahan high school teachers, most of which show very high rates, the effectiveness and efficiency of teaching aids that during learning (Sadeqe pour, 1994)are consistent.

The results indicated the possibility that occurs naturally in the environment can be found by going to offer educational content, Academic achievement and interest in education has a large impact on students, Therefore recommended to provide appropriate in-service training for teachers and managers, Orientation to the field of education, many of whom use natural materials and devices And evaluation of student learning activities provided in lessons, Substances produced naturally in the environment as devices and their use in teaching and learning activities by teachers, students, Widely used in all schools and all grades in all courses of study to be conducted. The results showed that students in the classes, Their means and ... Follow the advice of teachers and classes are created and taught by teachers using the materials and ... That their students bring to the classroom are, There have been a positive influence on the willingness to study and learn more effective and sustainable has been the students.

Experience in this class, students interested, motivated, and the more work than other students in the experimental group, Equipment and materials in the natural environment for the teaching - learning to enable them to prepare for the classroom teacher has his own show.

The reason for the increased academic motivation and increase student interest in science and science students will be offered to the fields, Opportunity for practical, Equipment and materials needed to provide the environment in the classroom learning process by students be provided. The findings suggest, By providing inservice training of teachers, Changes in the volume of books, and a change in the type of activities and changes in teacher teaching learning activities of students, Opportunities, situations and opportunities for the use of equipment and materials for teachers to teach in the classroom can be provided naturally in the environment, To students willing to study and learn.

Experience in classroom observation research group, shows teachers classrooms, though early, appropriate teaching materials and devices using natural materials found in the environment, especially when their students, they produced have , had problems. While continuing to work and earn enough practical experience and mastery of the grade you teach, The more widespread use of this method aims at providing training to the audience, More job satisfaction than teachers in the control group were given instruction. Therefore, to increase the job satisfaction of teachers, providing good conditions for teaching and practical field - in vitro studies, in particular issues of interest in the science classroom is recommended.

DISCUSSION

In the Millennium, the development and improvement and development capabilities, audiences around the world, has changed the expectations of the education system, Today the major duties and responsibilities of education in schools, Learning styles and teach students the skills and attitudes of the citizens can make, Themselves, and discovering the unknown to find ways of solving the problem. The content of education is going through practical activities - particularly science laboratory sciences, Can schools and teachers, as the last and most important link in providing education services to the audience, the closer to this goal. Active in the education, discussion and preparation of educational materials and media, this study sought to investigate the active use of equipment, materials and other natural features in the environment, That students bring to the classroom and in their preparation and classroom activities, he use, Sustained learning (academic achievement) and student attitudes and job satisfaction as well as what is the impact? Because of this, This semi-experimental study and control groups on the basis of academic experience both the third and fifth grade students in the environment, intended to offer educational content to their audiences, statistical analysis and



analysis findings, using questionnaires Pre-and post-tests measuring educational achievement and academic interest has acceptable reliability and validity data using descriptive and inferential statistics were performed. The results show that the use of the equipment and facilities available in the natural environment is intended to provide educational content in a teaching - learning process actively, Lead to deeper learning at higher levels of cognitive domains (positive achievement) and renewed interest in the study of this class of students, teachers also can increase job satisfaction.

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PEACE EDUCATION IN INDIA: A PROPOSAL

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ABSTRACT

Now–a-days, we live in an age of unimagined levels of violence with uncountable reasons. People are forgetting human values. Hence peace and welfare aspects are facing new challenges at this juncture. It is believe that war and violence occur due to unresolved conflicts. Learning to live with and in peace is emerging as a premise of peace education. Across the world, peace education programs are gaining popularity, as states international agencies and civil society organizations increasingly recognize the importance of such education. However, with this growing recognition there are increasing contestations over both the broader objectives and the specificities of carrying out peace education programs. This articles sketches out the various options that are available, and also looks at how a regional perspective on peace through education can be generated. While such a perspective would have to be sensitive to the history, the current reality and the future needs of the different South Asian states, given the shared cultural practices in South Asia, it may not be an impossible undertaking.

Key Words: Peace, Conflict, Conflict Resolution, Peace Education.

INTRODUCTION

Education aims at all-round development of the individual. But unless he is at peace within himself and with the external world or his environment, he cannot achieve progress in various fields. According to Swami Vivekananda, *"Education is the manifestation of divine perfection already in man"*. The individual has the potentiality to make progress and go ahead. He is endowed with different qualities of hand, head and heart (3H). He is to live in a peaceful atmosphere for utilizing there qualities and express himself through various activities.

Education is the powerful means of self expression and self realization. That is why, Gandhiji means education as "an all round drawing out of the best in child and man – body, mind and spirit". He is (Gandhi) the celebrated apostle of peace and for him peace is not merely absence of war. Rather for him, peace is creative, positive and co-operative. In the modern shrinking world; one cannot keep himself aloof from others. All are interrelated and share the same destiny- sorrows and sufferings, happiness and prosperity. Mankind is threatened with nuclear holocaust and mass devastation today. Peace is felt need of the hour. It has been eulogized through ages.



MEANING OF PEACE EDUCATION

Peace is the cherished goal of mankind. It cannot be achieved by peaceful measures and cannot be enjoyed by a group of people or a particular country or exclusive other. It can be realized only through mutual understand, international harmony and world brotherhood. Education which promotes such international brotherhood, follow and brotherhood is called peace education. It must enable the human being to be in peace irrespective of caste, creed, colour and geographical location.

Global Campaign for Peace Education, Peace education teaching for and about human rights, gender Equality, Disarmament, Social and economic justice, Non-violence, Sustainable development, International law and traditional peace practices.

According to R.D. Laing (1978) Peace education is an attempt to respond to problems of conflict and violence on scales ranging from the global and national to the local and personal. It is about exploring ways of creating more just and sustainable futures.

Peace education is the process of acquiring the *values*, the *knowledge* and developing the *attitudes*, *skills*, *and behaviors* to live in harmony with oneself, with others, and with the natural environment.

AIMS OF PEACE EDUCATION

- > To understand the nature and origins of violence and its effects victims and perpetrator.
- > To create frameworks for achieving peaceful. Creative societies.
- To sharpen awareness about the existence of unpeacefull relationship between people and within and between nations.
- > To investigate the cause of conflict and violence embedded within perceptions, values and attitudes of individuals as well as within social and political structure of society.
- > To encourage the search for non violent skills.
- > To equip children and adults with personal conflict resolution skill.

PEACE EDUCATION SKILL

- Identifying bias.
- Problem solving.
- Problem solving and co-operation.
- Creative self expression.
- Shared decision making.
- Honest talk and sensitive listening.
- Recognizing and expressing felling.
- Conflict resolution strategies.
- Non violent action.
- Self reflection.
- Independent research.

THE NEED FOR CHANGE: AN INDIAN SCENARIO

All over the world, a great deal of emphasis is currently being placed upon peace education, as the quest for peace necessitates extensive knowledge and unfailing assiduity. The widespread interest in preparing individual for peace on earth makes us resort to the teaching- learning process. The inevitability of this emphasis upon



education for peace has arisen not only from the need to educate the public opinion of the scourges of war, its prodigality or the danger of total annihilation etc, but also from the necessity to promote understanding, acceptance and friendship among all peoples and nations and to strengthen respect for human rights and fundamental freedoms.

Learning to make a living is not the sole reason for getting education; there is another, equally important by product: learning to make a life, a life that is beneficial, useful and peaceful. After all, humans are social animals; their success in life is largely a matter of successful social relations. Quite evidently, student age is the crucially important period which enriches one's whole life pattern seen from this perspective, one could very well understand the critical necessity of teaching students, youth and young leaders the art of loving together, in mutual respect, justice, love and peace.

Alfred North Whitehead calls education *"the acquisition of the art of the utilization of knowledge"*. We need to tell our students, youth and young leaders about our world and its problems. We need to explain to them their part in the solutions. We need to instill in them a genuine appreciation of, and a profound liking towards, our humanitarian traditions and values such as non violence, tolerance, understanding, and cooperation and peace. To quote H. G. Wells, "human history becomes more and more a race between education and catastrophe" and hence, we must educate the youth for peace. However, will any kind of education, given by anybody to anybody under any circumstances, bring about these results? It is highly unlikely.

Peace education itself is as abstruse a notion as peace. Any attempt to define peace education in strict terms, or to typify asset of programs for the purpose of generalization would prove futile, as the most important features that characterize the notion of peace education are many and varied. The aims and objectives, the perspective of the subject, the working methods and other theoretical and practical approaches are decisive variables. Furthermore, place, period, local environment and other internal variations are major affective components in deciding the kind of peace education, its scope, its nature and the values one would attach to it. Owing to these factors, peace education varies from country to country, and even between regions within one country. However multifarious the approaches are, all educational programs and activities collected under peace education would seek to prepare the students for peace. To put it in a nutshell, peace education sees to the construction of defenses of peace and fences of justice in the minds of younger generation. And to making the youth hold to peace individually in life.

APPROACHES OF PEACE EDUCATION

Peace education covers a wide territory, and has many subsidiaries. Mitsuo Okamoto argues that disarmament education, international education, development education and the like can, by broad definition, be included as programs in peace education. The contents denominated by the various titles like world order education, global education, education for international understanding, education for justice, ecological education etc., have been categorized by Okamoto into four types of peace education.

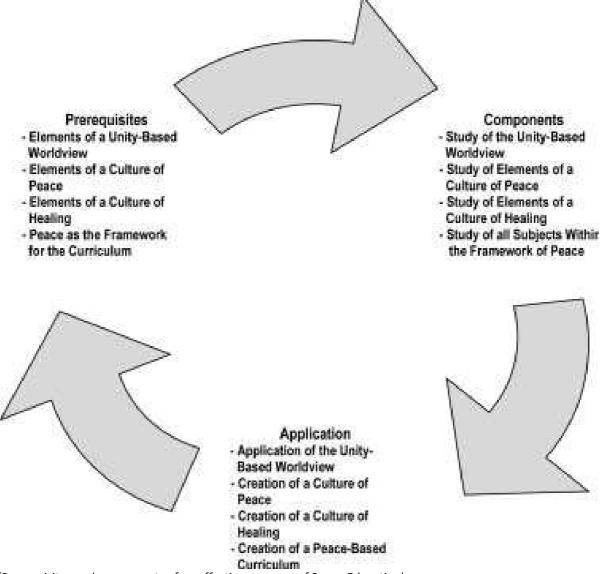
The first sees peace education as criticism of war. The basic view here is that peace is the absence of war (negative peace). Content of this type includes teaching, concerning the legacy of war experience, a scientific explanation of the causes of war and condition of peace. The promotion of international understanding as a preventive to war, etc.

The second type considers peace education as liberation. Here, a new concept of peace, positive peace (which is defined as that social condition characterized by economic independence, a stable order, social justice, human rights and welfare), is presupposed. Liberation from poverty, ignorance, discrimination and oppression etc. is seen as the objectives goal for peace education here.



The third type regards peace education as a learning process. In this type, peace education is grasped as learning process towards inter-personal maturity on the basis of unity between theory and practice on the hand, and a critical understanding of history and society on the other.

The fourth type holds peace education as life-style movements: it rests upon the realization that warfare and war preparations are intimately tied to the fact that the over – production and extravagance of the nations at the center have been gained at the expense of the wealth and development of nations at the periphery. Here, we can refer to a standard of values emphasized a simple life, human scale, self determination, ecological awareness personal growth.



(Prerequisites and components of an effective program of Peace Education)

Disarmament education is a major development in the field of peace education. It implies education both for and about disbarment. All who engage in education or communication may contribute to disbarment education by being aware and creating an awareness of the factors underlying the production and acquisition of arms, of social ,political, economic and cultural repercussions of the arms race, and of grave danger, to the



survival of humanity, of the existence and potential use of nuclear weapons. Development education explores development issues and focuses on the development process. Obviously, the content of development education in a developing country like India is entirely different from that of a developed country. Given the present situation in India, creating a dipper consciousness and awareness of our development problems among our students, and designing programs of personal involvement in development activities will open up new vistas in our development process. We can also find a very strong correlation between development education and environmental education.

The wider view of the meaning of peace gives rise to several innovations in the domain of peace education, viz. the teaching of human rights and fundamental freedoms, education for international understanding, education about the UN, its other non-formal peace education programs, such as the UN students' association, UNESCO clubs, UNESCO Associated Schools Project and so forth. Both the conceptual and the practical approaches must be quite conspicuously delineated. Having developed a theoretical frame work and drawn up policy prescription for carrying out peace education programs and activities, we should attend to curriculum change. In deed, peace education demands the modification of the existing educational system, rather than mere expansion of it.

In the case of India, although caste oppression, untouchability, gender discrimination and other cruelties existed (and continue to exist), the culture has been marked by acceptance, catholicity and an innate inclusiveness which refuses to be taken away by doctrine divergence. All these factors have facilitated the commingling and constant cultural exchanges of tribes, races religions and ethnic groups with grave doctrinal, philosophical and ideological differences. Islam, which came to conquer, compromised and became indianized in the form of Sufism, and Islam influenced Hindu reformation thoughts of the nineteenth century. Indian culture, characterized by a profound understanding of the nature of humans and their relations with bother beings and the universe, is absorbing all the essentials in the western scientific civilization, and the inherent Europeanism in it has made it possible to understand the Christian culture. This ancient culture of India was taken too many contiguous lands in Asia. When improved means of communication like the printing press and the rail road were about to hasten culture communication, the advent of political changes and aspirations, the movement for independence, fears of dominance dependence and all such sorts of influence gave rise to an insistence on cultural independence and actual divide. The South Asian scene, which was once described as a 'harmony of contrasts', gave a different picture. The contrasts with strong political and psychological undercurrents became violent and caused recurrent divisions.

Recently, however, there has been a rejuvenated will to see harmony through regional cooperation efforts, and bilateral transactions and dialogues. After all, there are many cross- cutting alliances and allegiances. One of the main philosophic-religious schools of Indian culture, Buddhism, reigns supreme in Sri Lanka, where the minority Tamils share their language and religion with the people of Tamil Nadu in India. Besides the Tamils, there are other 'language-culture' groups represented by the Urdu-speakers in Pakistan and India. Bengali speakers in Bangladesh and West Bengal (India), and Sindhi, Punjab and Nepali speakers across the borders of Pakistan. India and Nepal. If Pakistan, Bangladesh or the Maldives claims a preponderance of Islam, India too possesses eminence in Islamic culture as it has the second largest Muslim population in the world. Signaling India's unique identity, Hinduism and Buddhism offer a basis of understanding with the Himalayan kingdoms of Nepal and Bhutan.

Furthermore, there is ample scope to define commonalities on the foundations of philosophy, ethics and religion, literature, theater, music, dancing, painting, sculpture, architecture and even minor arts such as wood-caving, copper and cloisonné work, carpet making, earthenware etc. the wind and the limbs, the brush and the chisel, the trowel, the pen and the spirit itself strengthen the fabric of the rich cultural milieu off South Asia with some basic character-emphasis on melody in music, traditional and stylized form in dance, free variations in painting, monumentalism in sculpture, lyricism in poems, and realism in stories. Religious fervor, fervent



wedlock, strong affinity to family, respect for elders, and a host of others cultural habits and customs, too contribute to the spinning of the regional cultural web. In spite of all these, South Asian countries cannot be simply lumped together culturally; it is even less likely, under the present circumstances marked by divided politics, diverse allegiances, differing perspectives and cultural policies etc. May be a good compromise would be engaging in peace education activities in one's country without overlooking the larger regional backdrop.

TEACHERS' ROLE IN PROMOTING PEACE

The peace education we plan should be carefully adapted in kind, in amount and in distribution. The major point we have to reckon with, while deciding the quality of teaching to be given, is to understand the subcultures of India as a prerequisite to develop world-mindedness. It is highly difficult to specify the exact amount of peace education. But it is worth taking note of some of the basic questions in distribution. First, few teachers are capable of meeting the requirement and values dictated by peace education which are crucial for favorably affecting the awareness and behavior of young minds. Second, a trite descriptions and vague discussion will prove as useless as mere cramming up details, unless a solution is specially mentioned and the means of implementation are spelt out. Third, the form and content of peace education is quite unique and so it does not go with conventional treatment. Evaluation, for example is a rather difficult process as the teaching aims at the essence of individuals. There are many more related things which demand our prudent concern. It is important to remember that peace education is not an additional academic subject we add to the existing system. Instead, it is the general orientation that we introduce in the in the existing subjects, textbooks and teacher discourses. For instance, the sociology textbooks could underscore the fact that peaceful coexistence is an objective requirement for peaceful development, and vice versa. In the physics textbooks, emphasis could be laid on the need to fight for a ban on nuclear weapons and other weapons of mass destruction (WMD), and international agreements in this field. Biology books could explain, among other things, the deadly effects of exposure to radioactivity on human beings. Needless to say, one who wills the end wills the means. Though international comparisons are difficult, general lessons and indicatives suggestions can be taken from international experiences also.

CONCLUSION

The challenges for educators all over the globe is to chose between going ahead with the present effect educational system, or preparing our younger generation for the kind of life each and every one of us aspires towards. To use Swami Vivekananda's categorization, should we teach them just 'to know 'or to be? **"Learning-The Treasure within"** highlights the four pillars of learning and the third pillar which is most important is-Learning to live together.

'Let us work together Think together Achieve together With no hatred to each other.'

This is most important to all particularly to the learners to learn to live together on this planet. In order to survive on this planet peacefully every one must learn to live in harmony and in a violence free environment. Differences in race, caste, colour, creed, language, customs, traditions and cultures exist and to learn to live amidst these differences should be a wonderful and unique experience for all.



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ANALYSING THE SCHOOL READINESS OF PRESCHOOLERS FROM THE ASPECT OF THE SOCIAL SKILLS WHEN THEY START PRIMARY SCHOOL

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ABSTRACT

In this study, the relation between the readiness of the 66-72-month-old children in terms of the social skills in pre-service education institutions and their social skills at primary school was investigated. The population of the study consisted of 33 children who attended Marmara University Atatürk Education Faculty Prof. Dr. Ayla Oktay Pre-school Education Application Unit in the 2011-2012 academic year and started primary school in the 2012-2013 academic year. As the study was carried out by means of collecting data from the same population in specific time intervals, it can be described as a longitudinal study. In order to collect data, the Marmara Primary School Readiness Test and the School Social Behavior Scales were used. The readiness of the children for the school in terms of social development during the pre-school education and their social skills were assessed, and the evaluation was conducted again to assess the social skills of the children at the primary school environment. Considering the results of the study, it was identified that preschoolers with age-appropriate level of school readiness and social skills adapt to the school more quickly than their peers and their younger friends when they start primary school. In addition, it was found that the children in the study group performed in accordance with their potentials in their academic studies. The findings were also discussed from the perspective of social adaptation skills of the 66-month-old children who are eligible to start school.

Key Words: Preschool education, social skills, school readiness.

INTRODUCTION

Socialization is a lifelong learning process. Once a child is born, he/she is involved in a continuous socialization process (Tuna, 2006). Socialization first starting on the mother's lap expands and develops with the involvement of the other family members and the environment in the process. The family is the smallest building block of the society in which the child gets to know and to experience the rules of the society. In addition to the family and the environment in general, the school is the first social institution enabling the children to adapt to the society they live in (Oktay, 2000). The children find at school many of the opportunities



they cannot find at home. They tend to play games with their peers. By this means, they interact with their peers and learn to cooperate with them. They develop the habit of sharing and taking care of others (Yörükoğlu, 2000). As Polat Unutkan (2003) indicates, during this period, children endeavor to adhere to the societal rules and to socialize within this society. However, some children encounter difficulties in the process of acquiring the social skills mentioned above. Thus, communication problems can be observed between children with good social skills and the ones lacking these skills. This situation results in the isolation of the children with a lack of social skills from their peers. Moreover, these children face various problems in their later years regarding inter-personal communication, emotional-behavioral life, school and professional career and social contexts in general (Avcioğlu, 2005).

The social skills acquired at an early age have a direct influence not only on the social development of the children but also on their learning process, and thus their academic skills. Although it is known that the social and emotional developments of the children affect their success at school, most children start school lacking these essential skills (Sheridan, Knoche, Edwards, Bovaird & Kupzyk, 2010 ; Ladd, Harold & Kochel, 2006; Eisenberg, Valiente & Eggum, 2010). Razon (1981) points out that the immaturity of the children in terms of social skills is one of the reasons for the failure at school. The feeling of inadequacy at school might negatively influence their self-perception. Furthermore, as suggested by Bandura, if the children's perception of their self-efficacy is lower than their actual efficacy, they cannot use their full potential and tend to be inactive and lazy (Senemoğlu,2011).

Children may feel stressed at different levels as they pass classes. The transition from kindergarten to primary school is especially stressful as childhood games in the kindergarten are replaced by a more rule-based education process at the primary school. In addition to the behavioral, cognitive, socio-emotional and physical concerns of the children; new tasks assigned to them and the challenging social environment at the primary school also make the transition hard (Graue, 1992; Fox, Dunlap & Cushing, 2002). It is possible for children to deal with this transition only when they have social skills, such as self-confidence, empathy and the ability to ask for help when needed (Shure & Spivack, 1979; Denham, 2006). These social skills can be acquired more quickly by means of pre-school education. Pre-school education institutions not only support children to socialize but also develop skills such as making discoveries through trial and error, sharing, studying in cooperation with peers, solving problems and self-determining. The basic concepts and skills acquired by preschoolers thanks to their natural curiosity and discovery skills play a supportive role for their future learning (Gizir, 2002; Güven, et.al, 2004.; Milsom, & Glanville, 2010; Ayhan, 1998). A successful pre-school period leads to their readiness for school and their academic achievement (Ladd, Harold & Kochel, 2006; Eisenberg, Valiente & Eggum, 2010; Elliott, Barnard, & Gresham, 1989; Görmez, 2007); besides, it facilities transition to the primary school. For the children lagging in terms of school readiness and a successful pre-school period, it is impossible to catch up with their peers during their whole school life (Bub, 2009; Eisenberg, Valiente & Eggum, 2010; Morais & Rocha 2000). As a result, having social skills in the pre-school period may be a variable predicting children's level of primary school readiness.

Therefore, in this research study, the relation between the level of readiness of the 66-72-month-old children in terms of the social skills in pre-school education institutions and their social skills at primary school was investigated. The sub-purposes of the study are as follows:

- 1- Is there a relationship between the level of primary school readiness of the 66-72-month-old children and their social behaviors in pre-school and primary school in terms of socio-emotional developments during the pre-school period?
- 2- Do the school readiness levels of children who received pre-school education predict their level of social skills at primary school?
- 3- Is there a relationship between the social competences and their negative behaviors of the 66-72-monthold children in pre-school and their social competences at primary school?
- 4- Does the level of social skill in pre-school and primary school vary on the basis of the age variable?



METHOD

Research Design

In this research study, the single screening model, which is a type of general screening model, was applied. Research models conducted for the identification of the variables are called as single screening models. By means of single screening models, temporal developments and changes can also be identified. Such research studies are called as longitudinal research studies carried out by means of observations and cross-sectional approaches. In observations, the variable, whose temporal development and change is to be specified, is observed focusing on the same elements or units either continuously or at regular intervals starting from a certain point (Karasar, 2005). This study is a longitudinal study aiming to follow the social adaptation process of primary school children in the 2012-2013 academic year after they attended the Marmara University Prof. Dr. Ayla Oktay Pre-school Education Unit in the 2011-2012 academic year.

Participation

The population of the study was comprised of children who completed Marmara University Prof. Dr. Ayla Oktay Pre-school Education Unit in the 2011-2012 academic year and started primary school in the 2012-2013 academic year. Among the total number of 35 children, 14 were female (40%) and the remaining 21 were male (60%).

Among the children population participating in this study, 8 children were born in January-March 2006 (22,9%), 5 children in April-June, 2006 (14,3%), 5 children in July-September, 2006 (14,3%), 9 children in October-December, 2006 (25,7%) and 8 children were born in January-March, 2007 (22,9%). The age groups of the children born in the first three months of 2007 were divided into three periods as they directly started primary school in the 2012-2013 academic year.

Of all the participants, 13 children had pre-school education for two years (37,1%), 21 children for three years (60%), one child for 4 years (2,9%).

Data Collection Tools

Marmara Primary School Readiness Test (MPRT): The test was developed by Özgül Polat Unutkan in 2003 as a part of her PhD thesis. The scale was designed and standardized specifically for Turkish children so as to reveal to what extent 60-78-month-old children are ready for the primary school in terms of basic skills and each developmental area included in the scale. The Scale includes two forms that are the Application form and the Development form. The item total, item remaining and discriminant analysis of the scale yielded significant results at the level of p<. 001. The confirmatory factor analysis and the validity analysis of the scale were carried out using the data collected from 1002 children. The Cronbach α value of the Development form was found to be .982 while the Cronbach α value of the Application Form was found to be .930. The Application form is comprised of 5 parts as mathematics, science, sound, drawing and the labyrinth and 74 questions. The questions were prepared in line with application areas needed by the children for the preparation for the primary school. The responses given by the children were scored as (1) if they were correct and (0) if they were incorrect. On the other hand, the Development form includes 4 sub-scales that are mind and language development, socio-emotional development, physical development, and self-care skills as well as 175 items. Each item designed to be filled by teachers or parents has four possible responses related to the frequency of the behavior displayed by the child: always (3 points), often (2 points), sometimes (1 point) and never (0 point). The socio-emotional development sub-scale is comprised of 40 items and the maximum score obtained from this scale is 120. The Cronbach α value of the socio-emotional development sub-scale was found to be .942 (Unutkan Polat, 2003).

School Social Behavior Scales (SSBS): School Social Behavior Scales were developed by Kenneth W. Merrell in 1993 and translated into Turkish by Yüksel (2009). Aiming to evaluate the levels of social skills of pre-school and



primary school children, the scales designed in line with the five-point Likert model is comprised of 65 items. As a result of the linguistic equivalence analysis, each item was found to be significantly related to one another at the level of p<.001. The item total, item remaining and discriminant analysis of the scale revealed significant results at the level of p<.001. The confirmatory factor analysis and the validity analysis of the scale were done using the data collected from 467 students and teachers. The Cronbach α value for both sub-scales was found to be .98. School Social Behavior Scales is comprised of two sub-scales that are social competence and negative social behavior. The Social Competence sub-scale includes three sub-dimensions, such as interpersonal relationship, self-control skill and academic skills while the Negative Social Behaviors sub-scale has three subdimensions that are assailant-angry, antisocial-aggressive and destructive-demanding.

Procedures

The data was collected from 66-72-month-old children attending the Application Unit in the 2011-2012 academic year. The social skills of the children were identified through the "School Social Behavior Scales" (SSBS). On the other hand, the socio-emotional sub-dimension of the "Marmara Primary School Readiness Test" (MPRT) was focused on to assess children's readiness for primary school in terms of their social development. The assessment of the children during the pre-school period was carried out in April, 2012 while their social skills at the primary school was investigated by means of the SSBS in the first term of the 2012-2013 academic year. The scales were administered in 9 months intervals. By this means, the changes and developments of the children participating in this study were observed during nine months.

The applications throughout the pre-school period were carried out by their classroom teachers while the primary school applications were done by their classroom teachers at the primary school they were attending at that time.

Data Analysis

The data obtained was analyzed using the SPSS 16.0 statistical package program. The relationship between children's level of social behavior at school and their readiness for primary school as well as the relationship between their social skills in pre-school and primary school were investigated by means of the Pearson Product Moment Correlation analysis. The Kruskal Wallis-H Test, a non-parametric technique, was also applied to reveal whether the levels of social skills in the school environment vary depending on the age variable. Besides, the Mann Whitney-U was applied to the obtained data in order to realize in which groups the difference occurred. The significance of the data gathered for the study was tested at the level of .05 and in two ways.

FINDINGS

In order to answer the first research question, the researchers focused on the relationship between the scores of 66-72-month-old children obtained from the "socio-emotional development" sub-dimension of the MPRT and the scores obtained by pre-school and primary school students from the "social competence" (SC) and "negative social behaviors" (NSB) sub-tests of the SSBS.

Table 1: Pearson Product Moment Correlation Analysis Done to Identify the Relationship between the Scores of "Socio-emotional Development" Sub-dimension of the MPRT and Scores of SSBS Applied in Pre-school

		Pre-school SC	Pre-school SSB	Pre-school SSBS Total
MPRT Socio-emotional Development	r	,935 ^{**}	,833**	,931 ^{**}
	Ρ	,000	,000	,000
	Ν	35	35	35



As can be realized from the table, the relationship between the scores of MPRT's "Socio-emotional Development" and the scores of the "social competence" sub-scale of the SSBS applied in pre-school (r=.935; p<.01) was found to be statistically significant at the level of p<.01 and positively meaningful. The same is also true for the relationship between the scores of the MPRTS's socio-emotional development sub-dimension and the scores obtained from the "negative social behaviors" sub-scale (r=.833; p<.01) and for the total score of the SSBS (r=.931; p<.01).

Table 2: Pearson Product Moment Correlation Analysis Done to Identify the Relationship between the Scores of "Socio-emotional Development" Sub-dimension of the MPRT and Scores of SSBS Applied in the Primary School

		Primary School SC	Primary School SSB	Primary School SSBS Total
MPRT	r	,799 ^{**}	,714 ^{**}	,828**
Socio-emotional Development	Р	,000	,000	,000
	Ν	31	31	35

As can be understood from the table, the relationship between the scores of MPRT's "Socio-emotional Development" and the scores of the "social competence" sub-scale of the SSBS applied at the primary school was found to be statistically significant at the level of p<.01 and positively meaningful (r=.799; p<.01). The same case also applies the relationship between the scores of the MPRTS's socio-emotional development sub-dimension and the scores obtained from the "negative social behaviors" sub-scale (r=.714; p<.01) and for the total score of the SSBS (r=.828; p<.01).

The second research question of the study was "Do the school readiness levels of children who received preschool education predict their level of social skills at primary school?" To be able to answer this question, the regression analysis was applied.

Table 3: The Results of the Regression Analysis Showing Whether the School Readiness Levels of Children who Received Pre-school Education Predict Their Levels of "Social Competence", "Negative Social Behavior" and "School Social Behavior" at Primary School (PS)

Independent Variable	Dependent Variable	Model	R	R ²	Beta	t	р
	P.S.Social Competence	Model 1	,437	,191	,437	2,792	,009
КТ	P.S.Negative Social Behavior	Model 1	,351	,123	,351	2,155	,039
МРКТ	SSB Total	Model 1	,415	,173	,415	2,623	,013

As can be realized in Table 3, as a result of the regression analysis applied to identify the extent to which the MPRT can justify the sub-scales of SSB scales that are "Social Competence" (F=7,796; p<,05), "Negative Social Behavior" (F=4,644; p<,05) and the total score of the SSBS (F=6,881; p<,05), the model was found to be significant. Thus, the predictive power of MPRT scale predicting the "Social Competence" ($R^2=,191$; p<.05), "Negative Social Behavior" ($R^2=,123$; p<.05) sub-scales of SSBS and the total scores of the SSBS ($R^2=,415$; p<.05) was found to be significant. School readiness justifies around 19% of the social competence levels, around 12% of the social behavior levels and around 17% of the school social behavior levels of the children who started primary school after receiving pre-school education.

To give an answer to the third research question "Is there a relationship between the social competences and their negative behaviors of the 66-72-month-old children in pre-school and their social competences at primary



school?" the Pearson Product Moment Correlation Analysis was applied and the results are presented in Table 3.

Table 4: Pearson Product Moment Correlation Analysis Done to Identify the Relationship of the Scores of the SSBS and its Sub-tests Applied in Pre-school with the Scores of the SBSS and its Sub-tests Applied at Primary School

		Pre-school SC	Pre-school SSB Total	Pre-school SSBS Total	Primary School SC	Primary School SSB	Primary School SSBS Total
Pre-School	r	3C	,804 ^{**}	,950 ^{**}	,878 ^{**}	,656 ^{**}	,875 ^{**}
SC	P	-	,000	,000	,000	,000	,000
	Ν	35	35	35	31	31	35
Pre-School	r	<i>,</i> 804 ^{**}	1	,949 ^{**}	,721 ^{**}	<i>,</i> 936 ^{**}	,844 ^{**}
OSD	Р	,000		,000,	,000,	,000	,000
	Ν	35	35	35	31	31	35
Pre-school	r	,950 ^{**}	,949 ^{**}	1	,869 ^{**}	,873 ^{**}	,905 ^{**}
SSBS Total	Р	,000	,000,		,000,	,000	,000
	Ν	35	35	35	31	31	35
Primary School	r	,878**	,721**	<i>,</i> 869 ^{**}	1	,710 ^{**}	,919 ^{**}
SC	Р	,000	,000	,000		,000,	,000
	Ν	31	31	31	31	31	31
Primary School	r	<i>,</i> 656 ^{**}	<i>,</i> 936 ^{**}	<i>,</i> 873 ^{**}	,710 ^{**}	1	,931 ^{**}
SSB	Р	,000	,000,	,000	,000,		,000
	Ν	31	31	31	31	31	31
Primary School	r	<i>,</i> 875 ^{**}	<i>,</i> 844 ^{**}	<i>,</i> 905 ^{**}	,919 ^{**}	<i>,</i> 931 ^{**}	1
SSBS Total	Ρ	,000	,000	,000	,000,	,000,	
	Ν	35	35	35	31	31	35

The table above shows that there is a positively meaningful and a statistically significant relationship at the level of p<.01 between the scores of the SSBS's "social competence" sub-scale applied in pre-school and the "negative social behaviors" sub-scale (r=.804; p<.01). The scores of the SSBS's "social competence" sub-scale was also found to be significantly and positively related to the total scores of the SSBS (r=.950; p<.01); to the "social competence" sub-scale (r=.878; p<.01); to the "negative social behaviors" sub-scale applied at primary school (r=.878; p<.01); to the "negative social behaviors" sub-scale (r=.656; p<.01) and to the total scores of the SSBS (r=.875; p<.01).

The scores obtained from the SSBS's "negative social behaviors" sub-scale applied in pre-school were found to be statistically (p<.01) and positively related to the total scores of the SSBS (r=.949; p<.01); to the "social competence" scores of the SSBS applied at the primary school (r=.721; p<.01); to the scores obtained from the "negative social behaviors" sub-scale (r=.936; p<.01) and to the total scores of the SSBS (r=.844; p<.01).

On the other hand, the total scores obtained from the SSBS administered in pre-school were found to be statistically (p<.01) and positively related to "social competence" sub-scale administered at primary school



(r=.869; p<.01); to the scores obtained from the "negative social behaviors" sub-scale (r=.873; p<.01) and to the total scores of SSBS (r=.905; p<.01).

The scores obtained from the "social competence" sub-scale administered at primary school were found to be statistically (p<.01) and positively related to the scores obtained from the "negative social behaviors" sub-scale also administered at primary school (r=.710; p<.01) and to the total scores of the SSBS (r=.919; p<.01). A significantly meaningful relationship at the level of p<.01 and a positively meaningful relationship were also revealed between the "negative social behaviors" sub-scale administered at primary school and the total scores of the SSBS applied at primary school (r=.931; p<.01).

The forth research question of the current study was "Does the level of social skill in pre-school and primary school vary on the basis of the age variable?". The Kruskal Wallis-H Test was used to answer this question. The results are illustrated on Table 4.

Table 5: Results of the Kruskal Wallis-H Test used to Determine whether the scores of the "Social Competence" Sub-scale Administered in Pre-school Vary Depending on the "Age Groups".

Date of Birth	N	Mean Rank	X ²	sd	Р
January-March 2006	8	26,31			
April-June 2006	5	23,70			
July-September 2006	5	22,10	20,535	4	,000
October-December 2006	9	16,67	20,555		
January-March 2007	8	5,06			
Total	35				

As can be realized from the table, the Kruskal Wallis-H test applied to determine whether the scores of the "social competence" sub-scale administered in pre-school vary depending on the "age groups" showed that the difference between children's age groups and mean ranks was statistically significant (x2=20,535; sd=4). Following this statistical operation, complementary comparison techniques were used to identify which groups caused the meaningful difference found through the Kruskal Wallis-H. As there is not a test technique available for this purpose, the Mann Whitney-U test was used as a technique preferred in binary comparisons.

As a result of the analysis, it was found that the difference is between the groups who were born in January-March, 2006 and in October-December, 2006 (U=9,00; z=-2,598; 01) and in January-March, 2007 (U=0,00; z=-3,361; 01). The difference was found to be in favor of the group who were born in January-March, 2006.

On the other hand, difference was found between groups born in January-March, 2007 and in April-June, 2006 (U=2,50; z=-2,565; 01); groups born in July-September, 2006 (U=0,00; z=-2,93; 01) and groups born in October-December, 2006 (U=2,00; z=-3,372; 01). The difference was found to be against the group who were born in January-March, 2007.



Table 6 : Results of the Kruskal Wallis-H Test used to Determine whether the Scores of the "Negative Social
Behaviors" Sub-scale Administered in Pre-school Vary Depending on the "Age Groups"

Date of Birth	N	Mean Rank	X ²	sd	Р
January-March 2006	8	17,81			
April-June 2006	5	24,80			
July-September 2006	5	26,90	14 220	4	,007
October-December 2006	9	18,67	14,230	4	,007
January-March 2007	8	7,62			
Total	35				

As can be understood from the table, as a result of the Kruskal Wallis-H applied to reveal whether the mean rankings of the "negative social behaviors" sub-scale applied in pre-school vary depending on the children's age variable, it was found that the difference between the age groups of the children and the mean ranks was significantly meaningful (x2=14,230; sd=4; 007). As a result of the Mann Whitney U Test applied to identify which groups caused the difference, it was realized that the difference was against January-March, 2007. The difference was found to be between the group born in January-March, 2007 and the group born in January-March, 2006 (U=8,00; z=-2,52; 001); the group born in April-June,2006 (U=7,00; z=-1,93; 05); the group born in July-September, 2006 (U=1,00; z=-2,78; 01) and the group born in October-December, 2006 (U=9,00; z=-2,60; 01).

Behaviors Scales" Administere	d in Pre-scho	ool Vary Depending	on the "Age Gro	ups″	
Date of Birth	N	Mean Rank	x ²	sd	Р
January-March 2006	8	21,81			
April-June 2006	5	25,90			
July-September 2006	5	24,60	16,970	4	,002
October-December 2006	9	17,11	10,570	4	,002
January-March 2007	8	6,12			
Total	35				

Table 7: Results of the Kruskal Wallis-H Test used to Determine whether the total Sores of the "School Social Behaviors Scales" Administered in Pre-school Vary Depending on the "Age Groups"

As can be understood from the table, the Kruskal Wallis-H used to identify whether the mean rankings of the total scores of the "School Social Behaviors Scales" applied in pre-school vary depending on the age variable revealed that the difference between the age groups of the children and the mean ranks was significantly meaningful (x2=16,970; sd=4; 002). The Mann Whitney U Test applied to understand which groups caused the difference showed that the difference was against the group born in January-March, 2007. It was found that the difference was between the group born in January-March, 2007 and the group born in January-March, 2006 (U=1,00; z=-3,27; 001); the group born in July-September, 2006 (U=1,00; z=-2,78; 01) and the group born in October-December, 2006 (U=4,00; z=-3,07; 002).



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Table 8: Results of the Kruskal Wallis-H Test used to Determine whether the Scores of the "Social Competence"Sub-scale Administered at Primary School Vary Depending on the "Age Groups"

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Date of Birth	Ν	Mean Rank	X ²	sd	Р
January-March 2006	8	18,94			
April-June 2006	5	18,00			
July-September 2006	5	23,80	12,686	4	,013
October-December 2006	9	13,33	12,000	4	,015
January-March 2007	4	3,88			
Total	31				

As can be realized from the table, as a result of the Kruskal Wallis-H applied so as to identify whether the mean rankings of the "Social Competence" sub-scale applied at primary school vary depending on the age variable, it was revealed that the difference between the age groups of the children and the mean ranks was significantly meaningful (x2=12,686; sd=4; 013). The Mann Whitney U Test used to show which groups caused the difference revealed that the difference was against the group born in January-March, 2007. It was found that the difference was between the group born in January-March, 2007 and the group born in January-March, 2006 (U=0,00; z=-2,71; 007); the group born in April-June, 2006 (U=2,00; z=-2,21; 027); the group born in July-September, 2006 (U=0,00; z=-2,46; 014) and the group who were born in October-December, 2006 (U=1,00; z=-2,10; 034).

Table 9: Results of the Kruskal Wallis-H Test used to Determine whether the Scores of the "Negative Social Behaviors" Sub-test Administered at Primary School Vary Depending on the "Age Groups"

Date of Birth	N	Mean Rank	X ²	sd	Р
January-March 2006	8	15,81			
April-June 2006	5	19,80			
July-September 2006	5	24,30	9,737	4	,045
October-December 2006	9	13,44	9,737	4	,045
January-March 2007	4	7,00			
Total	31				

As can be seen in the table, the Kruskal Wallis-H applied in order to identify whether the mean rankings of the "negative social behaviors" sub-scale applied at primary school vary depending on the age variable showed that the difference between the age groups of the children and the mean ranks is significantly meaningful (x2=9,737; sd=4; 045). The Mann Whitney U Test applied to reveal from which group the difference stems showed that the difference was between the group born in July-September, 2006 and the group born in January-March, 2007 (U=0,50; z=-2,34; 019). The difference was found to be in favor of the group born in July-September, 2006.



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Table 10: Results of the Kruskal Wallis-H Test used to Determine whether the Total Scores of the "School Social
behavior Scales" Administered at Primary School Vary Depending on the "Age Groups"

Date of Birth	Ν	Mean Rank	x ²	sd	Р
January-March 2006	8	20,56			
April-June 2006	5	23,40			
July-September 2006	5	28,30	18,187	4	,001
October-December 2006	9	17,78	10,107		,001
January-March 2007	8	5,88			
Total	35				

As can be realized from the table, the Kruskal Wallis-H used to reveal whether the mean rankings of the total scores of the "School Social Behaviors Scales" applied at primary school vary depending on the age variable revealed that the difference between the age groups of the children and the mean ranks was significantly meaningful (x2=18,187; sd=4; 001). The Mann Whitney U Test applied to find from which group the difference stems revealed that the difference was against the group born in January-March, 2007. The difference was between the group born in January-March, 2007 and the group born in January-March, 2006 (U=1,00; z=-3,28; 001); the group born in April-June, 2006 (U=4,00; z=-2,38; 018); the group born in July-September, 2006 (U=0,00; z=-2,97; 003) and the group born in October-December, 2006 (U=6,00; z=-2,91; 004).

DISCUSSION

This study aimed to investigate the relationship between the readiness of the 66-72-month-old children in terms of the social skills in pre-school and their social skills at primary school. The findings are discussed below in relation to the research questions.

As a result of the statistical analysis, it was concluded that social skill levels of the 66-72-month-old children are related to their socio-emotional developments. A significant positive relationship was found between the socio-educational development scores in pre-school and primary school and the social competence, negative social behavior and the total scores of the SSBS. It was also found that social skills can predict primary school readiness. Besides, it was observed that the education aiming to support the social skills in the pre-school period positively affects children's level of social skills at the primary school, and thus enables children to adapt to the primary school environment with more ease.

In many of the research studies, it was proven that providing pre-school education aiming to enhance children's social skills have a positive influence on their socio-emotional developments and school readiness (Sheridan, Knoche, Edwards, Bovaird & Kupzyk, 2010; Knoff, 1990; Metin, 1999; Uysal, 1996; Ayhan, 1998; Polat Unutkan, 2003; Boz, 2004; Atılgan, 2001). For instance, Massetti ve Stroch Bracken (2010) investigated the school readiness of the children who have problems in terms of social skills and behaviors. Uğur (1998) found that the average scores of socialization of the children who attended private and state pre-schools were higher than those who have not attended a pre-school. Studying whether the social skill levels of the 6-year-old children with a higher level of social skill have a higher level of school maturity when compared to children with a lower level of social skill. In the study, it was also revealed that the profession, age and education background of the family influence children's social skills and school maturity. Likewise, Wohlwend (2007) showed that receiving pre-school education and playing at school during childhood positively affect children's reading skills, adaptation to the class and their social life and facilitate their learning of school rules. Balat Uyanık (2003) and Çimen (2000) also revealed that when compared to children who have not attended kindergartens, children starting the primary school after the kindergarten are in a better position with regards to mental, social,



emotional development as well as skills and interests, physical development and health; furthermore, these children were found to be more harmonious and successful in terms of social skills. Stacey Storch & Fischel (2007), also conclude that social skills and abilities have an impact on children's school readiness. It was revealed in their study that the social skills of the children having problems regarding social skills and behaviors improved during the pre-school period after attending pre-school education institutions since the age of four. It was also found that their verbal and mathematical skills developed and they became ready for school. Likewise, Mashburn and Pianta (2006) found that supporting the communication process between parents-child, childteacher, parents-teacher during the pre-school period strengthens children's school readiness and social relationships. In Özbek's (2003) study, a significantly meaningful relationship was found between attending pre-school and the improvement of the primary school students' social skills such as initiating and maintaining the relationship, doing tasks collaboratively within a group, coping with stress, planning and problem-solving, maintaining self-control. This significant result was in favor of the students having pre-school education. Moreover, it was proven in different empirical studies that children's emotional maturity, activities done at home and school to boost their language as well as other cognitive activities are important for the beginning of a successful school career (Lake, Al Otaiba & Guidry, 2010; Snow, 2006; Polat Unutkan, 2003; Vernon Feagans & Blair, 2006; Ülkü, 2007).

In the current research study, it was revealed that the level of social skills of pre-school and primary school children vary depending on the age variable. Children born in January-March, 2006 were found to have higher levels of social competence and lower levels of negative social behavior when compared to other age groups, especially the ones born in January-March, 2007. Polat Unutkan's (2003) study entitled "Preparation and Standardization of the Marmara Primary School Readiness Scale" showed that 5, 5:5 and 6-year-old children are mature enough to start school. It was also found that there is no significant difference between 5:5-yearold children and 6-year-old ones; however, it was stated that 5-year-old children are not mature enough from a developmental perspective. In another study, Esaspehlivan (2006) aimed to explore whether 78 and 68-monthold children are ready to start the first grade of the primary school and focused on their school readiness. According to the results of the study, there is a significant difference between 78 and 68-month-old children in terms of school readiness. In addition, a significantly higher level of school readiness was found for children who have attended pre-school education institutions. Stipek and Byler (2001) worked on the academic achievements, social behaviors, interaction with teachers as well as the academic skill-related self-images of children in three years following their initial year at kindergarten. For this study, 200 children at lower socioeconomic levels were selected. As a result of the study, it was concluded that during the first grade of the primary school, children starting the kindergarten at an older age were in a more advantaged position in terms of academic achievement. During the kindergarten period, older children were found to perform better academically. In summary, it was indicated by the researchers that the academic performance levels of the children who start kindergarten at a younger age are lower than the elder children; nevertheless, the influence of the school starting age on children's success level disappears in few years at the primary school.

Considering the findings of the current study, it would be fair to state that 66-month-old children starting primary school in the 2012-2013 academic year encountered more problems in terms of social skills when compared to their classmates. It is known that the social skills affect academic skills at the same time. For that reason, 66-month-old children should be exposed to individual and group sessions so that they can be supported in terms of social skills before they are accepted to the primary school. Such activities not only meet their developmental needs in the process of adapting to the primary school but also strengthen their academic skills.



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A COMPARISON OF CURRICULUM IN BANKING AND FINANCE DEPARTMENTS OF THE TURKISH UNIVERSITIES

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ABSTRACT

This descriptive study was conducted to assess banking and finance education curriculum by identifying and comparing the bachelors degree courses being taught at the banking and finance schools. We used a quantitative approach to content analysis. The data of the study have been gathered from the web pages, handbooks and the catalogs of the schools. The study contains all of the bachelors degree banking and finance departments of the universities in Turkey. In the first survey, we identified seven core competency areas for the courses in these schools. In the second survey, six more categories were identified accompanying the competency areas. In the third survey, we compared the curriculum in public universities and private foundation universities. Our results mostly indicate similarities as well as some differences in the curriculum. Explanations for these similarities and differences between the universities were suggested in terms of the core competency areas that were collected from their aims and missions.

Key Words: Banking, finance, curriculum, education.

INTRODUCTION

Finance is a function that is common to all business enterprises in every industry. There is also the financial services industry which lies at the heart of the global economy. The importance of the financial services industry to the society and individuals is a necessity for almost every country.

Similar to the most of the countries in the world, the financial services industry in Turkey includes the sectors such as banking, leasing, factoring and insurance. In Turkey, there are around 220,000 employees working in the financial services but the huge growth potential and fast growing economy of the country offer high growth potential for the sectors in financial services industry. The dominant sector of the Turkish financial services industry is banking. As of December 2012, there are 49 banks in Turkey comprising 32 commercial banks, 13 development and investment banks and 4 participation banks with a total employment of 201.474 people and 11.066 branches(BRSA, 2013).

Turkish banks are fast integrators of technology into their services. In addition to this, they have skilled labour force with higher level of vocational qualifications. But, the Turkish banking sector is not large enough. The size of banking sector in the EU is about 3.5 fold of the gross domestic product. It is yet on a par with the gross domestic product in Turkey. On the other hand, the total number of the personnel working in the Turkish banking sector is far below from the level of the developed countries banking sectors. When sector's indicators based on branches and personnel are analyzed, we see that Turkey is the first in rank for population per branch and population per personnel ratios compared with the EU countries. The population per personnel is about 150 in the EU while it is about 350 in Turkey yet. Also, population per branch is about 2.000 in the E.U.Turkey and 7.000 Turkey. On the other, hand Turkey is the seventh in rank for total branches and total personnels among EU personnels. Turkey should icrease the total number of branches and total number of the personnel



working in banking sector about 1,5 times in order to reach the closest rankings of the population per branch and population per personnel ratios of EU countries. In addition to this 6,7 of every 1,000 people in the labor force in the EU have been working in the banking sector but this number is only 1.7 in Turkey. All these data are seen as important indicators about the growth potential and employment capacity of the Turkish banking sector.

In Turkey, the total number of personnel working in the investment and deposit banks increased 61.849 (50%) and reached from 124.271 to 186.120 from 2002 to 2012. On the other hand, the number of the personnel working in participation banks was increased by 550% and reached from 2.250 to 14.302. Also, the number of branches increased to 780 as of 2012 while it was only 148 in 2002. The total number of higher education graduates working in these banks increased by 112% (73.563) and secondary school graduates decreased by 37% in the same period. The banks in Turkey are increasingly need to hire higher education graduates who can accomodate rapid evolution and have the skills of good communication and, high-tech skills. Banks and other financial institutions in Turkey mostly offer job opportunities to the undergraduates and graduates of banking and finance colleges as well as the other departments of economics, and administration-business faculties.

There are currently 175 universities in Turkey that 103 of them are public universities and 72 of them are private foundation universities. Most of them include economics and bussines-administration faculties but only 19 of them have banking and finance departments or colleges.

In this context, we aimed to assess the content included in bachelors degree banking and finance curriculum at the universities in our research. And the special objectives were to:

- Identify the core competency areas of the bachelors degree banking and finance departments of the schools.
- Identify the courses included in banking and finance education curriculum at the public and private foundation universities.
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Compare the courses included in banking and finance education curriculum at the public and private foundation universities.

BANKING AND FINANCE EDUCATION IN TURKEY

The rapid changes in the global economic and financial environment, evolution of financial markets and demographic changes increase the importance of comprehensive and quality banking and finance education. The importance of teaching theoretical knowledge and basic principles cannot be denied. In addition, the financial service sectors should apply many international and domestic standards and regulations into their services. These standards and regulations should be also taught. However, since banking and finance are applied sciences, skill development is also very important as well as increasing knowledge. Accordingly, the banking and finance education in Turkey has carried out by the vocational secondary scoools, the universities and the relevant departments of the banks.

Accounting and Finance Departments of Trade Secondary Schools

Banking and finance education has been carried out by trade schools in secondary school level in Turkey. These are four year schools include the departments such as "marketing and retail sales", "accounting and finance", "office management and assistance", "information technologies" and "logistics". Banking is one of the fields of accounting and finance departments of these schools. In the first year of the trade secondary schools, students get the equal courses with the other general, vocational and technical secondary schools. The vocational courses start at the second year. At the end of the third year the students choose their fields and the



field courses start at the fourth year as well as the internship period which include the practical trainings in the banks.

Banking and Finance Education in the Universities

Universities in Turkey provide Banking and Finance Education in two year higher vocational schools, four year colleges and faculties and graduate schools.

* Higher Vocational Schools : There are 124 two year vocational schools in 77 different universities offering banking and finance education in Turkey. The common objective of these schools is to educate inter skilled labour force for financial services industry.

* Colleges and Faculties : Most of the universities include economics and busines-administration faculties which give some courses on banking and finance. But, there are only 19 faculties or schools of applied sciences offering bachelor degree on banking and finance education. These are;

- Banking and Finance Department, Faculty of Economics and Administrative Sciences, Avrasya University.
- Banking and Finance Department, Burhaniye School of Applied Sciences, Balıkesir University.
- Banking and Finance Department, Faculty of Commercial Sciences, Baskent University.
- Banking and Finance Department, Faculty of Economics and Administrative Sciences, Beykent University.
- Banking and Finance Department, Faculty of Economics and Administrative Sciences, Cankaya University.
- Banking and Finance Department, School of Applied Sciences, Celal Bayar University.
- Banking and Finance Department, School of Applied Sciences, Dumlupinar University.
- Banking and Finance Department, Faculty of Economics and Administrative Sciences, Fatih University.
- Banking Department, College of Banking and Insurance, Gazi University.
- Banking and Finance Department, Gorele School of Applied Sciences, Giresun University.
- Banking and Finance Department, School of Applied Sciences, Istanbul Arel University.
- Banking and Finance Department, Faculty of Commercial Sciences, Istanbul Ticaret University.
- Banking and Finance Department, School of Applied Sciences, Kadir Has University.
- Banking Department, School of Banking and Insurance, Marmara University.
- Banking and Finance Department, Faculty of Economics and Administrative Sciences, Nigde University.
- Banking and Finance Department, Faculty of Economics and Administrative Sciences, Okan University.
- Banking and Finance Department, Faculty of Economics and Administrative Sciences, Ozyegin University.
- Banking and Finance Department, School of Applied Sciences, Trakya University.
- Banking and FinanceDepartment, Faculty of Management, Yildirim Beyazit University.

* *Graduate Schools :* Most of the universities have masters and doctoral programs on "finance" while only a few of them have on "banking" in their institutes of social sciences. There is only one university which has an institute of banking and finance and one university has a banking education department in institute of educational sciences.

Educational Activities in the Banks

Education is permanent in the banks in Turkey. They generally provide education programs through their employees and customers by means of the educational units as a part of human resources departments. Some of these programs are given as classroom training in their educational buildings, some of them are distance learning programs and some are accomplished through the purchase of educational services from outside. Outside training courses have been provided to the banks in Turkey by universities, The Banks Association of Turkey and some other third party education-training institutions.



REVIEW OF LITERATURE

Lai and et al.(2010) examined the effectiveness, teaching, assessment methods, and the importance of finance concepts in three undergraduate finance courses in a private university in Malaysia. The students they surveyed indicated that the finance degree courses were able to produce analytical, computer, communication, interpersonal, and language skills for them. The chalk-and-talk lecture method and tutorial session were the most important teaching methods of all.

Connick and Steiner(1999) researched some of the issues encountered in developing and implementing an integrative, team-taught finance and marketing MBA core course and offered integrative applications that have proven to be successful.

Abdul Hamid and Mohd Nohrin(2001) examined the Islamic Banking Education and stated that the curriculum should prepare students for the information age that depends on an integrated strategy, that is to provide all-round development with provision for individual abilities, emphasize intellectual, emotional, spiritual, and physical growth, produce a technologically literate work force, democratize education and finally increase the participation of stakeholders.

Ozaltan(2010) examined the relationship between the transformation of the labor market and the production process and the vocational education and training in Turkey. She focused on the idea that transformation of vocational education and training in Turkey has occurred at discursive level and also based upon the prevailing opinion on the necessity of developing human resources in compliance with the needs of the economy.

Harder and et al.(2009), identified the courses included in extension education curriculum at the undergraduate and graduate levels and compare the identified courses with the Ohio State model of extension education by using a quantitative approach to content analysis.

METHODOLOGY

In our study, we used a quantitative approach to content analysis to gather data from the web pages, handbooks and catalogs of the schools(Harder and etal., 2009). A quantitative approach to content analysis differs from a qualitative approach in that frequencies are used to derive meaning from the data, whereas a qualitative approach emphasizes the researcher's own interpretation.(Gall et al., 2007). We literally meant "counting the number and the categories of banking and finance departments of public and private foundation universities" by the quantitative approach to content analysis.

Courses within banking and finance education were identified by examining the web pages, handbooks and catalogs of the universities. Courses listed as departmental cores and/or electives for banking and finance education were included in the data analysis. To the extent possible, sporting and cultural activities, club activities, freshman orientation seminars and the seminars about general university requirements were not included in the data analysis.

The use of standard coding categories permits comparison with other studies that have used the same system(Gall et al, 2007). Given the stated objective, to compare courses included in banking and finance curriculum at the public and private foundation universities, we collected the aims and missions of each university and identified the core competency areas of these universities to code the data. The placement of a course into a competency area was primarily based on the course title. Course catalog descriptions were used to aid in the coding process when course titles were perceived to be ambiguous. Frequencies and percentages were reported for the types of courses available at the public and private foundation universities. Where the



core competency areas failed to capture certain courses, we clustered those courses into categories based on course titles and catalog descriptions.

The study has some limitations. First limitation of this study was the online collected data. We acknowledged that the schools might have made changes to their curriculum that were not reflected in their online materials. We attempted to minimize this limitation by using other sources of information, including handbooks and course catalogs. Second, the study was limited with the bachelors degree banking and finance schools in Turkey. Because of that, the universe and the sample of the study were equal in size. Third, the coding of courses was based on the course title and catalog description, which might not comprehensively reflect the true content of a course.

FINDINGS AND RESULTS

Survey 1 : Competency Areas

A brief knowledge about the aims and the missions of the schools that we collected from sources of information including their web pages, hanbooks and catalogs are as follows;

- University 'A' : It was declared by the university that "courses in banking and finance department and their contents were selected and arranged to gain students adequate occupational qualification and management skills. Upon the completion of the programme, the students were expected to be able to have general knowledge about all functions of the bank as institutions, basic concepts about banks and financial system, have ability to apply theoretical knowledge to practice, have ability to make correct planning at activities in the field of banking and finance, make division of labor and make self employment as a team member in the given time period, have ability to follow national and international developments in the financial system and ability to adapt new learning and application areas, behave attentive about ethical values, social responsibilities and social care in implementation, have ability to collect data about banking and finance system and group them according to the needs and interpret, have high level competence about computer and knowledge technological information, have ability to create analytical solutions with his/her information in the face of adverse conditions and move to action to eliminate disadvantages, have ability to be a leadership of working groups".
- University'B': The aim of the Department of Banking and Finance of the university was "to educate students as future financial managers by providing them an education in accordance with universal academic culture, discipline and quality". They announced their mission as "giving equipped graduates by providing education in accordance with universal academic culture, discipline and quality, and to contribute to the literature on banking and finance."
- University 'C' : The banking program of the university aimed to train qualified specialists and managers, who have ethical values , have knowledge about the operation and the legislation especially in the banking sector and in the money markets, can increase the quality of management, analyse the markets, have the ability to analyse risks and solve financial problems. Upon the completion of the programme, the students are expected to be able to; use mathematical and graphical tools in the field of banking, understand the basic concepts and assumptions related to the science of banking, use methods, techniques and tools necessary for the analysis and modelling of economic data to ensure and evaluate the obtained results, describe the structure and properties of the markets in economy, make predictions about the relationships between economic and financial variables, analyze and comment on current economic events, comment on Banking Sector, analyze the banks and the banking sector within the framework of economic, financial and accounting data, have the ability to develop solutions for social problems and have the ability to do inter-disciplinary research and study.
- University 'D' : The aim of the Banking and Finance Department of the University 'C' was to provide theoretical knowledge and applications in the field of banking and finance to the students; to give



them the opportunity to learn the changes and developments in the finance sector; and thus to educate the professionals that the sector requires.

- University'E': The school aimed to educate the potential specialists and senior managers for the banks firstly and then, the other sectors of financial services industry. It was also aimed to educate people who would meet the required qualifications, who were able to question, think analytically, and did research.
- University'F' : The purpose of the Department of Banking and Finance of the School 'F' was to train qualified, competitive banking and finance specialists and managers.
- University'G': The purpose of the school was to educate the employees for the financial services industry such as securities exchange dealers-brokers, customer representatives and inspectors. The program consisted the courses on the theoretical knowledge and basic principles of financial management in the banking sector above all.
- University'H': Banking and Finance program of the university aimed to train students in line with the growing demands of the sector and to create them employment opportunities in the globalized world. The tangible aim of the program was to train banking and finance specialists and senior managers who was able to add value to the institutions and organizations she/he works, able to analyze, synthesize, model and scope out the financial problems and capable of original research.
- University'' : The Banking and Finance Department of the university announced that they focus on training qualified manpower who was able to adopt the theory and practice, fast in thinking and making quick decisions, developed the creative skills that would be necessary in the workplace, questioning and researching the macro-micro economic developments and able to make risk-return analyses in fragile and rapidly changing economic environment.
- University'J' : The school consisted of two separate fields: banking and insurance. But they added that their curriculum also included common courses required for both banking and insurance. Becoming a specialist in only one of these two fields was expected to be achieved through elective courses to be determined and offered after the third year. The objective of the department was to train specialists equipped with applied knowledge particularly in banking and insurance fields. They announced that their approach was to enable their graduates to adapt to the business environment even without any work experience.
- University'K' : They announced that the undergraduate program which consisted of both core and elective courses, their students graduated to be employed by public and private sector institutions with the titles of "Banking Staff Member" and "Financing Staff Member". Their graduates were expected to be ideal applicants for the sector because of their professional (foreign language, computer software) skills. They might be employed by national/international banks, financial firms, financing departments of corporations or firms that give financial services. They also announced their mission as " to educate ethical graduates equipped with efficient scientific methods who could adapt to dynamic environments with our educational conception which combines theoretical knowledge and application in the field of Banking and Finance".
- University'L' : The goal of the banking and finance department was to grow innovative, dynamic, enterpreneur graduates with analytical thinking skills for all financial markets and institutions. Their undergraduate programs aimed to strengthen theoretical framework of their students on banking finance students on banking and finance issues with accounting, marketing, management and law knowledge. They indicated that the major benefit of their of their program was the flexibility that created innovative students with analytical thinking skills that were ready to compete international markets with technical and practical background and two foreign languages.
- University'M': They aimed to educate their students who woluld have enough theoretical knowledge to work in the banking sector. They also aimed to train qualified manpower who was able to work in leasing, factoring, securities exchange, insurance and asset management sectors as well as banking

sector. They announced that they were in touch with various banks and financial institutionsin this regard.

- University 'N' : The purpose of the Banking and Finance Department of the university was to educate the students in parallel with the growing demands of the industry and gave course that prepare them to work in the satisfying and respected positions in the global financial services industry. They announced their aim as training qualified manpower for financial institutions by means of theoretical and practice oriented courses. Professional experiences and skills, which were valuable for he students as well as having theoretical knowledge,was expected to be gained with elective courses in the school and with the practices in internship period.
- University 'O' : The mission of the school was to educate students as qualified specialists and managers of the 21.Century's global and competetive financial services industry who were productive, able to think analytical, innovative, have strong theoretical backgrounds and developed practical skills.
- University'P': Their objectives were to provide an overall and comprehensive outlook on banking and finance issues, to develop analytical skills to understand local and international economics and finance, to build the skills of the students to meet the needs of a changing business world and to improve research skills in banking and finance related problems.
- University'Q' : The Department of Banking and Financeof the school aimed at bringing together theoretical and practical aspects of banking and finance and offering its students the opportunity to study recent developments in this area in an active environment. They declared their mission as to train up experts needed in the finance, auditing, commerce and industry sectors that have strong theoretical backgroud in addition to the application oriented information and to lecture application oriented lessons. They announced that "reaching universal knowledge and producing new knowledge its basic value and does not accept any restriction and with the help of the education the students get they are expected to be graduated as the researcher, questioning individuals who comprehend the developments in their country and in the world, who can apply the scientific innovations and who have a vision".
- University'R' : They announced the mission of the department of banking and finance as "to provide high quality education to their students by equipping them with advanced academic and professional skills and knowledge required for their future careers in the banking and finance industries, and by preparing them as competent senior executives who would assume leadership roles in their organizations. They aimed to endeavor to produce highly qualified, accomplished graduates demanded by the industry, who keep abreast of the latest practical and technological developments in the finance and banking industry and to satisfy the current need for qualified workforce in the industry by producing graduates who were; able to analyze and evaluate the current status of both the national and international markets with a broad vision, productive, efficient, and analytical, fast and effective in financial decision making visionaries.
- University'S': The aim of the department of banking and of the faculty was to grow up experts in the field of banking and finance. In the structure of the Department of Banking and Finance, the faculty combined different components such as; in the Banking component, the students study theory and practices in the banking sector in a global context, in the Finance component, the students focus on theory, practices in the area of finance as a whole. They also announced their aim as "producing graduates who were well-qualified in every area of financial sector, including banks and in government and private sector as an expert, manager, instructor or as an academician at the universities".

We identified 7 core competency areas from the universities' announcements about their aims and visions. These were: (1) theories of economy, banking and finance; (2) knowledge on financial markets and institutions; (3)management; (4) applied research; (5) communication skills and behavioural skills, (6)internship and practicum; (7) ethical values, regulations and law.(Table 1).



Table 1 : Competency Areas of the Banking and Finance Departments (N = 19)						
Competency Areas	f	%				
Theories of Economy, Banking and Finance	11	57 <i>,</i> 89				
Management	9	47,37				
Applied Research	9	47,37				
Knowledge on Financial Markets and Institutions	7	36,84				
Internship and Practicum	7	36,84				
Ethical Values, Regulations and Law	2	10,53				
Communication Skills and Behavioural Skills	2	10,53				

Table 1 : Competency Areas of the Banking and Finance Departments (N = 19)

The most frequently declared competency areas were "theories of economy, banking and finance"(n=11) "management"(n=9) and "applied research"(n=9). The fewest ones were "ethical values, regulations and law"(n=2) and "communication skills and behavioural skills"(n=2).

Survey 2 : Course Identification

From this stage to the rest, we excluded 4 of 19 schools from the research since two of their data were inadequate and two had no information on their web sites or on their catalogs about their courses.

We identified six more categories accompanying the competency areas: (8) miscellaneous, (9)other topics of social sciences,(10) marketing and public relations, (11) technology, (12) calculus and statistics and (13) innovation and enterpreneurship. There were 186 courses listed in total for banking and finance education.(Table 2)

Table 2 : Courses in Banking and Finance Education	(N = 186)
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Course Category	f	%
Theories of Economy, Banking and Finance	42	22,58
Knowledge on Financial Markets and Institutions	23	12,37
Ethical Values, Regulations and Law	21	11,29
Applied Research	16	8,60
Miscellaneous	14	7,53
Other Topics of Social Sciences	13	6,99
Communication Skills and Behavioural Skills	12	6,45
Management	12	6,45
Marketing and Public Relations	10	5,38
Internship and Practicum	9	4,84
Technology	8	4,30
Calculus and Statistics	4	2,15
Innovation and Entrepreneurship	2	1,08

The most frequently offered courses were: "theories of economy, banking and finance" (n=42); "knowledge on financial markets and institutions" (n=23) and "ethical values, regulations and law" (n=21). The fewest course categories were "calculus and statistics" (n=4) and "innovation and enterpreneurship" (n=2).

Survey 3 :Comparison of Public and Private Foundation Universities' Courses

Each of the course categories was represented by at least one course at one or more banking and finance schools whether it was public or private foundation.(Table 3).



Course Category	Public	Universities	Foundation	Universities
	F	%	F	%
Theories of Economy, Banking and Finance	28	22,40	25	22,52
Ethical Values, Regulations and Law	18	14,40	11	9,91
Knowledge on Financial Markets and Institutions	17	13,60	10	9,01
Applied Research	12	9,60	10	9,01
Other Topics of Social Sciences	8	6,40	6	5,41
Communication Skills and Behavioural Skills	8	6,40	7	6,31
Management	8	6,40	8	7,21
Internship and Practicum	8	6,40	5	4,50
Marketing and Public Relations	7	5,60	6	5,41
Technology	5	4,00	3	2,70
Calculus and Statistics	4	3,20	4	3,60
Miscellaneous	1	0,80	14	12,61
Innovation and Entrepreneurship	1	0,80	2	1,80

Table 3 : Public Schools' Courses(N=125) and Private Foundation Universities' Courses(N=111)

The most frequently offered courses by the public universities were: "theories of economy, banking and finance"(n=28); "ethical values, regulations and law"(n=21) and "knowledge on financial markets and institutions" (n=23). The fewest course categories in public schools were "miscellaneous" (n=4) and "innovation and enterpreneurship"(n=1). The most frequently offered courses by the private foundation schools were: "theories of economy, banking and finance" (n=25); "ethical values, regulations and law" (n=11), "knowledge on financial markets and institutions"(n=10) and "applied research"(n=10). The fewest course categories in private foundation schools were "technology"(n=3) and "innovation and enterpreneurship"(n=2). The "theories of economy, banking and finance" courses (which were the most frequently offered ones by both of the school types) were also identified as the most frequent competency area among all. In addition to this, the competency areas also includeded the other most frequently offered courses. In contrast the fewest offered courses were not remain among the competency areas. The frequency of public schools' courses in the categories "'theories of economy, banking and finance", "ethical values, regulations and law", "knowledge on financial markets and institutions", "applied research", "other topics of social sciences", "communication skills and behavioural skills", "marketing and public relations", "internship and practicum" and "technology" exceeded the number of private foundation schools'. The frequency of private foundation universities' courses in the categories "miscellaneous" and "innovation and enterpreneurship" exceeded the number of public universities'. The frequency of private foundation universities' and public universities' courses were equal in the categories "management" and "calculus and statistics".

Figure 1 presents the levels of the banking and finance courses at the private foundation universities and public schools, the data from which was presented in Table 3.



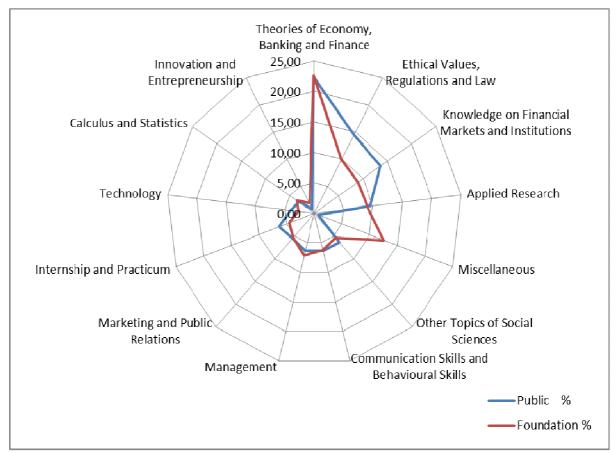


Figure 1 : Levels of the Courses (%)

As it can be seen in Figure 1, public universities have achieved a higher degree of offered courses on most of the measures. By comparison of each course category we determined that:

- Theories of Economy, Banking and Finance : This course category was the most frequent declared competency area. In accordance with that fact, the percentages of the courses in this category were the highest ones for the public schools and the private foundation universities both. The percentages of the public universities(22,40%) and the private foundation universities(22,52%) were almost equal to each other.
- Ethical Values, Regulations and Law : The third highest rank in percentage for the public universities(14,40%) and for the private foundation universities(9,91%) among the course categories was "ethical values, regulations and law'. This course category was one of the competency areas of the universities. Second highest range between the public universities and the private foundation universities in percentage was determined in this course category.
- *Knowledge on Financial Markets and Institutions :*This course category was also one of the competency areas. The percentages of the courses in this category was 13,60% for the public universities and 9,91% for the private foundation universities. The discrepancy pointed out the second highest range.
- *Applied Research*: The percentages of the public universities(9,60%) and the private foundation universities(9,01%) were almost equal in this competency area course category.
- Other Topics of Social Sciences: The discrepancy in the percentages of the public universities(6,40%) and the private foundation universities(5,41%) was narrow.



- Communication Skills and Behavioural Skills: This was also one of the competency area courses. In accordance with that fact it was the fewest declared competency area, the percentages of the courses in this category was also low. The percentages of the public universities(6,40%) and the private foundation universities(6,31%) were almost equal to each other.
- *Management:* This course category was the second most frequently declared competency area. In spite of this, the percentages of the public universities and the private foundation universitiescourses in this category were quite low. The discrepancy in the percentages of the public universities(6,40%) and the private foundation universities(7,21%) was narrow.
- Internship and Practicum: This course category was also one of the competency areas. The percentages of the courses in this category was 6,40% for the public universities and 4,50% for the private foundation universities. The discrepancy in percentages was not high.
- *Marketing and Public Relations:* The percentages of the public universities (5,60%) and the private foundation universities (5,41%) were almost equal in this course category.
- *Technology:* This course catogory had the one of the lowest percentage for the public universities(4%) and the private foundation universities(2,70%). The discrepancy in the percentages of the public universities and the private foundation universities was narrow
- *Calculus and Statistics:* This course category had the second lowest percentage for public universities and the third lowest pecentage for private foundation universities. The discrepancy in the percentages of the public universities(3,20%) and the private foundation universities(3,60%) was almost equal to each other.
- *Miscellaneous:* The percentages of the courses in this category was 0,80% for the public universities and 12,61% for the private foundation universities. The discrepancy pointed out the highest range.
- Innovation and Enterpreneurship: The percentage of the courses in this category were the lowest ones for the public universities and the private foundation universities both. The percentages of the public universities(0,80%) and the private foundation universities(1,80%) were almost equal to each other.

CONCLUSION

This study sought to identify the courses included in banking and finance education curriculum at the public and private foundation universities and compare them. One hundred eighty six courses clustered in thirteen fifteen competency areas and categories in total while it was one hundred twenty five in public universities and one hundred eleven in private foundation universities. The majority of the courses (72,58%) were included in competency areas. This percentage was almost equal with public universities(72,80) and private foundation universities(68,47%).

Theories of Economy, Banking and Finance category was the most frequently declared competency area. In accordance with that fact, the percentages of the courses in this category were the highest ones for the public universities and the private foundation schools both. But on the other hand, they offer only 12 management courses (6,45%) while this category category was the second most frequently (47,37%) declared competency area.

There were narrow discrepancies in the percentages of the public universities' and the private foundation universities' course categories except the "miscellaneous". The percentages of the courses in this category was 0,80% for the public schools and 12,61% for the private foundation schools. The private schools offered fourteen courses while public schools offer just one course on this category. Some examples in this category were history, culture, arts and modernity.

We researched the content of the courses in banking and finanse education curriculum in the bachelors degree banking and finance schools. The aim of the study was not to examine what content should have been included in the curriculum. Further research should be conducted to ensure the curriculum reflects the contemporary



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needs of student learners and the demands of the financial institutions in order to determine the appropriate balance of courses in banking and finance education curriculum.

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INVESTIGATION OF PRESERVICE TEACHERS' REFLECTIVE THINKING TENDENCIES IN TERMS OF VARIOUS VARIANCES

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ABSTRACT

Education is a significant issue in social and economical development of countries. The most important element of education is "teacher". Having various thinking abilities is worthy for teachers. Especially development of knowledge and attitude intended to reflective thinking is the determinative factor in effective teacher education.

In this study, it was aimed to investigate the pre-service teachers' reflective thinking tendencies in terms of various variables. This study was practiced in 2011-2012 Academic year with 449 preservice teachers who studied in various departments of education faculty in a public university in Istanbul. The findings were analyzed with ANOVA and independent group t test with SPSS software.

At the end of the study, it was seen that preservice teachers' reflective thinking tendencies were significantly different by growing up place and gender. In addition to this; there were no significant differences found by mother and father education levels, number of siblings, the type of high school and the undergraduate program type. Based on the findings of the study, several recommendations were given.

Key Words: Reflective thinking, Teacher Education, Education and Teaching.

INTRODUCTION

Education has a significant role in the social and economic development of countries. The most important element in education is teacher. Teacher training is among the primary issues a country has to give importance to. The fact that teachers are provided with both field competence and teaching professional skills is an issue that needs to be given importance for raising generations needed today and in the future. Today, information production has gained much acceleration; the development of informatics and technology has made it easier to access produced information. Though it is quite easy to access information, information does not make much sense when reached in raw form. Today, individuals who will process, transform, structure and reproduce information are needed. Therefore, in today's world, teachers should not be in a role that conveys it, but one that guides how to access and benefit from information. For this reason, they have to be able to use proper



thinking strategies. It is necessary for teachers to be able to use proper thinking strategies at first for providing students with proper thinking skills. Hence, especially in preservice teachers' training, enabling them to understand and developing "thinking skills" such as critical, creative, reflective, analytical thinking should be among the important functions of teacher training institutions.

In the studies regarding to reflective thinking; it is seen that reflection, reflective thinking and reflective teaching concepts are expressed. The first among these concepts; reflection is a special thinking form. The act of reflection which forms the base of reflective thinking is both active and controllable. It is not a reflection when thoughts come to mind without purpose. Reflection means focusing attention; namely, it means weighing, calculating and making a choice. Reflection emerges as one of the doctrines which aim at learning in class environment with constructive learning approach which is tried to be put into practice in Turkish National Education system.

Reflective thinking is a way of thinking that searches for the reasons of believing, instead of believing in something; and necessitates asking questions. Dewey (1957) expressed reflective thinking as an active, consistent and careful way of thinking. According to Taggard and Wilson (1998), reflective thinking is a logical and information-based decision making process which involves the evaluation of the results in the issues related to education (Duban and Yelken, 2010). A teacher with reflective thinking can have more accurate approaches and approach the situations in a critical way while conveying the information to students and analyzing the situations he/she faces. Reflective thinking is both related to critical thinking and contains a theoretical critical level within (Semerci, 2007). Reflective thinking aims at reflection. In our country, reflective thinking has been determined as one of the general competence fields for teachers within the concept of Basic Education Support Project (Ministry of Education, 2005). For teachers to have that field of competence, it is necessary that studies related to the development of knowledge and attitudes regarding to reflective thinking should be done in teacher training programs; because reflective thinking can be a determining factor in the training of effective teachers (Tok, 2008).

Henderson (1996) defines reflective thinking, which has an important place in education system, as a questioning method that features caring others' feelings and pays attention to constructivism in learning and as a whole of creative problem solving activities. Reflective learning has three learning levels. Taggard and Wilson (1998) mentioned that these levels were technical, contextual and dialectic level (Duban and Yelken, 2010).

According to Taggard and Wilson (1998), *technical level* is the major level of reflective thinking. Teachers with little experience generally do reflection in the technical level. Teachers who do reflection in the technical level focus on choosing appropriate courses and carrying out them, and on that the courses reach at certain objectives. Since the attainment of the skills and technical information are seen very important, the teacher has the awareness of the methods and the skill of carrying out a predetermined course. The second level of reflection is the *contextual level*. This level involves the exposure of what underlies assumptions, detailing and reflections regarding to performing an application in the class by using some strategies. Contextual reflection in the application level enables the teachers carrying out the application to evaluate their beliefs, the meaning and results of their acts. The third level reflection, which is the highest level, is *dialectic (critical)* reflection. This reflection involves the acts of questioning moral and ethical issues directly or indirectly by teaching applications. The teachers doing critical reflection design all the works regarding the process of planning and application of the teaching (Duban and Yelken, 2010).

Sahin (2011) stated in his study with Turkish preservice teachers that reflective thinking tendencies of preservice teachers who are in the fourth grade at the university are higher than those of the ones who are in the first grade, and that gender variance has no effect upon the tendency of reflective thinking. In Karadag(2010)'s study, while there is no meaningful difference in social sciences teachers' reflective thinking



levels in terms of occupational seniority and dwelling unit (province, county, village) where they are working; according to the variance of occupational seniority, reflective thinking tendency has been found higher among the teachers with 11-15 years of occupational seniority.

It is seen in the literature that reflective thinking tendency levels of preservice teachers attending various teaching programs and teachers who have already started their career have been analyzed in quantitative and qualitative dimensions. In this study, it is aimed to determine whether reflective thinking tendencies of preservice teachers attending a faculty of education differ or not, according to the variables of gender, parents' level of education, number of siblings, graduated high school, attended undergraduate program and grade. By this means, it is aimed to analyze the effects of different programs in Faculties of Education and other variables upon preservice teachers' reflective thinking tendencies comparatively, and to examine the causes of similar and different results. It is thought that the results of the study will contribute to the establishment of education programs for developing preservice teachers' reflective thinking skills.

METHOD

The Model, Population and Sample of the Study

In this research, survey (descriptive-survey) model was used. Survey model aims to describe the existing situation as it stands in the past or currently (Karasar, 2005). This research was conducted in one state university education faculty with 449 preservice teachers (302 female, 147 male) in İstanbul. Non-random sampling has been used in this study.

Data Collection Tools

1) In the study, Reflective Thinking Tendency Scale for Teachers and Preservice Teachers (YANDE) which was developed by Semerci (2007) was used. The scale was developed by applying upon 599 subjects. According to the results of factor analysis, KMO value of the YANDE scale is 0.909 and the Bartlett test value is 6811,461 (Sd: 595, p<0.05). In the scale of 35 items, there exist 7 sub-dimensions (Continuous and purposeful thinking, open-mindedness, inquiring and effective teaching, teaching responsibility and being scientific, being inquisitor, prescient and frank, the view of the occupation). In the scale, five degrees score interval has been given ranging from "strongly agree" to "strongly disagree", the variance is 53.268 and reliability co-efficient is 0.908 (Meral and Semerci, 2009).

For this study, Cronbach alpha reliability coefficient of the scale has been calculated as 0,743.

2) As another data collection tool, "Demographic information survey" has been used in the study. Demographic information survey which was developed by the researchers following this study comprises of the questions which consist of the items of gender, grow-up place, father's level of education, mother's level of education, number of siblings, the type of graduated high school, the type of attended program and class level.

Data Analysis

In data analysis, SPSS (Statistical Package For The Social Sciences) packet program was used; and in the analysis of the data which was collected in accordance with the purpose of the study, "independent group t test", "variance analysis" and as one of the post-hoc techniques, "Tukey test" were used.

FINDINGS

In this study, reflective thinking tendencies of preservice teachers who attend seven different types of programs have been analyzed. In the study, it has been primarily observed whether preservice teachers' reflective thinking tendencies differ according to the programs they are attending in the Faculty of Education.



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Table 1: The results of the one way variance analysis (ANOVA) which was done with the purpose of determining whether Reflective Thinking Tendency Scale Points of preservice teachers differ according to the program of class they are attending.

	Sum of Squares	df	Mean square	F	Sig.
Between Groups	983,930	6	163,988	,593	,736
Within Groups	121987,133	441	276,615		
Total	122971,063	447			

As a result of the one way variance analysis (ANOVA), it is seen that preservice teachers' reflective thinking tendencies do not differ according to the program they are attending. Though difference is not seen, it is seen that reflective thinking tendency points of the preservice teachers attending CEIT and Social Sciences Teaching programs are higher even with a slight difference.

Table 2: The results of the one way variance analysis (ANOVA) which was done with the purpose of determining whether Reflective Thinking Tendency Scale Points of preservice teachers differ according to the type of class they are attending or not.

Sum of Squares	df	Mean square	F	Sig.
864,270	3	288,090	1,050	,370
122130,202	445	274,450		
122994,472	448			
	864,270	864,270 3 122130,202 445	864,270 3 288,090 122130,202 445 274,450	864,270 3 288,090 1,050 122130,202 445 274,450 1

In the table 2, as a result of the one way variance analysis (ANOVA) which was done with the purpose of determining Reflective Thinking Tendency Scale Points of preservice teachers according to type of class they are attending, it is seen that no meaningful difference was found in the level of [F (3-445)=1,050;p>,001] according to the variance of the class they are attending .

Tablo 3: The results of the one way variance analysis (ANOVA) which was done with the purpose of determining whether Reflective Thinking Tendency Scale Points of preservice teachers differ according to high schools types that they graduated.

	Sum of Squares	df	Mean square	F	Sig.
Between Groups	39,590	2	19,795	,072	,931
Within Groups	122954,883	446	275,684		
	,	_	-,		
Total	122994,472	448			

In the study, with the purpose of finding out whether the high school program that preservice teachers attended prior to their coming to the Faculty of Education effects their reflective thinking tendencies or not, their reflective thinking tendencies were analyzed according to high schools types; however, it was seen hereby that there were not any meaningful difference [F (2-446)=,072;p>,001].



Tablo 4: The results of the one way variance analysis (ANOVA) which was done with the purpose of determining whether Reflective Thinking Tendency Scale Points of preservice teachers differ according to the variance of their grow-up place.

	Sum of Squares	df	Mean square	F	Sig.
Between Groups	4761,274	3	1587,091	5,973	,001
Within Groups	118233,198	445	265,693		
Total	122994,472	448			
Total	122994,472	440			

In the table 4, as a result of the one way variance analysis (ANOVA) which was done with the purpose of determining Reflective Thinking Tendency Scale Points of preservice teachers according to the variance of their grow-up place, it is seen that meaningful difference was found in the level of [F (3-445)=5,973;p<,001] according to the variance of their grow-up place .

Table 5: The results of complementary post hoc test, which were used to calculate between which groups the meaningful difference that emerged as a result of the one way variance analysis.

Group	(J) Group	Mean Difference	Std. Error	Sig.
		(I-J)		
Village	Town	4,36324	3,44267	,584
	City	-5,81854	2,73154	,145
	Metropolis	-5,80760	2,51331	,097
Town	Village	-4,36324	3,44267	,584
	City	-10,18178	2,98227	,004
	Metropolis	[*] -0,17083 [*]	2,78377	,002
City	Village	5,81854	2,73154	,145
	Town	10,18178 [*]	2,98227	,004
	Metropolis	,01095	1,83267	1,000
Metropolis	Village	5,80760	2,51331	,097
	Town	10,17083 [*]	2,78377	,002
	City	-,01095	1,83267	1,000

In the table 5, the results of complementary post hoc test, which were used to calculate between which groups the meaningful difference that emerged as a result of the one way variance analysis is, are seen. As a result of this; in comparison of reflective thinking tendencies of the preservice teachers who grew up in a town and the ones who grew up in a city or a metropolis; it is seen that there is a meaningful difference (p<0.01 level) in favor of the ones who grew up in a city or a metropolis, and that there is no meaningful difference between the students who grew up in a village and the others.

Table 6: The results of the independent group t test which was applied with the aim of determining whether students' Reflective Thinking Tendency Scale Points of preservice teachers' differ according to the variance of gender.

	N	Mean	Std. Deviation	df	t	Sig.
Female	302	149,4735	15,53982	2,880	253,734	,004
Male	147	144,4626	18,09877			



When the table 6 is examined, as a result of the independent group t test which was applied with the aim of determining whether students' Reflective Thinking Tendency Scale Points differ according to the variance of gender, it is seen that there is a meaningful difference between female students (X=149,47) and male students (X=144,46) in favor of female students [t (2,880)=253,734; p<,001].

Though it is not given here since the results are not meaningful; in the study, it is been observed that whether parents' level of education and the number of siblings affect reflective thinking level or not. It is seen in the variance analysis results (ANOVA) that there are not meaningful differences in father education level [F (3-445)=1,724;p>,001], mother education level [F (4-443)=,955;p>,001] and the level of sibling number [F (4-444)=,097;p>,001].

CONCLUSION AND DISCUSSION

It has been seen in the study that preservice teachers' reflective thinking tendencies show meaningful differences according to the variance of their dwelling place prior to coming to the Faculty and gender. As for the variances of program type, graduated high school, attended class, parents' level of education and number of siblings; meaningful differences have not been found. In this section, evaluations regarding the results of the study and various suggestions are included.

In the study, it is seen that preservice teachers living in a city or a metropolis have more reflective thinking tendency than the ones living in towns, yet, the ones who grew up in a village do not show a meaningful difference. That's reason might be the fact that there is much stimulus diversity and that students face with more problem solving behaviors. Also, it might be thought that the advantage of communicating with more individuals with different personalities and cultures leads to this situation. Although any meaningful difference between the preservice teachers who grew up in a village and the other variances have not been found, it is seen that they have more points than the ones living in town. According to Massialas (1963), students' reflective thinking is not by chance or accidentally; on the contrary, teachers and students ought to mobilize all the tools and sources consciously and directly for reflective thinking (cited. Tarman and Acun, 2010). Even though the ones living in villages do not encounter technological stimulus as often as the ones living in cities and metropolises, it is thought that their being much closer to the nature and their endeavors together with the family in the struggle for life might contribute to their maturity earlier and accordingly to the development of reflective thinking skills. This finding shows parallelism with the literature above. Considering there are lots of natural sources for developing students' reflective thinking, it can be thought that development of students' reflective thinking tendencies is not a coincidence. In addition, primary school education is given in smaller schools and teachers pay more attention especially to successful students. This can be interpreted as that teachers might have been involved in more activities with them to develop reflective thinking.

When the literature is looked over, comparisons regarding gender may give different results. For instance; in **her** study done with a total of 89 teachers working in the Province of Hatay to determine whether there is difference among classroom teachers' and branch teachers' reflective thinking skills and the variances of graduated school type, seniority year and branch; Erguven (2011) reached the finding that teachers' reflective thinking skills do not differ according to gender, age, branch and seniority qualities. And Dolapcioglu (2007); in her study intended to assess the use level of classroom teachers' reflective thinking skills by classroom teachers and the purpose of determining whether teacher views differ according to gender, occupational seniority and graduated school type. In the study, the finding indicating that there is not a meaningful difference between reflective thinking using level and teachers' gender, occupational seniority and graduated school type was reached. In this study, in contrast to Erguven (2011) and Dolapcioglu (2007), females' and males' reflective thinking tendency shows a meaningful difference, which is in favor of females. The fact that females have a



higher reflective thinking tendency can be interpreted as that it might be a result of the fact that their motivation for empathizing, understanding others, teaching others is high. In their work called "The Effect of Pre-service Teacher Training Programs in the Training of Reflective Teachers", Wubels and Korthagen (1990) developed the ALACT Model which consists of five stages which are action, looking back on the action, awareness of the essential parts, trial and creating alternative methods of action. In the related work, activities such as role-play, game, discussion are included in reflective practices. It is stated that these kind of activities allows students to develop their empathic understanding, to express their feelings and to solve their cooperative study problems (Keskin and Demirel, 2008). Therefore, with more use of activities regarding reflective thinking in programs, it can be thought that male students' reflective thinking tendencies may increase. In the literature, it is seen that gender comparisons give different results generally in some other studies, too. For example, on the topic of success, it was determined in some studies done with primary school students that girls are more successful (Poyraz and the others) while in some others there is not a meaningful difference in terms of the gender variance (Ekizoglu and Tezer, 2007).

In this study, it is seen that preservice teachers' high school types prior to their faculty education do not make a meaningful difference in their reflective thinking tendencies. When the variance of graduated high school type is analyzed, the findings of this study support the findings of Erguven (2011) and Dolapcioglu's (2007) studies. Yorulmaz (2006) studied with 450 classroom teachers with the purpose of evaluating first level primary school classroom teachers' views and practices about reflective thinking. In the study, the teachers' views were collected with a questionnaire developed. The analysis results of the collected teacher views are summarized as: the classroom teachers expressed that they did not receive any in-service training related to reflective thinking; that activities for students' individual development are not paid attention because of crowded classrooms; that strategies for enriching students' thinking cannot be practiced sufficiently in classroom; and that teachers cannot avoid the effects of teacher-centered education. Moreover, the teachers expressed that they were having trouble with lots of practices from planning to evaluation in their practices related to reflective thinking. And in order to cope with these troubles, they proposed that the physical condition of the schools should reach modern standards, the curriculums should be prepared in a way to develop individual's reflective thinking, and the in-service training should be carried out effectively and continuingly. That preservice teachers' reflective thinking tendencies do not differ in this study according to the graduated high school types may result from the facts that the high schools in Turkey, similar to the findings of the studies above, have crowded classrooms; that teachers are unable to use activities related to reflective thinking professionally; and that teaching practices far away from constructivism are applied predominantly.

On the other hand, whichever high school type preservice teachers graduate from, the ones having very close points have the right to attend the Faculties of Education. So as to attain high scores in the exams, students go into private teaching institutions as well as high school education. Hence, in the formation of reflective thinking tendency, high school difference may not have been effective. In addition to that, there is not a difference in the assignment of teachers according to high school types in Turkey. Therefore, it can be discussed that high school variance do not affect students' thinking styles much because of an almost lack of teacher and curriculum differences, even though they receive education in different high schools.

In the study, it has been determined that parents' education level and number of siblings do not make a meaningful difference in reflective thinking tendencies. Whatever parents' education level and the number of siblings are, the fact that the ones who pass an elimination examination become preservice teachers can be shown as the reason of this situation. Moreover, since the sample group can be accepted as an adult group considering their age, it can be said that the influence of their families in the shaping of their thinking tendencies has relatively decreased. It can be thought that different factors such as peer interaction, difference of interests, a change in environment and stimulus might have affected preservice teachers' reflective thinking tendencies. Kerimgil (2008) researched about the effect of a curriculum based on constructive learning in preservice teachers' reflective thinking and democratic behavior. In the related study, the observation result



that a curriculum based on constructive learning had positive and permanent effect in democratic attitudes in classroom was obtained; and while constructive curriculum was being applied, it was mentioned that extending the duration of the application could be more convenient for the development of reflective thinking. In this study, when assumed that children from families with similar qualities come to the faculty of education, considering the fact that the variance of parents' education level does not produce a meaningful difference results from that the study group is a selected group, the importance of creating a democratic environment in the family, showing respect to individual's ideas in this environment and expressing their ideas freely can be mentioned. In addition, parents' education level may affect the number of siblings and these effects may vary. In this study, though it was expected that there would be a difference in the reflective thinking tendencies of preservice teachers who attend different programs in the faculty, a meaningful difference was not seen. However, it is thought that some programs use reflective thinking activities more because of the curriculum they follow. Besides curriculum, it is seen that there is not a meaningful difference in classroom levels, either. This situation gives the notion that the education in the Faculty of Education cannot create the difference of reflective thinking. It is determined that reflective thinking activities have the effect of increasing academic success in Science course and attitudes towards the course (Tok, 2008), and it is thought that these kind of activities should be included in the curriculums more. In this way, the activities may contribute to the creation of a more effective education environment in different curriculums.

SUGGESTIONS

It is important to include activities that develop reflective thinking in the training of preservice teachers. Hence, reflective thinking activities should take parts more in the curriculums of the faculties of education.

Education environment should be organized with various scenarios regarding to the events that preservice teachers might encounter in their career. In this way, preservice teachers can show tendencies such as reflective thinking, making reflection and developing positive attitudes towards this type of thinking.

Also, diversifying the stimulus preservice teachers face in education environment and getting technological support when needed may increase preservice teachers' reflective thinking tendencies.

If similar studies are carried out with students in the same education level and with students from different classes but attending the same program, much more information may be obtained about the role of reflective thinking in the education system and students' tendencies for reflective thinking.

More different studies analyzing the effects of the socio-cultural environment where the students are in their reflective thinking can be done.

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A "LEARNING BY DOING" APPROACH IN THE DELIVERY OF STRUCTURAL ENGINEERING COURSES OF ARCHITECTURE

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ABSTRACT

A through understanding of the principles of structural system design is particularly important for architects practising in Turkey where over 90 percent of the population reside in seismically active regions and the structures built must withstand the damaging effects of severe earthquakes. However there are problems incorporating the classroom based structural engineering courses into architectural design curriculums which are largely centered on the architectural design studio. The students of architecture are accustomed to the "learning by doing" approach used in the design studio and have a hard time adjusting to the classroom delivery of structural engineering lectures which largely use mathematical abstraction to communicate concepts of physics. This paper presents the findings of a study conducted at the Faculty of Architecture of Istanbul Kultur University to investigate the use of a "learning by doing" approach at the Building Mechanics course to increase the motivation and the academic performance of students.

Key Words: Architectural Education, Building Mechanics Instruction, Learning by Doing.

INTRODUCTION

Structural system design is a complex process which involves the multidisciplinary collaboration of architects and structural engineers (Yazıcı and Erkan Yazıcı, 2012). In practice, architects start out by developing a conceptual design of the structure based on the client's demands, spatial constraints, building program, aesthetic concerns and various other factors. Afterwards, architects then pass the conceptual design to structural engineers and ask them to develop a structural system that will safely carry the loads acting on the structure. Usually architects suggest an idea for the structural system based on experience from "similar" design projects and designate the preferred locations and approximate dimensions of the structural system members on the architectural plans. Architects may also prefer to leave the design of the structural system entirely to structural engineers. In the first case, structural engineers examine the system suggested by the architect, design the structural members and connections according to structural design codes and communicate their structural design back to the architect. The problem with this approach is that it may lead to design fixation resulting in generic designs based on mental solution templates developed over years of experience. In the second case, structural engineers come up with a variety of structural system configurations while considering the formal and functional constraints shown on the architectural plans and communicate their design ideas back to the architect. Although, this may result in more efficient structural designs, this approach can increase the duration of the project development phase, particularly if the communication between the engineers and architects is weak. In any case, structural system design is an iterative process and



the duration of this process largely depend on the strength of the communication between the architects and engineers.

Architects require a thorough understanding of the principles of structural system design in order to communicate efficiently with structural engineers. This is particularly important for architects practising in Turkey where over 90 percent of the population reside in seismically active regions and structures must withstand the damaging effects of severe earthquakes. Therefore it is vital to provide a solid understanding of the fundamental concepts of mechanics, the mechanical properties of structural materials and other important concepts related to structural design at the undergraduate level of architectural education. Incorporation of the structural engineering courses into the curriculums of architectural design which are largely centered on the architectural design studio, is not an easy task. The students of architecture are accustomed to the "learning by doing" approach used in the design studio and have a hard time adjusting to the classroom delivery of structural engineering lectures which largely use mathematical abstraction to communicate concepts of physics. Hence, various studies have been conducted to find appropriate ways of conveying essential structural engineering knowledge to students of architecture (Erkan Yazıcı & Yazıcı, 2011), (Rodrigues, Rodrigues and Werner, 2008), (Schön, 1988), (Coskun, Aygün & Özgen, 1998).

This paper presents the findings of a study conducted at the Faculty of Architecture of Istanbul Kultur University to investigate the use of a "learning by doing" approach at the Building Mechanics course to increase the motivation and the academic performance of students.

EMPRICAL STUDY

The Building Mechanics course for the students of architecture at the Istanbul Kultur University is a condensed synthesis of the courses of statics and strength of materials. Statics and strength of materials courses are perhaps the most important courses in civil engineering curriculums and lay the theoritical foundations for a wide range of structural design courses. The students of civil engineering go through these classes in 3 semesters. The building mechanics course at the department of Architecture only covers the fundamentals of mechanics in the context of structural design. The statics component of this course focuses on developing a solid understanding of the behaviour of rigid bodies under forces and moments as well as the mechanical abstraction of the structures and structural loads. The strength of materials component of this course focuses on the behaviour of deformable bodies. The concepts of stress and strain, the mechanical properties of materials as well as the fundamentals of the design of beams, columns and and structural connections are covered within the scope of strength of materials.

Delivery of the building mechanics course cannot be and should not be expected to be identical to the delivery of the mechanics courses at civil engineering curriculums due to constraints on time and the differences in the objectives of the courses. However, students of this course should be have a basic understanding on the overall design of structural system components and be able to exchange their design ideas more efficiently with structural engineers.

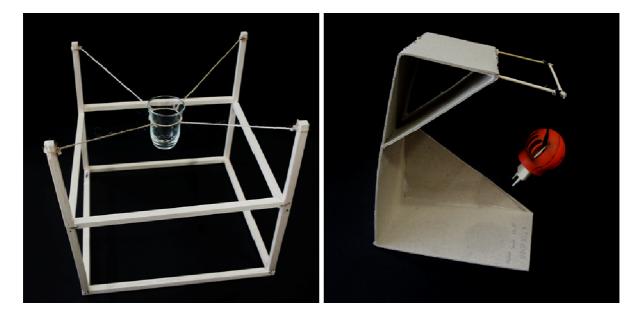
An emprical study has been conducted with 57 freshman students of the building mechanics course at the Department of Architecture of Istanbul Kültür University in order to increase their motivation towards the course and to facilitate the understanding of the theoretical concepts of mechanics. The study presented here has been initiated after the students were introduced to the concepts of forces, moments and equilibrium.

The students who have participated to the study were given the task of holding an object with a mass of at least 150 grams in the air without a direct support from underneath. Students were allowed to use the materials of balsa wood, string and cardboard, which are commonly used in architectural models. The largest dimension of the models was limited to 50 centimeters. Students were asked to consider the aesthetic aspects



just as well as the structural aspects of their design. The instructions were kept as vague as possible in order to avoid the effects of design fixation (Erkan Yazıcı, 2011) through examples or guidance. Students were given two weeks to turn in their models along with a brief written report describing the difficulties they have encountered in assembling the parts and making the model stand up. Examples of the models created by the students are presented in Figure 1.

Brief interviews with a limited number of students were conducted on the working principles of their models at the end of the study. Students were given information on the weaknesses and the strengths of the sytems they have come up with during the course of these interviews. Throughout the course of the discussions, students were encouraged to explain the working principles of their structural models as well as the possible reasons for the difficulties they have referenced in their written reports by using the concepts of forces, moments and equilibrium. Feedbacks from the interviews indicate that creating simple physical models and orally communicating their design process had a positive impact on the motivation of the students towards the course.





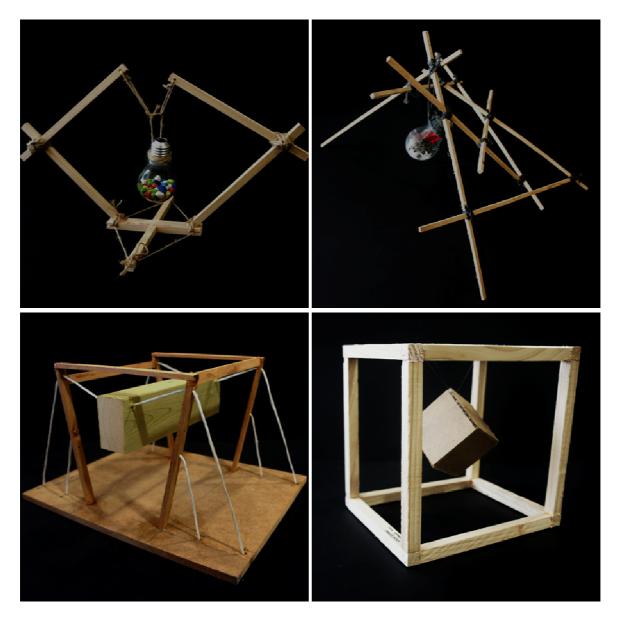


Figure 1: Examples of the Structural Systems Developed by the Students

CONCLUSIONS

Students of architecture are introduced to working within a design studio, starting from the first year of architectural education. The design studio is a unique learning environment which is built on the principle of 'learning by doing' where all the architectural knowledge obtained is put into practice. However, the integration of architectural knowledge obtained from classroom teaching environments, particularly the theoratical knowledge from structural engineering, is a very challenging task. One of the challenges is due to students' difficulties in switching back and forth between different modes of instruction (Erkan Yazıcı & Yazıcı, 2012). Design studio is the core of architectural design education and is based on the principle of "learning by



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doing" whereas structural engineering courses such as structural mechanics is based on the use of mathematical abstraction to communicate concepts of physics in a classroom environment.

First and foremost, a classroom based treatment of the concepts of mechanics through mathematical abstraction is absolutely essential for the delivery of the key concepts of this course. However, making use of a "learning by doing" approach such as the one described in this study to supplement the classroom teaching with active experimentation can facilitate the integration of the concepts of mechanics to design studio work.

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ACADEMIC ESSAY WRITING IN TURKISH HIGHER EDUCATION SYSTEM: CRITICAL THINKING OR READY MADE STRUCTURE?

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ABSTRACT

This study analyses the causes and the fundamental problems students in Turkey face when producing scientific research papers focusing on measurement and assessment methods, curriculum design, English language and academic writing skills of students. The study is based on a questionnaire consisting of 12 questions prepared in 2012. It was designed to measure the general research skills of 100 undergraduate students from different programs at one of the universities in Turkey. Results showed that academic essay writing is as difficult to university students as it is to academics. The researcher believes that this study can emphasize why academic writing is an issue for scholars and university students in Turkey.

Key Words: Research methods, curriculum design, measurement and assessment methods.

"Most of today's scientists did not have a chance to take a formal course in scientific writing. As graduate students, they learned to imitate the style and approach of their professors and previous authors. Some scientists became good writers anyway. Many, however, learned only to imitate the writing of the authors before them – with all its defects – thus establishing a system of error in perpetuity." (Robert A. Day & Barbara Gastel, 2011, preface section xvi)

INTRODUCTION

Writing a scientific research paper requires students to conduct a critical and thoughtful investigation on their specific topic. Students need to get involved in reading, thinking and presenting their own views as well as research findings (Öz, March 2000, p.1). So, the assessment will concentrate on one significant question: Why scientific research papers cannot be produced by the Turkish higher education system? Under the light of this study, the factors we concentrate on can be divided into four sub-topics. These are basically measurement and assessment methods, curriculum design, English language proficiency of students and how familiar students are to academic essay writing.

METHOD

This student based study was conducted at one of the universities in Turkey in fall semester of the 2012–2013 academic year. The questionnaire asked participants to evaluate their knowledge on scientific research methods. The population included 50 undergraduate students from the Faculty of Social Sciences and the other 50 students from the Faculty of Arts and Sciences. Participants were first, second and fourth year students. The researcher administrated the questionnaires during a regular lesson. They were instructed not to write their names on the surveys.



MEASURES

The questionnaire was designed to explore how familiar the students are to research based assignments. The researcher wanted to analyse what actually causes the high failure rate amongst the students. Findings showed that there are particularly four significant points which cause the high failure: measurement and assessment methods, curriculum design, English language and academic essay writing skills of the students. The participants were asked to respond 12 questions specifically on these points.

RESULTS

Measurement and Assessment Methods in Secondary and Higher Education

Turkish universities - which have shown great improvement have been succeeding to get better recognition among other institutions. On the other hand, due to a great influence of globalisation on Turkish education, new strategies should be taken into consideration. According to Küçük & Çepni (December, 2004), teachers are expected to use assessment to determine which student reaches skills and knowledge level as well as why students fail. Short answer and multiple choice tests are still the common methods employed by teachers. However, modern teaching and assessment methods are the most desirable ones among universities and the National Ministry of Education (p:13). Both authors think that even student centered teaching method is not a tangible indicator to determine their success rate because students are taking an active role only while writing an essay or during their oral examinations (p:13). Most significant measure, both authors believe, should indicate how students join others in research, share ideas and take care in classroom activities (p:13, 14). Results in table 1 support Küçük & Çepni's thoughts. It showed that 98 percent of our participants prefer short answer or multiple choice tests rather than long answer ones. Only 2 percent of these students prefer long answer tests. Interestingly, nobody prefers project or essay type assignments. It is probably the most common case at universities in Turkey.

Table 1:

What type of questions would you prefer in your examinations? 100	Total number of Participants:	
Multiple choice questions	56	
Short answer questions	42	
Long answer questions	2	
Projects	0	

Furthermore, another author Tokay Gedikoğlu (June 2005) points out that memorising lecture notes is common among students. Gedikoglu believes that this study method is not very beneficial for students because they may forget what they have memorised in short run. Hence, the author thinks that the educational system should teach students less but useful knowledge rather than more but unnecessary points. The aim should be teaching how to find source and use it in regards to their needs (p:75). Whereas, 74 percent of our participants only use their main texts rather than scientific journals and other publications in their assignments. Internet sources are not common preference amongst the students so only 20 percent of these respondents use Internet sources. Interestingly, nobody uses scientific journals. The full list of results can be seen in table 2:



Table 2:

What sources do you usually use for your assignments? 100	Total number of participants:
Main text	74
Internet sources	20
Encyclopedia	6
Scientific journals	0

This study also showed that, 42 percent of the students agree that the limited length of time spent on midterm and final examinations is the main problem and 40 percent think there are many lecture notes to study before the examinations. 13 percent of these believe there is not enough source to use before their examinations.

Table 3:

What is the most significant problem do you usually have during the examination period? 100	Total:
Limited time	42
Overload study notes	40
Not enough sources	13
No problem before examinations	5

Parallel to Gedikoglu's point of view, the number of students who study their lecture notes or summaries is high by 40 percent. On the contrary, 22 percent of our respondents study certain points highlighted by lecturers. Only 6 percent choose their main texts instead of lecture notes or other publications. The interesting point is that there are some students attempting to memorise their notes and their rate is 32 percent. The results are in table 4 below:

Table 4:

What technique(s) do you apply while studying for mid-term and final examinations? 100	Total:
Studying lecture notes or summaries	40
Memorising lecture notes	32
Studying only certain points	22
Studying the main text	6

Curriculum Design at Tertiary Level

Since 1998, the Council of Higher Education in Turkey has been designing standardised curriculum for all faculties of education in the country (Guven, 2008, p.11). The same condition applies for universities in the Turkish Republic of Northern Cyprus as well. Influence of the Council on universities to design their full curriculum according to their needs is vast. Based on the official website of the European University of Lefke, there is only one course called *'Scientific Research Methods'* offered by the English Language Teaching Department in their second year curriculum as shown in table 5.



Table 5: ELT Curriculum (Second year, second semester, 2012)

ELT272	English Literature II	(3,0)3
ELT274	Linguistics II	(3,0)3
ELT276	Approaches to ELT II	(3,0)3
ELT278	Language Acquisition	(3,0)3
<u>GCU272</u>	Scientific Research Methods	(2,0)2
EDU272	Methodology I	(2,2)3
EDU274	Teaching Technology and Materials Design	(2,2)3

According to this study, students are also not encouraged to make frequent use of library and to give true commitment regarding their assignments. The rate for those who donot frequently use the library during their studies is 68 percent. On the other hand, the participants who frequently use the library are 32 percent of the total number. The results are in the 6th table below:

Table 6:

Can you frequently use your library?	Total number of participants: 100
Yes	32
No	52
Sometimes	16

Furthermore, the rate for those who often use library materials more than five times a week is only 5 percent. Nearly half of the participants by 48 percent (see table 7) uses various sources in the library less than three times a week. 43 percent of them even do not use any material in the library.

Table 7:

How often do you use library materials a week? 100	Total number of participants:	
None	43	
0-3 times	48	
3-5 times	4	
More than 5 times	5	

Additionally, they are incapable of using library catalogue and indexes by 90 percent.

Table 8:

Can you use the library catalogue and indexes in an effective way?	Total number of participants: 100
No	90
Yes	10

English Language Skills of University Students

English is one of the global languages many journals are written and published. In their journal article titled *Turkey's English Deficit*, Koru and Akesson (December, 2011) provide a detailed discussion on why, what and how Turkey's poor English proficiency level is part of a broader education problem. One of the factors both



research associates argue is that English language instructions in top and mid-ranking countries commence in the first grade. In contrast, students receive language instructions in the fourth grade in Turkey (p:3). Another point of the discussion in Koru and Akesson's paper is the language instructions in the fifth and sixth grade. Those instructions were fully postponed to be held between the eighth and ninth grade in the 1990s. In the year 2005, those classes were withdrawn. Preparatory year is only offered for those who want to attend university programs but students, then, turn to the age 18 (p:3). Both associates, therefore, believe that it is not possible to get English language skills in our education system. The majority of the population cannot afford to attend private schools or tutorial classes (p:3). As can be seen in table 9, our research findings support Koru & Akesson's arguement. 97 percent of the participants are below the proficiency level. 15 percent of them have even no English. Only 3 percent of these think they are advanced level students. This indication gives us a clue on why university students are not willing to contribute in scientific projects.

Table 9:

What is your English language proficiency level?	Total number of participants: 100
None	15
Beginner	40
Intermediate	42
Advance	3

In addition, majority of this group by 85 percent cannot use print or visual materials published in English. Students who always use materials in English covers 1 percent of the total amount as indicated in table 10.

Table 10:

Can you use materials published in English for your assignments?	Total number of participants: 100
No	85
Sometimes	14
Yes	1

Academic Essay Writing

Academic essay writing requires well organised research as mentioned earlier in this paper. The rationale for studying on academic essay writing is best given by Vogan & Plotnick. Both authors' analysis is very crucial bringing an interesting approach why students especially struggle during their undergraduate study. What Vogan & Plotnick consider is that students should forget some basic rules they have learnt in high school because these rules will limit their freedom. As a result of following these rules, both authors emphasize, students may lead to repeat awkward expressions (p:1). The authors, therefore, underline the differences between those institutions from philosophical aspect.

One of the differences unveiled by Vogan & Plotnick is the ready-made structure to work with in high school. In contrast, university education provides freedom to come up with own way of structuring arguments so the critical thinking (p:2). Their arguments are convincing because according to Varaki (2006), critical thinking is basically the process of examining, analyzing, questioning and evaluating information from all kinds of survey results, theories or scientific research reports on a specific topic (p:178). Hence, it is quite an essential issue to find some of the reasons why students are not very productive in essay writing without knowing basic principles of scientific research in Turkey. Even though most students know about classical essay types, our astonishing results demonstrate that all students who responded to our questionnaires do not know how to apply scientific research methods in their assignments and oral presentations. Within this frame, our findings showed that all our participants are not capable in the use of research methods and they do not know the



significant importance of some terms such as '*plagiarism*', '*quotation*' and '*paraphrasing*'. It has become clear that none of our respondents has produced a research paper through the implementation of basic research principles before. Results are shown in table 11 and 12:

Table 11:

Have you ever taken a course on scientific research methods?	Total number of participants: 100
Yes	0
No	100

Table 12:

Have you ever written a research paper before?	Total number of participants: 100
Never	100
Once	0
Few times	0

RECOMMENDATIONS

In their first year, students should be informed about the importance and benefits of research techniques during their studies.

Practice seems an important factor to develop their skills. Students should be encouraged to write research based essays rather than using classical examination styles to measure their success rate.

Curriculums should be designed according to current needs at universities.

Special seminars can be organised for students from other faculties to improve or update their skills in research techniques as well.

Actual research papers might be used as sample writing by academics so students can be more familiar to journal articles.

CONCLUSION

This research clearly illustrates that scientific research techniques in further education need to be of greatest concern for teachers and academics. Despite the traditional form of measurement and assessment methods used in teaching and learning, a valid formula on a large extent would be a key for those who have similar responses. Although it takes a considerable period of time to develop new strategies in the Turkish higher education system and designing process of new curriculum depends on the Council of Higher Education in Turkey since 1998, this student based research clearly exposes the importance of more research based assignments use by academics in order for students to practice more at university. It may increase their productivity and work practices. Gaining research skills will assist them to increase their critical thinking in their related field as well.



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THE EXAMINATION OF PSYCHOMETRIC PROPERTIES OF KIDSCREEN-SHORT VERSION ON CHILDREN WITH AUTISM IN TURKEY^{1,2}

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ABSTRACT

Determining health related quality of life is crucial issue to conduct holistic implications toward children with autism. Unless any studies that do not examine health related quality of life features of these children could not be achieve about planning and practices. The aim of the study is to the examination of psychometric properties of KIDSCREEN Health-Related Quality of Life Questionnaire Short Version (or Kidscreen-27) on children with autism in Turkey. This descriptive quantitative research was conducted with 349 participants. After we provided linguistic equivalence, we collected data in the base of parent proxy report instead of their children with autism. The KIDSCREEN-Short Version that aims to put forward children's health related quality of life consist of originally 27 question and five sub domain which are physical activities and health (5 items), general mood and your child's feeling (7 items), family and your child's free time (7 items), friends (4 items), school and learning (4 items). After calculation of the item total correlation, we eleminated 3 items that have fewer than r_{ix} =.20 factors load and 24 items remained. Cronbach's alpha internal consistency reliability (α =.88) and split-half reliability are high (Spearman Brown rho.=.88**), item total correlations are acceptable except three items and the differences between %27 upper-lower groups were significant. According to construct validity analysis, the scale has an acceptable goodness of fit ($x^2/df=3.1$, RMSEA=.08, NFI=.90, CFI=.93). Analysis results show us that KINDSCREEN-Short Version can be used as a valid and reliable assessment tool to determine the health related quality of life for children with autism in Turkey.

Key Words: Confirmatory factor analysis, health related quality of life, KINDSCREEN-Short Version, reliability, validity.

INTRODUCTION

In recent years, there has been growing body of research interest on Health-Related Quality of Life (HRQoL) among children and it has been examining especially pediatric HRQoL (Matza et al., 2004; Mohler-Kuo & Dey, 2012). The measurement of HRQoL which is reflected a multidimensional concept covering the social, physical and psychological domains of health has been increasing in the assessment of pediatrics and adolescent care (Patrick & Chiang, 2000; Rajmil et al., 2004; Sieberer et al., 2006). Planning and assessing the effectiveness of health care or other interventions depend on a better understanding of perceptions of children on HRQoL

¹ The scale was applied to Turkish sample with permission of the KIDSCREEN Group (Project Coordination Prof. Dr. Ulrike Ravens-Sieberer MPH, University Clinic Hamburg Eppendorf, Center for Obstetrics and Pediatrics, Department of Psychosomatics in Children and Adolescents, Building W29 (Erikahaus), Martinistr. 52, 20246 Hamburg, Germany).

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(Mohler-Kuo & Dey, 2012). In order to provide this, children should be assessed within their social and psychological contexts that include family, peers, classroom, and community (Cox & Paley, 1997). These contexts might contribute assessment and analysis of pediatric health outcomes and HRQoL (Matza et al., 2004).

Measuring the HRQoL is that attempts to see all aspects of overall quality of life regarding general health which has been defined as physical and mental components (McHorney, 1999). HRQoL is a popular measurable outcome that evaluates appropriate and adequate health care service needs and intervention outcomes (Idler & Benyamini, 1997) as well as is a scientific demonstration of the impact of quality of life on health (Zhang et al., 2008).

HRQOL is based on the combination of the components of health and QOL. Health is a state of complete physical, mental, and social wellbeing, and not merely the absence of disease or infirmity (WHO, 1946). Health also includes person's feels, psychologically and physically conditions, interactions with other persons and daily functions. This defines perceived health that is known as "health-related quality of life-HRQoL (Mohler-Kuo & Dey, 2012). On the other hand, Quality of Life is defined as "individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs and their relationship to salient features of their environment" (WHO, 1997, page 1). The five domains were reported of QOL: (1) physical well being that includes health, fitness, mobility, and physical activity, (2) material well being that consists of finance or income, quality of the environment in which the individual lives, possessions, meals or food, transport, privacy, security, and stability, (3) social well being that addresses relationship within family, with relatives, and with friends, and community involvement, (4) development and activity that covers competence, choice, work, leisure, housework, education, and productivity, and (5) emotional well being that reflects positive effect, status, satisfaction, fulfillment, religious faith, and self-esteem (Felce & Perry, 1995).

Despite of the fact that different environmental, economic, political, and spiritual factors could affect an individual's QOL, these factors cannot be addressed directly by healthcare interventions, and are not associated with HRQoL (Khanna, 2010). So researchers need assessment tools different from QOL scales to assess the HRQoL. There are some assessment tools to measure HRQoL, particularly in pediatric area. Some of these scales are; Pediatric Quality of Life Questionnaire (PedsQL) (Varni et al., 19990), Child Health Questionnaire (CHQ) (Landgraf et al., 1999), Child Quality of Life Questionnaire (CQOL) (Graham et al., 1997), The KIDSCREEN-52 (Ravens-Sieberer et al., 2006) and KIDSCREEN Health-Related Quality of Life Questionnaire Short Version (KIDSCREEN-27) (Ravens-Sieberer et al., 2007).

We could not meet any research on the evaluation tools for determining health-related quality of life covariates of children with autism in Turkey. The aim of this research is to determine the psychometric properties of KIDSCREEN Health-Related Quality of Life Questionnaire Short Version (Ravens-Sieberer et al., 2007) on children with autism over the Turkish sample.

METHOD

Research Design and Group

We conducted this study as a descriptive quantitative research (Fraenkel & Wallen, 2006). We collected data with school sampling and mail administration in this study. The research group consists of 349 children with autism from 10 Autistic Children Education Center providing service in Turkey. Their mothers responded the questions instead of children within the scope of parent-proxy report. Age average of children with autism was 9.50 (sd=3.41) (27 missing values); 270 of children were male and 73 were female (6 missing values); 61 of



children were mild, 139 of children were moderate, 134 of children were severe and 8 of children very severe in term of severity of disability (7 missing values).

Process

Before applying the KIDSCREEN Health-Related Quality of Life Questionnaire Short Version to the Turkish sample, we obtained written permission from Ulrike Ravens-Sieberer on behalf of KIDSCREEN Group (Prof. Dr. MPH, Project Coordinator, University Clinic Hamburg Eppendorf, Hamburg, Germany).

Under the scope of adaptation of KINDSCREEN-Short Version into Turkish, it was translated into Turkish by two professionals and an English teacher and three independent translations were turned into a single Turkish form. The Turkish form and original English form were compared by a professional from the English Teaching Department and linguistic equivalence was provided (see Appendix 1).

We collected data of KINDSCREEN-Short Version in three months. Analyses were performed using the PASW Statistics 18.0 (SPSS Statistics) and LISREL 8.71 programs.

Instruments

KIDSCREEN-Short Version

Originally KIDSCREEN Health-Related Quality of Life Questionnaire Short Version (as called KIDSCREEN-Short Version or KIDSCREEN-27) was derived from the longer form of KIDSCREEN-52 and was administered to young people aged 8–18 years (Ravens-Sieberer et al., 2006). KIDSCREEN-Short Version questionnaire that is used to measure health-related quality of life of children and young people consists of 27 items in which 5 dimensions: First domain is Physical Well-Being that puts forward the level of the child's or adolescent's physical activity, energy and fitness within 5 items; second is Psychological Well-Being includes 7 items to assess positive emotions, satisfaction with life, and feeling emotionally balanced; third is Autonomy & Parent switch 7 items on evaluating relationships with parents, the atmosphere at home, feelings of having enough age appropriate freedom, and degree of satisfaction with financial resources; fourth is Peer & Social Support examines the nature of the respondent' relationships with other children/adolescents within 4 items; and last is School Environment with 4items measures the child's/adolescent's perceptions of his/her cognitive capacity, learning and concentration, and their feelings about school. Structural and cross-cultural validity of KIDSCREEN-Short Version were tested with results from 13 European countries: Austria (AT), Czech Republic (CZ), France (FR), Germany (DE), Greece (EL), Hungary (HU), Ireland (IE), Poland (PL), Spain (ES), Sweden (SE), Switzerland (CH), the Netherlands (NL), and the United Kingdom (UK) (Robitail et al., 2007).

FINDINGS AND RESULTS

Reliability

Internal Consistency Reliability and Split-Half Reliability

Cronbach's alpha (α) internal consistency coefficients of KIDSCREEN- Short Version were calculated as .88 for whole of the scale, .76 for Physical Activities and Health, .75 for General Mood and Your Child's Feeling, .74 for Family and Your Child's Free Time and .80 for School and Learning. A reliability of at least 0.70 is recommended (Nunnally & Bernstein, 1994). Hence, we can say that the scale has acceptable internal consistency (see Table 1).

We analyzed the correlation between odd items (1,3,5,7,13,15,17,19,21,23,25,27=12 items), even items (2,4,6,8,12,14,16,18,20,22,24,26=12 items) to demonstrate the split-half reliability. Split-life reliability of KIDSCREEN-Short Version was .88** (p<.01) according to Spearman Brown rho. Findings show that the split-half reliability of KIDSCREEN- Short Version was high (see Table 1).



Table 1: Internal Consistency Rel	liability and Split-Half Reliability	Results of KIDSCREEN-Short Version
(N=349)		

Variables	Cronbach alpha (α)	Split-half reliability	
	internal consistency	Spearman Brown rho.	
KIDSCREEN-Short Version_total	.88	.88**	
PAH_sub domain	.76	-	
GMF_ sub domain	.75	-	
FFT_ sub domain	.74	-	
F_ sub domain	.88	-	
SL_sub domain	.80	-	

** p< .01

 KIDSCREEN-HRQoL=KIDSCREEN-Short Version Health Related Quality of Life; PAH=Physical Activities and Health subdomain; GMF=General Mood and Your Child's Feeling subdomain; FFT=Family and Your Child's Free Time subdomain; F=Friends subdomain; SL=School and Learning subdomain

Item Total Correlation Calculation and Significance of Differences Between 27% Upper-Lower Group We observed that item total correlations of the KIDSCREEN-Short Version range between .28 and .61 with applied Pearson product-moment correlation coefficient. Accordingly, it is seen that item total correlations of KIDSCREEN-Short Version were acceptable (see Table 2).

The *t*-test was used in comparing item scores of %27 upper-lower groups determined according to total score of KIDSCREEN-Short Version. 27% upper-lower t(sd=187) values of KIDSCREEN-Short Version vary between - 3.69 and -18.03 and the difference between groups (p<.001) was significant (see Table 2).

Validity

Structure Validity with Confirmatory Factor Analysis

We applied "Confirmatory Factor Analysis (CFA)" for structure validity of KIDSCREEN-Short Version. The Critical N value which includes minimum number of participants for CFA was calculated as (CN)=136.93 in the research. Accordingly, it can be stated that the study group consisting of 349 participants was suitable for CFA. We used Root Mean Square Error of Approximation (RMSEA), Normed Fit Index (NFI), and Comparative Fit Index (CFI) to determine the sufficiency of the examined model (Hu & Bentler, 1999; Jöreskog & Sörbom, 1993; Şimşek, 2007).



Table 2: Item Total Correlations and Significance of Differences Between 27% Upper-Lower Group of KIDSCREEN-Short Version (N=349)

Items	r _{jx}	t
Physical Activities and Health (PAH)		
1. In general, how would your childrate her/his health?	.34	-7.01***
2. Has your child felt physically fit andwell?	.49	-9.93***
3. Has your child been physically active(e.g. running, climbing, biking)?	.42	-9.78***
4. Has your child been able to run well?	.30	-6.46***
5. Has your child felt full of energy?	.44	-9.31***
General Mood and Your Child's Feeling (GMF)		
6. Has your child felt that life wasenjoyable?	.60	-12.54***
7. Has your child been in a good mood?	.50	-9.98***
8. Has your child had fun?	.51	-10.28***
9. <u>Has your child felt sad?</u>	05	-
10. Has your child felt so bad that he/she didn't want to do anything?	04	-
11. <u>Has your child felt lonely?</u>	10	-
12. Has your child been happy with theway he/she is?	.44	-9.84***
Family and Your Child's Free Time (FFT)		
13. Has your child had enough time for him/herself?	.28	-3.69***
14. Has your child been able to do the things that he/she wants to do in his/her free	.47	-10.43***
time?		
15. Has your child felt that his/her parent(s) had enough time for him/her?	.37	-6.82***
16. Has your child felt that his/her parent(s) treated him/her fairly?	.40	-7.41***
17. Has your child been able to talk to his/her parent(s) when he/she wanted to?	.56	-18.03***
18. Has your child had enough money to do the same things as his/her friends?	.46	-11.28***
19. Has your child felt that he/she had enough money for his/her expenses?	.44	-11.16***
Friends (F)		
20. Has your child spent time with his/her friends?	.56	-12.96***
21. Has your child had fun with his/her friends?	.54	-12.44***
22. Have your child and his/her friends helped each other?	.61	-14.98***
23. Has your child been able to rely on his/her friends?	.56	-12.68***
School and Learning (SL)		
24. Has your child been happy at school?	.45	-8.73***
25. Has your child got on well at school?	.50	-10.40***
26. Has your child been able to pay attention?	.53	-12.19***
27. Has your child got along well with his/her teachers?	.43	-7.58***
Scale points: excellent 1-2–3–4–5 poor for question 1; not at all 1-2–3–4–5 extremely for		
24, 25; never 1-2-3-4-5 always for questions 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 2	19, 20, 2	21, 22, 23.

*** p< .001

CFA results shown that Chi-Square value (x^2 =758.07, N=349, df=242, p=0.000) was significant. In the research, it is observed that the model of KIDSCREEN-Short Version had an acceptable fit goodness (fit=3.1) according to x^2 /df=fit (758.07/242=3.1) calculation. Fit index values of the model based on CFA were calculated as RMSEA=.08, NFI=.90, and CFI=.93. Fix index values indicate that the model was fit and it achieved an acceptable



fit with the data. It was seen that factor loads for the model vary between .32 and .86 and it is greater than .40 except two questions (see Figure 1).

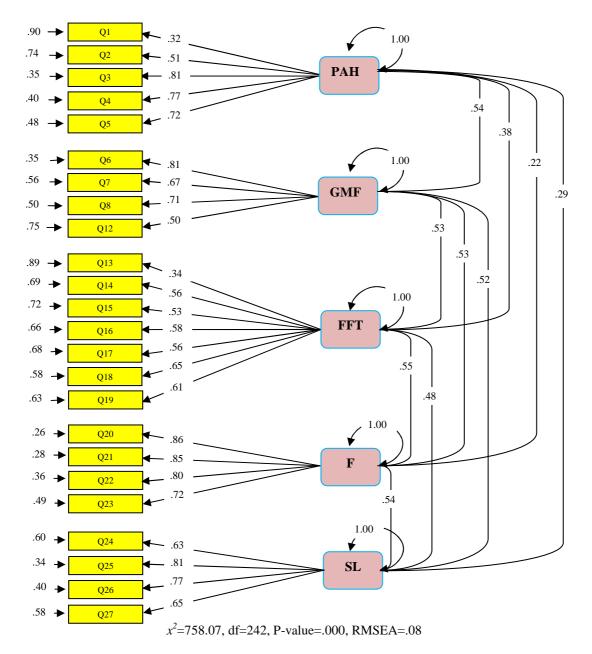


Figure 1 CFA Results of KIDSCREEN-Short Version HRQoL (path diagram)



CONCLUSIONS AND RECOMMENDATIONS

In the research, we aimed to examine the psychometric properties of KIDSCREEN Health-Related Quality of Life Questionnaire Short Version. Under reliability calculations of the scale, it was seen that total and sub-domains internal consistency reliability values were acceptable and split-half reliability of scale was high. We determined that item total correlations of the scale were good except for the 3 eliminated items (items 9-10-11). Also the differences between 27% upper-lower item averages of scale were significant. According to CFA results, it was seen that fit values of suggested model of KIDSCREEN-Short Version are within acceptable fit index values range and the model of the scale has an acceptable fit.

These findings of the research show that KIDSCREEN Health-Related Quality of Life Questionnaire Short Version can be used as a valid and reliable assessment tool to determine the health-related quality of life of children with autism in Turkey. Since not being able to examine test-rest reliability and concurrent validity were a restriction, it is beneficial to include related reliability and validity calculations in the further researches.

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The KIDSCREEN Health-Related Quality of Life Questionnaire Short Version was applied to Turkish sample with permission of the KIDSCREEN Group (Project Coordination Prof. Dr. Ulrike Ravens-Sieberer MPH, University Clinic Hamburg Eppendorf, Center for Obstetrics and Pediatrics, Department of Psychosomatics in Children and Adolescents, Building W29 (Erikahaus), Martinistr. 52, 20246 Hamburg, Germany).

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A NEW COURSE DESIGN ENHANCED WITH ANDRAGOGICAL PRINCIPLES^{*}

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ABSTRACT

Traditionally in pedagogy, children are learning dependently, learning activities are arranged by teachers, information is transferred from teacher to student and teachers are the only source of authority. Therefore, pedagogy needs some new supplementary approaches. Children, nowadays, reach independent learner level at an earlier stage. At this point, and ragogical principles can offer some new solutions. Although it is assumed that and ragogy deals with adults, actually the main point in and ragogical learning process is the consciousness level of learners but not their ages. Thus, and ragogy can be implemented to every age level.

Researches show that adults wait for their teachers' approval during the learning processes. They are conditioned doing so because of their pedagogical formal education experiences. In a pedagogical environment, students' sense of wonder is oppressed under the situations where information is transferred from teacher to student without questioning and criticizing. In order to eliminate these shortcomings in pedagogy, andragogy proposes independent and self-directed learners with its six principles.

In formal education enhanced with andragogical principles, children learn issues by relating with their lives, focus on lifelong learning and take their performance as a criteria in the evaluation level. The authority held only by teacher is shared with students. Teacher becomes participatory, collaborative and negotiator while s/he changes his/her role from information transmitter to problem solver. Accordingly, both teacher and students have new roles in such an educational process.

This study aims to represent the effects of andragogical principles in primary school level. The sample of the research consists of 168 students of 8th grade. Students are asked whether they are ready for the process enhanced with andragogical principles and andragogy can contribute anything to their school success. The results of survey reveal that with an 'Agree' point scale, students are ready for an education program enhanced with six basic andragogical principles.

Key Words: Andragogy, Pedagogy, New Course design.

INTRODUCTION

Throughout history, both education and learning have been defined in different ways by numerous researchers. Ciceron defines education as "the art of transforming a child into a person ". Emile Durkheim described education as "influence of educated generation on the growing generations". (Cit: Sönmez, 2010).

^{*} This study is an improved and expanded version of the research "A New Student and Teacher Model Enhanced by Andragogical Principles" which was presented at 1st International Symposium on the Sociology of Education, Faculty of Education, Ankara University, May 10-11, 2012.



Mazur (1990) defines learning as the permanent changes that occur in individuals by experience. Slavin's (1997) definition of learning is all kinds of skills that are not acquired innately. Senge (1996) states that learning is a set of changes in behavior and ideas which makes people can do the things that they are not able to do in advance. Both education and learning are open to redefine again and again. After all, human beings have always been engaged in education and learning, and it seems they will always be.

Pedagogy, which is the mere concept that comes to mind when one thinks of the concept of education, was developed in the monastery schools between the seventh and twelfth centuries. It is thought to be a field that can answer to the question of how learning and education should occur (Holmes and Abington-Cooper, 2000). The concept is a combination of words 'paid', which means 'child' in the ancient Greek language, and 'agogus', which means 'managing or training' in the ancient Greek. Accordingly, pedagogy can be defined as 'the art and science of children's education' (Knowles, 1977). The most prominent feature of pedagogy is to be a teacher-centered system. Therefore, in a pedagogical educational system, education and training activities are planned by the teacher and s/he is regarded as a source of knowledge, authority and power. Children's experience is not a key point in the educational process. Students are involved in the education process entirely dependent on the teacher about what to learn, how to learn and when to learn. Furthermore, in an education system that is dominated just by pedagogy, students' learning method is perceived as memorization and / or recalling in general. In this traditional system, evaluation of the students is only carried out by teacher as well. (Smith and Waller, 1997).

Conner (2008) states that, in the school system of the ancient times, teacher-centered structure was not available. She also emphasizes that students used to contribute to the formal education process. Former system was disrupted with the opening of the school of priests, since the idea was to teach only desired issues for the sake of remaining and keeping students as pure and clean. In the following centuries, the schooling system has adapted priest school system and formal education system has founded on this idea. However; pedagogy has some shortcomings for students, because even the best-intentioned teachers could suppress inherent sense of wonder of students by taking control of the learning environment. To handle with the deficiencies of pedagogy, andragogy offers some new principles and methods to the formal educational system.

Conner (2008) expresses that implementation of the andragogy to formal education is significant because of the reasons as follows:

- 1. Learners should know why it is important to learn the subject.
- 2. Learners should be educated how to be directed to the knowledge.
- 3. The target topics should be related to students' interests.
- 4. Human beings cannot learn without being ready and motivated.
- 5. Teachers should help students to change their prejudices, beliefs and attitudes towards learning.

Knowles (1977) defines the concept of andragogy- by the help of the definition of pedagogy- as the art and science of adult education. Forasmuch, 'andra' meaning 'adult (male)', and 'agogus' meaning 'educate or manage' in the ancient Greek are the words that form the concept of andragogy. The most important feature of andragogy is to be student-centered and the students are independent learners. In this regard, andragogical education system has features such as valuing students' experience in an educational environment, sharing of power and authority between teacher and students, revealing the knowledge not by rote but in relation to the life.

Knowles (1996) states that and ragogy is based on six fundamental principles:

1. The learner's need to know. Before attempting to learn anything, adults need to know why they should learn it. When adults undertake the responsibility of learning for themselves, they spend time and energy to examine both the benefits of what has been learnt and the negative consequences if they do not learn.



- 2. Self-conception of the learner. Adults have a self-perception as to be responsible for the decisions they make in their lives. They show resistance when they feel that others obstinately insist their requests on them.
- 3. Prior experience of the learner. Comparing to children, adults attend to an educational activity with a larger and more diverse of life experience.
- 4. Readiness to learn. For the changes they face in their lives, adults are ready to learn anything that they need to know.
- 5. Orientation to learning. Learning orientation of children and young learners' is subject-oriented. However; learning orientation of adults is life-centered and problem-centered.
- 6. Motivation to learn. Even if adults are affected by some external motives such as better jobs, promotions and higher wages, they are deeply affected by internal motives such as desire to get job satisfaction, self-esteem and quality of life.

Nowadays, children reach the independent learners' level at an early age when compared to the past. Most young learners want to be involved in the learning process with their own ideas since they are aware of what they need to learn and why they need to learn it (Essex, 2009). Essex proposes that independent learning is not a condition that occurs all of a sudden, once you reach at the age of 18 or 25. Learners are involved in the learning process, gradually get used to the situation and become independent learners. Therefore, it is useful for learners to meet andragogical approach as early as possible to help to conduct their self-evaluation and to become self-directed learners. Otherwise, some students may get stuck in dependent learning. Indeed, studies on adults show that adults wait for the approval of their teachers during a learning process because the education system they have gone through has taught them to do so. Thus, andragogy is required to be implemented to the formal education system since adults should act as independent learners during their adulthood learning process (Essex, 2009).

It can be inferred from the related literature above that andragogical approach and its principles should not be trapped only in adult education but they can also be applied to primary, secondary and higher educational levels. Therefore, an education program enhanced with andragogical principles can be implemented to every formal educational level. Even if some research and observations support this claim factually in English literature, it is really a rare situation to find any research or observations to support this claim factually in Turkish literature. In this context, the problem of this research is to examine whether the primary 8th grade students are ready for an educational system which is enhanced with the andragogical principles and whether this kind of educational system could positively affect their academic achievements and their interests in classes on the basis of their views.

Purpose of the Research

The purpose of this study is to determine the views of 8th grade primary school students about a new course design based on six core and ragogical principles along with pedagogy. For this purpose, the following questions are answered:

- 1. What are the views of students on the effects of compliance with 'need to know' principle of andragogy?
- 2. What are the views of students on the effects of compliance with 'self-conception' principle of andragogy?
- 3. What are the views of students on the effects of compliance with 'prior experience' principle of andragogy?
- 4. What are the views of students on the effects of compliance with 'readiness to learn' principle of andragogy?
- 5. What are the views of students on the effects of compliance with 'orientation to learning' principle of andragogy?
- 6. What are the views of students on the effects of compliance with *'motivation to learn'* principle of andragogy?



Motivation of the Research

Children are educated in a system that pedagogical principles are constantly at the forefront. A higher level of success and interest can be achieved in a new model of education. In this regard, a new pedagogical education system enriched with andragogical principles might be useful and create a solution to fight with issues such as students' academic failure and dropping out of the school.

Limitations

This research is limited with,

- 1. 168 primary 8th grade students who attend schools in Mamak district of Ankara province in the spring semester of 2011-2012 academic year.
- 2. assessments of students' principles of andragogy.

METHODOLOGY

Research Design

In this study, descriptive model is used to evaluate the views of primary 8th grade students. It is tried to be found out whether they are ready an educational program enhanced with the principles of andragogy. In a descriptive model; events, objects, entities, organizations, groups and various fields are tried to be described. These studies are also called as 'survey' and they are conducted on a large number of objects or subjects in a given period of time. Therefore, understanding and grouping both objects and subjects better, determining the relationship between them can be achieved. (Kaptan, 1998).

Participants

The population of the research is Mamak district of Ankara. Sample-taking application method is used owing to the density of population. Sampling is concerned with the selection of a subset of individuals from within a <u>statistical population</u> to estimate characteristics of the whole population. <u>Acceptance sampling</u> is used to determine if a production lot of material meets the governing <u>specifications</u>. Two advantages of sampling are that the cost is lower and data collection is faster than measuring the entire population (Yazıcıoğlu and Erdoğan, 2004).

The sample participants of the research are 168 primary 8th grade students who attend schools in Mamak district of Ankara in the spring semester of 2011-2012 academic year.

Data Collection and Analysis

A questionnaire consisting of 25 items is prepared to determine whether students are ready for a new course design enhanced with andragogical principles and to find out their opinions. 6 of the items in questionnaire are about 'need to know' principle of andragogy, 4 of them are about 'self-conception of the learners', 3 of them correspond to 'prior experience of learners', 3 of the items are about 'readiness to learn', 3 of them correspond to 'orientation to learning' and 6 of them are about 'motivation to learn' principle of andragogy. Students were asked to choose one of the five options in the table of items. The following table is used to evaluate the data range.

Table 1: Point Ranges

Options	Points	Point Scale	
Strongly Disagree	1	1,00-1,79	
Disagree	2	1,80–2,59	
Not Sure	3	2,60–3,39	
Agree	4	3,40-4,19	
Strongly Agree	5	4,20–5,00	



A draft questionnaire is applied to 30 students with 28 items to measure its content validity. The results are evaluated with the views of an expert. After this stage, the necessary arrangements are made on the survey and the survey of the sentence converted to 25 items. Then, the questionnaire is applied 168 students who constitute the real samples of the research. The data obtained from questionnaire is analyzed by using frequency and average. The average of each item in the questionnaire and intervals corresponding to the values are determined (Table 1). Subsequently, the results in Table 1 are matched with the points stated in writing and the range of scores in Table 2 are expressed in writing. Since some of the items are not answered by all 168 students who participated in the research, frequency of each item is written separately and the average is taken accordingly.

RESULTS

The results of frequency, average and point range values of primary 8th grade students' views on the new course design enhanced with six basic and ragogical principles along with pedagogy are shown in Table 2.

Table 2: Frequency, Average and Point Range Values for Items

ITEMS			
A. Need to Know	FREQUENCY	AVERAGE	POINT RANGE
	(f)	(\overline{X})	(Expression)
1. Before lecturing the lesson, teachers explain in	168	3,26	Agree
detail why I should learn the topic.			
2. I believe that I only learn lessons to be	168	2,607	Not Sure
successful in the exams.			
3. I believe that before starting to lecture, if I	168	3,77	Agree
have been informed why I need to learn the			
topic, I will be more successful.			
4. I believe that if I have been informed about the	168	4,34	Strongly Agree
benefits after learning the topic, I will be more			
interested in the lessons.			
5. Knowing how to apply the topics I've learnt in	168	4,17	Agree
the class into my everyday life will have positive			
influence on my learning.			
6. Knowing the fact that the courses I have been	168	4,23	Strongly Agree
taking will contribute to my future career will			
improve my performance.			
Average		3,72	Agree
B. Self-conception of the Learner			
7. I believe that if I take responsibility during the	168	3,303	Not Sure
activities in class, it will increase my interest in			
lessons.			
8. Participating in classes actively will improve my	168	4,38	Strongly Agree
performance.			
9. Doing extra studies by not only depending	168	4,011	Agree
what teachers have taught during the lessons will			
have positive impact on my learning			
performance.			
10. Doing more deeply researches about the	168	3,75	Agree
issues I have learnt in the class will increase my			



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interest in lessons.			
Average		3,86	Agree
C. Prior Experience of the Learner			
11. If the examples given about the subjects	168	3,92	Agree
could be related to my own life, it will have			
positive impact on my learning performance.			
12. I believe that classes will be more useful if I	167	3,75	Agree
am allowed to discover my traits during the			
lessons.			
13. If I feel that I and my experiences are valued	168	3,5	Agree
in the lessons, my learning performance will			
improve.			
Average		3,72	Agree
D. Readiness to Learn			
14. I am not sure whether I am ready to	168	2,99	Not Sure
understand all the issues that are lectured in the			
lessons.			
15. Before starting a new and difficult topic, if the	168	3,98	Agree
teacher links it with the topics that I learnt			
before, my learning performance will improve.			
16. If I apply the topics I learnt into my everyday	168	3,91	Agree
life, it will have positive effect on my learning.			
Average		3,62	Agree
E. Orientation to Learning			
17. If I learn anything that will help me in my daily	167	3,98	Agree
life, I will be more successful.			
18. Before starting to lessons, if I am asked what I	166	3,86	Agree
need to learn, my learning performance will			
improve.			
19. To explain the problems that I encounter	166	3,92	Agree
during the course and to find solutions to them			
with my friends and teachers will have positive			
effect on my learning performance.			
Average		3,92	Agree
F. Motivation to Learn			
20. Instead of memorizing, recalling-learning by	165	3,75	Agree
associating the issues with my own life will have			
positive effect on my performance.			
21. If my opinions are asked about the lecturing	165	3,79	Agree
method of the lessons, it will increase my			-
interests in lessons.			
22. Sharing of authority in the classroom between	165	3,87	Agree
teacher and students will increase my interests in			-
lessons.			
23. If my opinions are asked about the methods	163	3,73	Agree
of assessments at the end of level tests, it will		-	5
ncrease my interest in lessons.			



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24. If I know how the exams will be conducted, I will able to learn the topics better.	165	3,89	Agree
25. If I believe that my contribution to the lessons is valued, I will be more interested in lessons.	166	4,01	Agree
Average		3,84	Agree

The data above in Table 2 are analyzed with corresponding to each sub-objective of the research.

What are the views of students on the effects of compliance with 'need to know' principle of andragogy?

Students are known to be more successful and more interested in lessons if they are informed in detail why they need to learn the target topic (Knowles, 1996). As shown in Table 2, the first part of the questionnaire is intented to research this assumption. This section as called 'need to know', which is composed of six items, is answered by all 168 participant students.

Students state that if they are informed what will be the benefits of the topics they have learnt, they will be more interested in lessons and therefore they can be more successful. This item has the highest average in the 'need to know' section of the questionnaire. Students believe that if they know that the courses they are dealing with during the academic year are related to their future careers, this can be a factor to increase their interests in lessons.

In the 'need to know' section, the item which has the lowest average is the second sentence which asks students' views about the current educational system. Students are not sure whether they are studying for classes just to pass the exams or not. Therefore, the students' attitude for studying is not only to be successful in the exams but other variables also affect them. In this case, the students can be commented not to be dependent learners on exams. They, as being independent learners, take into account the benefits of the topics they have been learning in lessons.

By looking at the overall average of this section, it can be concluded that students have positive attitudes towards the 'need to know' principle of andragogy. Average of this section is 3,72 out of 5 points and it corresponds to the point range of 'Agree'.

What are the views of students on the effects of compliance with 'self-conception' principle of andragogy?

According to self-perception principles of andragogy, learners want to take responsibility for the issues they have been learning. Learners do not want third parties to impose their will on them (Knowles, 1996). In this respect, by looking at the answers of the second part of the questionnaire, students are observed to be undecided about whether they want to take responsibility in the educational environment or not. Therefore, 3,3 out of 5 points which is the average of the seventh sentences, corresponds to the point range of 'Not Sure'. In contrast, students strongly believe that their success in the class will increase if they actively participate in the lessons. In addition, students want to conduct extra researches out of the classes which are related to the topics they have learnt in the class. They believe that this situation will affect their achievement positively.

As shown in Table 2 and understood from the comments above, students are willing to participate in activities and conduct research on their own. However, they are not sure about taking responsibility for their learning. It can be interpreted that either students are not ready to take responsibility or they do not have enough confidence for taking responsibility.

It can be concluded from principle of 'self-concept of learners' that the point range corresponds to 'Agree' with the average of 3,86 out of 5. Therefore, primary 8th grade students' view on the self-concept principle of andragogy is positive.



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What are the views of students on the effects of compliance with 'prior experience' principle of andragogy?

It is an undeniable fact that comparing to children, adults involve in the educational environments with more various, different and deeper experiences. Nevertheless, it does not mean that because children have lived shorter than the adults, their experiences are not welcomed or respected in the educational environment. Regardless of their age, that is whether they are adults or children, it is important to make learners feel that they are valuable.

As shown in Table 2, students made positive comments on relating the subjects they have learnt in an educational environment to their lives, giving examples connected with the events they have experienced in their lives, having the opportunity to get to know themselves better with the given examples and being appreciated about their experiences. Students believe that such applications in an educational environment will increase their interests and success.

Nowadays children compared to previous generations have much more experiences in early ages especially by the help of technology. Thanks to virtual environment, advanced technology and wide communication nets, they have knowledge about anything they want. Thus, students' expectation of being respected for themselves and their accumulations are natural consequences. Knowles (1977) states that an educational environment in which students' lives are being taken into consideration will also flourish students' interests in lessons.

What are the views of students on the effects of compliance with 'readiness to learn' principle of andragogy?

Adults prefer to participate in an educational environment when they feel ready to learn. Regardless of their readiness, children are participated in educational environment. Because it is the learners' age that counts for the formal education, it is only the children's age that is taken into consideration. But it does not mean that students' opinions about their readiness towards to learning subjects should not be asked. Essex (2009) points out that when compared to their peers in previous times, young learners reach the independent learner level at an earlier age and they want to take part in deciding stage related to their education process.

As it resulted in Table 2, before starting a new and difficult subject, students want their teachers to connect the new subjects with previous ones in order to feel much more ready. Moreover, students express that when they have an opportunity to put the subjects they learnt before into practice they feel much more ready to learn the new subjects.

In this section, the item which students are not sure about is to be ready or not to understand all the subjects in a lesson. Therefore, there are students who are hesitant about being ready to understand all the subjects in a lesson, yet there are also students who feel themselves completely ready to learn.

The general average of students' answers is 3,6 out of 5 which is equivalent to "Agree" point range. Bearing this in mind, it may be concluded that there are not any negative comments related to 'readiness to learn' principle of andragogy in general.

What are the views of students on the effects of compliance with 'orientation to learning' principle of andragogy?

According to 'orientation to learning' principle of andragogy, adults do not make any efforts to learn a subject just for the sake of being motivated. They have problems that they cannot solve in their lives and they believe that it can only be overcome by education. Therefore, adults' tendency towards learning is problem-based. In education of children, it is not likely to plan all of the subjects in order to solve the problems they face in their lives. Yet, it is possible to make a plan by identifying the subjects which are potentially higher that children come up against. The problems they face do not have to be related to only their lives. Sharing the problems they come up against when they are learning and trying to find a solution to this problem with his / her teacher and friends are related to principle of 'orientation to learning', as well.



As shown in Table 2, students believe that being taught the subjects they need in daily life, being asked their necessities before starting the lesson and trying to find solutions together to the problems they come up against during the lesson might increase their success. Consequently, students do not have any negative tendency towards to principle of 'orientation to learning'.

What are the views of students on the effects of compliance with 'motivation to learn' principle of andragogy?

According to principle of 'motivation to learn', the more the learners participate in a learning environment, the more interested they are in. This situation is acceptable for both adults and children. Knowles (1996) points out that learners motivate their energy upon learning as much as they make their learning process a part of their lives. Including children in the planning, teaching and evaluation process of courses will increase students' interests, since students' views about the motivation items are positive in the questionnaire. In this regard, students want to be asked their opinions on how the lessons are to be lectured, want teachers not to be the sole authority in the class but sharing it between the teacher and the students and be asked their opinions on how to conduct the examinations.

The general average of students' answer is 3,84 out of 5 to the 'motivation to learn' principle of andragogy, which is equivalent to "Agree" in point range in Table 1.

DISCUSSIONS AND SUGGESTIONS

The survey conducted to 8th grade students reveals that students are ready for an education program enhanced with and ragogical principles. In this respect, it is concluded that the average of each and ragogical principle is close to each other, because the average of all of the sections is equivalent to 'Agree' point range.

By looking at the survey in general, it is observed that 3 items are responded as 'Not Sure', 3 items 'Strongly Agree', and 19 items 'Agree'. The principle of 'orientation to learn', is the highest one with an average 3,92 among all six principles. Students want to be asked their opinions about the subjects they need to learn and to be taught the subjects they need. The principle which students answered with the lowest average is 'readiness to learn'. In this section, students responded to the statement "I am not sure whether I am ready to understand all the issues that are lectured in the lessons." as "Not Sure". This item decreases the average of the section. However, students feel themselves ready to learn and understand the subjects since the total average of the section is 3,62 out of 5.

The suggestions derived from the information based on this research as follows:

- When preparing the annual education plan and/or unit plans, a section could be included that gives some information and examples about which unit topic is related to which professional field.
- At the beginning or at the end of each unit, some clues could be included about how students can use those issues in their daily lives.
- At the end of each academic year, learners' needs-analysis can be applied for each course separately. Therefore, it can be figured out which topics students are in need of learning for the next year. This analysis can be both out of new topics and the topics that students have had difficulty to understand throughout current academic year, so they can be lectured in a different method for the coming year.
- In addition to learners' needs-analysis, case-detection analysis could be applied while students continue their education during the academic year. In this regard, the learning process can be enriched with the views and wishes of the students.
- Seminars may be held to host professionals so that they can emphasize what benefits they have had in their professional lives from the topics they learnt in primary school. Hence, students' interests in lessons can be flourished.



- At the end of the units, some clues can be given about how students can deepen their researches on the topics they have learnt in the classes.
- The role of the teacher, as being the absolute source of power and authority, is needed to be changed. This objective can be achieved by carrying out studies to redeploy both physical and psychological environment, as well as in-service training.

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SCHOOL EFFECTIVENESS AT PRIMARY LEVELS OF EDUCATION IN RELATION TO COMMUNITY PARTICIPATION

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ABSTRACT

The study aims to investigate the relationship of School Effectiveness with regard to Community Participation at primary level of education. The objectives of the study were to identify the more-effective and less-effective schools; to find out the differences between more-effective and less-effective schools in relation to physical facilities, Head Master and Teachers' performance and Students' performance; to find out the relationship between the school effectiveness and community participation. The descriptive survey method was used to carry out this study. A Total number of 27 more-effective and 35 less-effective primary schools were included in the sample of the present study. And also all principals of selected schools and 5 community members from each locality of these schools were selected incidental purposively, to investigate their participation in school activities. In order to collect data from the selected samples the School Effectiveness Schedule and Community Participation Interview Schedule were developed by the researcher. On the basis of the findings of the present study it is revealed that the schools having better Physical facilities, HM and teachers' performance and Students' performance were identified as more-effective schools. It is essential to identify schools which are less-effective and provide necessary help to develop their physical facilities and other aspects so as to develop the performance of students in order to increase school effectiveness. One of the significant findings of the present study is the higher community participation is associated with greater school effectiveness.

Key Words: Community Participation, School Effectiveness, Physical Facilities, Students Performance, Quality Education.

PROLOGUE

Improvement of quality of education raises many issues such as curriculum renewal, textbooks improvement, better teaching methods, effective teacher education and provision of material facilities in the schools. Improving the working of one teacher schools, progressive methods of evaluation, democratization and humanizing school administration and supervision, provision of rich and varied programme of co-curricular activities, healthy interaction between school and the parents and community. In fact the issue of wastage, stagnation, dropouts and improvement of quality of primary education are interlinked. While appreciable efforts have been made much need to be done and, perhaps one of the most crucial steps to improve the quality of education at primary level is to ascertain the effectiveness with which schools are imparting educations at primary level.

The studies based on community effort in enhancing school effectiveness and learning achievement revealed that empowering communities could improve relevance and efficiency in primary schools in order to attract and keep more children school as well as for effective management and development of schools (Agarwal and Harding, 1995; Jalali, 1995; Seetharamu, 1995). Ambasht and Rath (1995); Barpanda, (1997) were pointed out that the participation of community increases the enrolment, retention and achievement of students in the



primary schools. The findings of some studies on community participation and school effectiveness also revealed a positive relationship of community participation in the functions of the school management committee and its formation, getting financial support to the schools from the community (Kumar, Patel and Mehta, 1998; Rao, 1998).

Overall, we can say, improvement of quality of elementary education raised many issues such as curriculum renewal, textbooks improvement, better teaching methods, effective teacher education and provision of material facilities in the schools, progressive method of evaluations, democratization and humanizing school administration and supervision, provision of rich and varied programmes of co-curricular activities, healthy interaction between school and the community, improvement of single teacher schools etc. In fact the issue of wastage, stagnation, dropouts and improvement of education are inter-linked. The reasons for such School effectiveness, Community Participation and Classroom Teaching at primary schools provide us with many valuable insights into the diverse aspects of the problem. Therefore, the researcher realized that there is a need for this type of studies to investigate the relationship of School Effectiveness with regard to Community Participation at primary level of education.

Objectives of the Study

- 1. To identify the more-effective and less-effective schools.
- 2. To find out the differences between more-effective and less-effective schools in relation to physical facilities, Head Master and Teachers' performance and Students' performance.
- 3. To find out the relationship between the school effectiveness and community participation.

Hypotheses of the Study

- 1. More-effective schools will be having better physical facilities, Head Master and Teachers' performance and Students' performance.
- 2. There exists real association between school effectiveness and community participation as a whole.
- 3. There exists real association between school effectiveness and community participation with dimension wise.

To test the above hypotheses for the present study the researcher following null hypotheses were framed.

- 1. There exist no significant differences between More-effective and Less-effective schools in Physical Facilities, Head Master and Teachers' performance and Students' performance.
- 2. There exists essentially unrelated or independent between school effectiveness and community participation as a whole.
- 3. There exists essentially unrelated or independent between school effectiveness and community participation with dimension wise.

METHODOLOGY

The present study utilizing descriptive survey method endeavors to select the More-effective and Less-effective primary schools and find out the relationships with regard to Community Participation. For this purpose a two-phased study was planned. In the *first phase* the more-effective and less-effective schools were selected from the rural area. In the *second phase* for getting community data from the school locality the community members were interviewed. The levels of community participation were studied at three levels *i.e.* low, moderate and high. This grouping of teachers and community members was done by applying the formula *i.e.*, Mean $\pm \frac{1}{2}$ SD to the score values.

Sample Size and Sampling Technique

All the rural primary schools and their Teachers, Students and the Community Members (Where the schools are situated) in Orissa constituted the population. There are 30 districts in Orissa. But the sample of the study was taken from two districts viz., *Puri & Ganjam*. These two districts were selected randomly. After selection



of these two districts one block from each district was selected by simple random sampling method. Pipili Block from Puri District and Hinjili-cut Block from Ganjam District were selected. In Pipili Block there are 109 Rural Primary Schools and in Hinjili-cut Block there are 94 Rural Primary Schools, where 5 or more teachers were working (at the time of selection of schools). In the first phase to find out more-effective and less-effective schools, the interview was taken by the researcher with the Block Development Officers (BDOs) for listing the primary schools in their blocks as more-effective and less-effective. In Pipili block out of 109 schools, the BDO listed 17 as more-effective and 30 as less-effective schools. In Hinjili-cut block out of 94 schools, BDO listed 25 as more-effective and 22 as less-effective schools. A total number of 94 primary schools, 47 schools from each block were listed by the BDOs. Further, the School Effectiveness Schedule was administered to the Headmasters/ Headmistresses of all the 47 schools of each block. The School Effectiveness score of each school was calculated. The School Effectiveness score were classified into two groups on the basis of their effectiveness i.e., more-effectiveness and less-effectiveness by adopting the criteria of Mean ± ½ SD i.e., Schools scoring Mean – $\frac{1}{2}$ SD were included in Less-effective school, those scoring Mean + $\frac{1}{2}$ SD were included in the More-effective school. Finally, the 9 more-effective & 23 less-effective schools from Pipili Block and 18 more-effective & 12 less-effective schools from Hinjili-cut Block were selected for the final sample. A Total number of 27 more-effective and 35 less-effective primary schools were thus included in the sample of the present study. And also 5 community members from each locality of these schools were selected incidental purposively, to investigate their participation in school activities.

Data Collection Instruments

In order to collect data from the selected samples, following tools were used. School Effectiveness Schedule and Community Participation Interview Schedule tools were developed by the researcher himself.

- 1. School Effectiveness Schedule: For Headmaster/ Headmistress
- 2. Community participation Interview Schedule: For Community Members.

ANALYSIS AND DISCUSSION OF RESULTS

Identification of more-effective and less-effective schools through School Effectiveness Schedule

For identification of more-effective and less-effective schools through School Effectiveness Schedule, the data collected from Headmasters/Headmistress. The School Effectiveness score were classified into two groups on the basis of their effectiveness i.e., more-effectiveness and less-effectiveness by adopting the criteria of *Mean* \pm ½ SD i.e., Schools scoring *Mean* - ½ SD were included in *Less-effective school*, those scoring *Mean* + ½ SD were included in the *More-effective school*. Finally, the 9 more-effective & 23 less-effective schools from Pipili Block and 18 more-effective & 12 less-effective schools from Hinjili-cut Block were selected. A Total number of 27 more-effective and 35 less-effective primary schools were found in both the blocks.

Table 1: Significance of difference between the mean scores of overall More-effective and Less-effective schools.

Schools	N	Mean	SD	SEd	'ť'	Level of sig.
More- effective	27	100.41	12.07	2.53	15.71	.01
Less- effective	35	60.66	6.00			

Df=N1+N2-2=60, The table value at .05 level = 2.00 and .01 level = 2.66

The table-1 shows that the mean scores of overall More-effective and Less-effective schools are found to be 100.41 and 60.66 with SDs of 12.07 and 6.00 respectively. The calculated't' value 15.71 is much greater than the table value at .01 level (2.66). Therefore, it can be concluded that it is significant beyond .01 levels. Thus, the Null Hypothesis-1 of the study that there exists no significant difference between more-effective and less-



effective schools is rejected for all dimensions i.e. Physical facilities; HM and teachers' performance; and Students performance.

It is further reveals that the mean scores on all dimensions i.e. Physical facilities; HM and teachers' performance; and Students performance of more-effective schools are higher than that of less-effective schools. It means that in more effective schools existing available Physical facilities; HM and teachers' performance; and Students performance are better than the less-effective schools. Therefore, the Hypothesis-1 of the present study that more-effective schools will be having better Physical facilities; HM and teachers' performance; and Students performance is retained.

Table 2: Significance of Difference between the mean Scores on Physical Facilities of More-effective and Less-effective Schools.

Schools	N	Mean	SD	SEd	'ť'	Level of sig.
More-	27	63.70	7.71			
effective				1.72	10.52	.01
Less-	35	45.51	5.27			
effective						

Df=N1+N2-2=60, The table value at .05 level = 2.00 and .01 level = 2.66

Table-2 highlights that the mean scores on Physical facilities of more-effective and less-effective schools are found to be 63.70 and 45.51 with SDs of 7.71 and 5.27 respectively. The calculated't' value 10.52 is greater than the table value at .01 level. Therefore, it can be said that it is significant beyond .01 levels. Thus, the Null Hypothesis-1 of the present study that there exists no significant difference between more-effective and less-effective schools is rejected for Physical facilities.

The above table further indicates that the mean scores on Physical facilities of more-effective schools are higher than that of the less-effective schools. It means that in more-effective schools existing/available Physical facilities are better than the less-effective schools. Therefore, the Hypothesis-1 of the study that more-effective schools will be having better Physical facilities; HM and teachers' performance; and Students' performance is retained for physical facilities.

Table 3: Significance of Difference between the mean Scores on HM and Teachers'	Performance of More-
effective and Less-effective Schools.	

Schools	N	Mean	SD	SEd	'ť'	Level of sig.
More- effective	27	29.29	9.12	1.91	10.47	.01
Less- effective	35	9.29	4.46			

Df=N1+N2-2=60, The table value at .05 level = 2.00 and .01 level = 2.66

The above Table shows that the mean scores on HM and teachers' performance of more-effective and lesseffective schools are found to be 29.29 and 9.29 with SDs 9.12 and 4.46 respectively. The obtained't' value, 10.47 is higher than the table value at .01 level. Hence, the Null Hypothesis-1 of the present study that there exists no significant difference between more-effective and less-effective schools is rejected for HM and teachers' performance.

The Table-3 further indicates that the mean scores on HM and teachers' performance of more-effective schools are higher than that of less-effective schools. It means that in more-effective schools HM and teachers' performance are better than that of the less-effective schools. Therefore, the Hypothesis-1 of the present



study that more-effective schools will be having better Physical facilities; HM and teachers' performance; and Students' performance is retained for HM and teachers' performance.

Table 4: Significance of Difference between the mean Scores on Students' Performance of More-effective and Less-effective Schools.

Schools	N	Mean	SD	SEd	'ť	Level of sig.
More- effective	27	7.41	1.90	0.54	2.87	.01
Less- effective	35	5.86	2.38			

Df=N1+N2-2=60, The table value at .05 level = 2.00 and .01 level = 2.66

It can be found from Table-4 that the mean score on Students' performance of more-effective and lesseffective schools are found to be 7.41 and 5.86 with SDs of 1.90 and 2.38 respectively. The obtained't' value, 2.87 is greater than the table value at .01 level. Therefore, it can be said that it is significant beyond .01 levels. Hence, the Null Hypothesis-1 of the present study that there exists a significant difference between moreeffective and less-effective schools is rejected for Students' performance.

Table-4 further reveals that the mean scores on students' performance of more-effective schools are higher than that of the less-effective schools. It means that in more-effective schools Students' performance is better than the less-effective schools. Hence, the Hypothesis-1 of the present study that more-effective schools will be having better Physical facilities; HM and teachers' performance; and Students' performance is retained for Students' performance.

Thus, on the basis of above analysis and interpretation, it can be said that the more-effective schools are found to be having better Physical facilities; HM and teachers' performance; and Students' performance.

Findings of the present study of this Section revealed that there is significant difference between moreeffective and less-effective schools in Physical facilities; HM and teachers' performance and Students' performance. The more-effective schools have been found to be having better Physical facilities; HM and teachers' performance; and Students' performance, which is some way linked to a conducive school environment and pupils' performance. It is supported by the many researchers' (*Scwietzer, 1984; Mortimore et al., 1988; Creemers, 1994*) findings that physical and infrastructural environment has an effect of pupils achievement.

The findings of studies conducted in India (Buch & Buch, 1983; Govinda & Verghese, 1991, 1993; Sharma et al., 1992) lend adequate support as they are also in conformity with the findings of the present study that the level of infrastructure facilities played an important role in improving teaching learning process, learners achievement level as well as overall school quality. Similarly, the findings of the study conducted by Saxena et al. (1994) on "School effectiveness and learners achievement", found that the factors of educational and physical facilities in schools have shown positive associations with achievement. It is also shows in support of the physical facilities dimension of the present study.

In this study, the HM and teachers' performance has been considered a dimension of the school effectiveness. It means HM and teachers' performance plays an important role for develop0ment and improvement of school effectiveness. It is conformity with the studies conducted by the eminent researchers i.e. *Burkey (1997), Morly (1997), Davies (1998), Tiguryera (1999), Reynolds & Teddile (2000), and Thrupp (2001)*. Their studies emphasized that performance of the teachers in the learning process, their academic involvement and their qualification plays an important role for the progress of school. In conformity with the findings of the present study, it can be concluded with the findings of many researchers (*Saxena et al., 1994; Rajakutty, 1995; Das,*



1997; Pathak et al., 1994; Rath and Rajesh, 1997; and Das, 2002) that the teachers, physical environment in the school and teaching learning materials also have positive association with the school effectiveness.

• School Effectiveness in relation to Community Participation

In this section analysis has been done to fulfill the objective of the present study i.e. to find out the relatedness or independence of school effectiveness in relation to community participation. The analysis has been done in two phases i.e. (i) School effectiveness in relation to overall community participation, and (ii) School effectiveness in relation to different dimensions (Improving school complex, Resource mobilization, Organizing socio-cultural activities, Management of the school and Improving academic environment of the school) of community participation. For this purpose, community members were classified into three groups on the basis of their participation in school activities i.e., Low, Moderate and High groups by adopting the criteria of $M \pm \frac{11}{2}$ SD i.e., community members scoring $Mean - \frac{12}{2}$ SD were included in Low level of participation group, those scoring $Mean + \frac{12}{2}$ SD were included in the High level community participation group, and those scoring between these two limits were included in Moderate level community participation group. The classification of community members into three groups on the basis of their community participation scores.

Table: : Calculation of Chi-Square (χ^2) Value Showing Association of School Effectiveness and Overall Community Participation

SCHOOLS	LC fo fe	DW e	MOD fo	ERATE fe	HI fo	IGH fe	Chi-square χ ²	Level of Sig.
More-effective	04	45.72	46	38.75	85	50.51	111.53	.01
Less-effective	101	59.27	43	50.24	31	65.48		

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210

The above Table shows that the obtained χ^2 value 111.53 of these three groups (Low, Moderate and High group) of the community members participation in more-effective and less-effective schools is greater than the table value at .01 level. It can be said that it is significant beyond .01 levels. Therefore, the Null Hypothesis-2(i) i.e. school effectiveness and community participation are effectively unrelated or independent is rejected.

It indicates that observed results are not close to those expected on the hypothesis of independence and there is greater evidence of real association between school effectiveness and overall community participation. Therefore, Hypothesis-2(i) of the present study i.e., there exists a real association between effectiveness and community participation is retained. It can be interpreted to mean that a significant majority of the community members belonging to the more-effective schools participates more in the school activities as compared to less-effective schools. It can also be observed that high community participation is associated with increasing the school effectiveness. It advocates that community participation is likely to increase the school effectiveness.



• School Effectiveness in relation to different Dimensions of Community Participation

Table 6: Calculation of Chi-Square (χ^2) Value Showing Association of School Effectiveness and Community Participation in Improving the School Complex

SCHOOLS	LC fo	9W fe	MODI fo	ERATE fe	HI fo	GH fe	Chi- square χ ²	Level of Sig.
More- effective	03	31.66	85	69.47	47	33.85	61.62	.01
Less- effective	69	40.33	73	88.52	30	43.14		

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210

It is observed from the above table that in Dimension-I (community participation in *Improving School Complex*), the community members were divided into three groups such as Low, Moderate and High groups according to their participation in more-effective and less-effective schools. The calculated Chi-square (χ^2) value found to be 61.62. This value is greater than the table value at .01 levels of significance, it can be said that it is significant beyond .01 level. Therefore, the Null Hypothesis-2(ii) present study i.e. school effectiveness and community participation are essentially related or independent is rejected for community participation in *Improving School Complex*.

It is also observed that the observed results are not close to those expected on the null hypothesis of independence and there is evidence of real association between school effectiveness and community participation in improving the school complex. So, the Hypothesis-2(ii) of the study i.e. there exist a real association between school effectiveness and community participation in improving the school complex of community participation is retained. It was also observed that where schools were functioning more-effectively, there was higher community participation in improving school complex Dimension in comparison to those schools functioning less-effectively. This can be interpreted to mean that high community participation is associated with increasing the school effectiveness.

SCHOOLS	LO	W	MOD	ERATE	HI	GH	Chi-	Level of
	fo	fe	fo	fe	fo	fe	square χ²	Sig.
More- effective	11	19.44	60	70.96	51	31.59	33.61	.01
Less- effective	29	20.55	86	75.03	14	33.41		

Table 7: Calculation of Chi-Square (χ^2) Value Showing Association of School Effectiveness and Community Participation in Resource Mobilization in the School

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210

The above table indicates that in Dimension-II (community participation in *Resource Mobilization*), the community members were divided into three groups such as Low, Moderate and High groups according to their participation in more-effective and less-effective schools. The calculated Chi-square (χ^2) value comes to be 33.61. This value is greater than the table value at .01 levels of significance, it can be said that it is significant beyond .01 level. Therefore, the Null Hypothesis-2(ii) present study i.e. school effectiveness and community participation are essentially related or independent is rejected for community participation in *Resource Mobilization*.



It is also revealed that the observed results are not close to those expected on the null hypothesis of independence and there is evidence of real association between school effectiveness and community participation in improving the school complex. Therefore, the Hypothesis-2(ii) of the study i.e. there exist a real association between school effectiveness and community participation in *Resource Mobilization* of community participation is retained. It was also observed that where schools were functioning more-effectively, there was higher community participation in *Resource Mobilization* Dimension in comparison to those schools functioning less-effectively. This can be interpreted to mean that high community participation is associated with increasing the school effectiveness.

Table 8: Calculation of Chi-Square (χ^2) Value Showing Association of School Effectiveness and Community Participation in Organizing Socio-Cultural Activities in the School

SCHOOLS	-	W	MOD	ERATE	HI		Chi-	Level of
	fo	fe	fo	fe	fo	fe	square χ²	Sig.
More- effective	11	39.57	77	57.61	47	37.82	52.86	.01
Less- effective	79	50.42	54	73.39	39	48.18		

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210

On Dimension-III i.e. Community participation in *Organizing Socio-cultural Activities*, the community members were divided into three groups such as Low, Moderate and High groups according to their participation in more-effective and less-effective schools. The calculated Chi-square (χ^2) value comes to be 52.86. This value is greater than the table value at .01 levels of significance, it can be said that it is significant beyond .01 levels. Therefore, the Null Hypothesis-2(ii) of the present study i.e. school effectiveness and community participation are essentially related or independent is rejected for community participation in *Organizing Socio-cultural Activities*.

It is also revealed that the observed results are not close to those expected on the null hypothesis of independence and there is evidence of real association between school effectiveness and community participation in *Organizing Socio-cultural Activities*. Therefore, the Hypothesis-2(ii) of the study i.e. there exist a real association between school effectiveness and community participation in *Organizing Socio-cultural Activities* and community participation in *Organizing Socio-cultural Activities* of community participation is retained. It was also observed that where schools were functioning more-effectively, there was higher community participation in *Organizing Socio-cultural Activities* Dimension in comparison to those schools functioning less-effectively. This can be interpreted to mean that high community participation is associated with increasing the school effectiveness.

Table 9: Calculation of Chi-Square (χ^2) Value Showing Association of School Effectiveness and Community Participation in the Management of the School

SCHOOLS	LO	w	MOD	ERATE	HI	GH	Chi-	Level of
	fo	fe	fo	fe	fo	fe	square	Sig.
More-	11	40.06	42	47.90	82	47.03	X	
effective							84.68	.01
Less- effective	81	51.93	68	62.09	26	60.96		

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210



The above table-9 indicates that in Dimension-IV (community participation in *Management of the School*), the community members were divided into three groups such as Low, Moderate and High groups according to their participation in more-effective and less-effective schools. The calculated Chi-square (χ^2) value comes out to be 84.68. This value is greater than the table value at .01 levels of significance, it can be said that it is significant beyond .01 level. Therefore, the Null Hypothesis-2(ii) present study i.e. school effectiveness and community participation are essentially related or independent is rejected for community participation in *Management of the School*.

It is also observed that the observed results are not close to those expected on the null hypothesis of independence and there is evidence of real association between school effectiveness and community participation in *Management of the School*. Therefore, the Hypothesis-2(ii) of the study i.e. there exist a real association between school effectiveness and community participation in *Management of the School* of community participation is retained. It was also observed that where schools were functioning more-effectively, there was higher community participation in *Management of the School* Dimension in comparison to those schools functioning less-effectively. This can be interpreted to mean that high community participation is associated with increasing the school effectiveness.

Table 10: Calculation of Chi-Square (χ^2) Value Showing Association of School Effectiveness and Community Participation in Improving Academic Environment of the School

SCHOOLS	LO	W	MOD	RATE	HI	GH	Chi-	Level of
	fo	fe	fo	fe	fo	fe	square	Sig.
More- effective	08	35.27	61	56.17	66	43.54	 	.01
Less- effective	73	45.72	68	72.82	34	56.45		

df= (c-1)(r-1)i.e. (3-1)(2-1)=2, The df table value at .05 level is 5.999 and .01 level is 9.210

The above table indicates that in Dimension-V (community participation in *Improving Academic Environment of the School*), the community members were divided into three groups such as Low, Moderate and High groups according to their participation in more-effective and less-effective schools. The calculated Chi-square (χ^2) value comes out to be 58.59. This value is greater than the table value at .01 levels of significance, it can be said that it is significant beyond .01 levels. Therefore, the Null Hypothesis-2(ii) present study i.e. school effectiveness and community participation are essentially related or independent is rejected for community participation in *Improving Academic Environment of the School*.

It is also observed that the observed results are not close to those expected on the null hypothesis of independence and there is evidence of real association between school effectiveness and community participation in *Improving Academic Environment of the School*. Therefore, the Hypothesis-2(ii) of the study i.e. there exist a real association between school effectiveness and community participation in *Improving Academic Environment of the School*. It was also observed that where schools were functioning more-effectively, there was higher community participation in *Improving Academic Environment of the School* Dimension in comparison to those schools functioning less-effectively. This can be interpreted to mean that high community participation is associated with increasing the school effectiveness.

The above interpretations is revealed that there is a real association between school effectiveness and community participation as overall and in all the five dimensions such as: *Community participation in improving school complex, organizing socio-cultural activities, the management of the school and improving academic environment of the school.* The finding of the analysis also shows that in more-effective schools, there is a higher community participation in all the activities covered under all the dimensions. It is similar to the findings



of Crispeels (1996) study that the support and participation of families, community members and agencies, and school staff in the community or at school, in activities and efforts that directly and positively affect students' achievement. The homework could be considered to be school practice, which links the role of parents and teachers.

Similarly, the findings of the study conducted by Creemers & Werf (1989) on "Effects and cost of community participation" revealed that there is a positive effective of community participation in management, evaluation, and monitoring and teacher professional development.

The Indian researcher, studies conducted in relation to the community participation variable, revealed that involvement of community in school activities develop the achievement of their student (Agarwal & Harding, 1995; Ambasht & Rath, 1995). In the present study also shows that in more-effective schools community participation is higher in comparison to less-effective schools. This is supported by some studies conducted in the Indian socio-cultural context. Ambasht & Rath (1995) and Barapanda (1997) found that in his studies, the community participation helps in increasing enrolment and retention of children in the schools.

The research findings of Kumar, Patel & Mehata (1998) related to the community participation variable of the present study found that there is a positive relationship of community participation in the functions of the school management committee and its formation, getting financial support to the school from community. This is also falls in line with the present study. Similarly, the findings of the study get almost a direct support from the findings of Rao's (1998) study i.e. there is a significant positive relationship between community participation and school effectiveness.

Thus, the above discussion reflects that there is a real association between school effectiveness and community participation as overall and in all the five dimensions such as: *Community participation in improving school complex, organizing socio-cultural activities, the management of the school and improving academic environment of the school.* It is also very clear that in more-effective schools, there is a higher community participation in all the dimensions.

Educational Implications

On the basis of the findings of the present study it is revealed that the schools having better Physical facilities, HM and teachers' performance and Students' performance were identified as more-effective schools. It is essential to identify schools which are less-effective and provide necessary help to develop their physical facilities and other aspects so as to develop the performance of students in order to increase school effectiveness.

One of the significant findings of the present study is the higher community participation is associated with greater school effectiveness. Community members must constitute the integral part of school education. School activities must be organized in constitution with the Village Education Committee (VECs). VEC must actively engage in the programmes meant for development of the school. So in order to make their actively participate and to get their whole hearted co-operations. School must organize community awareness programme on different occasions. It is also revealed that in decision making process such as taking decision on financial matters, improvement of physical facilities etc. there is lower community participation. Thus particular measure should be taken so as to make them on participation participate in the decision-making processes of the schools.

All school must be provided with appropriate teaching-learning material and at the same time the teacher must be encouraged to develop the improvised teaching Aids so as to suit the need of child in the classroom. During pre-service and in-service training programme, the teacher-educators and experts should give emphasis on development of the teachers profile, development of teacher-students interaction and the teaching activities.



The orientation programmes for teachers should be organized at a regular interval. At the time of orientation and training programmes the HM/teachers from more-effective schools should be given a chance to exchange of their ideas and experiences on the classroom teaching techniques which were found effective in enhancing the school effectiveness at primary level.

Therefore, the findings of the present study has implications for Govt personals, educational planners, administrators, researchers, designers and others who involved with the task improvement of school effectiveness by improving learning environment and encouraging the community members to participate in school activities. VEC must be empowered in the development of school effectiveness programme.

Although some tall claims on the basis of a humble research effort based on a mere adequate sample cannot be made, however, it can be said in that the present study has implications for improving the school effectiveness at primary level of education. The findings of this study provide direction to improve the state primary education in the country, provided efforts are to be made in the right direction and at right moment

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STEEL BRIDGE COMPETITIONS: A CASE OF HANDS-ON STRUCTURAL STEEL EDUCATION

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ABSTRACT

Each year since 2007, the steel bridge building competition "Design and Construct" is organized by the Construction Club of Boğaziçi University and is open to the undergraduate or graduate students enrolled in civil engineering and architecture programmes in Turkey and abroad. The competition provides an opportunity for students to have a comprehensive hands-on practice of the steel design process from conceptual design to fabrication and assembly in a team setting. Another important aspect of the competition is that it provides to present their work to a jury of steel design professionals and to other teams from various countries and universities. This paper presents the experience of Department of Civil Engineering of Istanbul Kültür University who participated at the competition every year with a number of teams since 2007 and outlines the benefits and opportunities of this hands on learning opportunity for students.

Key Words: Steel Design, Steel Education, Hands on instruction.

INTRODUCTION

Student competitions provide excellent opportunities for the students of civil engineering to put their theoretical knowledge acquired from lectures into test on a small-scale engineering design task such as the design and construction of a concrete canoe or a steel bridge. These competitions are annualy hosted by universities and sponsored by construction companies and relevant engineering institutions such as the American Society of Civil Engineers (ASCE) and the American Institute of Steel Construction (AISC) (American Institute of Steel Construction [AISC], 2013a). The organizing committee provides a set of criteria and constraints regarding the design, fabrication, erection and evaluation of the design product. Students may enter these competitions in teams and submit their designs according to the rules and the time table set forth by the organizing committee. Student teams are fully responsible for the design as well as the coordination of fabrication and erection processes.



Steel bridge competitions are perhaps one of the most popular and sensational student competitions in the field of civil engineering. The origins of the steel bridge student competition in United States of America go back as early as 1987 and the competiton became a nation wide event since 1992, sponsored by the American Society of Civil Engineers and American Institute of Steel Construction (AISC, 2013b). The success of the ASCE/AISC steel bridge competiton led to the spread of this event in other parts of the world. Some of the international examples of these student steel bridge competitions include "Design&Construct (DECO) Steel Bridge Competition" in Turkey, "Wroclaw Student Steel Bridge Contest" in Poland, "Japan Steel Bridge Competition" and BRICOM Asia (Student Organization Active Builders, 2013), (Japan Steel Bridge Competition 2012, 2012), (Bricom Asia , 2009).

The first student steel bridge competition in Turkey was conducted as a one time event during the "MIM Günleri" organization at the Istanbul Technical University (Mim günleri, Mimarlık İnşaat Mühendislik Günleri, 2002). The student steel bridge competition was later turned into an annual event by the Contruction Club of Boğaziçi University under the title of "Design&Construct". A historical overview of the student steel bridge competitions in Turkey are presented in Table 1 (Boğaziçi University, 2013a).

Year	Organization	Hosting Institution	Winning Team/University
2002	Steel Bridge Student Competition	MİM Günleri, İstanbul Technical University	SpanTECH Istanbul Kültür University
2007	"Design&Construct" Steel Bridge Competition		
2008	"Design&Construct" Steel Bridge Competition	BÜYAP Construction Club, Boğaziçi University	CETAYFA Boğaziçi University
2009	"Design&Construct" Steel Bridge Competition	BÜYAP Construction Club, Boğaziçi University	4BlackSea Karadeniz Technical University
2010	"Design&Construct" Steel Bridge Competition	BÜYAP Construction Club, Boğaziçi University	Steel Punch Karadeniz Technical University
2011	"Design&Construct" Steel Bridge Competition	BÜYAP Construction Club, Boğaziçi University	Steel Fighters Istanbul Kültür University
2012	"Design&Construct" Steel Bridge Competition	BÜYAP Construction Club, Boğaziçi University	CRO Team K University of Zagreb

Table 1: A Historical Overview of the Student Steel Bridge Competitions in Turkey

This paper presents the experience of Department of Civil Engineering of Istanbul Kültür University who participated at the steel bridge competition every year with a number of teams since 2007 and outlines the benefits and opportunities of this hands on learning opportunity for students.

DESIGN&CONSTRUCT (DECO) STEEL BRIDGE COMPETITION

Design&Construct (DECO) steel bridge competition is a three day event held by the Construction Club of Boğaziçi University (BUYAP) since 2007. After the call for applications of the competition is announced, interested students of civil engineering and architecture form teams and start working on the conceptual design of the bridge. The bridges designed by the competing teams are evaluated according to the following criteria:

- Uniqueness and Aesthetics
- Workmen-Time Efficiency



- Deflection Efficiency
- Dead-Weight Efficiency
- Compatibility to the Competition Program

After the call for applications is announced, interested students of civil engineering and architecture form teams and start working on the conceptual designs of their bridges according to the set of criteria and constraints set forth by the organization (Boğaziçi University, 2013b). Students usually come up with a number of conceptual models and use finite element analysis software to assess the structural performance of these models under vertical and horizontal loading. This is a highly iterative process which involves trying out various configurations of structural members. Once students feel they have obtained the "optimum" structural system configuration for their bridges in terms of "self-weight", "deflections" and "ease of fabrication and assembly", they prepare and submit the structural calculations, structural plans and connection details of their models to the organizing committee in accordance with the competition guidelines.

The list of teams which will proceed to the next stage of the competition is announced by the organizing committee upon the completion of the technical evaluation of structural designs by a jury of steel design experts. The teams that pass the technical evaluation, start working on the fabrication of their bridge models. Structural members and connections are cut and welded in a steel workshop facility (Figure 1). Students are fully responsible for the procurement of the appropriate steel sections and the supervision of the fabrication process. Structural members are cleaned up and painted after the dimensions and worksmanship of each part is throughly inspected.



Figure 1: Fabrication of the Structural Members at the Workshop by Students.

After the completion of the fabrication process, students practice working on the assembly of the bridge to improve their team coordination skills and to reduce the time spent on the assembly of their bridges in the day of the competition. It is mandatory for the students to use work gloves, steel toed boots, safety goggles and a hard hat at all times during the assembly of the bridge.

On the day of the competition, competing teams assemble their bridge models in the locations designated for the team by the organizing committee (Figure 2). Uniqueness and aesthetic merit of the bridge designs are evaluated in the first stage of the competition.



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Figure 2: Bridge Exhibition at the Southern Campus of Boğaziçi University.

Other criteria are evaluated in the second phase of the competition where the competitors assemble their bridges (Figure 3) and the bridges are subjected to the vertical and horizontal loads prescribed by the competition rules (Figure 4). An extensive description of the competition rules and evaluation criteria is presented in the competition web page (www.boundc.com). The event ends after the presentations from sponsors and the award ceremony.



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Figure 3: Erection of the Bridge at the Competiton Site by Students.



Figure 4: Application of the Vertical Loads to the Bridge.



RESULTS AND CONCLUSIONS

The primary aim of the student steel bridge competitions is to supplement the steel design courses in civil engineering programs by providing an opportunity for the students to work on a small-scale design project, where they are involved in all the stages from conceptual design to fabrication and erection. Students also gain experience on the project management aspects of a design project such as the procurement of the construction materials, management of the project cost, project planning, coordination of the fabrication processes as well as dealing with spatial constraints and client demands. Another important benefit of the competition for the students is teamwork experience. Students have to work as a team starting from conceptual design to the erection of the bridge on the competition site, for which a perfect coordination of the team members is essential for the minimization of construction time.

In our experience, steel bridge competitions have been quite beneficial for our students who have participated in these events. Even the students who did not participate in the competition were motivated by the efforts of the students entering the competitions, particularly the bridge assembly exercises held on the university grounds.

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AN INVESTIGATION OF CHEMISTRY STUDENT TEACHERS' UNDERSTANDING OF CHEMICAL EQUILIBRIUM

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ABSTRACT

The purpose of the study is to investigate chemistry student teachers' levels of understanding and alternative conceptions concerning chemical equilibrium. The study was conducted with totally 97 chemistry student teachers (16 from first grade, 15 from second grade, 22 from third grade, 22 from fourth grade and 22 from fifth grade) who are enrolled in the department of secondary science education of Fatih Faculty of Education at KTU. A test, consisting of 13 two-tier multiple choice questions, was used to collect data. The first tier is a question with three choices, while the other tier involves four possible reasons for all possible answers in the first tier. The questions in the test were taken from literature related to chemical equilibrium. The results of the present study confirmed many alternative conceptions that had been identified in previous studies and showed that fourth-year student teachers are more successful than the other classes.

Key Words: Chemistry Education, Chemical Equilibrium, Student Teacher.

INTRODUCTION

Students develop their concepts and construct their own theories based on their experiences, attitudes, background, and abilities before coming to school (Nakhleh, 1992). These concepts and theories which are brought to classroom by students are usually different from scientific conceptions. Students' self-constructed ideas have been called in literature as misconceptions, alternative conceptions, preconceptions, naive concepts. The studies have revealed that many of students have difficulties in understanding chemistry concepts and hold a lot of alternative conceptions (Demircioğlu et al., 2004). One of the most important



reasons for this is that chemistry concepts are abstract in nature and require abstract reasoning. Another reason is that chemistry concepts generally require that students must be able to use representations in three different levels: *macroscopic, microscopic, and symbolic levels* (Johnstone, 2000). Macroscopic level refers to what can observe with our senses. We can observe the macroscopic events. Microscopic level refers to what is actually taking place at the particulate level in a chemical reaction involving the movement of electrons during bond breaking and bond forming. We cannot observe chemical changes taking place in this level. For this reason, students have difficulty explaining chemistry phenomena in the microscopic level and tend to attribute the macroscopic properties of matter to its microscopic particles (Ben-Zvi, Eylon and Silberstein, 1986). Symbolic level refers to the symbolic representations of atoms, molecules, and compounds used in writing chemical formulae and equations. Students have more difficulty in learning microscopic and symbolic representations than macroscopic one because these levels are invisible and abstract.

In the literature, one of the chemistry concepts often studied is chemical equilibrium. It is considered to be one of the most difficult concepts to teach and to learn because it relates a number of chemistry concepts such as oxiditation-reduction, acid and base, reaction rate and solubility equilibrium, and requires to use representations at macro, micro and symbolic levels (Yıldırım et al., 2011). The results of studies in the literature show that most students in different age levels retain many alternative conceptions about chemical equilibrium (Hackling and Garnett, 1985; Huddle et al., 2000; Piquette and Heikkinen, 2005; Solomonidou and Stavridou, 2001; Voska and Heikkinen, 2000). Some of alternative conceptions discovered in these studies are: "the concentrations of all species at equilibrium are equal"; "the more the value of equilibrium constant increases, the more the rate of reaction increases"; "the rate of forward reaction increases until equilibrium is established".

And also, literature shows that student teachers hold alternative conceptions about a number of basic science concepts (Demircioğlu and Baykan, 2012; Yadigaroğlu and Demircioğlu, 2012). Wandersee et al. (1994) claim that teachers often have similar alternative conceptions with their students. And also, teachers can transfer their alternative conceptions to their students (Wilson and Williams, 1996). So, an investigation of chemistry student teachers' alternative conceptions on chemistry concepts would be worthwhile. The major aim of this study is to investigate chemistry student teachers' levels of understanding and alternative conceptions conceptions.

METHOD

The Sample

The sample consisted of 97 chemistry student teachers in the department of secondary science education of Fatih Faculty of Education at KTU. All student teachers voluntarily participated in the present study. The numbers of the participants ranged from grade 1 to grade 5: 16 from grade 1, 15 from grade 2, 22 from each of grade 3, 4, and 5.

Data Collection

In this study, Chemical Equilibrium Concept Achievement Test (CECAT) has been used to collect data. The test consisting of 13 two-tier multiple choice questions has been taken from literature related to chemical equilibrium (Özmen, 2008; Tyson et al, 1999). In the test, the first tier is a question with three choices, while the other tier involves four possible reasons for all possible answers in the first tier. This type of tests has often been used to determine students' alternative conceptions in science education. Third question randomly selected from the test is presented below as an example. This question is about reversible reactions.



Question 3:

Carbon monoxide and hydrogen react according to the following equation.

 $CO_{(g)} + 3H_{2(g)} \rightleftharpoons CH_{4(g)} + H_2O_{(g)}$ When 0,02M CO and 0,03 M H₂ are introduced into a vessel at 800 K and allowed to come to equilibrium, what can we say about the rate of reverse and forwad reactions at equilibrium?

(a)* the rates are equal

(b) forwad reaction rate is greater than the reverse one

(c) reverse reaction rate is greater than the forwad one

Reason

(1) forwad reaction goes to completion before the reverse reaction starts

 $\ensuremath{(2)^{\star}}$ the rates of the forwad and reverse reaction are equal when the system reaches equilibrium

(3) as time passes, concentrations of products increase(4) at the begining, the concentrations of reactants are greater than concentrations of products

*Correct option and reason

The conceptual areas covered by the test are presented in Table 2. The pilot study of the test was conducted with 52 undergraduate chemistry students. Cronbach's alpha reliability coefficient was found as 0,71 for this study.

 Table 2: The Conceptual Areas Each Test Item in CECAT Attempts to Measure

Subject areas	item no
Le Chatelier's Principle	4, 12, 13
Reach to equilibrium	3, 7, 8
The equilibrium constant	1, 5, 11
Heterogeneous equilibrium	2, 9
Effect of catalyst	6, 10

Data Analysis

In this study student teachers' responses to the items are categorized as; *correct option-correct reason, correct option-wrong reason, wrong option-correct reason* and *wrong option-wrong reason*. Students' responses are scored by giving 3 points for *correct option-correct reason; 2 points for correct option-wrong reason;* 1 point for *wrong option-correct reason;* 0 point for *wrong option-wrong reason*. Thus, total score of the test is found 39. This type of scoring was used in other research as well in the literature (Demircioğlu et al., 2004). In statistically analysis of data, ANOVA and Tukey's HSD were used because there were five different groups (grade 1, 2, 3, 4, and 5).

RESULTS AND DISCUSSIONS

The descriptive statistics obtained from the test used in the present study are presented in Table 3. As can be seen in Table 2, while the highest mean belongs to grade 4 chemistry student teachers (M=19.56; S.D: 5.73), the lowest mean belongs to grade 2 chemistry student teachers (M=12.53; S.D: 5.76). The overall mean (15.93) of groups is lower than anticipated (Table 2).

Grade	N	Mean	S.D.	Min.	Max.
Grade 1	16	13.12	6.32	7	26
Grade 2	15	12.53	5.76	6	23
Grade 3	22	16.54	6.06	6	27
Grade 4	22	19.56	5.73	10	30
Grade 5	22	16.03	6.10	9	25
Total	97	15.93	6.14	6	30

Table 2: The mean and standard deviation values of given answers for items in the test

The ANOVA is used to determine whether there are any significant differences among the group means. Tukey's HSD post hoc test is used in order to determine which groups differ from each other. The ANOVA and Tukey's HSD results are presented in Table 3.

Table 3: The results of ANOVA and Tukey's HSD.

	Sum of Squares	df	Mean Square	F	р	Tukey's HSD
Between Groups	613.545	4	153.386			Crede 4 Crede 1
Within Groups	3003.363	93	32.294	4.75	0.02	Grade 4 - Grade 1 Grade 4 - Grade 2
Total	3616.908	97				Graue 4 - Graue 2

As seen in Table 3, the results of ANOVA show that there are statistically significant differences between the means of sample groups (F(4;93)= 4.75; p=0.02). Tukey's HSD results shows that the differences between the means of grade 4 chemistry student teachers and grade 1 and 2 chemistry student teachers in favor of the grade 4 are statistically significant at 0.05 level.

Analysis of the results obtained from CECAT shows that students do not have a satisfactory understanding of the chemical equilibrium. For the first tier of the items, the range of correct choice is 24.7 % to 57.7% (Table 4). When the both tiers are combined, students' correct responses are decreased to a range of 6.1 % to 52.5 %. As seen in Table 4, the percentages of student teachers' correct responses for both content choice and combination are generally under 50 %.

Table 4: Percentages of Content Choice and Correct Combination

Items	Correct choice	Correct choice
	for first tier	for both tiers
1	49.4	32.9
2	37.1	34
3	40.2	26.8
4	54.6	24.7
5	44.3	35
6	57.7	52.5
7	45.3	42.2
8	39.1	6.1
9	25.7	22.6
10	50.5	47.4
11	38.1	27.8
12	24.7	8.2
13	35	9.2



Ten alternative conceptions held by at least 20% of the sample were identified through analysis of items on the TISAC and presented in the Table 5. The percentages of alternative conceptions ranged from 23.7% to 46.3%.

Table 5: The Percentages of Students' Alternative Conceptions Determined in the Test		
Alternative conceptions	f	%
When a catalyzer is added to a system in equilibrium, K _{eq} increases.	30	33.3
When the temperature is changed, whether the reaction is endothermic or exothermic does not affect the equilibrium.	31	31.9
When a catalyzer is added to a system in equilibrium, concentration of reactants and products increases.	26	26.8
At equilibrium system, forward reaction rate is not equal to reverse reaction rate	36	37.1
Forwad reaction goes to completion before the reverse reaction starts	32	32.9
At equilibrium, no reaction occurs	45	46.3
When a substance is added to equilibrium system, equilibrium will shift to the side of addition	23	23.7
At equilibrium, the concentration of reactant is equal to the concentration of products	40	41.2
Concentration of solids are included in the equilibrium constant	28	28.8
Le Chatelier's principle can be applied to all systems, including heterogeneous equilibrium systems	25	25.7

The main aim of this study is to investigate chemistry student teachers' levels of understanding and alternative conceptions concerning chemical equilibrium. Chemical equilibrium is a difficult concept in which students in all grade levels have misconceptions. In this study the results show that chemistry student teachers hold significant misconceptions about chemical equilibrium. These misconceptions are related to changing equilibrium conditions (temperature, concentration), effect of catalysts, Le Chatelier's principle and characteristics of equilibrium. For example, some chemistry student teachers think that temperature changes do not affect the equilibrium (Table 5). When the literature checked, same result is reported in a number of studies (Akkuş et al., 2003; Özmen, 2007, 2008; Şendur et al., 2011; Voska and Heikkinen, 2000). Another misconception is about effect of catalyzer on a system at equilibrium (Table 5). They think that when a catalyzer is added to equilibrium system K_{eq} increases and when a catalyzer is added to equilibrium system, concentration of reactants and products change (Table 5). This results are consistent with the findings in the literature (Bilgin and Geban 2001; Voska and Heikkinen, 2000). 37.1% of student teachers think that at equilibrium system, forward reaction rate and reverse reaction rate are not equal (Table 5). After a careful examination of available science education literature, this result is reported in the studies of Costu and Ünal (2005) and Bilgin et al. (2003). 25.7% of the sample think that Le Chatelier's principle can be applied in all systems, including heterogeneous equilibrium systems (Table 5), similar misconceptions reported in the related literature (Özmen, 2007, 2008). While 46.3% of students' teachers think that at equilibrium, no reaction occurs, 23.7% of them think that when a substance is added to equilibrium system, equilibrium will shift to the side of addition (Table 5). Similar misconceptions are reported in the related literature (Özmen, 2007, 2008). Another misconception determined in this study is at equilibrium, the concentration of reactant is equal to the concentration of products (Table 5). In the literature, Canpolat et al. (2009) reported similar misconception.

CONCLUSION AND RECOMMENDATION

The results of this study show that chemistry student teachers have many alternative conceptions about basic principles and concepts of the chemical equilibrium. These alternative conceptions are parallel to literature. Two-tier multiple choice tests are useful instruments that can be used by teachers to identify their students' preconceptions and evaluate their instruction.



There are several methods using teaching of chemistry such as concept mapping, simulations, laboratory activities, analogies, conceptual change texts, worksheets (Harrison and Treagust, 2000; Özmen, Demircioğlu and Coll, 2009). Many reports indicate that these methods are useful for teaching some chemistry concepts such as chemical equilibrium (Chiu et al., 2002; Özmen, 2007; Sandberg and Bellamy, 2004; Yıldırım et al., 2011). Some of these methods are good for high ability students and some of them for low ability students. Lecturers can adapt these methods in to their lessons. A combination of different methods may develop students' understanding of chemical equilibrium and help to change their misconceptions. Students' misconceptions should be taken into account during the curriculum development and curriculum developers should develop new teaching materials about the chemical equilibrium. Lecturers and curriculum developers should give more examples related to daily life, in this way many chemistry topics like chemical equilibrium can be learn easily.

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PEACE EDUCATION VERSUS WAR JOURNALISM

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ABSTRACT

We are living in critical times. Hardly does a day go without bombs in the Middle East, serial killings in the USA, the suffering of people in refugee camps in various parts of Africa, or a violent repression of people including wallstreet, France, Italy and Turkey. The programs have skyrocketed recently to raise awareness of peace in the world. For example, since 1986, the Grant Program of the United States Institute of Peace (USIP) has made more than 2,100 grants and invested roughly \$86 million in support of research, education, training, media, and public diplomacy by individuals and organizations engaged in efforts to understand, prevent, manage, and resolve violent conflict.One stumbling block is the terminology used in this field, for instance UNESCO widely uses peace education in all its general documents, but the terminology changes when its country offices collaborate with educational systems and government ministries that prefer other terms, such as peacebuilding in schools (eastern and southern Africa), education for peace (Rwanda), global education (the Middle East and north Africa), education for conflict resolution (Sri Lanka), and values for life (Egypt). Any kind pf peace education encompasses four domains, which are regarded as knowledge, concern, skills and action. The purpose of this study is to see how university students feel about peace and violence. For this study a semistructured interview is given to 110 students at a western public university to see whether they have the knowledge and concern for peace and the results will be juxtaposed with the events reflected in the media to substantiate that peace education braves a great deal of responsibility against war journalism of the postmodern times.

Key Words: Peace education, pre-service teachers, violence.

INTRODUCTION

We have been living in hard times. Each generation has seen too much violence and too many deaths; many kinds of conflicts—international, regional, intergroup, and interpersonal— damage people, communities, and the natural world, change the world, socially and ecologically, and prompt vast human migrations in response to political violence, poverty, and ethnic and religious tensions (Opotov, Gerson & Woodside, 303). Though dreams of peace are as old as humanity, a sustained peace remains elusive.

The terms "peace" and "war " are two of frequently and liberally used words in the media, the public and the private sector as well as in the international arena. Magi (2010, p.16) holds peace is a key term for education, because it pertains to the basic condition of human existence and societal and political embedding. Defining peace is a difficult thing because it encompasses not only a concept but also a plethora of behaviors and conditions that could be necessary to obtain peace. The most common definition of peace states that peace is the absence of war or protracted conflict. Johan Galtung (1969), one of the best known theorists of modern peace research, defines peace through social goals as a major part of a scientific strategy. The terms peace and violence are closely linked to each other, where peace is regarded as an absence of personal (direct) and structural (indirect) violence.



The absence of peace is often a war, although not always. The state of absence of war can be understood as peace, but may not necessarily be peaceful. Violence can be expressed not only in a direct manner (e.g. physical confrontations) but also through structural violence (e.g. circumstances that limit life, discrimination, deprivation of basic human needs, economical oppression). Peace is a concept that motivates and inspires imagination, indicating more than the absence of violence.(Magi, 2010, p.17).

It also encompasses collaboration, dignity, respect and love for each other.

Positive peace – The absence of structural violence; a positively synergistic co-existence as a precondition to peace.
Negative peace – The absence of direct violence of all kinds.

Negative peace - The absence of unfect violence of an kinds.

There are some abstacles preventing people from having peace as (Finn, 1984, p.58) :

- 1. concrete concepts of war are much easier to grasp that concrete aspects of peace.
- 2. people have prejudices and they have little information on the enemies
- 3. people have a strong sense of powerlessness and a lack of inspiring models
- 4. today's people are cynical at a time when they should be idealistic.

People especially students need to see that they can be peacemakers but this sounds daunting among the media items that promote enmity, "otherness", and wars and conflicts. Obstacles to peace such as fear, prejudice, aggression, ethnocentrity, ideology and propaganda need to be identified and confronted, then individual, social and international peace can be established.

METHOD

Participants

110 pre-service English teachers participated in the semi-structured interview. Their views were recorded and transcribed in the course" Community Service".

Design

The method employed was qualitative, using individual interviews.

The approach and size of qualitative research means that it is not designed to be quantitatively representative of the general population. The smaller sample size associated with qualitative methodology enables more indepth understanding. Its flexible style of questioning means that the research can focus on, following and explore interviewees' own lines of thought (Lister et al., 2001, p. 9).

The interviews were semi-structured, in order to draw out issues of war, peace and conflict. First, in the open end questionnaire, participants were presented with 9 alphabetically ordered concepts and were asked to express their opinion on the basis of the meaning of the concepts. The instrument consisted of the following concepts: absence of peace, absence of violence, absence of war, global citizen, peace, violence and war. These nine concepts were selected as the core concepts of peace education derived mainly from the literature relating to peace education (Bajaj, 2004; Haavelsrud, 1996; 2008). Secondly, a batch of open ended questions were posed to determine what pre service teachers know regarding war, peace, conflict in neighbouring countries and in the world.

RESULTS

When pre service teachers are asked to associate the concepts with war, here are the results: They believe that peace is associated with good, beautiful clean, pleasant and slow. However, war is connected to ugly, bad,



unpleasant and fast (they erupt suddenly) as shown in Table 1. Their responses show that pre-service teachers do have clear-cut concepts regarding war and peace.

Table 1: Adjectives about Peace and War	Table 1: Ad	liectives	about Peace	and War
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	War N (%)	
110 (100)		
	110 (100)	
110 (100)		
	110 (100)	
110(100)		
	110 (100)	
110 (100)		
	110 (100)	
50 (45.4)	60 (54.5)	
60 (54.5)	50 (45.4)	
75 (68)	35 (32)	
80 (72)	30 (27)	
	110 (100)	
110 (100)		
50 (45.4)	60 (54.5)	
60 (54.5)	50 (45.4)	
30 (27)	80 (72)	
80 (72)	30 (27)	
	110 (100) 110 (100) 110 (100) 50 (45.4) 60 (54.5) 75 (68) 80 (72) 110 (100) 50 (45.4) 60 (54.5) 30 (27)	110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 50 (45.4) 60 (54.5) 50 (45.4) 75 (68) 35 (32) 80 (72) 30 (27) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 10 (100) 10 (100) 10 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 110 (100) 10 (100) </td

The second section starts with the questions whether pre service teachers think the world is peaceful and safe. 105 of them have said "no", the rest 5 of them have said it depends on where people live, but in most areas the society is full of chaos, which indicates that pre servic eteachers have a bleak perspective into the world.

When asked what they would do if Turkey joined the war, 70 % expressed sadness and anxiety and 30% showed support for joining the war due to patriotic reasons in Table 2.



Table 2: Pre service teachers's views on a possible war

Views	N (%)
Sad	80 (72)
Anxiety	85 (77)
No feeling	10 (9)
supportive	40 (36)

When they are asked to comment on the possible reasons for wars, they have stated them as economic interests/benefits (80%), getting power (75), and greed (25%).

When asked whether they have conflicts in their own lives, all accepted it and 65% indicated the use of passive agression strategies (doing nothing, not talking and waiting) and 35% of them have stated their desire to solve the problems through talking.

On the same day the interviews were held, the news clips were taken, collected and analysed from major newspapers to see whether media promotes peace or war. Here are the results.

News clips about Israel are about targeting it as the enemy and threatening the country to stop bombs and killings in Gaza. It accentuates the images of the Hell focusing on the imminent apocalypse.



As to Syria, the media is all about the readiness and preparation of the military once they see the syrian planes crossing the borders.



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Even when the news is about something the newly-elected President Obama's trip to Myanmar, the focus is on Obama's "slave " grandfather, which does not fit into the historical facts. Slavery was already over during the second warld war and Obama's grandfather was working as a cook with an English commander's family relocated to Myanmar, however, the news has the war and slavery overtones, leading readers to be misinformed about the real evets.



http://www.hurriyet.com.tr/planet/21955231.asp



CONCLUSION

For those committed to peace and to peace education, the question of exactly why we should be committed to this endeavour seems moot and the everpresent threat of global or imperial warfare and the continuing injustice of the maldistribution and exploitation of global resources are more than obvious. On a local scale, problems of violence and a culture of violence in personal relationships are also evident almost everywhere (Page, 2004, p.11). It is precisely the overwhelming nature of these phenomena which underscores the importance of developing a thorough rationale for what we hope to achieve through peace education. We need to be able to articulate not only what should be done through education for peace, but moreover why it should be done.

As former UNESCO Director-General Federico Mayor (1999) described,

The United Nations initiatives for a culture of peace mark a new stage: Instead of focusing exclusively on rebuilding societies after they have been torn apart by violence, the emphasis is placed on preventing violence by fostering a culture where conflicts are transformed into cooperation before they can degenerate into war and destruction. The key to the prevention of violence is education for nonviolence. This requires the mobilisation of education in its broadest sense—education throughout life and involving the mass media as much as traditional educational institutions. (p. 23)

However, this proper observation of preventing violence is not even visible in the media or in the ideas of preservice teachers. With the wae journalism which aims at selling more, it seems so hard to establish the prevention of war and establishment peace through the media. What is left is the schools where both educators and school managers thrive in shaping the ideas on war and peace. Maybe the best way is to start with the personal conflicts.

Regarding personal conflict, the steps in using problem solving negotiations are (Johnson & Johnson, 2005) as follows:

- 1. Describing what you want. "I want to use the book now." This includes using good communication skills and defining the conflict as a small and specific mutual problem.
- 2. Describing how you feel. "I'm irritated." Disputants must understand how they feel and communicate it openly and clearly.
- 3. Describing the reasons for your wants and feelings. "If I don't get to use the book soon my report will not be done on time. It's frustrating to have to wait so long." This includes expressing cooperative intentions, listening carefully, separating interests from positions, and differentiating before trying to integrate the two sets of interests.
- 4. Taking the other's perspective and summarizing your understanding of what the other person wants, how the other person feels, and the reasons underlying both. "My understanding of you is..." This includes understanding the perspective of the opposing disputant and being able to see the problem from both perspectives simultaneously.
- 5. Inventing three optional plans to resolve the conflict that maximize joint benefits. "Plan A is ... , Plan B is ... , Plan C is..." This includes inventing creative options to solve the problem.
- 6. Choosing one and formalizing the agreement with a hand shake. "Let's agree on Plan B!" A wise agreement is fair to all disputants and is based on principles. It maximizes joint benefits and strengthens disputants' ability to work together cooperatively and resolve conflicts constructively in the future.

Ultimately, opportunities for the promotion of peace and more equitable practices are closer than many of us can imagine, Friedrich (2007, p.82) claims, from teaching our own students to resolve conflict in constructive and empowering ways, to explicitly teaching peace in the world, to advocating more research on language and peace and the implementation of the findings of such research efforts, we must start to promote and reinforce what works rather than exclusively denounce what does not. There are those who believe that a state of



conflict is a natural part of human experience, a reason why peace is so difficult to uphold. However, whether peace is an idyllic view of a world we cannot go back to, that pre-Babel state of harmony and uni-language, or a more complex combination of alliances and compromises, it is our duty to defend it. The consequences of not having it are too hard to bear.

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