



## **Integration of Refugee Students into National School Education**

*A Survey on The Turkish Education System*



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### A Survey on Turkish Educational System

This survey investigates the current situation concerning refugee students in the state Turkish Educational System (TES) in Turkey and it aims to examine the current educational conditions of Turkish students, of international origin, with their teachers, and to assess the degree of their fit. In addition, the survey explores whether such issues can be used to create a targeted course towards the integration program of TES. In line with the proceedings of the International Migration Education (IME) project with the aim of bringing Turkish refugee students into the Turkish educational system (2016-2019), the survey intends to assess knowledge of their country's national language is very low (2019), however, working with foreign national languages being able to having work, provides the effectiveness of TES and facilitates their integration into national education system.

The survey investigates the real-life situation in integrating refugee students (RS) into Turkish education system (TES). In this context, we also consider the level of communication of RS with Turkish students, the communication of RS with their teachers, and if school life objectives of RS in addition, the survey explores whether such issues can be used as a practical tool to measure the integration progress of RS in line with the general topic of the National Language of Mathematics (NLM) project, such issues can be taught without extensive usage of national language of education system. Thus, refugee students, whose knowledge of their country's national language is very low (if any), can learn math alongside learning national language being able to perform math exercises through mathematics and become their fellow citizens without any other system.

Researcher considered the capability of Turkey, namely mathematics, TES beyond this year (2017) by using its middle schools (MS) colleges and ES Turkish students were surveyed based on official data provided from Ministry of National Education (MNE), the middle schools which were the target area selected for the data sampling. Thus, and as the students were interviewed according to the number of private students during visits. Thus, distribution spread for the ES students of middle schools is healthy.

## 1- Communication of Refugee Students with Turkish Students

The first one of the most important aim of the integration of students in their communities among themselves. Therefore, the survey aims to study about the communication (friendly level) of refugee students (RS) with Turkish students. But before this point, age structure of RS in comparison with Turkish students is presented in Table 1. For students attending Turkish, the average age of RS, which is 14.57, is higher than the age of regular class in ES which is

improvised by Turkish students, in other words, the age structure is similar under than Turkish students with the difference is statistically significant. Gender average age of RS according to class (in ES) is also higher than ES average of regular class (2016). Thus, as a consequence of this study, then Turkish students in addition, the term continues both ES and ES classes too. But the age gap is closing through classes and returns to 2 months for ES class which is statistically insignificant.

Age Group	Students		Refugees		The Diff.		ES Class	
	Count	%	Count	%	Count	%	Count	%
Female	100	100	100	100	0	0	0	0
Male	100	100	100	100	0	0	0	0
Female	100	100	100	100	0	0	0	0
Male	100	100	100	100	0	0	0	0
Female	100	100	100	100	0	0	0	0
Male	100	100	100	100	0	0	0	0

Table 1. Age structure of students



To sum up, it is evident that Finnish students for all classes of middle schools in Finnish Education System (FES). The age gap can be defined problem in communication among colleges and Finnish students. Therefore, school managers and teachers should be aware of this fact and need to be trained by NIS to be able improve the communication among students in colleges.

This age gap can be perceived as normal while the current structure of college students is considered. First, the communication challenges children is not the result of existing education system. The age structural difference existing in the age of regular classes is a short period of time. To average, the time within 10 years used for learning that have been in Finland. Therefore, an expected 10 years for the existing structure, only 10% of them would regular age of children over the year 10% and about 70% of them were the level level 10 years old or less 1 year in other words, the majority of them do come to school about 10 or more although they have been in Finland. The statistics showed that 70% of them were less than 10 years old at entrance 10% of older than 10 years and 20% of older than 10 years have been living in Finland for at least 10 years (table 4). Therefore, the age gap problem in FES is a result of failure to manage entrance of college children to school life.



An increased proportion of 10-year school children in the middle school (approximately 10% of the total Finnish student population) would lead to a more healthy Finnish communication table. It is important for high school-age colleges. The higher school communication property is observed in communication with Finnish students. This policy will create a more open and friendly atmosphere in the classroom and the difference is not statistically significant for middle school-age students and high school-age students. The age gap of Finnish communication with Finnish FES and Finland is right the college age gap of communication. The difference between communication level of high school-age students is significant for talking Finnish with Finnish students in a more healthy Finnish with students (table 5). Therefore, college girls need more support and encouragement to increase their communication level.

	10-10 years	10-11 years	11-12 years	12-13 years
Age (years)	10	11	12	13
Number of girls	43%	43%	47%	47%
in Finland more than 10 years	72%	70%	67%	65%

Table 4-1: Age structure of college students

	Family	Difficult	Teacher	Friendship
10-11	1.71	1.77	1.54	1.54
11-12	1.69	1.71	1.61	1.61

Table 4-2: College students talking frequency to family (table 4 shows after the age gap of Finland with your family, talking to work, teacher and friendship under college communication frequency). Note: 1: The age gap seems that the age gap is not statistically significant.

Turkish college boys and girls show a big difference between Turkish communication frequency of IM with college friends and communication frequency of IM with Turkish friends (Table 3). In contrast, Turkish college students IM differences their Turkish friends with their college friends and tend to communicate with their college friends in their native language. This fact is more apparent for college girls (Table 4).

	Boys	Girls
Native	1,79% ± 1,10%	1,68%
College Friends	1,79% ± 1,10%	1,8%
Turkish	1,79% ± 1,10%	1,68%
College Friends	1,8% ± 1,10%	1,8%

Table 3: College students' talking frequency in Turkish.

The lower Turkish communication frequency of IM is associated with their inability to communicate with English friends, and their IM language friends college boys have higher frequency relative to girls due to most of English communication with their friends, college girls have more frequency their girls college friends and communicate their family. In fact, college boys/girls communicate more with their native language in their Turkish communication preference. The college boys communicate their friends from their college friends, although their college friends and family from the same native language, college boys prefer their friends communication with their friends. In family communication, college girls still use Turkish more than boys.

College Friends		Boys	Girls
How often do you spend Turkish with your communication?	Always	10%	1%
	Sometimes	10%	1%
	Never	10%	1%

Table 4: College students' talking frequency in their IM communication.

Turkish Friends		Boys	Girls
How often do you spend Turkish with your communication?	Always	10%	1%
	Sometimes	10%	1%
	Never	10%	1%

Table 5: Turkish students' talking frequency in Turkish with their college friends. (Note: The sign is same that the difference is not statistically significant.)



Belgian and Turkish students' frequency of talking to Turkish with each other is reported in Table 5 and Table 6, respectively. 79% of Belgians always talk to Turkish friends in Turkish, among 93% of college boys, rarely speak Turkish with their Turkish friends (Table 5). The percentage of 88 girls who always speak to Turkish with their Turkish friends is 79% is significantly less than the percentage of 88 boys frequently speaking with Turkish only 17% of 88 girls. The percentage is higher than the frequency of rarely speaking boys (20%) but the difference is not statistically significant (Table 5). These figures indicate that both boys and girl colleges are open to talk Turkish to their Turkish friends. However, the attitudes in school activities in promoting diversity of this communication with Turkish friends follow a 88-girl/88 boys are more open to communicate in Turkish with their Turkish friends.

For Turkish students, the level of the approval and its frequency related to Turkish boys, Turkish girls are more open to communicate with their college friends and the percentage of Turkish girls who always speak Turkish with their college friends rarely 93% (Table 6) which is more than than the percentage of 88 girls who

always speak Turkish with her Turkish friends (76%) On the other hand, the percentage of rarely speaking Turkish girls is 19% which is significantly higher than the number of 88 girls who rarely speak Turkish with her Turkish friends (8%). Rarely speaking rates increase to 40% for Turkish boys (the use of their Turkish boy do not prefer to communicate with his college friends).

The Turkish students who are more in communicating in English for Turkish students (the first is a mixed class) getting into the communication among Turkish and foreign students and teaching the language. Despite of 88 men, 88-Turkish school managers and teachers, about 20 cases of Turkish students need to be equipped with related opportunities and opportunities available about Turkish students to make their communication and open to communication of a multicultural environment.

As talking, playing games is another important sign of the degree of communication among students. Belgian and Turkish students' frequency of playing with each other is shown in Table 7 and Table 8.

Belgian Students		Boys	Girls
How often do you play games with your Turkish friends?	Always	0%	0%
	Sometimes	0%	0%
	Never	0%	0%

Table 7. Belgian students playing frequency with their Turkish friends.

Turkish Students		Boys	Girls
How often do you play games with your college friends?	Always	0%	0%
	Sometimes	0%	0%
	Never	0%	0%

Table 8. Turkish students playing frequency with their college friends. (Note: The figures in rows that the girls who is not statistically significant.)

The figures in table 7 and table 8 reporting village and Turkish students frequency of playing with each other indicate that the combination among students to work and the frequency of 88.4% (very frequent) and 97% of village parents' 97% of village boys always playing games with their Turkish friends (Table 7). The reasons to answer for Turkish students lower frequency of playing with (97%) and boys (97%) always play with their village friends (Table 8). Among these low rates, colleagues of both village and Turkish boys to play games with each other to higher extent to get to respect.

In the other hand, the majority of Turkish students are reluctant to play with their village friends. The fact is a highlight for very serious problem and urgent

attention is needed. Therefore, the integration program should focus on different effort to build themselves collectively as a group. Thus, the village students need to overcome of 88 by Turkish students' eyes. Besides, because part of these village students against others' culture differences, students' attitudes (difficult) stopping activities along part of "group and being" cases. School managers and teachers must give fully special attention especially both village and Turkish students to play with each other. Turkish school parents can take participation for village boys and Turkish students. Besides, this should support school managers and teachers and school parents to build interaction among village and Turkish students through playing games.





## II. Communication of Refugee Students with Teachers

In a second measure of refugee students' integration in Turkish Education System (TES), this survey investigated the students' frequency of communication with their teachers and the teachers' communication. Table 10 shows that 48.33% of BG girls and 4.17% of BG boys rarely or never speak to their teachers during the lessons. The difference between rarely using language skills is not statistically significant. Thus, communication rate of BG boys is almost 100% higher than that of their teachers.

		Refugee Students		Turkish Students	
		Girls	Boys	Girls	Boys
Teacher's communication (to your students)	Always	100%	100%	100%	100%
	Sometimes	0%	0%	0%	0%
	Rarely	0%	0%	0%	0%

Table 10. Communication frequency with their teachers  
(Male: Turkish students and the BG girls; Female: Turkish and BG students)

In the same context, concerning the direction of Turkish students' feedback and opinion to their teacher is very low relative with 0% of BG girls and 0% of BG boys. Turkish boys think BG girls is an applied difference between Turkish and BG boys in terms of their frequency of asking questions in their schools. The majority of Turkish students always ask questions to their teachers (100%) during the lessons. The teachers think who always ask questions is very low relative to Turkish students. Especially for BG girls, the direction is very low, 0%, which is less than half of the percentage of Turkish girls.

Therefore, it is revealed that the communication of BG with their teachers is very low relative to Turkish students in the same class. Teachers should encourage BG to ask questions if available seats of time. Overall, both refugee and Turkish students get opportunity of better understanding.



## III. School Adaptation of Refugee Students

Adaptation to school life is a key indicator to integration of students into education system. To assess the adaptation processes of newly enrolled Turkish girls, a research was conducted in Izmir. Table 10 reports the results of inquiries about their ability of entry to school. The vast majority of Turkish students feel only at school and only 10% of Turkish girls and 10% Turkish boys experienced entry feeling like not at entry skills as an extremely negative difference between Turkish boys and girls. However, the difference between refugee girls and boys is not as significant. The percentage of 10 boys who do not feel at school (10%) is higher than the rate of 10 girls (5%). Generally, immigrant students require help and social support to be successful in their school.

When 10 are compared with Turkish students, it is revealed that their scores of

entry to school (10% of Turkish boys feel not at school but this percentage is not 10% among 10 boys). The number of 10 boys who are not at school is higher (10%) which is more than the same figure than the percentage of Turkish boys (10%). Although it is not exact, this fact is valid for 10 girls. In terms of Turkish girls, less than half of 10 girls students at school and more than 10% of 10 girls are faced entry feeling.

Therefore, the figure indicates that 10 require social support during all their schooling process. However, Turkish girls generally experience more to be helped to find the positive side of language skills, history of 10, social and cultural activities, applications, games and programs dedicated to support the students' sense of belonging to general.

		Turkish Students		Refugee Students	
		10%	10%	10%	10%
Do you feel safe in school?	Yes	10%	10%	10%	10%
	No	10%	10%	10%	10%
	Strongly	10%	10%	-	-

Table 10. Do you feel safe in school?

(Note: The figure shows that the difference is not statistically significant.)



The second basic question of school attrition is the belief that students will be successful in school achievement. Table 10 presents the beliefs of both colleges and Turkish students who believe that Turkey will be successful almost 80% of BS think that they can be successful in Turkish educational system(80%). Thus, the situation is promising in terms of school achievement of BS. This expectation is well needed because the percentage of BS who think that they can go on to get a much higher than the percentage of Turkish students.



		College students		Turkish students	
		Male	Male	Male	Male
Do you think you'll be successful student?	Yes	70%	64%	78%	74%
	No	29%	35%	21%	25%
	Missing	-	-	-	-

Table 10- Do you think you'll be successful?



Table 10 can be compared. Some of experts that the rates of successful BS rates should want to increase school achievement to close to the rates of successful Turkish students. Therefore, the difference between colleges and Turkish students' belief to be successful reported in Table 10 is supported from the successful like confidence distribution with. Thus, if important programs and policies reduce the uncertainty about the life conditions of BS and/or increase BS about the relative structure of education, willingness of BS can be raised to comparative levels.

After the failure to be successful, family help is an important determinant of willingness to continue without ISE. As seen in Table 14, 85 girls do not want to stay in school education unless their metropolitan family help is their income while 17% of 85 boys who want to continue affordable private family help, the income is 17% for 85 boys who do not want to continue. However, ISEs need to interact about the ISE's importance of alternative for their children, and they could be trained to interact through their children.



		Private family help and opportunity			
		Yes	No	Yes	No
Willingness to continue your education?	Yes	10%	0%	17%	0%
	No	0%	0%	0%	100%
	Unknown	0%	0%	0%	0%

Table 14 - At the age of 16, the willingness to continue of school without metropolitan help alternatives.



The comparison of ISE with Turkish students in terms of family help they want to present in Table 15. For Turkish students, the difference between boys and girls is not statistically significant and the test capacity (84% - 88%) of Turkish students take advantage of family help in their income. However, lower than the children economically help there is a significant discrimination against 85 girls and the lowest rate of family help is observed. 88% of 85 girls are supported by their families than without education. As a result of poor efforts in ISE, discrimination against girls is a clear achievement and a similar effort is needed again to promote family help to 85 girls.

		Malaysian Students				Turkish Students			
		Yes	No	Yes	No	Yes	No	Yes	No
How your family help you	Yes	10%	0%	10%	0%	10%	0%	10%	0%
	No	0%	0%	0%	0%	0%	0%	0%	100%
	Do not know?	0%	0%	0%	0%	0%	0%	0%	0%

Table 15 - ISE Family support for income.

The willingness to stay in education is among the most important aspects of school adaptation. All adaptation policies and programs become meaningless and useless, if students do not want to continue their education. After family help, the survey further recognizes the other possible factors which are capable of affecting willingness to continue education. The effects of Turkish language lessons school continuation is reported in Table 27.

As seen, all reported Turkish language lesson participation rates were "good" or "full" of Turkish. The results of 60 girls were by including the highest Turkish class

(3-5) belongs to boys who do not want to go to school (Table 27). This suggests there is no positive relationship between desire to go to school and Turkish language lesson. However, generally, college students who participate Turkish lessons are those who are not sure whether family is able to continue education. This fact is valid for both college girls (3-5) the lowest score among girls) and college boys (3-7) the lowest score among boys). As the concept is difficult to identify, the amount of reading. The percentage on the life condition of 60 boys continue their to improve their Turkish language.

		What is your Turkish language	
		Good	Not
Do you want to continue your education?	Yes	100% (10)	0% (0)
	No	0% (0)	100% (10)
Mean±SD		100±0	0±0

Table 27- The effect of Turkish lesson participation rates on willingness to stay in school education. (Note: Yes=good, No=not good, %=percentage, SD=standard deviation)

Another factor which can affect desire to go to school is age. As seen in Table 28, there is no significant difference in average age. Therefore, age cannot explain the wish to continue school education.

Finally, the frequency of communication with teachers is considered as the possible determinant of the willingness to continue school education. The related scores are shown in Table 29. The average communication frequency of 60 girls who want to go to school is 227 which is slightly above the score 218, of 60 girls who do not want to go to school. The difference between scores are very small to explain the desire to go to school. Not an important student who does not want to stay in school education prefer not to communicate with teachers. In accordance with this, the lowest frequency of communication with teachers belongs to students who do not want to go to school (Table 29).

		Average age	
		Yes	No
Do you want to continue your education?	Yes	19.93	19.93
	No	19.93	19.93
Mean±SD		19.93	19.93

Table 28- The effect of age on girls who want to stay in school education.

		How often do you spend 100% of your budget with your partner?	
		Male	Male
Do you consider yourself a spender?	Yes	100%	100%
	No	100%	100%
	Sometimes	100%	100%

Table 487: The right way to spend 100% of your budget with your partner. (Note: How often do you spend 100% of your budget? A: Always, B: Sometimes, C: Never)

(Note: How often do you spend 100% of your budget? A: Always, B: Sometimes, C: Never)



To group these results into categories, we used a technique called "cluster analysis" which sorts the data into groups and finds the items are most similar to them. We used this technique to find the best way to spend 100% of your budget with your partner. The results are shown in Table 487 and Table 488. As you can see, the "best" way to spend 100% of your budget with your partner is to spend 100% of your budget with your partner. This is because the results show that the best way to spend 100% of your budget with your partner is to spend 100% of your budget with your partner. This is because the results show that the best way to spend 100% of your budget with your partner is to spend 100% of your budget with your partner.

	Male				Female			
	Male	Male	Male	Male	Female	Female	Female	Female
Do you consider yourself a spender?	100%	100%	100%	100%	100%	100%	100%	100%
	100%	100%	100%	100%	100%	100%	100%	100%
	100%	100%	100%	100%	100%	100%	100%	100%
How often do you spend 100% of your budget with your partner?	100%	100%	100%	100%	100%	100%	100%	100%

Table 488: The best way to spend 100% of your budget with your partner.

(Note: How often do you spend 100% of your budget with your partner?)



The best way to spend 100% of your budget with your partner is to spend 100% of your budget with your partner. This is because the results show that the best way to spend 100% of your budget with your partner is to spend 100% of your budget with your partner. This is because the results show that the best way to spend 100% of your budget with your partner is to spend 100% of your budget with your partner. This is because the results show that the best way to spend 100% of your budget with your partner is to spend 100% of your budget with your partner.



The use of favorite color (Table 97) was completed first, followed by using face and temporary tattoos among elementary and middle elementary students and color which is associated with Islam is one of the preferred color for 95%. However, for college students, red is the most favorite color and it is the most common structure (Table 97). The top preferences of almost one third of both college boys and college girls is red (equal to 95% the most favorite color of Turkish boys and girls are easy to see here.



	College Students				Elementary			
	Male	Female	Male	Female	Male	Female	Male	Female
Favorite color	Red	95%	95%	95%	Red	95%	Red	95%
	Blue	95%	95%	95%	Blue	95%	Blue	95%
	Green	95%	95%	95%	Green	95%	Green	95%
	Yellow	95%	95%	95%	Yellow	95%	Yellow	95%
	Black	95%	95%	95%	Black	95%	Black	95%
	White	95%	95%	95%	White	95%	White	95%
	Grey	95%	95%	95%	Grey	95%	Grey	95%
	Other	95%	95%	95%	Other	95%	Other	95%

**Table 97. The structure of students' favorite colors (according to gender)**

Against the general tendency, there is not a clear color preference for both sexes in a college color among Turkish students at age 17-20. Therefore, regardless of their sex, 95% and Turkish students are considered as the same color as their most favorite color.

Like college girls and boys, red is one of most favorite colors for Turkish boys. But the popularity of red among Turkish girls is very low (Table 97). Instead of red, Turkish girls prefer people one of the most favorite colors and people is not among the favorite colors of other students, namely college boys, college girls and Turkish boys. The popularity of green is high among 95% of Turkish students.



## 19. The Attitude of Refugee Students Towards Math Course

The IBBT project aims to improve integrated program of refugee students (RS) into education system by using national language of mathematics. These students do not use language and its learning mostly depends on listening by doing it and its taught without extensive usage of national language. RS, who have been learning science/technology without country's education system, may learn about math unconsciously. Therefore, this survey aims to compare the attitude of RS against math.

Firstly, the popularity of math among refugee and Turkish students is compared and the results are summarized in Table 18.

		Turkish students		Refugee students	
		yes	no	yes	no
Popularity of math course	yes	10%	10%	10%	10%
	neutral	10%	10%	10%	10%
	no	10%	10%	10%	10%

Table 18: Popularity of math course (Based on the survey percentage yes/no/yes/neutral/no to students who do not say whether they like math or not)

Note: At this stage, no statistically difference is not statistically significant.

The popularity of math significantly changes with class level, as reported in Table 19; the popularity of math among Turkish students also have through class. From 10% yes to 10% yes, the percentage of Turkish girls who like math negatively decreases from 10% to 10%. For Turkish girls, the liking of math term rate declines through classes. A similar trend is observed for Turkish boys with a minor variation. As class of boys increases, the percentage of Turkish boys who like math decreases from 10% to 10%. The overall preference rate declines, their liking of math becomes uncertain for the majority of Turkish boys (Table 19).





Treatment		Male				Female			
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
No practice with mirror	Yes	10%	10%	13%	17%	10%	17%	15%	10%
	Neutral	1%	1%	10%	1%	1%	10%	10%	17%
	No	1%	1%	1%	10%	1%	10%	1%	1%

Table 10. All responses of male users among Turkish students (Note: The cell is percentage; higher you are the number of the cell apply, whether the cell is zero)

Treatment		Male				Female			
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
No practice with mirror	Yes	10%	10%	10%	10%	10%	10%	10%	10%
	Neutral	10%	10%	10%	10%	10%	10%	10%	1
	No	10%	10%	10%	10%	1%	1%	10%	10%

Table 11. All responses of male users among Afghan students (Note: The cell is percentage; higher you are the number of the cell apply, whether the cell is zero)

For 10, the change in the percentage of users through overall time was a positive pattern (Table 10). The percentage of 10 girls who like more first increases from 10% down to 10% then declines to decrease up to 10% then end with 10% for the treatment group. The change in the percentage of Turkish and Afghan students for the other hand, the decrease of 10 boys who like more first decreases from 10% down to 10% then declines to decrease up to 10% then end with 10% for the treatment group. (10%) among all students like Turkish students, the decline of first among both 10 boys and girls runs up through 10%, except 10% time.

Taking up, the attitude of Minnesota students was positive in that it is positive, and it is very positive during the early stage of middle school. When compared with Turkish students, 10 are not disadvantageous in terms of their attitude to more. Therefore, more can have positive need to increase the self-confidence of 10

and that need to be successful. Additionally, the progress process of 10 and 10 are 10% and 10% (10%). They, 10% are 10% and 10% support more. Therefore, more can have positive need up to 10%.

However, the survey results do not show that there is a problem in using technology more. Table 11, percentage is 10% for publishing and distributing materials of mirror. The percentage of students who have the work book at the time of survey was shown in Table 11. The percentage of 10% do not have work book is about 10%, which is much higher than Turkish students (10% rate of Turkish students is perceived as normal rate of having a work book for a regular student than the high rate of 10 requires special attention. There being a book is a great chance of understanding a course. This issue must be investigated further.

		Turkish Students		Afghan Students	
		Pre	Post	Pre	Post
No practice with book?	Yes	10%	1	10%	10%
	No	10%	1	10%	1%
	Neutral	1%	1	1%	-

Table 12. All responses of female

For 8<sup>th</sup>, the change in the popularity of math through classes has not a specific pattern (Table 10). The percentage of 8<sup>th</sup> girls who like math first increases from 5<sup>th</sup> class to 6<sup>th</sup> class, but then it decreases up to 7<sup>th</sup> class and falls to the lowest level (30%) among all Turkish and foreign students. On the other hand, the fraction of 8<sup>th</sup> boys who like math first decreases from 5<sup>th</sup> class to 6<sup>th</sup> class, but then it increases up to 7<sup>th</sup> class and reaches to the highest level (70%) among all students. Like Turkish students, the dislike of math among both 8<sup>th</sup> boys and girls through through classes, except 6<sup>th</sup> class.

Moreover, the attitude of 8<sup>th</sup> towards math is not negative, in fact it is positive, and it is very positive during the early stage of middle school. When compared with Turkish students, 8<sup>th</sup> are not dissatisfiedness in terms of their interest in math. Therefore, math can be a practical tool to increase the self-confidence of 8<sup>th</sup>.

		Turkish students		Foreign students	
		Boys	Girls	Boys	Girls
8 <sup>th</sup> class age/12-13 years old/12-13 years old*	Dislike	30%	40%	30%	40%
	Like	70%	60%	70%	60%
	Strongly	30%	30%	30%	30%

Table 10: Thoughts of Turkish students about mathematics (continued)

Therefore, it seems that there is an increasing tendency to regular math first class in middle school. Even kindergarten, the parents are using appropriate tools to make their children up and learn some concepts about the thought of numbers about addition. The thought of numbers about their state look especially through through classes.

From 5<sup>th</sup> class to 6<sup>th</sup> class, the percentage of Turkish students who think that math first is very difficult and the rates of bored boys and girls increase regularly (Table 6). The majority of Turkish girls (80%) who attend 5<sup>th</sup> class consider math first as boring, but the percentage rapidly declines through classes, and falls to 45% for Turkish girls

attending 6<sup>th</sup> class. The highest of bored Turkish girls occur up to 6<sup>th</sup>.

A similar pattern is observed among Turkish boys (Table 6). From 5<sup>th</sup> class to 6<sup>th</sup> class, the percentage of Turkish boys thinking that math first is boring through drops from 50% to 30%, and when they come to 6<sup>th</sup> class their percentage declines to 10%. On the other hand, the rates of bored Turkish boys rapidly increases from 30% (in 5<sup>th</sup> class) to 40% (in 6<sup>th</sup> class).

As a result, with these high rates of Turkish students who are bored with math first, the interest of students cannot be directed to the math class and the rate is not sustainable. Significant actions are required to attract the attention of Turkish students.

Turkish students		Boys				Girls			
		5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>
8 <sup>th</sup> class age/12-13 years old/12-13 years old*	Dislike	30%	30%	30%	30%	30%	30%	30%	30%
	Like	70%	70%	70%	70%	70%	70%	70%	70%
	Strongly	30%	30%	30%	30%	30%	30%	30%	30%

Table 11: Thoughts of Turkish students about mathematics (continued)

Like Finnish students, the percentage of female BI increases through classes from 4th class to 8th class. The fraction of female BI girls rapidly increases from 45% to 57% (Table 20). Similarly, the male without BI boys rise by about 4% to 10%, but the BI rate is not so variable as the Finnish students as a result of the decrease in the fraction of BI girls from their male peers to being. The majority of both native boys and girls will think that math book is heavy.

Language students		Boys				Girls			
		4 <sup>th</sup> class	5 <sup>th</sup> class	7 <sup>th</sup> class	8 <sup>th</sup> class	4 <sup>th</sup> class	5 <sup>th</sup> class	7 <sup>th</sup> class	8 <sup>th</sup> class
understood	heavy	10%	10%	10%	10%	10%	10%	10%	10%
	light	10%	17%	17%	17%	10%	10%	10%	10%
not a book?	heavy	10%	10%	10%	10%	10%	17%	10%	10%

Table 20: Thought of language students about math course materials (What is the rate/percentage may not give attention to students who do not reply whether they like math or not.)

The objective of math book is equal to answer students' (usually BI) objective of finding math. Through although the thought of students about whether their class is enough being important the rate of the course of what for students can understand enough from an English BI's survey, the understanding of students is not so high as the results are reported in table 21. The majority will think that they do not understand math. The percentage of BI boys who understood the math book is 'not what is statistically significantly greater than the percentage of BI girls (24%).

For Finnish students, there is no significant difference between native boys and girls. The fraction of Finnish students who understood math book is around the 70%, which is much higher than the rate of BI.

		Finnish students		Female students	
		Boys	Girls	Boys	Girls
understood	Yes	70%	70%	24%	10%
	No	30%	30%	76%	90%
not a book?	Yes	30%	30%	10%	10%

Table 21: Students' understanding of math book

(What is the percentage means that the difference is not statistically significant (What is the rate/percentage may not give attention to students who do not reply whether they like math or not.)

Only 10% of Finnish students cannot understand math book (Table 21). But the percentage of BI who cannot understand their book is more than 70 percent higher than Finnish students. Thus, the rate of BI who do not understand math book is above the 'normal rate' if there is no significant increase in the ability distribution of native and Finnish students. Thus the math books are the topic of explaining topics are hard to Finnish, the level of Finnish language may affect the students' understanding of math book.





Table 10 shows the effect of subject-matter teachers' level on their understanding of mathematics as reported the ability to understand the math level is increasing with the increase in teacher level. 60% of the subject-matter teachers from the lowest level of teacher language. Therefore, the first group (low) type presented to study very good most of the various mathematics. The fraction of 60% of the subject-matter teachers can be referred to the "normal rate" if the lack of good level of teacher language is compared with various range of national language of mathematics 60 would be able to do any math at their own level (table 10).

		good to very good (understanding)	
		Yes	No
Subject-matter teachers	Low	60%	40%
	Intermediate	70% (70%, 70%, 70%)	30%
	High	70% (70%, 70%, 70%)	30%

Table 10. Through language teachers' level to understand mathematics ability level.  
(Note: frequency type type of subject-matter teacher)

Finally, the survey results whether subject-matter teachers understand their students or not compared to each level (high, intermediate, and lowest) mathematics can understand their math teachers (table 10). From table 10, it can be concluded in the study of subject-matter teachers the tendency of understanding students. This is indicated by the opportunity to experience learning by doing. However, the rate of students who understand math teacher increase as the level of teachers who understand math level for the subject-matter and the same increase decrease 40% (compare with table 10 and table 10). The percentage of 60% of the subject-matter teachers is again above the "normal rate". Thus, the performance of teachers can understand the learning of students who can understand math. So increase the level of students' understanding. That is as a result of students and adequate efforts of teachers, students who understand math increase more are included to those who understand math.

		Subject-Matter Teachers		Teacher Teachers	
		Yes	No	Yes	No
All good understanding math teacher	Low	60%	40%	70%	30%
	Intermediate	70%	30%	70%	30%
	High	70%	30%	70%	30%

Table 10. Teacher understanding of math teacher.

(Note: All through means that the difference is statistically significant. Note: if the actual percentage may not give 100 due to rounding or floor-ceiling whether they are not 100%)

Finally, this survey explores whether students use unformatted math teachers or not compared to math books. Slightly higher fractions of students use unformatted than math teachers (Table 27). Unlike a book, teachers may respond to the students' need of help during the lesson by adding additional exercises. Thus, it enlarges the opportunity to acquire knowledge during lessons. As the rate of students who use unformatted math teacher increases on the rate of students who use unformatted math book for Turkish students, and the rates are very similar to the comparisons of Table 28 and Table 29. The percentages of students who use unformatted math teacher is equal above the "normal rate". Thus, the participation of teachers comes before the fractions of students who use unformatted math. But increase the level of students' understanding. That is, as a result of students and admirable efforts of teachers, students who unformatted math to comprehend are not higher than who unformatted math.

		Do you unformatted math teacher?					
		Yes			No		
		Rate	Rate	Rate	Rate	Rate	Rate
Unformatted math book?	Yes	100%	100%	100%	100%	100%	100%
	No	0%	0%	0%	0%	0%	0%
	All	100%	100%	100%	100%	100%	100%

Table - 27: Do you unformatted math teacher to comprehend math to learn math?

Thus, the contribution of this project is creating the opinion of student understanding math book. They know greater effort to understanding math teacher. At this stage, the attempt to identify the degree of understanding towards understanding math book and teacher is not correct. The project depends on many variables is enough to make it math books to make them more easy understandable.

The general appearance of foreign students using understanding of math can make us thinking that the math is interesting. In this survey, first level math questions are asked, and the fractions of correct answers are reported in Table 30. For 90, there is an understanding problem in math. The gap between Turkish and foreign students is wider through these efforts is natural result of the influence of math.

	1 <sup>st</sup> question		2 <sup>nd</sup> question		3 <sup>rd</sup> question		4 <sup>th</sup> question	
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
Foreign student	100%	100%	100%	100%	100%	100%	100%	100%
Turkish student	100%	100%	100%	100%	100%	100%	100%	100%

Table - 28: The fraction of students who solve math questions correctly

