

MAKING VOCATIONAL AND TECHNICAL UPPER SECONDARY SCHOOLS MORE ATTRACTIVE FOR STUDENTS TO PREFER: AN ACTION RESEARCH

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ABSTRACT

The purpose of this action research was to help the students to identify professions appropriate with their abilities, interests and personality traits and to guide the students to technical and vocational training especially at upper secondary level with their own will. Action research strategy in which qualitative methods and quantitative methods were used was selected for this study. As a result of this action research there was a promising difference in terms of the proportional change between the number of the students who graduated from junior high school in the sample and attended to technical and vocational upper secondary schools last year and the number of the students in the sample who has graduated from junior high school and then who will attend to technical and vocational high schools this year. The findings of this research have important implications about how vocational and technical secondary education can be updated, improved, increased the quality and attractiveness, well-organized according to market needs and thus more preferred in Turkey based on the perceptions and preferences of the students who preferred or did not prefer vocational and technical education.

Key Words: Technical and vocational secondary education, students, action study.

INTRODUCTION

The Turkish education system consists of 12 years of compulsory education (4 year primary, 4 year junior high school and 4 year general or technical and vocational upper secondary education) and higher education respectively. In Turkey, there are four main types of high schools: science high schools, Anatolian general high schools, public general high schools and vocational schools. Admission to science high schools is competitive by the government examination, and applicants must have good grades following their compulsory education. Science high schools are the most prestigious and the most difficult to enter of all high schools in Turkey. Students attend for four years and study a broad science curriculum and foreign languages. Anatolian general high schools also select by the government entrance exam and applicants must have completed their eight year education without repeating any year. However less prestigious they are than Science High Schools, Anatolian High Schools cover a similar four-year program. Public general high schools which have been transformed to Anatolian general high schools with the recent reform by the government are those which any students who have taken the government entrance exam have a right to be enrolled according to their scores. Vocational High Schools consist of Vocational and Technical High Schools, Trade and Tourism Vocational High Schools, Religious High Schools, Special Education High Schools and Vocational Health High Schools. Technical and Vocational High Schools are schools aiming at training and educating students for employment. Vocational high schools are the least prestigious of these and the easiest to enter in terms of the scores obtained at the high school entrance exam. Any students who have graduated from junior high school and have not been admitted to other prestigious schools have a right to attend vocational high schools according to the scores they get from the high school entrance exam. These schools consist of Vocational and Technical High Schools, Trade and

Tourism Vocational High Schools, Religious High Schools, Special Education High Schools and Vocational Health High Schools. (Dogan, Oruncak & Gunbayi, 2002; MEB, 2012).

Vocational graduates have several disadvantages relative to general secondary education students. Firstly, because of their concentrated vocational training, they tend to be less prepared for the academically-oriented university entrance exam. Secondly, the university entrance formula, which gives greater weight to students' performance when they are applying to study in a related field, reduces the likelihood that vocational graduates could enter into a four-year university program because, by definition, none is directly related to a vocational field. And thirdly, while vocational graduates are provided with direct access to tertiary education (without consideration of their scores at the university entrance exam), their choice of discipline is limited to the specific field they studied in their secondary vocational school (Katsu & Vorkink et al. 2005). The basic problem for vocational education for Turkey is the student. Thus, there are not so many students who attend vocational high schools through choice or who have been selected on some definite criteria. The reasons for selection of these schools in order of importance are: because of getting inadequate scores to go to general science and Anatolian high schools; economic inadequacy of the family; guidance of the family and acquaintances; desire to join economic life and guidance performed under some definite criteria by both the primary and junior high school and the family.

When the student distributions in general and vocational secondary education in Turkey were examined, in 1998 majority was in upper secondary studies in general in Turkey with the percentage of 65 in general and 35 in vocational (OECD, 1998); in 2002, 63 in general and 37 in vocational (OECD, 2005) and in 2005, 58 in general and 42 in vocational (OECD, 2007), 63 in general and 37 in vocational (OECD, 2009, MEB, 2009), 57 in general and 43 in vocational (MEB, 2012). As it can be understood from OECD and MEB –Ministry of National Education- statistics, there has been considerable increase in enrolment to VET in Turkey for ten years. Nevertheless, the enrolment rate to the VET has not reached the target, yet of 9th Development Plan of SPO – State Planning Organization- (2007-2013), which investigated that the 65 % of the students are to be enrolled to the VET and the remaining part is to attend the general education (SPO, 2006).

On the other hand, in Turkey the latest unemployment data shows that there is a serious problem in youth unemployment. The high unemployment rate of educated young people should be considered as a serious and dangerous sign in terms of the country's future prosperity. Despite the importance given to vocational education and rapidly increasing number of those schools, the demand for general upper secondary education is still ongoing. Limited quota of higher education causes those general secondary graduates flow to the labor market without any professional background, facing with a serious unemployment problem. Definition of the educated youth is a person who has graduated from secondary school and higher education institutions. The majority of the unemployed people are those of general secondary graduates. According to State Planning Organization (SPO) and Turkish Statistical Institute (TSI) unemployment rates of those graduates of general secondary education are the highest among persons with a secondary educational background. In this case, re-examining the function of secondary education according to labor market needs, planning and implementation of urgent measures to be taken are of great importance (TSI, 2012).

One of the most important elements of the planning of upper secondary education in accordance with technical and vocational education and labor market needs is to provide that the junior high school graduates should know and learn more about qualities, facilities and opportunities to be provided by technical and vocational upper secondary education. Therefore, promotional activities and introductions to junior high school students for qualities, facilities and opportunities of technical and vocational upper secondary schools should be carried out, which will increase the qualities of education in TVET secondary schools as the more demanded they are, the more quality they will have in time as a result of the fact that they will have to meet the desires of those who prefer TVET secondary schools and thus more students will be attracted to TVET high school education and there will be a decrease in the number of unemployment of educated and qualified adults in the long term.

The aim of this action research was to help the students to identify professions appropriate with their abilities, talents, interests and personality traits and to guide the students to technical and vocational training especially at upper secondary level with their own will. Thus, a voluntary school serving junior high school education in Antalya province was chosen to participate in the project and they were mentioned about the purpose of the project and the following action plan was implemented:

Action Plan

1. The formal permission procedures from local education directorate for the project were fulfilled.
2. The target student population and sample were determined in schools. (Forty-one 8th grade students in Dr. Galip Kahraman Junior High School in Muratpasa province in Antalya)
3. The numbers of students who graduated from primary school in the previous year and preferred vocational and technical education were checked and their numbers were determined.
4. Individual and focus interviews with the selected sample of students in their eighth grade in Dr. Galip Kahraman Junior High School in Muratpasa province in Antalya and their parents who were volunteers were done by using a semi-structured interview forms to understand their attitudes to technical and vocational training at the beginning of the project prior to presentations and school visits.
5. Specialists, principals and vocational and technical teachers from technical and vocational education made presentations of those promising technical and vocational programs with the highest employment potential.
6. The students and teachers from those promising technical and vocational programs in TVET education introduced their own programs.
7. School visits for observing the practical operation of those technical and vocational programs were organized.
8. Individual and focus group interviews with the selected sample of students in their eighth grade in Dr. Galip Kahraman Junior High School in Muratpasa province in Antalya were done again in order to understand whether there was a change in students' attitudes to vocational and technical upper secondary education.
9. The preference rates of the students from the sample school for technical and vocational upper secondary education were compared with the previous year to reveal the realization level of this project.

METHOD

Action research strategy in which qualitative methods and quantitative methods were used was selected for this study. "Action research simultaneously assists in problem solving and expands scientific knowledge, as well as enhancing the competencies of the respective actors, being performed collaboratively in an immediate situation using data feedback in a cyclical process, aimed at an increased understanding of a given social situation, primarily applicable for the understanding of change processes in social systems and undertaken within a mutually acceptable framework." (Hult & Lennung, 1980, p. 241-250). Thus, the advantages of an action research can be summarized such as direct links between research and problem solving, Possible personal benefits for practitioner/professional self development, a continuous cycle of change and development - organizational benefits, practitioner participation, an accumulation of action research may lead to policy and practice changes.

Participants

This study was conducted in Dr. Galip Kahraman Junior high school in Muratpasa province in Antalya in Turkey. Thus the population of the study consisted of thirty 8th grade students – eighteen girls, twelve boys and eight of girls and three of boys, total eleventh of them (36.66%) preferred vocational education - who graduated from Dr. Galip Kahraman Junior high school last year in 2012 and forty-one 8th grade students – twenty-one girls and twenty boys- who would graduate from Dr. Galip Kahraman Junior high school this year in 2013 and those students' parents who would graduate this year. The sample of the study consisted of forty-one 8th grade students who would graduate from Dr. Galip Kahraman Junior high school this year in 2013, their four parents and six students who graduated from Dr. Galip Kahraman Junior high school last year in 2012. Thus a sample of

total six students who graduated last year in 2012 and forty-one students who would graduate this year and their four parents who were volunteers were interviewed by the researcher and also forty-one students and their four parents participated in the activities carried out in the action plan in the research.

Data Collection

In order to investigate participants' perceptions on technical and vocational education and training and how to make vocational and technical upper secondary schools more attractive for students to prefer, semi-structured interviews and focus group interviews were used because it would provide an in depth exploration of the topic, it would allow the researchers the flexibility, for example, to change the order of questions, simplify the questions and to probe the interviews (Cohen, *et al.* 2007). Data were collected from June, 2012 through June, 2013. This included a 30-60 minute recorded interviews with the informants- face-to-face interviews and focus group interviews- with initial interview questions. Face-to-face interviews were done and informants' experiences, thoughts and feelings were recorded in a taped diary. Additionally, the target student population and sample were determined in schools-8th grade students in Dr. Galip Kahraman Junior high school in Muratpasa province in Antalya in Turkey-, the numbers of students who graduated from the selected junior high school last year in 2011-2012 academic year and preferred vocational and technical education were checked and their numbers were determined from school statistics. Thus, the preference and enrolment rates of those students who graduated last year and who would graduate this year from the sample school for technical and vocational upper secondary education were compared with the last year to reveal the realization level of this the action research.

Data Analysis

Data analysis began with repeated readings of interview transcripts from conversations with participants. The purpose was to determine the essence of the phenomenon and structures of experiences of participants related to technical and vocational education and training and how to make vocational and technical upper secondary schools more attractive for students to prefer. During data analysis, the data were organized categorically and chronically, reviewed repeatedly and continually coded. Interview transcripts were regularly reviewed. In addition, data analysis process was aided by the use of a qualitative data analysis computer program called NVIVO. These kinds of computer programs do not actually perform the analysis but facilitate and assist it. That is NVIVO does not perform the analysis but only supports the researcher doing the analysis by organizing data and recodes and nodes etc (Kelle, 1995; Cohen et al., 2007).

Ethical Considerations

Participants were briefed about the research aims, kept informed at all stages and be offered anonymity. A consent form was signed between researcher and the parents of each participant about the use of the data in terms of how its analysis would be reported and disseminated. It was also tried to be careful not to impose researcher's belief on others and researcher's beliefs were secondary and the participants thinking be what was required.

FINDINGS

The findings of the action study were analyzed under five main sub-headings: the view of the students who graduated from junior high school last year and preferred vocational and technical education on TVET high schools, parents and students' views on Vocational and Technical Education prior to introductory presentations on TVET high schools and school visits, presentations and school visits, the students' views on Vocational and Technical Education after presentations and school visits and the comparison of the enrolment rates of the students from the sample school to technical and vocational upper secondary education with the students who graduated from the junior high school last year.

THE VIEW OF THE STUDENTS WHO GRADUATED ON TVET HIGH SCHOOLS

In 2012-2013 academic year thirty 8th grade students, eighteen of whom were girls and twelve of whom were boys, graduated from Dr. Galip Kahraman Junior high school. Eleven (36.66%) of those thirty students, eight of whom were girls and three of whom were boys, preferred and attended TVET high schools. Those students

were informed about the action research and invited to an interview about why they chose technical and vocational high school training and their satisfaction in relation to their preferences, but only six of them accepted the interview invitation. When six students were asked about their attitude to TVET upper secondary schools, all of them answered that they had positive attitudes to TVET upper secondary schools. When they were asked what they thought about TVET, they explained about what they thought about TVET upper secondary education as *"a well-established education system offering lots of job opportunities"*(GSP1, GSP5), *"acquiring the qualifications of a vocation and finding a job easily"*(GSP2), *"TVET graduates' being luckier in terms of finding a job"*(GSP3), *"the schools the aim of which is to train and educate us according to the vocational programs students choose"* (GSP4) and *"education both in theory and practice"*(GSP6).

When six students were asked about whether they were glad with the vocational program they preferred, they all answered as 'Yes'. Besides they were asked what vocational program they preferred and why they did so. They explained their reasons as *"the popularity of information and communication technology (ICT) everywhere"* (GSP1), *"Being familiar with sea and Maritime Vocational High School"* (GSP2), *"Vocational Health High School, First Aid and Emergency and Medical Anesthesia program offering a wide range of job opportunities in health organizations just after graduation"* (GSP3, GSP4), *"Child Development Program due to children"* (GSP5) and *"Catering and food technology due to guidance teacher"* (GSP6).

When six students were asked what their suggestions were on what should be done to make TVET high schools more attractive and preferred by majority of the students, five of them put forward their suggestions as *"guiding students according to their abilities, talents and interests"*(GSP1, GSP2), *"introduction of vocational programs to students"*(GSP3), *"school visits and presentations by the teachers of vocational programs at TVET high schools"* (GSP4) and *"Counselor and guidance teachers help for students to prefer vocational programs"* (GSP6).

When six students were asked what metaphors they would formulate on TVET high schools and their vocational programs and their reasons for the metaphors, three of them formulated metaphors and explained the reasons for the metaphors they formulated as *"A cogwheel: Because cogwheels function in a system. If the system is out of order, the roller becomes out of function, too. So TVET high schools are components of an education system. Without those schools, the education system cannot function."* (GSP1), *"The sun: The sun enlightens the world. So just like the sun, the graduates of TVET high schools will enlighten the world by performing their profession and contributing to the welfare of the world."* (GSP3) and *"A machine: You put a raw material in a machine, proceed it and finally you get a qualified and useful material as an output or a product. Similarly students are trained and educated in TVET high schools and when they graduate, they will have qualifications of various professions as a human output and will perform their professions effectively. That's why a TVET high school is similar to a machine."* (GSP5).

PARENTS AND STUDENTS' VIEWS PRIOR TO PRESENTATIONS ON TVET HIGH SCHOOLS AND SCHOOL VISITS

Forty-one students and their parents were informed about the action research and invited to interviews on TVET high schools. Only four parents of forty-one students who would graduate from Dr. Galip Kahraman junior high school this year were volunteers for the interviews although all of the parents of forty-one students accepted their children to participate in the action research titled "Making vocational and technical upper secondary schools more attractive for students to prefer".

Parents' Views Based on Individual Interviews

Firstly, when four parents were asked whether they knew about the content of education and training in TVET upper secondary schools, all of them answered as "Yes". Secondly, when four parents were asked about their attitudes to TVET upper secondary schools, all of them answered that they had positive attitudes. Thirdly, when they were asked what they thought about TVET, four of parents explained about what they thought about TVET secondary education as *"education and training in accordance to qualifications of various professions"*(PP1, PP4), *"acquisition of the qualifications of professions to find a job in labor market"* (PP2) and *"high schools offering many facilities and job opportunities"* (PP3).

When four parents were asked about whether they wanted their children to prefer and attend vocational programs in TVET high schools, all of them said "Yes". When, they were also asked why they wanted their children to prefer and attend vocational programs in TVET high schools, they explained their reasons as *"a job guarantee in the future" (PP1), "essential for one who wants to live in wealth in the future" (PP2), "a job guarantee in accordance with the qualifications of the profession" (PP3) and "being employed easily" (PP4).*

When four parents were asked about whether and how they guided their children to vocational programs in TVET high schools, three of them told about whether or how they guided their children to vocational programs in TVET high schools as *"letting the child prefer the vocational program where he or she will be successful" (PP1), "TVET high schools' being secondary to prefer" (PP3) and "guiding the child to a vocational program as he or likes in a TVET high school" (PP4).*

When parents were asked about what schools or vocational programs they wanted their children to prefer in TVET upper secondary schools for their high school education, only one of them mentioned about their preferences and mentioned about the reason why they preferred those schools and programs as *"maritime vocational high school or military high school due to job guarantee" (PP1).*

When four parents were asked what their suggestions were on what should be done to make TVET high schools more attractive and preferred by majority of the students, all of them put forward their suggestions as *"supply information to students about vocational programs students are interested in" (PP1), "introductions of professions and vocational programs in TVET high schools in mass media" (PP2), "school visits to all types of vocational high schools" (PP3) and "letting students prefer vocational programs with their own free will" (PP4).*

Students' Views Based on Individual Interviews

Firstly, when forty-one students were asked whether they knew about the content of education and training in TVET upper secondary schools, twenty-four of them answered as "No" and seventeen "Yes". Secondly, when forty-one students were asked about their attitude to TVET upper secondary schools, fifteen of them answered that they had negative attitudes to TVET upper secondary schools and twenty-four of them answered that they had positive attitudes to TVET upper secondary schools and two of them answered that they were neutral to TVET upper secondary schools. Thirdly, when they were asked what they thought about TVET, eighteen of them explained about what they thought about TVET upper secondary education as *"training and educate youth according to qualifications of a profession" (PS1, PS2, PS11, PS25, PS35, PS38), "after graduation being employed in industry" (PS6), "not knowing much about TVET high schools(PS8), "after graduation from becoming a qualified work power" (PS9), "courses in practice not in theory according to vocational programs" (PS13), "shortcuts to life of work" (PS15), "vocational programs in TVET high schools according to students' abilities" (PS16), "gaining qualifications of a profession both in theory and practice" (PS20), "being guided to a profession through practice in enterprises"(PS22), "attending courses according to various vocational programs" (PS28, PS32), and "schools training intermediate technical manpower for occupations" (PS30, PS33).*

When forty-one students were asked whether they would prefer TVET upper secondary schools for their high school education, sixteen of them said "No" for their preferences. Additionally, twelve of them explained the reasons why they did want to prefer TVET secondary education as *"being willing to attend more prestigious highs schools like Anatolian high schools than TVET high schools" (PS5, PS11, PS13, PS14), "being reluctant to become intermediate technical manpower for work market" (PS15), "preferring Anatolian High due to the higher quality of education is higher" (PS22, PS29, PS33, PS34, PS40), "too many and very intensive courses in TVET high schools" (PS25) and "good and nice high schools" (PS27),*

When forty-one students were asked whether they would prefer TVET upper secondary schools for their high school education, twenty-four of them said "Yes" for their preferences. Additionally, eighteen of them explained the reasons why they wanted to prefer TVET upper secondary education as *"desire to become more successful at work (PS1), "learning how to perform the future profession in practice" (PS2, PS7), " best choice for students" (PS6, PS8), "a well paid profession and a job to work just after graduation" (PS9, PS12, PS17, PS20,*

PS28, PS30, PS39), "a way to join economic life" (PS30), "schools where students work hard" (PS31), "friendly atmosphere at TVET high schools"(PS35), "enrollment of students based on success scores in junior high school diploma" (PS37), "schools easy to be enrolled" (PS38) and "a well paid occupation in the future" (PS39).

When twenty-four students who wanted to attend TVET high schools were asked what schools or vocational programs they would prefer in TVET secondary schools for their high school education, twenty-two of them mentioned about their preferences and twenty also mentioned about the reason why they would prefer those schools and programs as "technical education school" (PS1), "tourism and photography and camera shooting in Trade and Tourism Vocational High Schools due to high income in tourism market" (PS2), "vocational health high school due to desire to help those who suffer from an illness" (PS6, PS21), "health high school due to guidance of parents and demand both in public and private health sectors" (PS7, PS9, PS10, PS30, PS31), "vocational high school child development program due to children" (PS8, PS17), "information and communication technology (ICT) program due to being interested in ICT and software (PS16, PS41), "catering program due to being good at cooking" (PS18, PS24), "Art High School due to being good at drawing and having visual and spatial talents" (PS19), "tourism program in trade and tourism schools due to lots of job opportunities in tourism sector in Antalya" (PS20), "accounting and information and communication technology (ICT) program in Trade High School being interested in accounting and ICT and software" (PS 32, PS38), "technical high school electricity program due to being keen on electricity" (PS35), "trade high school due to run an enterprise after graduation" (PS37) and "architecture program due to desire to design projects for buildings in building sector in labor market" (PS39),

When forty-one students were asked what their suggestions were on what should be done to make TVET high schools more attractive and preferred by majority of the students, sixteen of them put forward their suggestions as "introduction of the opportunities and facilities of TVET schools by the staff and senior students from TVET high" (PS7, PS8, PS32), "reduction of the entrance scores of those TVET high school programs with the highest employment potential and more promising" (PS9, PS39), "update and improvement of the names and the facilities of TVET high schools" (PS13, PS14, PS 19, PS25, PS27), "the higher entrance scores for TVET high schools' becoming more prestigious" (PS15, PS22), "making students start TVET education at earlier ages" (PS20), "student centered education programs to attract students' interest and attentions in TVET high schools" (PS31), and "guidance to TVET high schools according to students' talents and desires by arranging school visits and introduction by the teachers"(PS34, PS37).

Students' Views Based on Focus Group Interviews

Six students were interviewed in focus group prior to presentations and school visits related to TVET high schools. Firstly, when six students in focus group were asked whether they knew about the content of education and training in TVET secondary schools, all of them answered as "Yes". Secondly, when six students were asked about their attitude to TVET upper secondary schools, four of them answered that they had positive attitudes to TVET upper secondary schools and only two of them answered that they had negative attitudes to TVET upper secondary schools. Thirdly, when they were asked what they thought about TVET, six of them explained about what they thought about TVET upper secondary education as "acquiring the qualifications of a profession and join labor market at younger ages" (SP9, SP14, SP15, SP22), "a shortcut to labor market"(SP20) and "having a right to start and run one's own enterprise" (SP2).

When six students in focus group were asked whether they would prefer TVET upper secondary schools for their high school education, two of them said "Yes", two "No" and two were neutral for their preferences. Additionally, six of them explained the reasons why they wanted or did not want or were neutral to prefer TVET upper secondary education as "having the qualifications of a profession and being employed easily" (SP9), "a chance both to attend courses in theory at school and to practice in an enterprise due to the dual system at TVET" (SP14), "having to study harder due to both subject courses similar to those in general high schools and vocational courses of a program" (SP22, SP2), "not having decided, yet but probability to attend tourism vocational high school"(SP20) and "reluctant to prefer TVET high schools due to the possibility of regretting to attend a TVET high school" (SP15).

When four of students who wanted to attend TVET high schools or who were neutral were asked what schools or vocational programs they would prefer in TVET upper secondary schools for their high school education, three of them mentioned about their preferences and about the reason why they would prefer those schools and programs as *“vocational health high school due to being employed easily just after graduation”* (SP9, SP14) and *“vocational high school of tourism due to easily being employed easily in labor market related to tourism”* (SP20).

When six students were asked what their suggestions were on what should be done to make TVET high schools more attractive and preferred by majority of the students, six of them put forward their suggestions as *“lower entrance scores to TVET high schools”* (SP9), *“up-to-date of TVET high schools”* (SP14), *“increasing the quality of education served in TVET high schools and guidance by teachers, guidance and counselor teachers according to students’ interests, abilities and talents”* (SP22), *“higher entrance scores to TVET high schools in terms of their prestige and a supplementary higher education just after TVET high school”* (SP20), *“up-to-date names, buildings and physical facilities, well-equipment in terms of technology of TVET high schools and recruitment of qualified and enough teachers in all vocational programs”* (SP15), and *“organization of social activities and campaigns to introduce the facilities of TVET high schools”* (SP2).

PRESENTATIONS AND SCHOOL VISITS

Two specialists from technical and vocational education made a presentation of promising technical and vocational programs with the highest employment potential. The first specialist (EY) worked as a vocational teacher at Tourism Vocational High School in Antalya. The second one (HC) was a principal of a vocational and technical school in Antalya. They gave the students and parents some general information about technical and vocational programs at the hall of Dr.Galip Kahraman Secondary School in Antalya. Those presentations were important because most of the students could understand vocational and technical education means.

Another two specialists from technical and vocational education were invited to make a presentation of promising technical and vocational programs with the highest employment potential for parents of the students in their eighth grade in compulsory education. The first specialist (NAD) worked as a school guide and counselor at Vocational Health High School in Antalya. The second one (AU) was also worked as a school guide and counselor in National Education Directorate in Antalya. The aims of the presentations were to help the parents and students to identify professions appropriate with their students’ abilities, interests and personality traits and to understand importance of TVET education. All presentations were made at hall of Dr.Galip Kahraman Secondary School in Antalya. Although all students participated in the presentations by four specialists, there was not enough attendance for those presentations by parents.

After the presentations about TVET education, the teachers from those promising technical and vocational programs in TVET education introduced their own programs to students in their eighth grade in compulsory education and their parents. The teacher (MAT), who was a TVET teacher in electricity program, came from vocational and technical high school in Antalya and the teacher, who was a vocational teacher in nursing program, came from Vocational Health High School. The aims of the introductions were to promote the students and vocational programs of technical and vocational training especially at upper secondary level. The introductions were carried out at hall of Dr.Galip Kahraman Secondary School in Antalya. All presentations and introductions on TVET high schools and their vocational programs were carried out in February and March, 2013.

Then there were school visits to various technical and vocational upper secondary schools for observing the practical operation of those technical and vocational programs. First the students were taken to a visit to Ataturk Vocational and Technical High School. It had programs of ICT, electricity and electronic technology, machinery and mechanical technology, metallurgy and material technology; wood works technology, maintain works and air conditioning technology. During that time, there were science exhibition of the students of Ataturk Vocational and Technical High School. The students observed the exhibition carefully and asked many questions about their products. The second school visit was to Muratpasa Vocational and Technical High School

included departments of industrial automation technology, automotive technology, infrastructure technology, machinery technology, metallurgy technology, wood works technology. The third one was to Fettah Tamince Maritime Vocational High School included two kinds of programs as marine port management and marine science technology. Although it was not in the action plan in Appendix 1, the last additional school visit sponsored by Dr. Galip Kahraman junior high school management was organized to Antalya Dosemealti Anatolian Health Vocational High School including programs of nursing, anesthesia, first aid and emergency technician, dental prosthesis. All school visits were fulfilled in March, 2013.

STUDENTS VIEWS ON VOCATIONAL AND TECHNICAL HIGH SCHOOL EDUCATION AND TRAINING AFTER PRESENTATIONS AND SCHOOL VISITS

Students Views Based on Individual Interviews

Firstly, when forty-one students were asked again after presentations and school visits whether they knew about the content of education and training in TVET upper secondary schools, all of them (n:41) answered as “Yes”. Secondly, when forty-one students were asked about their attitudes to TVET upper secondary schools, thirty-three of them answered that they had positive attitudes to TVET upper secondary schools and only eight of them answered that they had negative attitude to TVET upper secondary schools. Thirdly, when they were asked what they thought about TVET, forty of them except only one explained about what they thought about TVET upper secondary education as “*training and education depending on what vocational programs students attend*” (PS1, PS4, PS23, PS24, PS29, PS31, PS32, PS33, PS37), “*schools easy to be employed in labor market after graduation*” (PS2, PS12, PS28), “*schools where students are fixing or repairing something*”(PS3), “*schools which are easiest to be enrolled*” (PS5), “*education and training in accordance with the qualifications of a profession*” (PS6, PS7, PS8, PS10, PS11, PS13, PS16, PS18, PS19, PS21, PS22), “*a shortcut to labor market*” (PS9, PS16, PS17, PS38, PS40), “*more advantageous than general high schools in terms of being employed easily*” (PS14), “*in the first year the same courses as in general high school and in the second year vocational courses of the program preferred*” (PS15, PS27, PS36, PS39), “*after graduation a chance to run your own enterprise and to become a technician*” (PS20), “*a guarantee to have a profession and good job opportunities after graduation*” (PS25, PS26, PS30), “*having qualifications of a profession and no need to attend higher education*” (PS34), and “*a chance to attend a two year undergraduate school after graduation*” (PS41).

When forty-one students were asked whether they prefer TVET secondary schools for their high school education after presentations on TVET high schools and visits to TVET high schools, eight of them said “No” for their preferences. Additionally, all eight of them explained the reasons why they did want to prefer TVET secondary education as “*having to attend a sport high school due to parents’ guiding*” (SP1), “*desire to attend Anatolian general high schools due to being a hard working student* (SP5, PS13, PS20, PS23, PS25, PS33) and “*reluctant to attend TVET high schools due to desire to attend more prestigious high*” (PS40).

When forty-one students were asked whether they would prefer TVET upper secondary schools for their high school education after presentations on TVET high schools and visits to TVET high schools, thirty-three of them said “Yes” for their preferences. Additionally, thirty-two of them explained the reasons why they wanted to prefer TVET secondary education as “*economic independence at younger ages*” (PS2, PS9, PS19, SP26), “*job and money*” (PS3), “*being employed easily after graduation*” (PS4, PS6, PS12, PS17, PS24, SP30, SP31, SP32), “*acquiring the qualifications of a profession without entering university entrance exam*” (PS7, PS8, PS11, SP15, PS21), “*having the qualifications of a profession and a chance to be employed easily*” (PS14, PS18, SP27, SP36, SP38, SP41), “*being more suitable for my psycho-motor abilities*” (PS16), “*offering more facilities than general high schools*” (SP22), “*a chance to make a career in a profession*” (SP28, SP29, SP34), “*a chance to run one’s own workplace with TVET high school diploma*” (SP35) and “*a chance to practice what is learnt in theory*” (SP37),

When thirty-three students who wanted to attend TVET high schools were asked what schools or vocational programs they would prefer in TVET secondary schools for their high school education after introductory presentations on TVET high schools and visits to TVET high schools, twenty-nine of them mentioned about their preferences and twenty also mentioned about the reason why they would prefer those schools and

programs as “tourism and photography and camera shooting due to earning a good amount of money (PS2),” maritime vocational high school due to being interested in sailing and commanding a ship” (SP3, SP29, SP34), “vocational health high school due being easier to find a job in health labor market and to attend higher education” (SP4, SP9), “vocational program for nursing in vocational health high school due to becoming a nurse in health sector (SP6, SP12, SP22), “vocational high school child development program due to intimacy in the profession and children” (SP7, SP8, SP11, SP17, SP21), “vocational health high school due to desire to take care of the health problems of people” (SP14, SP26), “architectural program. due to being easier to find a job and start working after graduation” (SP15), “information and communication technology (ICT) and web design due to being suitable for a disabled student” (SP16, SP27, SP38), “catering program due to keen on cooking” (SP18, SP28), “art High School due to talent and being good at drawing” (SP19), “tourism and automotive programs due to desire to become a chief cook in hotels and a chance to earn considerable amount of money after graduation in a mechanic enterprise” (SP24), “trade Vocational High School due to being good at trade and desire to become an accountant” (SP30), “tourism due to being easy to find a job and desire to contribute to the tourism of Antalya” (SP32), “electricity program due to obtaining an authority to start and run one’s own enterprise” (SP35, SP41) and “electricity and electronic program due to a well-paid job and finding a job easily” (SP37),

When forty-one students were asked what their suggestions were on what should be done to make TVET high schools more attractive and preferred by majority of the students after introductory presentations on TVET high schools and visits to TVET high schools, thirty-seven of them put forward their suggestions as “a job guarantee when graduating from a TVET high school” (SP1), “an equilibrium between vocational courses and subject courses” (SP2), “support by teachers at TVET school to pass the university entrance exam” (SP3), “seminars, meetings, school visits and introductory activities to increase the attractiveness of TVET high schools” (SP4, SP6, SP8, SP13, SP20, SP21, SP22, SP25, SP34, SP36, SP37, SP41), “lower entrance scores of the most demanded vocational programs” (SP5, SP29, SP39, SP40), “guidance by the manager and staff at TVET schools about the facilities and advantages of TVET high schools” (SP7, SP24, SP30, SP31, SP32, SP38), “guidance activates to TVET high schools at earlier stages of junior high school education” (SP9, SP26), “studying harder than others in general high schools to pass the university entrance exam” (SP10), “advertisements and slogans in order to increase the attractiveness of TVET high schools” (SP11, SP40), “support by extra subject courses and private courses for TVET students to pass university entrance exam” (SP12), “revision and change of the names of vocational and TVET high schools the accommodation and dormitory facilities for students from low-income families” (SP14), “higher entrance scores for TVET high schools to make them more attractive and getting hard working students to prefer TVET high schools” (SP15), “Up-to-date and various kinds of vocational programs and vocational programs suitable for disabled students” (SP17), “renewing the titles and the names of TVET high schools” (SP19), “arrangement of sample entrance exams to enter TVET high schools once a month” (SP26), “increasing the number and quality of TVET high schools are increased, it will be better. Besides if the entrance scores are lower, more students may prefer those schools” (SP31) and “settlement of TVET high schools nearer to downtown” (SP33).

When forty-one students were asked what metaphors they would formulate on TVET high schools and their vocational programs and their reasons for the metaphors, seventeen of them formulated metaphors and explained the reasons for the metaphors they formulated as “A pen: I write my fate by preferring TVET high schools and the pen is a vocational program which writes my fate. The vocational program in TVET high school determines our fate and future. That’s why I make a similarity between a pen and a TVET high school” (SP4), “A history book: I don’t like history. I think it is boring just the same as TVET high schools” (SP5), “Labor market: Labor market means to me to earn money and be economically independent. So a TVET high school is a way to work in labor market” (SP7), “Money: I like shopping very much. And you need money for shopping. That’s why a TVET high school means money to me and it is also a way to earn money.” (SP11, SP12), “A pen: Just as a pen is a tool to write, a TVET high school is a pen or a tool to acquire the qualifications of a profession.” (SP13), “A businessman: When I graduate from a TVET high school, I will get the qualifications of a profession, find a job easily, and start working and earn money just like a businessman. So my dreams will become real in life” (SP15), “Gold: To acquire the qualifications of a profession is very worthy. Every graduate of TVET high schools has his or her profession and he or she can faster and more easily find a job and start work. Besides he or she can

improve own career at work" (SP18), "Teachers: In TVET high schools the courses are more in practice than theory. We also visited Vocational Health High School. There the teachers told us that they would take students to hospitals and teach them how to perform injection. I can learn something if I see and touch. That's why TVET high schools remind me teachers" (SP19). "Factory: In a factory there are various departments and machines in charge in those departments just as there are various technical and vocational programs in TVET high schools. Students will contribute to the economy of the country by acquiring the qualifications of profession and start working after graduation" (SP20), "A tree and its roots: Just as the roots of a tree enable a tree stand still, the TVET schools are the roots which enable a country stand still if a country is accepted as a tree. Besides, just as the roots of a tree nourish the tree, the TVET nourish the economy of a country and make the country survive" (SP22), "An enterprise: In an enterprise you are in charge to use a machine. Similarly, you are taught how to use a machine in TVET high schools" (SP27), "A toy: If you are talented for the vocational program you prefer, then it is a baby toy for you to learn the requirements of the vocational program" (SP28), "A tool. You can solve the problems by using the right tool and every tool is a way out for problems experienced in life. So a TVET high school is a way out for me to earn my life." (SP30), "A house: Because in TVET house the first floor is my being student and the second floor is my work of life" (SP34), "A car: No sooner you graduate from a vocational program in a TVET high school, than you find a job and start working in labor market. In a sense it is as fast as a car is. That's why in my opinion a TVET high school is similar to a fast car" (SP40) and Future: TVET high school means profession and job in the future (SP41).

Students' Views Based on Focus Group Interviews

Firstly, when six students in focus group were asked again after presentations and school visits whether they knew about the content of education and training in TVET upper secondary schools, all of them (n:6) answered as "Yes". Secondly, when six students were asked about their attitudes to TVET upper secondary schools, four of them answered that they had positive attitudes to TVET upper secondary schools and only one of them answered that he had a negative attitude to TVET upper secondary schools and one was neutral. Thirdly, when they were asked what they thought about TVET, six of them explained about what they thought about TVET upper secondary education as "finding a job and starting to work at younger ages" (SP9), starting to work in both public and private hospitals (SP14), "being employed after a successful education and training both at a school and practicing in an enterprise" (SP22), "acquiring the qualifications of a profession" (SP20), being employed just after graduation (SP15) and "having a right to start and run one's own enterprise" (SP2).

When six students in focus group were asked whether they would prefer TVET upper secondary schools for their high school education, three of them said "Yes", one "No" and two were neutral for their preferences. Additionally, six of them explained the reasons why they wanted or did not want or were neutral to prefer TVET secondary education as "guidance by parents to Anatolian General High School." (SP9), "dual system in TVET courses at school and practice and work in an enterprise" (SP14), "preferring a TVET high school due to lower entrance scores" (SP22, SP15), "reluctant to attend a TVET high school" (SP20, SP2), and "TVET high schools are in secondary position for me".

When six of students who wanted to attend or not to attend TVET high schools or who were neutral were asked what schools or vocational programs they would prefer in TVET secondary schools for their high school education if they were to attend those schools, six of them mentioned about their preferences and about the reason why they preferred those schools and programs as "Vocational Health High School due to desire to be a nurse" (SP9, SP14), "Vocational Health High School due to being employed easily just after graduation" (SP22), "Catering and Tourism due to being good at cooking and desire to work as the head chef in a five star hotel" (SP20), "Architecture program due to finding a job easily in building labor market" (SP15) and "Photography and camera shooting or Health vocational programs due to be employed after graduation" (SP2).

When six students in focus group were asked what their suggestions were on what should be done to make TVET high schools more attractive and preferred by majority of the students after introductory presentations on TVET high schools and visits to TVET high schools, all of them put forward their suggestions as "guidance by parents well-informed about school types" (SP9), "the same proportions of subject courses in TVET high schools with those in Anatolian high schools" (SP14), "More introduction activities on TVET high schools" (SP22),

“increasing the numbers and facilities of TVET high schools” (SP20), “changing the name of TVET high schools as Anatolian Technical and Vocational High Schools” (SP15), and “making TVET high schools more attractive” (SP2).

When six students were asked what metaphors they would formulate on TVET high schools and their vocational programs and their reasons for the metaphors, five of them formulated metaphors and explained the reasons for the metaphors they formulated as *“Small kitchen machines and tools: All the machines and tools we use in the kitchen have their own functions different from each other. In a sense all of them are just like professions. Similarly, people having qualifications of different professions work to do something.” (SP9), “A garden: In a garden there are various kinds of trees such as apple, orange and banana. They are all beneficial for people. Similarly TVET high schools different from general high schools are also beneficial for society and people in terms of training intermediate man power for the economy.” (SP15), “A thick book of encyclopedia: Nowadays, while looking up something, google comes first but encyclopedias are secondary sources. Similarly, TVET high schools are secondary for me.” (SP22), “A factory: A TVET high school is a factory. Machines are components of a factory and function in various ways for production. Similarly, TVET high schools produce man power in various vocational programs for the development and economy of a country just like a factory.” (SP20) and “A golden bracelet: There is an old saying by our grand parents that we should have a golden bracelet around one of our wrist. That golden bracelet around one of our wrists symbolizes having qualifications of a profession. So when I have qualifications of a profession, I will have a golden bracelet around one of my wrist” (SP2).*

STUDENTS` PREFERENCES BASED ON THE ENTRANCE EXAM

All of forty-one students in their 8th year in Dr. Galip Kahraman junior high school in the sample took the entrance exam for high school education by Ministry of Education in Turkey and preferred the types of high schools according to the scores they got in the exam, their interests, abilities, talents and parents` and teachers` leading and guiding. As mentioned above last year in 2011-2012 academic year thirty of 8th grade students graduated from Dr. Galip Kahraman Junior high school. Eleven (36.66%) of those thirty students, preferred and attended TVET high schools. According to school preference statistics, this year in 2012-2013 academic year each student had a right to prefer ten types of high schools and seven of the forty-one students (17.07) who have just graduated from Dr. Galip Kahraman junior high school this year did not prefer TVET high schools and their vocational programs at all. However all the rest thirty-four students (82.92), thirteen (31.70) in their first preferences, three (7.31) in their second preferences, six (14.63) in their third preferences, the rest nineteen (46.34) in their last seven preferences in order, preferred TVET high schools and their vocational programs. Namely, twenty-two (53.66) students preferred TVET high schools in their initial three preferences.

DISCUSSION

As analyzed in general all the views of parents and students on the quality of education and training in TVET high schools, we might conclude that the education and training in TVET high schools were not found attractive yet, not found as very important and found lower in rank compared to general high school. This is consistent with the finding in Sonmez's (2008) study called “The problems of vocational and technical education in Turkey and the necessity of restructuring” that “the Council of Higher Education enacted a regulation in 1998 to limit access to higher education for technical high school graduates with the introduction of weighting coefficient to their scores achieved in the entrance examinations, which penalized them with respect to general high school graduates. This regulation led to a sharp decrease in vocational-technical participation, quantitatively and qualitatively. These schools lost their attractiveness for many talented students”.

Analyzing the views of the six students who graduated from junior high school last year and preferred vocational and technical education on TVET high schools in general, it was understood that all of them were happy with their preferences. The reason for this may be the fact that after graduation from TVET high schools students will have acquired the qualifications of a vocation and they will find a job easily in the labor market as indicated by the student GSP1 *“TVET is a well-established education system. It offers lots of job opportunities. The graduates can start and run their own enterprises. That's why TVET is good.”* One another promising

finding with the interview with those six students was that the importance of TVET school system was understood. The sun metaphor formulated for TVET high schools and their vocational programs by the student GSP3 *"The sun enlightens the world. So just like the sun, the graduates of TVET high schools will enlighten the world by performing their profession and contributing to the welfare of the world"* could explain and support this finding.

As for analyses of four parents' views and attitudes on Vocational and Technical Education, it may be concluded that they shared the same ideas with the six students who graduated from junior high school last year and preferred vocational and technical education on TVET high schools in that students could find jobs which were parallel with the qualifications of their professions they acquired during their education in TVET high schools and could start to work in labor market just after graduation. This finding is consistent with the aims of Ministry of Education for Vocational and Technical High Schools as Vocational and technical secondary education involves the institutions that educate and train students as manpower for business, for other professional areas and for higher education (MEB, 2001). Parents also admitted that TVET high schools and their facilities and job opportunities were not known by students and parents enough. Accordingly, one of the parents' (PP3) confession and suggestion that *"Our children do not know about vocational programs in TVET. TVET programs can be made familiar to them. School visits to all types of vocational high schools is the best way for that. Those visits and introductions would be useful for students to prefer the best one for themselves"* was very parallel with the activities carried out in the action plan of this research.

As a result of analysis of the students' views both individually and in focus group on Vocational and Technical Education prior to introductory presentations on TVET high schools and school visits, twenty-four (58.5%) out of forty-one students admitted that they did not know about the content of education and training in TVET secondary schools and 15 (36.5%) of them had negative attitude to TVET high schools. This finding was significant for this study because it showed that how well-directed the action research carried out to make vocational and technical upper secondary schools more attractive for students to prefer was. The reason why 36.5% of those students in the sample had negative attitude to TVET high schools was the fact that they did not find those schools prestigious and they wanted to attend higher education after high school education. This finding is consistent with Sonmez's (2006) finding that vocational high schools are not considered good enough to prepare the students for university education (Sonmez, 2006). One another important finding was that the students who were willing to attend vocational programs in TVET high schools wanted to prefer first health vocational programs in Vocational Health High Schools, second catering in Tourism Vocational High Schools and third Information and communication technology (ICT) programs. The reason for preferring those vocational programs can be those students' knowing to find a job easier and start to work just after graduation as they stated in interviews. This result is parallel with Yavuz's (2003) idea that a student who studies in a vocational school must know that he will have a good job, earn more money, and get good life conditions after graduating from the vocational school successfully.

When forty-one students were asked whether they would prefer TVET secondary schools for their high school education sixteen of them said "No" for their preferences and twenty-four of them said "Yes" and one "Perhaps" for their preferences. However after presentations on TVET high schools and visits to TVET high schools when forty-one students were asked whether they knew about TVET high schools and they positive or negative attitude to those schools, all of them said they knew much about TVET high schools and only eight of them had negative attitude to those schools and when forty-one students were asked whether they would prefer TVET secondary schools for their high school education, thirty-three of them said "Yes" and only eight said "No". This showed at least the change in the attitudes of the students likely to prefer TVET education, presentations on TVET high schools and visits to TVET high schools in the action plan worked well in favor of the attractiveness of TVET high schools and in terms of the attitudes of the students to TVET high schools, the aim of this action research was reached. Additionally, the student SP29's thoughts as *"I will have the qualifications of a profession. Your future will be unclear if you attend a general high school. After school visits and introductory presentations on TVET high schools I have understood that to attend a TVET high school will be better for my future"* and also student SP20's thoughts as *"I think everything has been done to introduce the facilities and job opportunities of TVET high schools. I believe that in our class majority of my classmates will*

prefer TVET high schools as they have already known about the facilities and job opportunities of those schools. Prior to visits and presentations there were few students in my class to prefer TVET high schools but now I know that there are more students..." also supported the aim of this action research and showed how well the action plan worked.

One of the remarkable finding was the fact that parents usually do not desire their children to prefer and attend TVET high schools although their children desire to prefer and attend to those schools. The student SP9's confession as *"Yes. Indeed my mother wants me to attend a general high school, but I think about preferring and attending a TVET high school because after graduation, you have the qualifications of a profession and you are employed easily. At those schools you can directly learn about the profession you prefer and concentrate on it. But for general high schools this is not the case."* and the student SP20's confession as *"...For example my mother forced me not to prefer and attend a vocational program in a TVET high school yesterday. Parents should not force their children about their school preferences."* are evidences to parents' pressure over their children. This finding was parallel with Bozgeyikli and Isiklar's (2011) finding in their study called "An obstacle of guiding students to apprenticeship training center: negative parent opinions". In that study it was found that parents did not want their children to attend vocational programs in TVET and they had negative attitudes against those vocational programs because they wanted their children to go on a university. Additionally, it was understood from the metaphors which students who wanted to prefer TVET high schools formulated for TVET high schools that TVET high schools were seen as golden opportunity for students to be employed in labor market. The student SP2's "golden bracelet" metaphor for TVET high schools and his explanation as *"There is an old saying by our grand parents that we should have a golden bracelet around one of our wrist. That golden bracelet around one of our wrists symbolizes having qualifications of a profession. So when I have qualifications of a profession, I will have a golden bracelet around one of my wrist"* and the student SP18's gold metaphor for TVET high schools and his explanation as *"...Because to acquire the qualifications of a profession is very worthy. Every graduate of TVET high schools has his or her profession and he or she can faster and more easily find a job and start work. Besides he or she can improve own career at work."* support the finding that TVET high schools are seen as golden opportunity for students to be employed in labor market and in career. This finding was also promising in that the attractiveness of TVET high schools had increased recently.

Finally, as a result of this action research there was a promising difference in terms of the proportional change between the number of the students who graduated from junior high school in the sample and attended to technical and vocational upper secondary schools last year and the number of the students in the sample who have graduated from junior high school and then who will attend to technical and vocational high schools this year as thirty-four (82.92) of forty-one students, thirteen (31.70) in their first preferences, three (7.31) in their second preferences, six (14.63) in their third preferences, the rest nineteen (46.34) in their last seven preferences in order, preferred TVET high schools and their vocational programs. This finding was also promising in terms of 9th Development Plan (2007-2013) in Turkey, which investigated that the 65 % of the students are to be enrolled to the VET high schools and the remaining part is to attend the general education high schools (SPO, 2006) and also supported the aim of this action research and showed how well the action plan worked.

IMPLICATIONS

This research analyzes vocational center managers, teachers, apprentices, apprentices' parents, managers of chambers of commerce, employers and master trainers' perceptions on the problems in apprenticeship education and training. Thus the findings of the research have important implications about how vocational and technical secondary education can be updated, improved, increased the quality and attractiveness, well-organized according to market needs and thus more preferred in Turkey based on the perceptions and preferences of the students who chose or did not choose vocational and technical education and their parents' perceptions.

In addition, this study suggests important implications about what can be done to increase the attractiveness of TVET high schools and to make more students to prefer those schools in Turkey based on the suggestions on how to solve the problems related to low demand for TVET high schools and to increase the attractiveness of those schools by students and their parents as they, themselves, expressed their views related to the preference problems of those schools and suggested solutions on how to make TVET high schools more attractive for students to prefer.

CONCLUSION

TVET high schools in Turkey were perceived both by students and their parents as the schools the aim of which is to train and to educate students according to the vocational programs they choose based on their talents, abilities and interests, help them to find a job easily in the labor market after graduation by acquiring the qualifications of the professions they preferred or as the schools which offer a chance to run their own enterprise. However, TVET schools are not perceived prestigious when compared to general high schools as students attending to TVET high schools the aim of which to train and educate students as intermediate manpower for labor market are not as luckier as those attending general high schools the aim of which to prepare students for academic higher education in attending tertiary education.

In vocational programs in TVET high schools the most preferred ones are health-medical emergency, nursing, anesthesia-, catering, tourism, ICT technology, maritime, child development, electricity, accounting tourism and architecture as they offer job opportunities after graduation. Participants' suggestions on how to make vocational and technical upper secondary schools more attractive for students to prefer were reduction at the entrance scores of vocational programs, guiding students according to their abilities, talents and interests, presentations of vocational programs to both parents and students, school visits, guidance by teachers and parents apt to students' abilities, talents and interests, preferring vocational programs with students' own free will, the development and update of the facilities of TVET high schools, increase at the entrance scores of vocational programs for the prestige and so attractiveness, attending at younger ages, advertisements and campaigns to introduce the facilities and job finding opportunities of TVET high schools, changing traditional names of TVET high schools and putting more attractive names, carried out student centered education and training vocational programs, increasing the number and quality of teachers in all vocational programs, increase the number of subject courses, increase the number of vocational programs which offer job guarantee after graduation, increasing the number and quality of TVET high schools, building TVET high schools in areas in a city easy to reach, increase the awareness and consciousness of parents on the facilities of TVET high schools, not forcing the children about their school preferences, organizing science fairs and an exhibitions of works done by students and their teachers in TVET high schools.

The metaphors formulated by students on TVET high schools and their vocational programs were a roller, the sun, a machine, a pen, a history book, work of labor, money, a businessman, gold, a teacher, a factory, a tree and its roots, an enterprise, a toy, a tool, a house, a car, future, small kitchen machines and tools, a garden, a thick book of encyclopedia, a golden bracelet.

To sum up, there are still much to do in order to make TVET high school education more attractive for students to prefer although the findings of this action are promising and supporting in terms of making vocational and technical upper secondary schools more attractive for students to prefer. Thus, all partners had better be aware of the difficulties and problems which are likely to affect the prestige and attractiveness of TVET high schools negatively in order to create an improved, up-to-date, well organized TVET high schools according to the requirements of the changing labor market needs and thus more attractive to prefer. Therefore, promotional activities and introductions to junior high school students for technical and vocational upper secondary schools are essential to attract more students to TVET high school education and thus to decrease the number of unemployment of educated adults.

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