Journal of Education and Practice
ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)
Vol.8, No.6, 2017

Educational Connoisseurship and Criticism: Evaluation of a Cooperation Model between University and the Sector on Vocational Education[1]

Feyzi Kaysi[1] Bunyamin Bavli[2] Aysun Gurol[2]
1.Vocational School of Technical Sciences, Istanbul University, PO box 34320, Istanbul, Turkiye
2.Faculty of Education, Yildiz Technical University Davutpasa Campus/Istanbul, Turkiye

Abstract
Vocational schools which were opened to raise intermediate staff for the sector must update their functions to fulfill the intermediate staff need emerging as a result of the developments and changes in the sector through the time. Considering the needs of the sector, updating content of the courses and opening new lessons or programs will fulfill the need. The purpose of this study is to evaluate the flight simulators lesson aiming to fulfil the intermediate staff need in the field of flight simulators according to educational criticism model. Qualitative techniques were employed to obtain data within the scope of this study. The study was designed according to case study method. In-depth and focus group interviews were conducted with the participants by using semi-structured interview forms and the findings were obtained through content analysis. The study group consisted of students, instructors and the head of the program. As a result of the study, it is found that participants were satisfied with the course, the staff need of the sector was fulfilled, the learners had sector knowledge, and the aim of the teaching process included practice opportunity in the sector. Besides, highlighting the co-operation between the sector and the university and keeping educational programs up-to-date was another expectation.
Keywords: Educational connoisseurship and criticism, Program evaluation, Vocational education, Vocational schools, Cooperation model

1. Introduction

One of the objectives of the vocational schools of higher education is to fulfil the intermediate staff need for the sector. In time, the relationships between the sector and these institutions which stayed behind the developments and changes in the sector can weaken. The issue of the co-operation between university and the sector is among the common problems of the sector in Turkey (Çağlayan and Bener, 2006; Gül Koçak, 2006). Although the sector tends to collaborate with universities (Beyhan and Fındık, 2014), it was found, sector seeking cooperation with institutions other than universities (Bal and Akçi, 2013). It is extremely important for the sector, schools and learners that programs in colleges should be of high quality to fulfil the needs of the sector. "For this reason, by constantly improving the college programs, it should be ensured that they have a dynamic structure" (Özyılmaz, 2013:222). In this way, cooperation can be established between universities and the sector. To increase the cooperation between universities and the industry, the contribution of the sector should be taken into account to a greater degree (Yardımcı and Müftüoğlu, 2015). The co-operations can easily be established with the contributions of the qualified academic staff (Kyvik and Aksnes, 2015). On the other hand, Peker, Ar and Baki (2014) stated that problems arising from the sector and faculty members are two main reasons of failure to ensuring these cooperations. Attention should be paid that in order for the intermediate staff to be effective in the expected sector of development in Turkey, they need to have quality education and the programs should be of high quality to fulfil the needs of the sector (Akyurt, 2009). Otherwise, the students attending these programs may not find the opportunities they expect from the sector after their graduation and the sector can hire the staff it needs by training their own. Finally, the following things can be seen as far as satisfaction expectancy of college students are concerned: practice to increase their chances to find a job after graduation, the knowledge and expertise of instructors about their fields and the benefits of the practice for students (Aydın, Görmüş and Altıntop, 2014). Hence, improving and refurbishing educational programs to fulfill the needs of the learners can positively contribute to the satisfaction of the learners.

Since curriculums of vocational schools of higher education are changed through time, it is necessary to evaluate the changes and effects. Through the evaluations, decisions can be made to improve, maintain or terminate the programs. Besides, during these evaluation processes, it should be aimed to determine the effectiveness of these programs. Especially during the evaluation of recently developed program, it is substantial to determine the effect of the program on the students and instructors and changes in terms of the program (Kumral and Saracaloğlu, 2011). According to Varış (1996:185), 'to make a current program more efficient, first of all it is essential to analyse its effectiveness'. Having carried out a program with Educational criticism model,

[1] Some parts of this study presented in 13th International Conference on Cognition and Exploratory Learning in Digital Age, Mannheim, Germany, 2016.

information about the qualitative results of the program could be collected (Erden, 1998). In this way, necessary data was obtained to evaluate the program in a qualified manner. Eisner (2005) advocates a two-part process including educational expertise and educational criticism as a way to making a interrelationship between practitioners and the learning practice. Educational expertise requires observing the quality of teaching by considering sample implementations. As the second phase of the process, the purpose of the educational criticism is to translate the special reasoning skill of the expertise into a language which can be shared and discussed. At the same time, Eisner states that a class should be evaluated through an expert's perspective (Brazer and Bauer, 2013). Educational criticism model is basically composed of description, interpretation, evaluation and theming steps (Eisner, 1985; Eisner, 198). Besides, Eisner (185) states that it is necessary to analyse the effects of the program on students and other participants by utilizing qualitative research methods of program evaluation. According to Eisner, the purpose of program evaluation is for the people who have information about the program to express their opinions about the quality of the current program (Sıcak and Arsal, 2013). For this reason, it is important to ensure an evaluation of the program within the framework of the participants or stakeholders participate in the program. The credentials of the expert have become an essential issue in this approach which is based on the experiences and opinions stated by individuals who are participating in this program (Sıcak and Arsal, 2013). The key features stated by experienced experts can serve for a better a program. Furthermore, this model differs from others models of evaluations as it emphasizes qualitative analysis (Koçak, 2006). Consequently, the model lays emphasis on the analyze and the effects of the program evaluation on participant or beneficiaries by utilizing qualitative study methods (Kumral, 2010). Also, in the evaluation process of the model, the person who will make the evaluation is added to the evaluations as a participant (Kumral, 2010). Having the person who makes the evaluation in the process can contribute to better results in the evaluation. According to Educational criticism model, the perceptions of the evaluator towards the current program and his/her expertise are in the centre of the evaluation process (Patton, 1990).

"As the graduates of vocational schools of higher education are expected to be hired in the business world, the expectations, desires and attitudes of the business world towards these institutions have not been searched yet" (Özyılmaz, 2013:220). In order to fill in this gap, the representatives of the sector in the field of flight simulators requested vocational schools of higher education to open a Flight Simulator class. Knowing the opinions of students, instructors and the head of the program about this flight simulator class would contribute to the evaluation of course. Evaluation is becoming important in order to smooth and enlighten the way for such cooperation. The findings obtained in the evaluation process will become important for other cooperation. The purpose of this study is to provide an evaluation according to Educational Criticism for the Flight Simulator-I class which was opened in accordance with the demands of the sector. By this means, an important example can be provided for the lessons which will be established later through the evaluations of students, instructors and head of the program in the process of carrying out a lesson opened in accordance with the demands of the sector. Educational Criticism model which was called the "educational connoisseurship and expertise" by Elliot Eisner in the beginning appeared as a result of the objection to the experimental and quasi-experimental studies. Eisner indicated that problems can not be solved by using quantitative data and the work of evaluation is a sophisticated and interpretive study (Alkin, 2003). To that end, educational criticism model was utilized in this study, which is frequently used to evaluate "value" and "judgement" dimensions in social studies and also considered as suitable in this research design.

1.1. Research Questions

The study reported in this paper aims to investigate the following questions:

1. What are the expectations of the participants about the opened course?
2. What are the benefits of the course to the participants?
3. What are the Success and Satisfaction Levels from the Course?

2. Methodology

2.1. Design

This study was carried out using the qualitative research method. Qualitative study provides an analysis for an existing phenomenon through the perspectives of the participants (Merriam, 2009). The case study was used to evaluate Flight simulator course. 'sample case study' method was used as this study was aimed to define and explain an event systematically (Berg & Lune, 2012). In the case study, 'single-case design' was used as the program will be evaluated starting off from the implementation process. 'Intertwined single-case design' among the single-case designs was used as there are more than one case which needs to be analyzed and which documents experiences and lives to understand this process (Yin, 2003).

2.2. Participants

As the purpose of the study was to evaluate a lesson within the vocational school program of higher education,

the participants consist of the students who selected this course, instructors and the head of the program. While selecting the likely participants from among the students, verbal announcements were made and written notices put up in classrooms. As result of the announcements, students who wanted to participate in this study included on a volunteer basis. Within this scope, 7 students from the day time schedule and 6 students from the evening classes agreed to participate in this study. As far as gender is considered, 9 of the participants were male students and 4 of them female students. Codes and pseudonyms were given to the participants in order to preserve personal privacy. Convenience sampling among purposeful sampling techniques were utilized to select the participants. As it is stated in its definition, concenience sampling technique was used in this study as the data unit was close to and easily accessible to the researcher (Yin, 2011). Within this scope, focus group interviews were carried out with students and semi-structured interviews were conducted with other participants. Patton (1987) defines the interview method as the effort to get into the inner world of a person and to understand and grasp the events from his/her perspective. Focus group interview is an interview method in which people hear each other'-s' opinions but they do not have to agree with each other and which is different from problem solving (Frankel & Walllen, 2009). During the research process, data from students, instructors and head of the program were collected through semi-structured interviews (one to one and focus group).

2.3. The Role of the Researcher

The researcher worked in the department in which the course had been opened for five years. The researcher attended all the interviews conducted in the academic year of 2012-2013 and followed the process of negotiating, organizing and implementing the protocol signed between the private company and the university. After the spring term of the 2012-2013 academic year, 12 students were interviewed in two separate groups in a 6+6 format and after the spring term of the 2013-2014 academic year, 6 students were interviewed in 3 groups in a -2+2+2 format via the Internet during their 30-day summer internships. Besides, the staff of the company were interviewed via the Internet and phone calls. All the implementation areas were seen onsite during excursions to the company which were organized by the students and the head of the program. The researcher conducted interviews with all the participants and tried to collect information about their suggestions concerning the course in the 14-week teaching process of the course and in the registers for the course in fall semester of the 2014-2015 academic year. In addition to this, the researcher collected more detailed information about the instructors of the course and the course itself especially through conversations with the students in his/her room.

2.4. Data Collection

In the data collection process, current literature was reviewed, internship record books of the students were analyzed and informal interviews were conducted with students and the representatives of the sector before doing the research. After these first interviews, the draft of the semi-structured interview form was created. While formulating the questions, a question pool was prepared to evaluate the process, and the questions were delivered to the program evaluation experts to be reviewed. In line with the views of the experts, the questions were re-organized and the validity of the questions was ensured. In the finalized semi-structured interview form, dimensions such as expectations about the course, benefits presented by the course and the satisfaction from the course were included. During the data collection phase, the process was planned to compile the views of the students who selected the flight simulator course which was opened as a selective course first in the 2014-2015 academic year, instructors and the head of the program. In the interviews, before starting the actual study, it is necessary to conduct a pilot study (Silverman, 2006). Verbal and written information about the study was provided for the participants. Before starting the study, a pilot interview was conducted with 3 students and an instructor. It was requested from the instructor of the course and the head of the program to participate in the study in a face to face conversation. All the potential participants were informed both verbally and in black and white that the expressions which would reveal their privacy would not be used and pseudonyms would be used instead. Besides, it was stated again both verbally and in black and white that they could leave the interview whenever they wished. Furthermore, it was also stated that they would participate in this study voluntarily. The interviews were carried out in their suitable time and in places in which they felt comfortable. Two different focus group interviews were carried out with 7 seven students from the daytime classes and 6 students from the evening classes who were selected for the course. The data were collected through semi-structured interviews conducted with other participants. The interviews were audio recorded with the voluntary participation of the participants. In addition to the interviews, the signed protocol and the teaching program were analyzed and according to the protocol signed between the company and the school, visits were organized to the company and unstructured observations of the participants were conducted. Apart from this, the internship record books of the students were analyzed within the scope of this study by taking the permission of the trainee students. In conclusion, triangulation was provided in the study by collecting data from various resources and environments through different methods. Therefore, it was attempted to minimize the risks regarding the limitations and bias of the study and maximize the validity of the study (Maxwell, 1996).

2.5. Data Analyses

The data obtained in this study were interpreted by conducting content analysis. The objective of the content analysis is to reduce the words in a research text to a fewer number of content categories (Creswell, 2013). The basic assignment carried out in content analysis is to combine similar data around specific concepts and themes and to interpret them in a way readers can understand (Yıldırım & Şimşek, 2008). All the interviews were transmitted into computers. Audio recordings were transcribed and later sent to the participants via e-mail to be proofread. According to the feedback from participants, necessary editions were made. After that, the analyses were conducted on the resultant final transcriptions. In addition to all of these, the reliability and validity of the study was increased through the evaluation of two external researchers. The participants were coded as PB for the head of the program, OE-1, OE-2, OE-3 for the instructors. The day time students in the first focus group were coded as O1_K1, O1_K2, O1_K3, O1_K4, O1_K5, O1_K6, O1_K7, and students from the evening classes in the second focus group were coded as O2_K1, O2_K2, O2_K3, O2_K4, O2_K5 and O2_K6. In order to sustain homogeneity in groups, students were divided into two groups as day time classes and evening classes. In the analyses of the data, 'In Vıvo' coding technique was used. In this technique, data coding was carried out by including the participants' expressions directly (Chenail, 2012). Within this scope, direct quotations of the participants' views were used in data analyses. The researchers paid attention not to reflect on their own thoughts. In order to increase the internal validity of the research, triangulation was utilized. Direct quotations were used in the presentation of the findings to increase the reliability of the study. Potential codes and themes were determined through reading interviews and document analyses by the researchers. It is important for the study to confirm the findings obtained from the study to share with the participants (Merriam, 2009). For this reason, some of the participants were asked to provide feedback about the recently obtained findings. With the help of this, it was attempted to check whether or not the researcher's perception about the data, and the comments made based on these data, seemed to be correct. Finally, 18 students' internship training record books were included in the study by analyzing them with program techniques.

3. Findings

The purpose of this study was to evaluate a Flight Simulators course by soliciting views of the students selected for this course, instructors and the head of the program. In this study, a 'single-case design' was selected and as there is more than one case in the process, the 'intertwined single-case design' was utilized from single-case designs. As it is clear on figure 1, the 'teaching program' was considered the context, 'the implementation process of the program' was taken as the case and in order to obtain information about the process, multiple resources were used to get information in context and case.

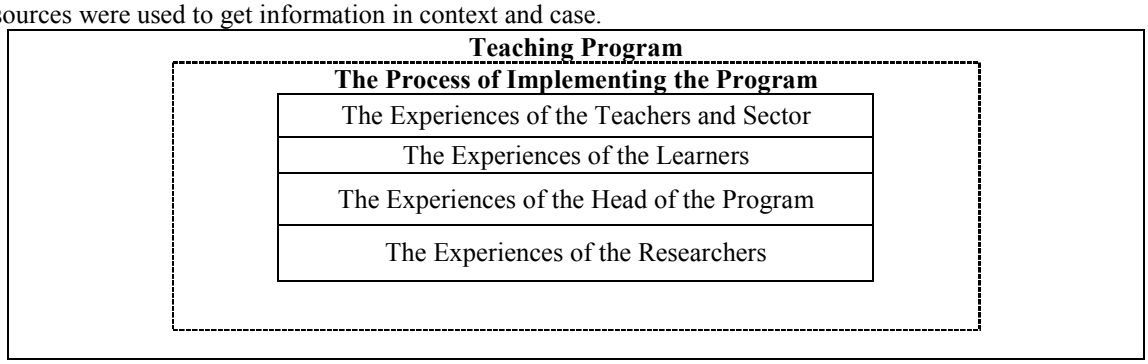


Figure 1: Research Design

Findings regarding the interviews carried out with 17 volunteer paricipants in order to evaluate Flight Simulator-I and Flight Simulator-II courses will be presented. The courses were opened as a result of the cooperation between the sector and the university will be presented in this section. As a result of the content analysis, themes such as 'expectations from the lesson, the benefits of the course and the success of the course and satisfaction' emerged.

3.1. Description

In view of the demand for intermediate staff in the private sector, there were meetings held between representatives of the private sector and a vocational school of higher education which was linked to a public university in Istanbul in the academic year of March 2012 -2013 academic year. As result of the meetings, within the scope of the 2013-2014 academic year, mutual studies, excursions and visits between the instructors of the program and private sector representatives were conducted. After that, it was aimed to prepare a protocol between the university and a private sector representative to create the general framework in this protocol. As a result of the efforts made, a protocol was signed between the university and the private sector representative in the 2013-2014 academic year. According to the signed protocol, it was decided to include and teach Flight

Simulators I course as an elective course in the 3rd semester of the fall term and Flight Simulators II in the 4th semester of the spring term from the 2014-2015 academic year. In this regard, the purpose of limiting the number of students who can select this course to 30 was to prevent crowded classrooms. As a result of the study carried out in the public sector, the content of the courses and the topics to be covered were determined and they were approved by the university senate. These courses were given to students selecting this course for the first time in the 2014-2015 academic year. Three experts from the sector were assigned to teach these courses to ensure that these courses have been taught by experts from the sector. Assignments were made according to the 31st article of the law number 2547, 'people who are known for their own works and studies in their own field can be appointed full time or be paid per course to teach and to implement courses which require special information and expertise' (Higher Education Council, 1981). Thus, it was thought that each expert was able contribute more efficiently to the content in their own expertise fields. Besides, after each academic year, 6 students who have been studying in this program might have had their workplace training through Practice II (Internship II) in that company for 30 days. In this way, students had opportunities to practice the theoretical knowledge they have gained in this process directly in the sector. During the internships, students' practice was supported by 2 Airbus and Boeing flight simulators.

3.2. Interpretation

It is a well-known fact that developing the curricula for vocational schools of higher education aiming to fulfil the needs of the sector according to the current needs has become a necessity. Interviews between the head of the program and experts and companies of the sector to provide an up-to-date curriculum are an important step in terms of fulfilling the intermediate staff need of the sector by vocational schools of higher education. In this way, the graduates who will be hired in the sector can adapt themselves to the sector consciously and in a more active manner by collecting detailed information about the sector in the course of their study. Similarly, getting to know the staff which will fulfil the needs of the companies in the sector before hiring them and knowing their levels will fulfil the need for qualified staff.

It can be interpreted that having carried out these interviews via a protocol shows the importance assigned to this agreement by both sides. It is important for the students to have theoretical parts of the courses in vocational schools of higher education and to practice through simulators in the companies. Because theoretical information learned during the courses can be learned permanently with real life practice. In addition to this, at the end of each academic year, it is important for 6 students to have 30-day internships. This is important both to see the sector and to understand employment situations. Students have very little information about employment opportunities as they do not gain enough information about the sector during their education. Especially, courses taught by experts from the sector can be seen as another important step. Because it can be interpreted as a key factor for the learners to find out details about the content by benefitting from the experiences of the experts from the sector. Apart from this, although it is not obligatory, students' visit to companies in the term is another outstanding point.

3.3. Evaluation

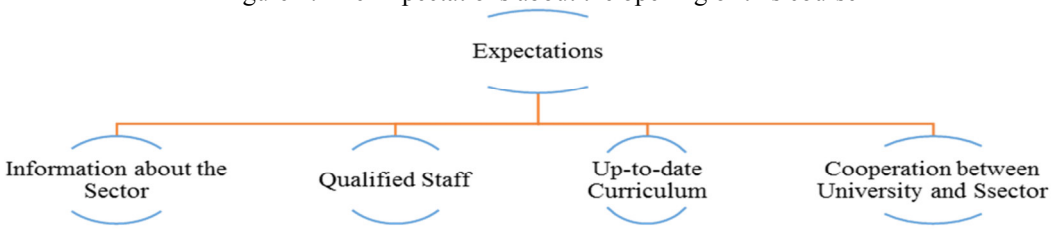
The evaluation of the effectiveness of the courses opened by considering the needs of the program and the private sector was conducted in three phases. In the first phase, mid-terms carried out during each term, exit and make-up tests are effective. In this sense, these tests are carried out to evaluate theoretical information learned by students in the term. In the second phase, through the end of the term, three-week courses are supported by the practices at the companies. These practices in which students can participate voluntarily are carried out with groups of 12 students in hours and days which are suitable to the students and the companies. In this phase, the level of information which students acquire theoretically at schools and which is thought to become more permanent with practice is observed at the field. Students both get to know the company in detail and have opportunities to use and get to know the equipment more closely. The evaluation in this phase is used for Workplace Learning through Practice (Internship). In the third phase, they can gain detailed learning thanks to their internship which lasts 30 work days. In this phase, 6 students in three different groups have opportunities to practice all the information that they acquired in the academic year at the workplace. Together with the evaluation step in the last phase, it is possible to access information about students who are planning to be hired by the companies and whose interest in the sector may increase. As all the students are expected to work in this sector, an opportunity arises to evaluate students who are interested in this sector with this three-phase elimination and election method in a good way.

3.4. Themes

3.4.1. The Expectations of the Participants from the Lesson

The participants were asked to express their expectations about the opening of the lesson. The themes appeared as a results of the findings obtained showed visually in Figure 2.

Figure 2: The Expectations about the opening of this course



According to figure 2, it is evident that 4 opinions have come into prominence. Among the opinions of the head of the program and 3 instructors teaching the lesson, fulfilling the need for qualified staff in the sector were stated by both head of the program and the instructors. The opinion that students should gain information about the sector the course of their education was stated by the instructors. Besides, among the expectations of the head of the program about the opening of the lesson, keeping the curriculum up-to-date and improving the cooperation between the sector and the university are highlighted. Some of the sample statements of the participants are as in the following:

PB: The companies want to minimise their external dependency by improving their technical staff capacities. Besides, our major objective as the head of the program is to update our teaching curriculum by cooperating with the companies operating in the field of industry. For this reason, a protocol was signed between our program and a leading company operating in flight simulators. Within the framework of this protocol, thanks to lessons which are offered to be opened, our students can graduate as experts in flight simulators as their teaching is still in progress. Students will have opportunities to find a job including their internships first by providing education.

OE-3: We demanded the opening of this lesson as there has not been an education for raising flight simulator technical staff in the aviation sector so far and the background of the staff who applied to our company for a job or internship is insufficient. The main purpose of this lesson is to provide information about aviation and flight simulators to the personnel who will be coming to our company for internship and to make their internship period effective.

3.4.2. The Bebefits of the Course to the Participants

The results obtained from the participants about the contribution of the Flight Simulator I-II lessons which are provided for the first time in Turkey to the students and vocational school of higher education by considering the cooperation between the university and the sector were figured out in figure 3.

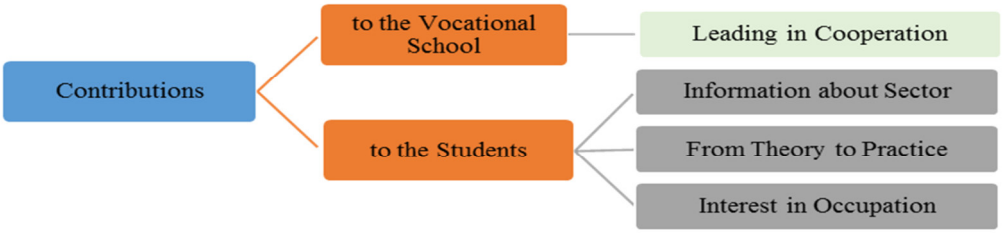


Figure 3: The Contribution of the Course to the Students and Vocational School of Higher Education

The participants stressed that the course benefitted the learners in terms of giving them the everyday practice of the knowledge taught theoretically. Besides, it was also pointed out that it can be helpful for the learner to know the sector better by gathering information about it before. In this way, it was stated that the interest of the learners towards the sector increased. In addition to this, the head of the program highlighted the opinion that a leading case has appeared with the opening of this course to establish other partnerships with the sector and to open other courses. Some of the transcriptions of the participants are as in the following:

O1-K3: Also it is something that we have known before. In fact, there is a servo-system and a hydro pneumatic system in the plane. We knew this before. And there is a complicated system for everything on the plane. When somebody sees this, he/she becomes more curious and gets more interested in his/her job.

PB: There will be a two-stage benefit from this course. First of all, our students can graduate as experts in Flight Simulators thanks to these courses when they receive their education. In this way, they can use directly their own professional knowledge and skills in the Flight simulators topic. Thus, the current need for qualified technical staff in the fields of aviation and flight simulators will be fulfilled continuously. Another, more important benefit is as following: There is a wide gap between universities which have been providing technical education and industrial companies. Thanks to this course, there will be cooperation between the private sector company and the university. Solutions will be sought to overcome problematic situations, there will be background for other partnerships and we will gain experiences of cooperation with private companies. In conclusion, a model can be created for the cooperation between the university

and the industry.

O1-K4: Each university student has a fear inside. I will graduate from university and then what will happen? Will I get a job or continue at university? This directly gives a chance to have a job during your university education. It says come here, be successful and I will give you a position at my company.

3.4.3. Success and Satisfaction Levels for the Lesson

It was asked from the participants to state their opinions about the achievement level and opening of the lesson according to their own perspectives. The results about 'the achievement and satisfaction levels for the lesson' theme as a result of the opinions stated by the participants were displayed visually in Figure 4.

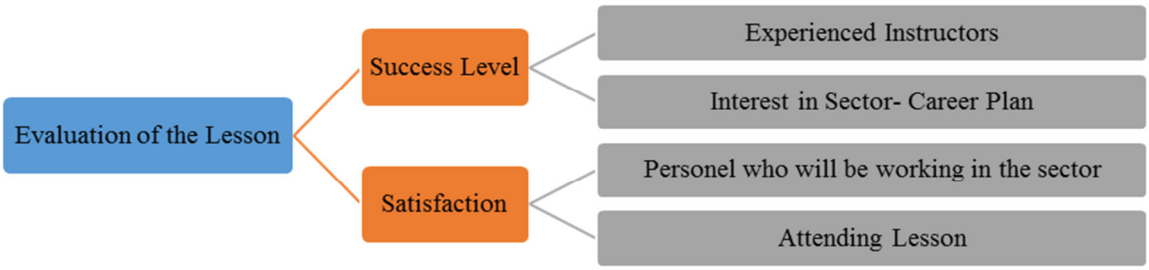


Figure 4: Success and Satisfaction Levels for the Lesson

All the participants stated that the course was successful. The fact that the instructors teaching this course were from the sector and that they have been transferring their experiences to the students was highlighted by the students and the head of the program. Besides, it was stated by the instructors that students were getting interested in the sector and that they were making career plans in the sector. It was outstanding that while daytime students expressed their satisfaction with the course, they also attended the evening course. Finally, it was seen that the head of the program and the instructors stated that they are happy with the course as it trains people who have the necessary qualifications to fulfil the needs of the sector. Some of the transcriptions of participants are as in the following:

PB: Some very experienced administrators and technical experts of the company have been instructors of the course. Besides, within a limited quota, students who have been taking this course can have their internship in the same company. For this reason, I can easily say that this course is very successful.

OE-3: The interest and curiosity of most of the students who selected this course increased. Besides, some of the students started to make a career plan at the school level by heading for the objective to become an expert on this subject and to be in this sector.

OE-2: I think that staff who will be working and needed in this sector can be found and trained from the students who have been taking this course and who are interested in this field. A resource which can fulfil the needs of the sector has been created.

O1-K4: for example, we have some courses, they last an hour and we pray for the end of the course. However, this course lasts two hours. And our courses normally take two and a half hours. I know that I joined the evening classes. We stay with our instructor and listen to same subject once again. That is, it attracts students' attention more in this way.

4. Discussions

Flight Simulators I-II courses were opened to fulfil the need for qualified staff in the sector, to give learners more information about the sector and to keep the curriculum up-to-date by establishing cooperation between the university and the sector. It is known that vocational education is influenced by science, technology and changes in the sector (Sezgin, 2000). For this reason, it is necessary to develop the curriculum of vocational schools of higher education aiming to fulfil the needs of the sector according to the needs of the time. The issue of cooperation between the university and the sector is among the problems of the sector in Turkey (Çağlayan & Bener, 2006). In addition to that, very few lines of communication and cooperation exist between universities and the sector (Bulgan & Dolmacı, 2015). Whereas the sector tends to collaborate more with universities (Beyhan & Fındık, 2014: 91). It is easier to develop cooperation with the help of qualified instructors (Kyvikand Aksnes, 2015). Keeping university curriculums up-to-date in a parallel manner to the sector and being comfortable about adapting students to the sector after their graduation are among the expected outputs. It is a well-known fact that vocational schools are insufficient (Çağlayan & Bener, 2006) both qualitatively and quantitatively when the sectoral dimensions of Turkey are considered. For this reason, opening this kind of a course can fulfil the qualified staff need and also their expectations. In this way, the cooperation between universities and the sector can be strengthened. To increase the cooperation between universities and the sector, the contribution of the sector should be taken into account to a greater degree (Yardımcı & Müftüoğlu, 2015). Because, among known problems, there has been a wide gap between the competencies acquired by the students studying in vocational schools of higher education and the needs of the sector (Gül Koçak, 2006). In the process

of filling the gap, the contribution of the qualified staff will be upmost important.

By considering the statements of the participants, it was concluded that the course directed students to the sector and increased their curiosity about the sector, so it benefitted the students in terms of more information about the sector. The statement of the participants such as 'practicing the knowledge in the sector' is especially outstanding. It can be stated it contributed to turning theory learned during the class into practice by practicing learned knowledge during the course (Becit, Kurt & Kabakçı, 2009). In this way, it can remove some of the question marks from the minds of the learners about how learned knowledge can be used in real life. In addition to this, it can ensure the increase of interaction between the learners and the instructor and it also gives them professional responsibilities and equipment by providing them examples of theory being put into practice (Postareff & Linndblom-Ylanneand Nevgi, 2004; Wagler, 2007). According to the signed protocol, in order to strengthen theoretical information , , learners can use simulators to practice them. In a study carried out by Çağıltay and others (2007) enriching the courses with simulators was highlighted among the expectations of students attending the courses. Similarly, Aydın, Görmüs & Altıntop (2014) stated that practice is important for the learners. With the help of this, practicing theoretical information can be ensured.

The fact that all the participants were satisfied with the course can be interpreted in such a way that the expected interest in the course was created. Especially learners' satisfaction is an important indicator for the quality of the learning experience (Yukselturk & Yildirim, 2008). Among the most important reasons of this, the performance of the experts during the courses can be considered. Because instructors can provide a high level of educational supervision and satisfaction for learners (Shackelford & Maxwell, 2012). Among the important factors in the process of determining satisfaction with the course is the fact that instructors know and master their content knowledge and together with their experience they can provide answers for the questions posed to them (Emanuel and Adams). At the same time, the perspectives of the experts have great effect on determining the qualities of the courses according to educational criticism model (Brazer & Bauer, 2013). Besides, the quality of education provided to learners is based on their positive attitudes about the competencies regarding professional and content knowledge which they received in the course, Moreover career plans of the learners became important in evaluating this course as successful (Harper & Daane, 1998). This is because career planning may effect learner attitudes toward the course in a positive way. Aydin, and Altintop (2014) indicate that the possibility of finding a job after graduation is among expectations of learners. In addition, learners enjoy a high-interactive learning environment (Holmes & Benders, 2012). However, during the application development in the sector, giving lectures by experts in the field and practices will contribute to the training of qualified technicians according to the sector's expectations (Dündar, Yılmaz & Kara, 2014).

Transferring information from the experienced instructors to the learners may increase the interest of the learners towards the course. There is a need for an experienced staff to provide answers immediately to the questions appearing in the minds of the students about where and how they can use the information they learned during the course in practice (Akben, Subaşı & Kıymık, 2005). Besides, having good content knowledge, following current developments and improvements in his/her field and sharing them with the learners are among the most important expectations of the learners from the instructors (Ekinci & Burgaz, 2007; Aydın, Görmüs & Altıntop, 2014). For this reason taking courses with experienced instructors from the sector can be interpreted in such a way that they answered all the questions posed by students satisfactorily and increased the motivation of students towards the course. In addition to this, in the participants' satisfaction process regarding the course, it is highlighted that daytime students also participated in the evening classes and qualified staff for the sector were trained. In order to hire graduates into this sector, some contribution and cooperation should be ensured from sectors providing job opportunities (Gül Koçak, 2006). Thus, an increase in the interests of learners towards their education and the fulfillment of their expectations can be ensured. Training qualified staff for the sector will contribute to the development of the connection between the university and the sector because practical training increasing students' chances to find a job after graduation is among the greatest expectations of the learners (Aydın, Görmüş & Altıntop, 2014). For this reason, learners expect from instructors to offer detailed guidance and demonstration about recruitment opportunities in the sector (Ekinci & Burgaz, 2007). Besides, it is expected that fulfilling the expectations of the learners about the courses and the teaching environment will result in an increase in the satisfaction of learners so their interests towards the course and their participation will also increase (Gömleksiz, 2002). In conclusion it can be said that the task of training qualified and fully equipped staff according to their professional fields (Başer, 1994), which is stated among the objectives of the universities, was accomplished.

5. Conclusion and Suggestions

It is appeared that Flight Simulators I-II lessons which was opened for the first time in Turkey were appreciated by the head of the program, instructors who are teaching the lesson and the students. More particularly, it can be seen as a model to increase the cooperation between the sector and university, to fulfil the need for qualified staff in the sector and to establish different partnerships. In this way, it can be ensured that institutions which are

trying to fulfil the personnel need for the sector can keep their curriculum up-to-date by cooperating with the sector. It was concluded that during their training the learners had the opportunity to see how the knowledge gained in the classroom can be put into practice. Courses taught by experienced instructors from the sector contributed positively to the interests of the learners in the course. By this means, it was concluded that learners prepared their career plans for the sector and gained more information about the sector. In addition to this, it appeared that the interest of some students attending daytime classes was high and for this reason they also participated in the evening classes of the same course.

The suggestions for the evaluation of the course were as following:

- When the statements of the participants are taken into account, the satisfaction of the all partners towards the course came into prominence. It can be said that among the reasons for it is that because the course was taught by people who are experts in this field, students started to get to know this sector, so the program became more attractive for the students. For this reason, opening courses similar to this model in the programs can be positive in terms of the program, the students and the sector. In addition to this, some other courses can be opened to increase cooperation between the university and the sector and to provide opportunities for the students to know the sector better.
- It is necessary to bring vocational schools of higher education and sector representatives together. By this means, shared programs or the organization of the programs according to the improvements in the sector can be guaranteed. In conclusion, the graduates of the program are candidates who will probably be working in this sector. In order for the learners to obtain expected academic achievements in the courses, their motivation can be increased by showing them how they can turn theory into practice, especially by presenting examples from daily life. In order for the instructors to reach the expectations about the courses or to increase the interests towards the courses, practicing learned theoretical knowledge in professional life or providing examples of this practice should be made possible.

References

Akben, S. B., Subaşı, A., & Kıymık, M. K. (2005). Mühendislikte e-eğitim uygulamasının getireceği sonuçlar, II. Elektrik Elektronik Bilgisayar Mühendislikleri Eğitimi Sempozyumu, Samsun.

Akyurt, N. (2009). Meslek yüksekokulları ve Marmara üniversitesi sağlık hizmetleri meslek yüksekokulu öğrencilerinin genel profile, *Fırat Sağlık Hizmetleri Dergisi*, 4(11), 175-189.

Alkin, C. M. (2013). *Evaluation Roots* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Aydemir, E. (2016). Öğrenci memnuniyeti açısından üniversiteler arası sıralamada yeni bir sistem önerisi. *Journal of Higher Education*, 6(3), 124-137.

Aydın, S., Görmüş, A. Ş., & Altıntop, M. Y. (2014). Öğrencilerin memnuniyet düzeyleri ile demografik özellikleri arasındaki ilişkinin doğrusal olmayan kanonik korelasyon analizi ile incelenmesi: meslek yüksekokulunda bir uygulama, *Abant İzzet Baysal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 14(1), 35-58.

Bal, V., & Akçi, Y. (2013). Rekabetçilikte, Sanayicilerin Teknolojik Yenilenmeye İlişkin Görüşlerinin Üniversite-Sanayi İşbirliği Çerçevesinde İncelenmesi. *Uluslararası Alanya İşletme Fakültesi Dergisi, 5*(2), 129-137.

Başer, G. (1994). Hemşirelikte yükseköğretim. *Hacettepe Üniversitesi Hemşirelik Yüksekokulu Dergisi* 1(1): 15-18.

Becit, G., Kurt, A. A., & Kabakçı, I. (2009). Bilgisayar öğretmen adaylarının okul uygulama derslerinin yararlarına ilişkin görüşleri. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 9(1), 169–184

Berg, L. B., Lune, H. (2012). *Qualitative Research Methods for Social Sciences* (8th ed.). New Jersey: Pearson Education Inc.

Beyhan, B., Fındık D. (2014). Firma Yenilik Stratejisi ve Üniversite-Sanayi İşbirliği: Türkiye Üzerine Bir Çalışma. *İktisat İşletme ve Finans, 29* (242), 71-102.

Brazer, S. D., & Bauer, S. C. (2013). Preparing Instructional Leaders A Model. *Educational Administration Quarterly*, 49(4), 645-684.

Bulgan, G., Dolmacı, N. (2015). Önlisans eğitiminde öğrenci gözüyle sorunlar fırsatlar; Isparta myo örneği. I. Ulusal Şişli Sempozyumu, 2-25.

Çağıltay, K., Yıldırım, S., Aslan, İ., Gök, A., Gürel, G., Karakuş, T., & Yıldız, İ. (2007). Öğretim teknolojilerinin üniversitede kullanımına yönelik alışkanlıklar ve beklentiler: Betimleyici bir çalışma. Akademik Bilişim Konferansı Bildirileri, Kütahya.

Çağlayan, U., & Bener, A. (2006). Avrupa Birliği Sürecinde Türkiye'de Bilişim ve Telekomünikasyon Teknolojileri Sektörü Üzerine Görüş ve Öneriler. Yayın No. TÜSİAD, 2006-06.

Chanail, R. J. (2012). Conducting Qualitative Data Analysis: Qualitative Data Analysis as a Metaphoric Process. *Qualitative Report*, 17, 248-253.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.).

Thousand Oaks, CA: Sage Publications.
Dündar, B., Yılmaz, H., & Kara, Y. (2014). Mesleki ve teknik eğitimde üniversite-sanayi işbirliği protokolü yerel uygulama örneği: Yeniçağa. *21. Yüzyılda Eğitim ve Toplum Eğitim Bilimleri ve Sosyal Araştırmalar Dergisi, 3*(8), 121-127.
Eisner, E. W. (2005). *Reimagining schools: The selected works of Elliot W. Eisner*. London and New York: Routledge.
Eisner, E.W. (1985). *The Educational Imagination: On the design and evaluation of school programs*. New York: Macmillan Publisging.
Eisner, E.W. (1998). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*. Ohio: Prentice Hall.
Ekinci, C. E., & Burgaz, B. (2007). Hacettepe üniversitesi öğrencilerinin bazı akademik hizmetlere ilişkin beklenti ve memnuniyet düzeyleri. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 33(33), 120-134.
Emanuel, R., and Adams, J. N. (2006). Assessing college student perceptions of instructor customer service via the quality of instructor service to students (QISS) questionnaire. *Assessment ve Evaluation in Higher Education*, 31(5), 535-549.
Erden, M. (1998). *Eğitimde program değerlendirme*. Ankara: Anı Yayıncılık.
Fraenkel, J. R., Wallen, N., E (2009). *How to Design and Evaluate Research in Education* (7th ed.). New Yor: McGraw-Hill Higher Education.
Gömleksiz, M. N. (2002). Modüler öğretime ilişkin bir tutum ölçeğinin geçerlik ve güvenirliği. *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 12(2), 275-285.
Harper, N.W. & Daane, C.J. (1998). Causes and reductions of math anxiety in preservice-elementary teachers. *Action in Teacher Education*, 19, 29–38.
Holmes, J., & Benders, D. S. (2012). Comparison between Distance Methods Versus Traditional Classroom in Teaching Intelligence Analysis. Available at SSRN 2090375.
Koçak, H., G., (2006). Bilgisayar Teknolojisi Ve Programlama Eğitim Programının Sorunları. Çukurova University, Social Sciences Institute, Department of Educational Sciences, Unpublished Master Thesis.
Kumral, O., (2010). Eğitsel Eleştiri Modeli İle Eğitim Fakültesi Sınıf Öğretmenliği Öğretim Programının Değerlendirilmesi, Bir Durum Çalışması. Adnan Menderes University, Social Sciences Institute, Department of Educational Sciences, Unpublished PhD Thesis.
Kumral, O., & Saracaloğlu, A. S. (2011). Eğitim programlarının değerlendirilmesi ve eğitsel eleştiri modeli. *Uluslararası Eğitim Programları ve Öğretim Çalışmaları Dergisi*, 1(2), 27-35.
Kyvik, S., & Aksnes, D. W. (2015). Explaining the increase in publication productivity among academic staff: a generational perspective. Studies in Higher Education, 40(8), 1438-1453.
Maxwell, A. J. (1996). *Qualitative Research Design: An Interactive Approach*. London: Sage Publication.
Merriam, S. B. (2009). *Qualitative Research: A guide to design and implementation*. San Francisco, CA: John Wiley and Sons.
Özgüven, İ.E. (2004). *Görüşme ilke ve teknikleri*. Ankara: Pdrem Yayınları.
Özyılmaz, Ö. (2013). *Türk milli eğitim sisteminin sorunları ve çözüm arayışları*. Ankara: Pegem Akademi.
Patton, M. Q. (1987). *How to use qualitative methods in evaluation* (No. 4). London: Sage Publications.
Patton, M.Q. (1990). *Qualitative evaluation and research methods*. Newbury Park: Sage Publications.
Peker, İ., Ar, İ., M., Baki, B. (2014). Üniversite Sanayi İşbirliğinin Gelişmesinin Önündeki Engellerin AAS Yöntemiyle Belirlenmesi: Karadeniz Teknik Üniversitesi Örneği. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi, 28*(3), 107-126.
Postareff, L., Lindblom-Ylänne, S. & Nevgi, A. (2004). The effect of pedagogical training on teaching in higher education. European Association for Research on Learning and Instruction (EARLI) Higher Education Special Interest Group Konferansı, Stockholm, Sweden.
Sezgin, İ. (2000). *Mesleki ve teknik eğitimde program geliştirme* (4.Basım). Ankara: Nobel Yayınları.
Shackelford, J. L., & Maxwell, M. (2012). Sense of community in graduate online education: Contribution of learner to learner interaction. *The International Review of Research in Open and Distance Learning, 13*(4), 228-249.
Silverman, D. (2006). *Interpreting qualitative data: Methods for analyzing talk, text and interaction*. Sage Publications.
Sıcak, A., and Arsal, Z. (2013). 5. Sınıf fen ve teknoloji öğretim programı canlılar dünyasını gezelim tanıyalım ünitesinin eğitsel eleştiri modeline göre değerlendirilmesi. *Karaelmas eğitim bilimleri dergisi*, 1(1), 157-175.
Türnüklü, A. (2007). Liselerde öğrenci çatışmaları, nedenleri, çözüm stratejileri ve taktikleri. *Kuram ve uygulamada eğitim yönetimi dergisi*, 13(1), 129-166.
Varış, F. (1996). *Eğitimde program geliştirme*. Ankara: Alkım Yayınevi.
Wagler, R.R. (2007). Assessing the impact of vicarious experiences on preservice elementary science teacher

efficacy and preservice elementary teacher efficacy. Yayımlanmamış doktora tezi. Oklahoma: Oklahoma State Universitesi.

Yardımcı, A., & Müftüoğlu, E. B. (2015). Üniversite sanayi işbirliğine sanayi kesiminin bakışı. *Ankara Üniversitesi SBF Dergisi, 70*(4), 815-838.

Yin, R.K. (2003). Case Study Research. Sage Publication: London.

Yin, R.K. (2011). Qualitative Research from Start to Finish. Guilford Press: New York.

Yıldırım, A., and Şimşek, H. (2008). *Sosyal bilimlerde nitel araştırma yöntemleri* (6. Baskı). Ankara: Seçkin Yayıncılık.

Yüksek Öğretim Kurulu, (1981). Denklik Bildirimi – 2547 Sayılı Kanun. Access: January 2015 <http://goo.gl/ZPY8lL >

Yukselturk, E., & Yildirim, Z. (2008). Investigation of interaction, online support, course structure and flexibility as the contributing factors to students' satisfaction in an online certificate program. *Educational Technology & Society, 11*(4), 51-65.