

A Qualitative Research on the Analysis of the Use of European Credit Transfer System Tools in Vocational Secondary School

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Abstract

The aim of this research is to examine the level of European Credit Transfer System tools in Vocational Secondary School in Erasmus+ mobility projects carried out and granted by the Turkish National Agency. European Credit Transfer System tools in Vocational Secondary School has been developed as a tool of policy which aims recognition, verification and transfer of the documents, certificates and diplomas acquired in European Union countries, regardless of where they have been obtained. The data of the research are obtained from school principals, vice principals, branch managers and vocational teachers working at vocational schools which, in the 2019–2020 Erasmus+ project application period, applied to The Turkish National Agency for a grant and announced that ECVET tools would be used. Furthermore, vocational skills, qualifications, certificates and the recognition of the acquisitions obtained abroad by the students within the scope of Erasmus+ mobility project have been evaluated in this study. It has been concluded that vocational school principal, vice principal and teachers use European Credit Transfer System tools in Vocational Secondary School in Erasmus+ mobility projects, apply these tools and consider them to be favorable. In the study, suggestions regarding the application and use of European Credit Transfer System tools were made for the institutions that are planning to carry out Erasmus+ mobility project in vocational secondary school.

Keywords: vocational education, ecvet, erasmus+, recognition and verification of the certificates and diplomas, vocational qualification, skill and acquisition

1. Introduction

1.1 Introduce the Problem

European Union not only aims to improve the life standards of the citizens living the countries which are members of the union but also works on issues such as starting vocational education, mutual recognition of the certificates and diplomas and the integration of the national applications of the member countries without breaking down the union's basic approaches to the issues. Yet, there are obstacles preventing the mutual recognition of the vocational diplomas and certificates obtained from any one of the countries which is a member of the union.

In terms of the European Union, the development and the awareness of the knowledge, skills and qualifications of its citizens are extremely important for their socialization, employment and competition in society, along with their own personal and vocational developments. Within this context, The European Union is required to provide international mobility for employees and students and it must help to meet the needs in the European labor market. Lifelong Learning for all and the transfer, awareness and accumulation of formal, informal and non-formal learning of all individuals should be ensured and developed at the union's level (Avrupa Parlamentosu & Konsey, 2009).

Vocational education is one of the controversial fields in the education systems. The expectations in the labor

market and the excess number of the partners diversify the contradictions compared to other education levels. Vocational secondary education in Türkiye is carried out in 55 fields and 203 branches. It is quite natural that there are great expectations from vocational education in Türkiye, where the technology has been advanced (Özer, 2020a). Moreover, vocational education has a critical importance in terms of accelerating development, increasing employment and strengthening the competitiveness of the country. The rapid change in science and the latest technology raises the demands for a qualified workforce. As a result of this demand, working from home and flexible hours have emerged (Yörük, Dikici, & Uysal, 2002).

Designing professional standards and qualifications based on international standards and increasing the qualifications and competences in each level of vocational education enhance the quality of vocational education. The education given in vocational education schools should be open to external auditing. In order for vocational education to be evaluated, quality offices and quality assurance offices should be founded. Training regarding job standards, vocational qualifications and increasing the effectiveness of the learning environment must be carried out for vocational teachers (Üstün, 2016).

European Credit System for Vocational Education and Training (ECVET) is a series of tools which has been developed to enhance the mobility in vocational learning among member countries, to encourage personalized career paths and the ways of learning and to recognize formal and informal education. ECVET is not an element that can be applied alone in European teaching and training (CEDEFOP, 2010). While some vocational education schools consider ECVET to be an international student mobility tool only, other institutions relate it with systematic vocational education reforms for Lifelong Learning.

The European Commission has assigned National Agencies of the countries an active role and responsibilities since 2014 in line with the implementation of the European Credits Transfer System on local level. Within this context, a national ECVET, which consists of the representatives from the Ministry of National Education, non-governmental organizations and Vocational Qualification Institute, has been founded.

There is no unity of practice about ECVET among European Union countries. With the purpose of promoting the use of ECVET tools and finding a proper method, the union has supported several strategic partnership projects so far. For instance, in Poland, a vocational education reform was passed in 2012 and most ECVET principles were adopted with regard to the recommendations of the European Commission. ECVET points, which are found in ECVET principles, have been defined as the relation between the total number of class hours taken in vocational education and the numerical weight of each module. However, the vocational education reform carried out in Poland is currently unable to predict if ECVET points will be in use. For all European Union countries, it is too early to discuss how ECVET points will be used for the verification, recognition and transfer of the credits in formal, informal and non-formal learning which are compatible with vocational secondary schools (Dębowski & Stęchły, 2015). One of the most significant steps regarding the use of ECVET tools and vocational secondary education in Turkey is the Recognition of Prior Learning, Accreditation and Assessment and Evaluation Process manual which was published in 2017.

The creation of a modular vocational education system, the implementation of an education system including rapid, technical and systematic changes and the evaluation of prior learning and the problems existing for years have been discussed. Countries are currently encountering various problems such as finding qualified workforce, aging of society, rapid advancements in communication technology, social and economic challenges. The response to these challenges is to move towards a more flexible system in vocational education. There are three different models applied in vocational education systems around the world. The first one is the free market model in which the government plays almost no role in vocational education, and England can be considered as an example for this model. The second one is the bureaucratic model which is led by the government. France can be given as an example for this model. The government organizes and inspects vocational education in this model. The third model is dual vocational education. Denmark is an example for this model. In this model, the responsibility of vocational education is shared between the government and the private sector; as a result, the education is given partly at schools and partly at workplaces (Pilz, Li, Canning, & Minty, 2017).

ECVET tools and methodology cover (VET Express Project, 2022):

- 1) The recognition of the qualifications in terms of learning outcomes
- 2) The process of transfer and accumulation of the qualifications obtained
- 3) Additional documents such as learning contracts, transcripts and ECVET manuals

The learning process starts when the learning contract is signed by the host institute providing education and the sending institution. Learning outcome defines the knowledge, skill, competence, attitude and behaviors a

successful individual is expected to know, understand and demonstrate at the end of the learning process. The process of the accumulation of learning outcomes in ECVET is demonstrated in Figure 1 (Demirer, 2018). As shown in Figure 1, the learning outcomes are evaluated by the education provider. The outcomes obtained are saved in Europass and transcript and approved. Finally, the learning outcomes are recognized and converted into a certain amount of accumulated ECVET points as part of the intended qualification (Miteva, Ilieva, Pesznyak, Kiss, & Klepakova, 2018).

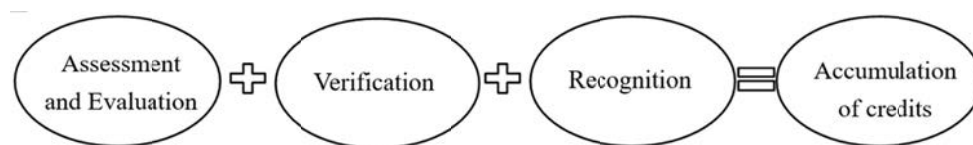


Figure 1. The accumulation of learning outcomes in ECVET

There have been thousands of students who have been abroad thanks to mobility projects. The fact that the students go abroad is not important in terms of knowledge, skills and attitudes. What matters is the new knowledge, skills and attitudes that the students obtained after the mobility and how they will contribute to the development of society and the individual. Within this framework, there are various kinds of learning mobility. Different learning outcomes are expected from each kind of mobility. Thus, learning mobility is considered to be not only logistics arrangement and coordination but also a pedagogical activity (Kristensen, Krzaklewska, & Nico, 2017).

The results expected from ECVET recommendation in secondary school education can be listed as follows (Centro Italiano Di Studi Superiori Sul Turismo E Sulla Promozione Turistica, 2021):

- It must be ensured that the learning outcome/success of an individual, who participates in a learning method leading to vocational certificate, qualification or diploma, is approved and saved.
- The verification, recognition and transfer of the learning outcomes obtained in formal, informal and non-formal education abroad must be strengthened.
- Verification and accumulation of learning outcomes, which is defined in terms of the required knowledge, skills and qualifications based on the individual, must be ensured
- Lifelong learning for adults and European mobility in vocational education must be encouraged.
- The learning methods which result in acquisition must be supported.
- The transfer of the credits among different vocational education systems must be enabled and learning outcomes must be provided to the units within a common methodological framework.

The effective use of EU funds (Erasmus+, ESIF, EURES, Your First EURES Job) by the students and the teachers in vocational education will increase international mobility. For the recognition and verification of formal, informal and non-formal education on EU level, the EU transparency tools (EQF, ECVET, EQAVET, EUROPASS) will be promoted and applied more. Social partners participate in projects more day by day for the development of Vocational Education and Training policies and implementation of them. However, the participation of employers and unions in the control and management of Vocational Education and Training will make it stronger (Conclusions, 2015).

Studies regarding ECVET have been carried out in Türkiye since 2005. The most important one of these studies is the foundation of the Vocational Qualifications Authority (VQA) in 2006. VQA has had great contributions to form the National Qualification Framework in Türkiye (Bağlıbel & Samancıoğlu, 2019). It is obvious that the number of studies carried out regarding the use of ECVET tools recommended by the European Commission in Turkish vocational education (Akkök, 2016; Ata & Çepni, 2015; Demirer, 2019).

This research is expected to be a contribution to the literature in regard to the level of use of ECVET tools in Türkiye and their practicality in vocational education. Besides, this study will contribute to the extended use of ECVET tools for the project coordinators of Erasmus+ mobility and Turkish National Agency vocational education coordinating experts.

The aim of this research is to conduct a thorough analysis about the use of ECVET tools in Erasmus+ projects in line with the opinions of the school principals, vice principals, branch managers and vocational course teachers,

who work at vocational education schools. In addition, in this research, the recognition, verification and transfer of professional skills, qualifications and acquisitions obtained by the students abroad as part of Erasmus+ mobility projects are tried to be evaluated. According to this purpose, answers are sought for the following questions:

- 1) What are the perceptions regarding the European Credit System for Vocational Education and Training (ECVET) in Vocational Secondary School?
 - 2) What are perceptions regarding the ECVET tools used in student mobility projects carried out within the framework of Erasmus+ in Vocational Secondary School?
 - 3) In what ways the acquisitions obtained by using ECVET in Vocational Secondary Schools have been verified and recognized?
 - 4) How were the acquisitions obtained by using ECVET in Vocational Secondary Schools transferred?
 - 5) What are the benefits of ECVET tools in Erasmus+ projects carried out by Vocational Secondary Schools?
- The Method section describes in detail how the study was conducted, including conceptual and operational definitions of the variables used in the study, Different types of studies will rely on different methodologies; however, a complete description of the methods used enables the reader to evaluate the appropriateness of your methods and the reliability and the validity of your results, It also permits experienced investigators to replicate the study, If your manuscript is an update of an ongoing or earlier study and the method has been published in detail elsewhere, you may refer the reader to that source and simply give a brief synopsis of the method in this section.

2. Method

The research design, the study group, data collection tool and collection of the data and their analysis are the main focus of this chapter.

2.1 The Research Model

This research was carried out with a qualitative case study approach. Case study is a research design which is utilized in various fields and enables the researcher to conduct a thorough analysis about a programme, a case or activity and one or more individuals (Stake, 1995; Yin, 2012). The purpose of conducting this research with a case study approach is for an in-depth analysis of the use of ECVET tools in Erasmus+ projects in vocational education schools.

2.2 Study Group

The study group is composed of school principals, vice principals, branch managers and vocational course teachers working at Vocational and Technical Anatolian High Schools or Vocational Training Centers which have realized an Erasmus+ mobility project funded by Turkish National Agency. The study group was chosen as the maximum variation sampling from purposive sampling group in terms of the qualifications that it has to provide the data. Purposeful maximum sampling was preferred in terms of selecting situations that reflect different perspectives on the problem, process and event (Creswell, 2016). In this regard, it is aimed that the participants have in-depth knowledge about the use of ECVET tools in Erasmus+ projects. Hence, the whole study group is comprised of 32 participants who have conducted an Erasmus+ mobility project in vocational education supported by Turkish National Agency. The demographic information of the participants is demonstrated in Table 1 below: both conventional and expedient to divide the Method section into labeled subsections. These usually include a section with descriptions of the participants or subjects and a section describing the procedures used in the study. The latter section often includes description of (a) any experimental manipulations or interventions used and how they were delivered-for example, any mechanical apparatus used to deliver them; (b) sampling procedures and sample size and precision; (c) measurement approaches (including the psychometric properties of the instruments used); and (d) the research design. If the design of the study is complex or the stimuli require detailed description, additional subsections or subheadings to divide the subsections may be warranted to help readers find specific information.

Include in these subsections the information essential to comprehend and replicate the study. Insufficient detail leaves the reader with questions; too much detail burdens the reader with irrelevant information. Consider using appendices and/or a supplemental website for more detailed information.

Table 1. Demographic Information of the Participants

Participant	Sex	Duty
K1	Male	Vocational Course Teacher
K2	Female	Vice Principal
K3	Male	Vocational Course Teacher
K4	Male	Branch manager
K5	Male	Vice Principal
K6	Male	Vice Principal
K7	Male	Branch manager
K8	Male	Vocational Course Teacher
K9	Male	Branch manager
K10	Male	Branch manager
K11	Female	Branch manager
K12	Female	School Principal
K13	Female	Vice Principal
K14	Male	School Principal
K15	Male	School Principal
K16	Male	Vice Principal
K17	Male	Branch manager
K18	Male	Vice Principal
K19	Male	Vice Principal
K20	Male	School Principal
K21	Male	Vocational Course Teacher
K22	Female	Branch manager
K23	Male	Vocational Course Teacher
K24	Male	Branch manager
K25	Male	Vice Principal
K26	Female	Vice Principal
K27	Male	Vice Principal
K28	Male	Branch manager
K29	Male	Vice Principal
K30	Female	Vocational Course Teacher
K31	Female	Vocational Course Teacher
K32	Female	Vice Principal

According to Table 1, 23 of the participants are male and 9 of them are female; 12 of them are vice principal and 9 of them are branch managers; 7 of them are vocational course teachers and 4 of them are school principals. The fact that participants are in a position where they can express their own opinion supports the maximum variation sampling in the research.

2.3 Data Collection Tools

In this research, data are collected with semi-structured interview form utilizing interview technique. Apart from being a very rich data source preferred very often, the interview method in a case study is also important in terms of providing the researcher with information from different perspectives (Ellinger, 2005; Hays, 2004). The interview is composed of open-ended questions which aims to reveal the opinions of the participants (Creswell, 2016). In this context, measurements were taken to increase the internal and external validity of the form during the process of developing the interview form. Therefore, in order to develop a form with high validity in line with the aim of the researcher, necessary arrangements were made after taking expert opinions of three lecturers, one from education programmes and two from EU programmes. Further necessary arrangements were made according to the feedback received at the end of the pilot interviews with the 4 participants who had been unable to attend the first interview. The interview form contains six questions. Additionally, there is a form which reveals the demographic information of the participants.

2.4 Process

Data were collected by interviewing 32 participants who are school principals, vice principals and vocational course teachers working at Vocational and Technical Anatolian High Schools or Vocational Training Centers which have realized an Erasmus+ mobility project funded by Turkish National Agency. After sharing information about the research topic with the participants, the interviews, which are based on volunteering and confidentiality, were conducted. During the process of collecting data, the interviews were conducted with 32

participants online, by requesting an appointment beforehand. The interviews lasted 20 minutes and were recorded with the permission of the participants. These recordings were transcribed and offered to the participants to check and approve them.

The interviews and codes were held by the same researcher. The codes were prepared by a lecturer who is an expert in qualitative research. The codes were analyzed with descriptive analysis. First, the data obtained from the interview forms were transcribed. Then, they were listed and categorized. Thus, everything stated in each category was grouped. Finally, the frequency of the codes and their percentages were specified. The responses given to the questions were grouped separately and in an order for each participant.

2.5 Validity and Reliability

In order to increase the internal validity of the research, the related literature was reviewed thoroughly while creating the interview form, and the interview questions were prepared within the theoretical framework. Based on voluntariness, the interviews were held online on the date that had been appointed for each participant. The validity and the reliability of the findings are extremely important in research. There are various concepts (accuracy and credibility) that qualitative researchers use to describe validity and reliability (Creswell, 2013).

In this research, the credibility and the accuracy of the research were emphasized through data triangulation, the approval of the participants and expert opinion. In this context, among different data sources, school principals, vice principals and vocational course teachers were chosen to be interviewed through data triangulation in order to increase the validity of the research. These interviews were recorded after getting permission from the participants. In order to confirm the accuracy of the research, the voice recordings were transcribed and the participants confirmed them. Besides, the perspectives of the participants were included with their own sentences in order to demonstrate their impressive opinions. Apart from the researchers, an expert analysis by a lecturer from a European Union programme was made about the weaknesses and strengths of the research.

2.6 Analysis of Data and Its Interpretation

The data were analysed through inductive analysis, one of the content analysis types. Inductive analysis is a method which contains rich descriptions (Merriam, 2009). Besides, in order to reveal the underlying concepts by coding and put forth the relations of those concepts (Yıldırım & Şimşek, 2006), inductive analysis was chosen. The analysis was carried out as follows. At the first stage, the data were coded by the researcher. Then, they were coded again by an expert. On these codes that the researcher and the expert worked on, the formula “reliability = agreement + disagreement x 100” is used (Miles MB & Huberman, 1994). The compliance percentage of two coders was calculated as 87%. Because the compliance percentage was expected to be 70% and above, the reliability in terms of data analysis was ensured. The themes based on the codes prepared by the researcher and the lecturer were specified. The literature reviewed was taken into consideration during the interpretation of the findings.

2.7 Finding

- Perceptions regarding European Credit Transfer System (ECVET) tools in Vocational Secondary Education

The question below regarding European Credit Transfer System (ECVET) tools was asked to school principal, vice principals, branch managers and vocational course teachers who are working at vocational secondary schools and the findings are demonstrated in Table 2.

Table 2. Perception regarding ECVET tools

Question 1. What do ECVET tools mean to you?	f	%
Recognition of learning outcomes	30	94
Evaluation of learning outcomes	27	84
The recognition of lesson credits in EU	25	78
Providing vocational accreditation	24	75
Documentation of learning outcomes	23	72
Credits acquisition and transfer system	20	63
Adaptation to EU education system	18	56
Experience abroad	17	53
A system providing facility of payment- financial support	17	53
Correspondence of the acquisitions	15	47
Reliability	14	44
Recognition on international level	13	41
Sharing knowledge and skills	13	41
Common criteria and values	13	41
Credit transfer system	13	41
Its requirement for EU equivalency	12	38
Its importance for foreign language education	11	34
Its contribution to social development	10	31
Acquisitions based on content	9	28
Objective evaluation of skills	8	25
Transfer of skills	7	22
Supportive	6	19
Motivating	6	19
Mobility in vocational education	6	19
Accumulation of credit points	6	19
Culture and interaction	5	16
Cutting off the extra hours of teachers and damaging them financially when they go abroad	4	13
A methodological method	3	9
A system which is difficult to practice	2	6

As it is demonstrated in Table 2, the participants perceive ECVET tools as the recognition of the learning outcomes. Respectively, the most perceptions stated by the participants about ECVET tools are recognition of the learning outcomes, the evaluation of the learning outcomes and the recognition of the course credits in EU while the least perception stated includes providing culture and interaction, finding a methodological method and being a system that is difficult to practice. The participants' opinions about ECVET tools are as follows: "The statements that I am about to use are not technical, but they convey a sincere opinion. I personally took part in the training for ECVET offered by the National Agency. ECVET is defined as a credit transfer system. Although it is an ideally perfectly-thought-out system, it is difficult to use in practice since the education systems differ in each country. For instance, the fact that my student who has taken a few courses (servo motor control, PLC programming etc.) on a modular system related to electric and electronics technology completes one term in a German vocational school, where the field of application is wide, and finishes the other term taking another module (operator panel, controller etc.) in Italy will take the student to the top" (K9). "ECVET is the recognition of the modular system course credits, which are obtained by the vocational secondary school students, in the EU. It identifies vocational accreditation" (K4). "For me, ECVET represents a chance to go abroad for those who do not have enough socio-economic opportunities to go out of town under normal circumstances" (K25). "It is a methodological way which enables a qualification to be completed in terms of the units of the learning outcomes (knowledge, skill and competence) that can be transferred and accumulated with credit points" (K12). "As far as I know, ECVET is the correspondence of the acquisitions obtained throughout the internship abroad to the acquisitions that are needed to be obtained at school. At some point, it is the recognition of the acquisitions obtained in the internship abroad and the supposition that the school education is completed throughout this internship process" (K3). "It is the sharing of different applications, knowledge and skills in different fields" (K5). "It is about ensuring the education or applications taken in Europe are recorded and validated" (K17). "We can define it as the record of the assessment and evaluation performance, which results from the education received in a different European country, in the hometown of the student receiving vocational education" (K24).

- Perceptions regarding the ECVET tools utilized in student mobility projects within the framework of Erasmus+ Programme

The question below regarding the use of ECVET tools in student mobility projects carried out within the framework of Erasmus+ Programme was asked and the findings are demonstrated in Table 3.

Table 3. Perceptions regarding the ECVET tools used in student mobility projects carried out within the framework of Erasmus+ for Vocational Secondary Education

Question 2. What do you think of the ECVET tools that you made use of in your student mobility projects carried out within the framework of Erasmus+ for Vocational Secondary Education?	f	%
It is a beneficial application.	32	100
It contributes to the professional career of students.	32	100
It contributes to the quality of the mobility.	30	94
It ensures the mobility to be more reliable.	30	94
It enables the mobility to be more systematic and programmed.	28	88
It is a system encouraging the transfer of knowledge.	27	84
It causes teachers to be financially damaged as extra hours are cut off when they are abroad.	25	78
It provides objectivity and transparency in evaluating the students.	24	75
It contributes to the development of skills.	20	63
ECVET tools are guidelines in evaluation of skills.	16	50
ECVET tools help the development of professional standards	15	47
ECVET tools benefit in training qualified employees in labour market.	15	47
Not all teachers at school are assigned to run or disseminate the project.	14	44
ECVET tools have shortcomings.	2	6
It is difficult to use ECVET tools and fill in the documents.	2	6

As it is demonstrated in Table 3, ECVET tools utilized in student mobility projects carried out within the framework of Erasmus+ in Vocational Secondary Education are considered to be a beneficial application and it is perceived as a tool which contributes to the professional careers of the students.

Respectively, the most perceptions stated by the participants about ECVET tools are its benefits, its contribution to the quality of the mobility and its ensurance of the reliability of the mobility while the least perception stated includes the shortcomings of ECVET tools, the challenges encountered in their use and the difficulty in filling the related forms. The participants' opinions about ECVET tools, which are used in student mobility projects conducted within the framework of Erasmus+ in vocational secondary education, are as follows: "We think it is beneficial. Although it is not easy to use, we consider it to be an important part of the job" (K1). "Our institution is accredited in the vocational field and in this process, I realized that ECVET tools are a must and I needed them. However, it has shortcomings. Our students fall behind in culture lessons received in long term internship mobility, so they encounter problems. ECVET corresponds solely to skills education. In addition, as far as I know, it does not correspond to the other culture lessons that are supposed to be received at school. That becomes a problem in long term internship mobilities. Although ECVET is a very useful tool, since the culture lessons are out of scope, it becomes a great challenge. Thus, the students lack points. I think ECVET tools must cover all these circumstances. I took advantage of ECVET tools, but I believe it requires training" (K3). Our project is still in process. We developed an ECVET tool and we will take advantage of it. We will use it in recognition of the summer internships of the students and in evaluation of the skills training in business lessons for the process through the term at school" (K7). "I know that it is a real challenge to use it. It requires a difficult process to fill in each form for candidates. The process management and filling out documents must be on digital platforms with e-signature. I think it must be discussed again through the process of full integration with the EU. I think the outcomes of Vetexpress project and the use of the platform in all projects should be considered as an obligation" (K8). "We developed an ECVET document and applied it in the mobility projects run by The National Agency in the past terms. We arranged ECVET documents based on the content of our mobility projects and sent it to our project partners. In this way, we realized our project. Our students' internship activities abroad were verified and documented with ECVET documents" (K9). "The development of the vocational standards based on the qualifications needed in the labor market and qualified employees in the scope of vocational standards in the sector have been acquired with Europass documents" (K13).

"The teachers who go abroad within the scope of the project are not paid for the extra lessons. This is a circumstance that damages the teachers financially. We go abroad for training for the sake of the projects, not for pleasure. It is our duty to go abroad. Since our money for extra lessons is cut off, we don't want to volunteer to go abroad. We want to be paid for extra hours when we are abroad" (K20). "In our project, we

used Learning Agreement, Transcript and Skill Evaluation Form. These forms were tracked and evaluated by the qualified instructor working at the workplace abroad where our students were doing the internship. Thus, the development of the knowledge, skill and qualifications of the students were tracked objectively” (K24). “The fact that people who developed or carried out the project do not cooperate with the group teachers prevents the dissemination of the project at school. The project is being carried out, but some teachers are unaware of it. This is a sad situation, especially for culture lessons teachers. The project belongs to the school and the teachers. It must be run in the charge of only one person” (K27). “Thanks to our project coordinator and other members of the team, I learnt what ECVET is and how to use it. I would like to say thanks and express my gratitude to them. I used all the tools. It is very effective and, most importantly, very systematic. I also ran my project transparently in terms of both parts. In addition, I was using the tools in my previous projects, but it has become more fruitful after it was introduced clearly in the seminar. I organized my project and its outcomes better. I heard that ECVET is finished. I wish it was put to use again; it is 2022...Thank you again” (K31).

- The validation and the recognition of the acquisitions obtained using ECVET tools

The question below regarding the validation and the recognition of the acquisitions obtained using ECVET tools was asked and the findings are demonstrated in Table 4.

Table 4. Findings regarding the verification and recognition of the acquisitions obtained by utilizing ECVET tools for vocational secondary education

Question 3. How were the acquisitions obtained by utilizing ECVET tools for vocational secondary education verified and recognized in the project that you took part in?		f	%
Short term student mobility	Via accompanying teacher	29	91
	Via foreman at workplace	29	91
Long term student mobility	By foreman at workplace and accompanying teacher during the process	25	78
	By branch manager at the end of the mobility	25	78
	By vocational course teachers	25	78
Documents	Acquisitions in Learning Agreement	24	75
	Signing the Memorandum of Understanding	23	72
	With Europass Mobility document	20	63
	Internship Evaluation Form	19	59
	Course Information Forms	18	56
	With Skill Assessment Forms	15	47
	With certificate	14	44
	Working Journal	13	41

As it is demonstrated in Table 4, the acquisitions obtained by using ECVET tools are verified and recognised via accompanying vocational course teachers and the foreman at the workplace.

In this research, how the acquisitions obtained from ECVET tools are verified and recognised by the participants are highlighted. This process is achieved in short term student mobility by the accompanying vocational course teacher and the foreman at the workplace. In the long-term student mobility, on the other hand, the process is achieved by the foreman at the workplace and the accompanying vocational course teacher during the project. At the end of the project, the process is completed by the vocational course teacher and the practice exam. Learning Agreement signed between institutions contains the acquisitions obtained in the student mobility. This process starts with signing the Memorandum of Understanding. It is followed by Europass Mobility Document, Internship Evaluation Form, Course Information Forms, Skill Assessment, Certificate and Working Journal. The participants' opinions regarding verification and recognition of the acquisitions obtained by using ECVET tools in vocational secondary schools are as follows: “The acquisitions stated in Learning Agreements are obtained from the course information forms which are developed for national vocational secondary education. Thus, the learning outcomes are verified and recognised” (K2). “In the project that our institution developed, both parties signed the learning agreement by using ECVET tools. The acquisitions of the interns are ensured and the responsibilities of both parties are recorded. the learning outcomes were concretely demonstrated” (K4). “The acquisitions were verified and recognised in the evaluation of the skill training course (internship) at the workplaces” (K18). “We ensured the recognition of the related ECVET documents (progress table included) by having them signed and verified by the host institution” (K21). “The acquisitions aimed in the scope of the project were approved by two common institutions and the evaluation criteria prepared were filled out for each

student separately by the instructor of our partner abroad” (K32).

- The transfer of the acquisitions obtained by using ECVET tools

The question below about the transfer of the acquisitions obtained by using ECVET tools was asked and the findings are demonstrated in Table 5.

Table 5. Findings regarding the transfer of the acquisitions obtained by utilizing ECVET tools

Question 4. How did you transfer the acquisitions obtained by utilizing ECVET tools?		f	%
Knowledge	With success in written exam	24	75
	With presentation at school	20	63
	With preparation of the bulletin board	19	59
	With websites	18	56
	With exhibition	10	31
Skills	With practice exam	28	88
	With success in the practice exam		
	By transferring the learning outcomes whose written and visual materials are designed	25	78
	Language development exam	15	47
Competence	By monitoring during internship	30	94
	By organizing workshops	26	81
	By peer learning	25	78
	With internship points	24	75
	With on-the- job training	20	63
	With reflective learning	15	47
	With sustainable activities	14	44
	With the dissemination activities of the project on platforms such as E-Twinning, Epale	10	31
Document	By signing Learning Agreement	32	100
	By signing Memorandum of Understanding	32	100
	With Europass document	30	94
	The evaluation form of the host institution	24	75
	With transcript form	20	63
	Via qualification assessment tool	20	63
	With skill assessment form	19	59
	With bank and ministry of finance forms	5	16

As it is demonstrated in Table 5, the transfer of the acquisitions obtained by using ECVET in vocational secondary education were analyzed in terms of knowledge, competence and documents. In this context, the transfer of the acquisitions is stated in the category of knowledge in the following order: success in written exams, doing presentations at school, preparing bulletin boards, news broadcasted on websites and exhibition. The category of skills include success in practice exams, transference of the learning outcomes designed as written and visual materials and success in language exams. The category of competence contains the track of internship activities, arrangement of the workshops, peer learning, internship points, on-the-job education, reflective learning, sustainable activities, dissemination activities on international platforms such as e-twinning and EPAL. The category of document contains learning agreement, signing the Memorandum of understanding, Europass document, the evaluation form prepared by the host institution, transcript form, competence evaluation form, skill assessment form. The participants' opinions regarding transfer of the acquisitions obtained by using ECVET tools in vocational secondary schools are as follows: “Although the transfer does not occur among different institutions, the acquisitions stated in the learning agreement abroad are introduced by the interns to the other students in our school in workshops” (K4). “I transferred it with a Europass document. I am trying to share my experience with my colleagues and students on every platform, whenever it is the issue. In my educational material designs, I use the knowledge and skills that I acquired in the trainings” (K8). “For Anatolian Vocational High School students, we ensured the integration of the points taken in the internship abroad with the grading system at our school” (K9). The learning outcomes belonging to the related field were conveyed through written and visual materials to the other students by vocational course teachers” (K10). “On-the-job education was transferred through personal observation, reflective learning, competence evaluation tool, language development and Europass mobility document” (K12). “Presentations were made for the other students, studies were published on the school website, bulletin boards were prepared and exhibitions were opened” (K22). “I think there is an urgent need for training related to this issue. I choose workplaces that will provide internships in

accordance with the acquisitions stated in skills training and some vocational course modules in order to match the acquisitions with the skills training at school and I sign learning agreement and memorandum of understanding with them on this issue. Also, there is an exam to measure the success of the acquisition transfer” (K26). “We used these tools and we validated them for the internship that they are responsible for in Türkiye” (K29). “Europass, certificate, foreman and the evaluation of the accompanying teacher affected the grades. In an abstract sense, we transferred the acquisitions in the life of students and this is the most important point. Although there is no concrete recognition, our students became aware of themselves and discovered their limits. They will never forget this internship experience throughout their lives” (K31).

- Perceptions regarding the benefits of ECVET tools

The question below regarding the benefits of ECVET tools in Erasmus+ projects in Vocational Secondary Education was asked and the findings are demonstrated in Table 6:

Table 6. Findings regarding the benefits of ECVET

Question 5. What are your opinions about the benefits of ECVET tools in your project? Explain.		f	%
Vocational education student	Providing personal development	25	78
	Effective internship process	25	78
	Recognizing the labor market	24	75
	Professional experience	24	75
	Providing employment	20	63
	Rewarding	19	59
	Take mobilities seriously	18	56
	Motivation	17	53
	Wide social network	16	50
	Becoming a qualified employee with Europass	15	47
	Going abroad	15	47
	Developing new entrepreneurial ideas	14	44
	Developing different visions	14	44
	Improving foreign language	14	44
Vocational course teacher	Providing personal development	24	75
	Providing detailed documents	20	63
	Developing information network	15	47
	Objective and systematic tracking of the professional development of the students	15	47
Workplace	The increase in the awareness of the host workplace	28	88
	Developing the vocational standards	28	88
	The qualification of the vocational skills education	27	84
	The reliability developed with the preliminary agreement with the host workplace	20	63
Mobility	Providing objectivity in specifying the acquisitions and their assessment	31	97
	Developing reliability	30	94
	The quality of mobility	28	88
	Providing EU quality standards	27	84
	Revealing concrete goals	25	78
	Providing a positive impression to the environment with dissemination	15	47
	The transparency of financial activities	14	44
	Providing convenience for the intermediary which write projects	2	6

As it is demonstrated in Table 6, the findings related to the benefits of ECVET tools were analysed in the categories of vocational education students and teachers, workplace and mobility. Within this context, the benefits stated in the category of vocational education students are providing personal development and Effective internship process. The category of Vocational course teachers contains providing personal development and providing detailed documents. In the category of workplace, the increase in the awareness of the host workplace and developing the vocational standards are included. The category of mobility reveals the objectivity in specifying the acquisitions and their assessment. The participants’ opinions regarding benefits of using ECVET tools are as follows: “It is beneficial because students take the mobilities seriously, it is rewarding, it raises awareness at the host workplaces about the specification and the assessment of the acquisitions. Moreover, it is useful for effective internships” (K1). “The fact that the content of the internship activities and the programme have been recognised develop trust between both parties. The list and the explanation of the learning outcome which is stated in personal learning agreements ensure the responsibilities of both parties. The

Memorandum of Understanding, which is signed with the host institution, helps our institution to be recognised as the certified institution and it contributes to the reliability and the quality of the mobility” (K2). “ECVET is very necessary and important for the student to compensate for the process abroad in terms of legislation. However, I think it has shortcomings. I think the time spent abroad by the student should be clarified in terms of absenteeism. Also, it should bring clarification to the exam points that will be taken, along with vocational and culture lessons and their exams that the student cannot attend” (K3). “ECVET is beneficial in terms of the standard of quality, specification of the acquisitions on the preparation stage of the project and setting concrete goals” (K4). “We think that it is beneficial for the ongoing internship during student mobility, the skill training at the workplace, and elimination of the deficiencies (day, knowledge, evaluation etc.) in vocational education” (K7). The European vocational standards were observed and gained the qualification of being a qualified employee in the work labour. These acquisitions were recognised through Europass document” (K12). “Based on the competences that the work labour requests, it is useful to develop the professional standards” (K13). “Since we did not have enough time to develop a project, we planned our programmes and internship studies thanks to the intermediary who was writing projects” (K22). “We find it beneficial in terms of tracking the students’ professional development more systematically and objectively” (K24). “Without these budgets, our students cannot even go to another city, let alone go abroad. It becomes an extraordinary experience for them” (K25). “When the students complete their internships abroad, their perspectives broaden as a result of the same education received with the students from different countries at the workplace” (K26).

3. Results and Discussion

The first finding of the research is that the perceptions of the school principals, vice principals and vocational course teachers (including the branch managers) working in vocational secondary schools are related to the recognition of the learning outcomes of ECVET tools. This might have been resulted from the fact that participants consider ECVET tools in mobilities to play a significant role, especially in reaching the acquisitions of the learning outcome. Thus, VET-express project developed by the Ministry of Education and General Directorate of Vocational and Technical Education (2017) resembles the general principles stated in ECVET guideline for Vocational and Technical Education teachers and the qualifications of the vocational education students have been defined based on their learning outcomes. Besides, learning outcomes are a structure which helps the teacher to guide the students by putting them at the center. Considering this, learning outcomes and students can participate in the process actively. Moreover, the relationship and the integrity of learning outcomes of ECVET tools, their evaluation, units, ECVET points, verification and recognition and the concepts of credit transfer can be transferred through online meetings to the people who are benefiting from Erasmus+ project.

The second finding of the research contains the perceptions of the participants about the benefits of ECVET tools utilized in student mobility projects within the framework of Erasmus+ programme and how these tools contribute to professional careers of students. Since the participants work systematically and with a schedule, it can be considered to be a convenient tool. It has changed from a closed option within secondary education to become an alternative career path to university education (Perini & Kämäräinen, 2018). As a matter of fact, Demirer (2019) has offered a model for the recognition of the certificates, documents and diplomas, which are received in vocational secondary education, with ECVET tools. What enables this model to be used is the systematic structure it contains (Demirer, 2019). It is observed that, generally in Türkiye, vocational secondary education provides more opportunities for employment when compared to regular secondary education. Also, the disintegrity of skills encountered in MEM programmes is very low. 88% of the students in MEM programmes start working in their study fields while 75% start working in the companies where they receive on-the-job training (Özer & Suna, 2022). In this context, on-the-job training, which takes place in the scope of the accumulation of the learning outcomes with ECVET, contributes to the professional career of students and provides employment. When considered from this perspective, the findings are consistent with the research.

The third finding of the research is that participants achieve verification and recognition of the acquisitions obtained with ECVET tools through the accompanying vocational course teacher and the foreman at the workplace in the short-term student mobility. The fact that both the accompanying vocational course teacher and the foreman at the workplace track the verification and the recognition of the acquisitions is the indication that they utilized ECVET tools. In addition, it is stated in the legal legislation that the acquisitions obtained by the vocational education students at the workplace will be tracked by the vocational education teacher who is assigned for the job. “a coordinator teacher is chosen among the principals and teachers at school whose fields are related to either workshops, labs or vocational courses and they are assigned with the job of planning a vocational education internship project at workplaces, monitoring its convenience to the programme, identifying the possible problems, tracking the success, absenteeism and discipline of the students” (MEB, 2013). At that

point, the process of the use of ECVET tools and the verification, recognition and transfer of the acquisitions are applied successfully with the integration of the national legislation by vocational course teachers. According to a report in Ireland, teachers' ability to participate in a mobility project which includes additional competences along with connection with the industry and assessment of the learning outcomes must be enhanced. Besides, the fact that the acquisitions are verified and recognised by the foreman and the accompanying vocational teacher during the process and by the branch manager and vocational course teachers at the end of process of the long-term student mobility can be considered as an example for the process to be carried out properly. For a good quality of Erasmus+ project, it is extremely important to prepare the learning agreement and memorandum of understanding. These documents prepared are the ones requested for the verification, recognition and transfer of the acquisitions. Preparing the related documents mentioned in the guideline is a significant step in the process of improving mobility (Ata & Çepni, 2015). On the other hand, teachers need the competence to form proper assessment tasks and carry out assessment in a valid and agreed manner in order to assess learning outcomes as part of the mobility and have the assessment accepted or validated when the student completes the mobility. If a student is employed, the advisor at the workplace (foreman) or supervisor must also have the authority to make an assessment. This requires more clarity in interpreting the planned learning outcomes and agreeing on an appropriate program of study in order to support the achievement (De paor, 2018).

The fourth finding of the research reveals that the transfer of the acquisitions obtained by the participants by using ECVET tools was assessed with a written exam at the knowledge level and success in the practice exam at the skill level results from the observations of the practices in the internship at the competency level. Thus, the issue in the legal legislation is that learning outcomes can be obtained from different learning environments, learning methods and strategies (MEB, 2017). In addition, using ECVET tools from the European Credit Systems, which is the oldest and most successful mutual transfer system in the world, contributes to the creation of the framework for lifelong learning in order to emphasize learning. It is also known that it highlights the quality assurance and contains studies regarding the transparency of the quality between institutions and the increase of the recognition (Songhe, 2011).

The last finding of the research is about the benefits of ECVET tools in terms of different roles. The findings include the benefits such as personal development of the vocational education student with ECVET tools, effectiveness of internships, ensuring the personal development of the teacher, raising awareness at the workplace and identifying the acquisitions and evaluating them objectively. Lots of problems such as students living in a place which lacks a labour market, the absence of institutions offering vocational education, young people dismissed from employment after graduation, inability to enter higher education after graduation arise. Especially during Covid-19, the students who study at improved Vocational Education and Training took on critical tasks. Vocational Education and Training which has been improved since 2018 can not only provide a qualified source of individuals requested by the labour market on the necessary level but also play an active role in overcoming pandemics like Covid-19 with its production capacity (Özer, 2020a; Özer, 2020b). From this perspective, ECVET tools are expected to have a more critical role in the employment of the individuals who take care of their personal development, acquire a foreign language skill, and obtain necessary vocational knowledge and experience. Also, the existence of a common dictionary to be consulted by the host and the teacher can be considered as a requirement in order to enable teachers to discuss ECVET mobilities with their colleagues abroad, to continue planning and accepting the learning agreement and the assessment grades. Also, preparing the dictionary upon a single language is significant in terms of students' command of the language (De Paor, 2018). In the long term, creation and modernisation of vocational education programmes for ECVET in vocational secondary school will be a factor in the increase of the competitiveness of such programmes in the national and international labor market and education services. At the same time, ECVET must be one of the basic factors to increase the academic and vocational mobility and to improve the opportunities of lifelong learning (Kopnov et al., 2018).

As a result of the research, the following findings and suggestions regarding the use of ECVET tools in vocational secondary schools are presented:

- 1) For a good quality of Erasmus+ project, ECVET tools are considered to be effective.
- 2) The vocational education institutions taking part in the research have used ECVET tools successfully.
- 3) The acquisitions obtained in Erasmus+ projects are tracked at the workplaces abroad by the vocational course teachers and they are applied in accordance with the legal regulations by using ECVET tools.
- 4) Erasmus+ projects are carried out by Vocational and Technical Education Institutions and Provincial National Education Directorate. The change of duty occurring in these institutions affects the process of ECVET tools

negatively.

5) Seminars and meetings are considered to be useful since the use of ECVET tools, the process of the acquisitions and their transfer are not understood clearly enough.

6) The fact that the project coordinators have Erasmus+ projects developed by intermediary affects the use of ECVET tools negatively. It can be ensured that the main activities of Erasmus projects are carried out by the coordinators themselves after training them for developing Erasmus+ projects for Vocational Education institutions.

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