

## **RELATIONSHIP BETWEEN WEB-BASED LEARNING TIME OUTSIDE THE CLASSROOM AND ACADEMIC ACHIEVEMENT IN GERMAN AS A TERTIARY LANGUAGE BY THE STUDENTS ON VOCATIONAL HIGH SCHOOLS**

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### **ABSTRACT**

The purpose of this empirical research is to investigate the relationship between web-based learning time and academic achievement in German. 36 learners of L3 German with L1 Turkish and L2 English from Vocational High School of Kahta at Adiyaman University were the participants of this study. The empirical process of the study continued 6 weeks in 2011-2012 fall semesters. During this time, the German, as tertiary language, course was lectured by traditional face-to-face method in the classroom. But the students studied outside the course the same subjects in interactive form via web page, specifically designed for this study.

At the end of the empirical process, the data about the study were obtained. The Pearson product-moment correlation was used to find out the relationship between web-based learning time and academic achievements in German.

As a result of this study it is found out that there is a significant relationship between web-based learning time and academic achievement in German as a tertiary language.

**Keywords:** German as a tertiary language, web-based learning, academic achievement

### **INTRODUCTION**

The political developments and structural changes have a direct impact on multilingualism. An example of this may have happened in the last few decades in Europe: The completion of the European Union and the dissolution of military and political blocks in Eastern and Western Europe led to the increasing mobility of international - especially European-market and greater social heterogeneity. These improvements increased the importance of the concept of multilingualism (Heid, 1990). Depending on this situation, the European Union demands that every European should speak her/his own language in addition to at least two other languages. "Multilingualism of the European citizen" is therefore the overarching concept. Tertiary language learning, in the school context is a way (Hufeisen & Neuner 2001, 18).

The term "tertiary languages" refers to foreign languages learned after the first foreign language, i.e. as one's second, third, fourth, etc. foreign language (Hufeisen, 1991). The sequential constellation of "English as the first foreign language and German as the second one" is common in the foreign language programs offered in the schools of many countries (Hufeisen & Neuner 2004, 5). There are advantages and disadvantages in the second foreign language (L3) learning and teaching as in L2. One of the positive aspects is that the students of German as a 2nd FL are older than the average EFL beginner. They have a wider "knowledge of the world," and have already had more "life experiences," They know their own "learning style," (Hufeisen & Neuner 2009, 6). So they are able to learn German faster.

But the weekly amount of German as tertiary language course is short (2 hours). The need for effective teaching approaches is therefore urgent. One of the solutions to this problem about time-limitation can be to combine the web-based learning with face-to-face teaching. Language learning in the distance learning has a long tradition. (Blake 2009; White 2003) and today language learning via technology has become a fact of life (Chapelle, 2001).

These systems are centered on the concept of learning object, which can be defined as "an independent and self-standing unit of learning content that is predisposed to reuse in multiple instructional contexts" (Polsani 2002; Wiley, 2001). In this context, especially web-based learning comes forward. Web-based learning can be defined as an information technology-enabled and supported form of distance learning in which the traditional restrictions of classroom learning have disappeared (Liu, Chan, Hung, & Lee, 2002).

The Internet can be a useful aid in teaching reading, writing, vocabulary activities, and some grammar exercises.

Also, including rapid global access at any time from any computer with Internet access, integration of graphics, audio, and text; and ease and low cost of publication are the potential of the web (Brink 1997; Kern & Warschauer 2000).

In other words the educationalists, apparently limitless, supply asynchronous education for students who have only an Internet connection and a computer (Woolf & Stern 2006, 322).

Web-based Institution has the following characteristics:

- It is interactive,
- It is multi-medial,
- Learners can use other information of the Internet (open structure).
- Include computer-mediated communication, including E-Mail, chat, forums, news groups, etc.
- human or computer-controlled devices,
- location and time-independent. (Ma 2006; Astleitner 2000)

Web-based tool provides a comprehensible user interface and facilitates individuals with no specific computer science or e-learning skills to easily use the provided functionality (Bouras & Nani, 2004). However, only the web-based learning may not be suitable for the foreign language course. Because interaction plays a critical role in the foreign language learning, especially in terms of communicative approach (Gass 2003; van Lier 1996). Therefore, the web-based learning evaluated as a factor in helping for face-to-face learning.

## **PURPOSE AND RESEARCH QUESTIONS**

The purpose of this study is to investigate the relationship between web-based learning time and academic achievements in German by the students on the vocational high schools. In this context, questions below were sought for an answer:

- Is there a relationship between web-based learning time and academic achievements?
- Is there a significant difference in the academic achievements of two groups (one group that used the Internet under 10 minutes per a week, and the other over 10 minutes)
- What are the lecturer's impressions through his observation about the empirical process?

## METHOD

### Participants

36 learners as beginner of L3 German with L1 Turkish and L2 English from the Department of Tourism and Hotel Management in the Vocational High School of Kahta at Adiyaman University were the participants of this study. In the table below the distribution of students are given with respect to gender and age.

Table: 1  
The distribution of Students with Respect to Gender and Age

Gender	(Age)	<i>f</i>	%
Female	(21.43)	7	19.4
Male	(22.00)	29	80.6
Total	(21.89)	36	100

### Procedures

The study continued six weeks. Within this period, the German course was conducted in traditional face-to-face method in the classroom. The first week of fall semester the students were shown how to use the website. Students worked through the web page outside the classroom for 6 weeks. At the end of the empirical process, the data about the study were obtained. The Pearson product-moment correlation was used to find out the relationship between web-based learning time and academic achievements in German. Also the achievements of the students (their mid-term scores) were compared in accordance with their use of Internet much or less i.e. the first group (G1; N=23) consisted of students who used the Internet under 10 minutes per a week, and the other group (G2; N=13) of the students who used it over 10 minutes. Analysis of two groups were performed with Mann-Whitney U test. Finally, impressions gained through observation of the lecturer of the German course were evaluated as qualitative data.

### The Website Developed For This Study

A website was developed for this study. It consisted of two modules: The module, "First step 1" and the other module, "First step 2". In "First step 1" included 'meeting', 'letters', 'numbers' and 'greetings' as topics. The topics of "First step 2" were 'where the people live', 'about their jobs' and 'which languages they speak.

With these modules in the website, the students can;

- hear and repeat the pronunciation and spelling of German,
- read the dialogues
- understand grammar items by comparing English and German with each other, and also with their mother tongue.

## FINDINGS

In this part the findings of the research questions are given.

### Relationship Between The Web-Based Learning Time And Academic Achievement In German

To examine the relationships between web-based learning time and academic achievement in German, the Person-correlation coefficient was calculated. In this process, the correlation between use-time of website and the mid-term examination scores of the students were analyzed. The data about web-based learning time and academic achievement in German correlated at the .01 level (see Table 2) with a coefficient of .401

**Table: 2**  
**Relationship Between the Web-Based Learning Time and Mid-Term Score in German**

N	Sig (2-tailed)	r
36	.015	.401

It is observed in Table 2 that there is a positive and significant relationship ( $r=.401$ ) between the total score of web-based learning time and the total score of academic achievement in German. In the following section the academic achievement scores of the students who used the website under 10 minutes a week and the students who used it over 10 minutes were compared. In this way it was targeted to understand the meaning of the relationship in the concrete.

### Difference In The Academic Achievements Of Two Groups

The Mann-Whitney U-Test was used to examine the difference in the academic achievements of two groups. The first group (G1; N=23) consisted of students who used the Internet under 10 minutes per a week, and the other group (G2; N=13) of the students who used it over 10 minutes.

**Table: 3**  
**Difference in the Academic Achievements of Two Groups**

Groups	N	Mean Rank	Sum of Ranks U	Mann-Whitney Asymp. Sig. (2-tailed)
G1	23	15.17	349.00	.012
G2	13	24.38	317.00	

It is seen in Table 3 that there is a differentiation of the academic achievement scores ( $p<.05$ ) between two groups. So it can be inferred that the students who used the the web page, developed for practicing German as a tertiary language course, over 10 minutes a week has more academic achievement than the other students who used it under 10 minutes.

### Observations of the Course Lecturer About The Empirical Process

Impressions gained through observation of the lecturer were as:

Most of the students had problems in having an access to the Internet. The reason of this problem seems to be that there was lack of places to have an access to the Internet in the vocational high school and that majority of students did not have computers.

The absence of the habit of using the Internet for learning and research purposes was another problem. Most of the students did not see the Internet as a learning tool. What they wanted was using the internet independently instead of performing the works with the teacher.

### CONCLUSION AND DISCUSSIONS

The findings of this study have shown that students who used the Internet to study German as a tertiary language outside the classroom have better achievement scores than the students who did not use the web-based learning environment. That German as a second foreign language course takes place in the program only two hours per a week is an important problem. According to the results, web-based learning environment (outside the classroom) seems to be an effective solution to this problem. Scope of this study observed that there were some problems.

One of these problems was that most of the students had problem of having access to the Internet. Reasons of this problem seem to be that there was lack of opportunity to have an access to the Internet in the vocational high school and that majority of students did not have computers. To solve this problem Internet access opportunities can be created in the school. So students can access to Internet when they need.

The other problem is that there is a lack of habit in using the Internet for learning and research. Most of the students did not see the Internet as a learning tool. We can overcome this problem throughout the school education of both teachers and students in web-based learning. So providing a good atmosphere throughout the school gives positive results for all courses.

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